List of Published Research of the Institute of Sports, Physical Education, and Recreation

Title	Authors	Year of Publication	Journal	Indexing
1. **The influence of teacher emotional support on academic engagement of university students: Examining the mediating role of academic motivation through the lens of Self-determination theory**	Jet Longakit, Joseph Lobo, Novri Gazali, Lyndie Toring-Aque, Minerva Sayson, Felix Jr Aque, Teejay Panganiban, RL Tagare, AL Garcia, J Michael, J Mark, Elvie F Celestial	2025	Sportis Scientific Journal of School Sport Physical Education and Psychomotricity	Scopus
2. **Resilience in the Classroom: A Qualitative Inquiry on How Parental Separation Affects College Students' Learning and Their Coping Abilities**	Genevieve Redulfin, Desiree C Tenebroso, Ruben L Tagare Jr, Ana Trisha F Siocon, Rishel Lyn P Gaspar, Gauvin Adlaon	2025	Indonesian Journal of Education Research (IJoER)	ASEAN Citation Index
3. **Driven by grit, inspired by curiosity: Enhancing students' academic engagement in Physical Education in the higher education system**	Joseph Lobo, Francis Balahadia, Teejay Panganiban, Rhene Camarador, Jeric Quibral, Jet Longakit, Christian Alex Mondido, Deljun Rodriguez, Ruben Tagare Jr, Elvie Celestial, Argel Payumo	2025	Sportis Scientific Journal of School Sport Physical Education and Psychomotricity	Scopus
4. **Active lives, fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among Filipino university students**	Mark Anthony R Dalipe, Mark Anthony B Rosario, Mark Dexter L Reyes, Steffany Anne C Poblador, Jinny Chee Kee, Nikki Lou Dumagalagan, Rowel Dacanay, Mark San Pedro, Carl Wayne Villarta,	2025	Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity	Scopus

	Christine May Mangubat, Vinus Java, Jerum Elumaring, Ruben Jr Tagare			
5. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes	Jet C Longakit, Joseph Lobo, Deljun Rodriguez, Ruben Tagare Jr, Teejay Panganiban, Jay Mark Sinag, Louie Gula, Vlad Adrian Geantă, Novri Gazali, Jeric Quibral, Christian Alex Mondido, John Michael Aquino	2025	Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity	Scopus
6. Fit to connect: The role of physical activity in enhancing social self-efficacy among students	Ronel Peromingan, Sammy Paringit, Dorothy Joy Tan, Zcharina Tinaytina, Emie Misil, Ruben Jr Tagare	2025	Multidisciplinary Reviews	Scopus
7. Moving away from mental stagnation: The role of physical activity in reducing non-productive thoughts among filipino Gen Z	Mark Anthony Dalipe, Mark Anthony Rosario, Mark Dexter Reyes, Ma Lorena Adigue, Nehemias Adigue, Rowel Dacanay, Carl Wayn Villarta, Jennie Philip Saniel, Christine May Mangubat, Leonardo Rondero II, Jomar Esto, Ruben Jr Tagare	2025	Multidisciplinary Reviews	Scopus
8. Students' distress level and its relationship in developing non-productive thoughts: The case of premier universities in Mindanao, Philippines	Jomar Esto, Christoffer Roy Acelar, Maria Angelika Balungay, Altair Neri, R Vibekehh Bat-og, Lawrence Anthony Dollente, Ashley Coleen Ortiz, Paul John Ongcoy, Mary Jane Castilla,	2025	Multidisciplinary Science Journal	Scopus

	Norquez Mangindra, Mark San Pedro, Ruben Jr Tagare			
9. **Fueling growth: Exploring personal growth initiative among college students**	Cristine Joyce Abadejos, Vinus Java, Maricar Juaneza, Lawrence Anthony Dollente, Donnie Tulud, Ashley Coleen Ortiz, Paul John Ongcoy, Ma Leslie Sales, Mary Jane Castilla, Norquez Mangindra, Jomar Esto, Ruben Jr Tagare	2025	Multidisciplinary Science Journal	Scopus
10. **Coach-athlete relationship and interpersonal behaviour: Influence in youth athlete continuous participation in sports**	Siegfried Kent Elicot, Elpedio Arias, Marlene Orfrecio, Ruben Jr Tagare	2025	Journal Sport Area	ASEAN Citation Index
11. **Empowerment in action: Exploring social self-efficacy among mindanawon's adolescents**	Lawrence Anthony U Dollente, Jomar B Esto	2025	Multidisciplinary Reviews	Scopus
12. **Strengthening future educators: How school climate shapes academic resilience in Physical Education teacher education students**	Teejay D Panganiban, Ruben L Tagare Jr, John Michael D Aquino, Francisco Gabriel Prevandos, Erwin R Mañalac, Argel S Payumo, Jay Mark D Sinag, Jeric P Quibral, Jet C Longakit, Alfonso L Garcia Jr, Janice D Ballera, Elvie F Celestial, Edi Setiawan, Joseph Lobo	2025	Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity	Scopus
13. **From Home to Campus: Unveiling Parents' Perspectives on the Resumption of In-Person Classes in Higher Education**	Normena M Comampong, Ruben L Tagare Jr, Marichu A Calixtro, Marlene E Orfrecio, Joanna Caryl P Esponja, Bae Kellah	2025	Indonesian Journal of Education Research (IJoER)	ASEAN Citation Index

	Kassandra Landawe, Cheeze R Janito, Norge D Martinez			
14. **Navigating Excellence in Physical Education: Insights and Suggestions of Teachers Towards an Improved PATH-Fit Implementation in Philippine Higher Education**	Ruben L Tagare Jr	2025	Research in Education and Learning Innovation Archives	Web of Science
15. **A comparative study between continental grip and western grip service in lawn tennis among Arakeños, in Mindanao, Philippines**	Alben Khrystopher P Bagayas, Marichu A Calixtro, Ruben L Tagare, JrJomar B Esto	2025	International Journal of Physical Education, Sports and Health	Peer-reviewed Journal
16. **Stance and speed among softball players: Basis for training design development**	Lhister John A Barro, Cheeze R Janito, Marlon A Mancera, Marlene E Orfrecio, Ruben L Tagare, Jr Jomar B Esto	2025	International Journal of Physical Education, Sports and Health	Peer-reviewed Journal
17. **Navigating Excellence in Physical Education: Insights and Suggestions of Teachers Towards an Improved PATH-Fit Implementation in Philippine Higher Education.**	Ruben L Tagare Jr	2025	Research in Education & Learning Innovation Archives (REALIA)	Web of Science
18. **The Relationship between Social Appearance Anxiety and Holistic Self-Esteem among University Students in Southern Philippines**	Joanna Caryl P Esponja, Donnie M Tulud, Jomar B Esto, Jo-Ann D Santos, Carmee Lyn B Paylangco, Jemwell B Francisco, Lara Ivanna C Nadela, Marichu A Calixtro, Priscilla P Dagoc, Ruben L Tagare Jr, Michelle	2025	Journal of Public Health	Scopus

	R Dee, Lorralie F Canape, Christian Jude Wariza, Desiree Ann C Tenebroso, Lyn Bicodo-Ortele			
19. **Stepping Towards Growth: Examining the Relationship Between Physical Activity Engagement and Personal Growth Initiative Among Filipino Students**	Jomar B Esto, Vinus P Java, Jerum B Elumaring, Ruben L Tagare Jr, Norge D Martinez, Mark Anthony B Rosario, Mark Dexter L Reyes, Mark Anthony R Dalipe, Mark E San Pedro, Carl Wayn S Villarta, Stephen D Celestial, Jenie Philip S Saniel, Christine May T Mangubat	2025		Scopus
20. **University students' physical activity pattern: Assessing literacy, engagement, and barriers post physical education course completion**	Mark Justin N Riño, Marlene E Orfrecio, Joanna Caryl P Esponja, Bae Kellah Kassandra A Landawe, Ruben L Tagare Jr, Eduard T Sumera, Vinus P Java	2025	International Journal of Physical Education, Sports and Health	Peer-reviewed Journal
21. **Support system on the participation and level of determination among college varsity athletes**	James C Jovita, Vinus P Java, Ruben L Tagare Jr, Marlene E Orfrecio, Helen Grace D Lopez, Moreno B Java Jr, Jomar B Esto	2025	International Journal of Physical Education, Sports and Health	Peer-reviewed Journal
22. **How passion fuels student athletes? A Dualistic model approach to engagement in sports**	Jet C Longakit, Deljun R Rodriguez, Ruben L Tagare, Louie P Gula, Jay Mark D Sinag, Jeric P Quibral, Rhene A Camarador, Teejay D Panganiban, Joseph Lobo	2025	Physical Culture and Sport	Scopus

23. Navigating Excellence in Philippine Tertiary Physical Education: Insights and Suggestions of Grassroots Teachers Towards an Improved PATH-Fit Implementation	Ruben L Tagare Jr	2025	Research in Education and Learning Innovation Archives. REALIA	Web of Science
24. It's hard to quit: the exploration of the reasons for trouble withdrawal with smoking habits among filipino early adult men	Junalyn Suminguit, Ruben Tagare Jr, Cheeze Janito, Marlene Orfrecio	2025	Universidad Miguel Hernández	Scopus
25. Interweaving perceived instructors' emotional support and students' academic resilience in the physical education context through the lens of mindset and attachment theories	Teejay Panganiban, Rhene Camarador, Ruben Tagare Jr, Joseph Lobo, Jay Mark Sinag, Jeric Quibral, Jet Longakit, Louie Gula, Joeven Santos, Michael San Miguel, Davidsol Mendoza, Argel S Payumo	2025	Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity	Scopus
26. Experiences, Motivation, Commitment, and Suggestions of Physical Education Teachers Amidst COVID-19 Crisis	Kathleen Pascua, Ruben Jr. Tagare	2024	EĞİTİM VE BİLİM	Scopus
27. The Experiences of Non-Physical Education Generalist Teachers in Implementing PE in the Primary Grades: Implications for Capability Development Initiatives.	April Joy B Nioda, Ruben L Tagare Jr	2024	International Electronic Journal of Elementary Education	Scopus
28. Investigating the Local Culture and Characteristics of Gen Zs in Rural Communities: Insights in Improving Students' Physical Education Experience	Ruben L Tagare Jr, Daniel B Saroca Jr, Jerrwin C Aguinaldo	2024	Physical Culture and Sport. Studies and Research	Scopus

29. The Role of Social Support in Shaping Students' Goal Achievement	Paul John B Ongcoy, Ruben L Tagare Jr	2024	The International Journal of Learner Diversity and Identities	Scopus
30. Filipino Teachers' Favorable Experiences in Teaching Sports Track during the Transition Years of Philippine K-12	Steffany Anne C Poblador, Ruben L Pagare Jr	2024	Physical Educator	Web of Science
31. Examining the influence of achievement goals in sports on the quality of life among students in Philippine higher education	Ruben Tagare, Marlon Mancera, Eduard Sumera	2024	Revista iberoamericana de psicología del ejercicio y el deporte	Scopus
32. the Early Teaching Experiences of Newly Hired Physical Education Teachers: Implications for Curriculum Enhancement	Danie John C Asio, Ruben L Tagare Jr	2024	The Physical Educator	Web of Science
33. Investigating the effect of a 12-week game skill-based activity in physical education to enhance movement competence of students: a randomized trial	Jet Longakit, Joseph Lobo, Ruben Jr. Tagare, Johnlenon Aliser, Britanny Colobio-Englatiera, Teejay Panganiban, John Michael Aquino, Deljun Rodriguez, Novri Gazali, Mert Kurnaz	2024	Pedagogy of Physical Culture and Sports	Scopus
34. Kako je pandemija bolesti COVID-19 oblikovala filipinske nastavnike tjelesne i zdravstvene kulture u lokalnoj zajednici	Ruben Tagare Jr	2024	Croatian Journal of Education: Hrvatski časopis za odgoj i obrazovanje	Scopus
35. Evaluation of handeye coordination fitness test performance in folk dance.	Sudirman Burhanudin, Andi Rizal, Suriah Hanafi, Swamynathan Sanjaykumar, Ruben Tagare Jr, Joseph Lobo	2024	Fizjoterapia Polska	Scopus
36. A Review on How the COVID-19 Pandemic Shaped Philippine	Ruben Tagare Jr	2024	Croatian Journal of Education	Scopus

Physical Education Teachers in the Grassroots				
37. Back to in-person classes in the Philippine basic education: threading the opportunities and limitations in the teaching of Physical Education	Ruben Tagare Jr	2023	Retos: nuevas tendencias en educación física, deporte y recreación	Scopus
38. Dropped Interest: Generation Z Students' Demotivating Reasons on Gradual Dislike on Sports and Recreation	Ruben Jr Gapa, Izle Jane and Tagare	2023	Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity	Scopus
39. Exploring the Positive Experiences of Senior High School Teachers in Teaching the Sports Track during the K-12 Transition Years in Southern Philippines	Steffany Anne Poblador	2023	Research in Education and Learning Innovation Archives	Web of Science
40. Phenomenological Probe on Senior High School Teachers' Experiences in Teaching Sports Track During the Transition Years of Philippine K To 12	Steffany Anne C Poblador, Ruben L Pagare Jr	2023	Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity	Scopus
41. Dropped Interest: Generation Z Students' Demotivating Reasons on Gradual Dislike on Sports and Recreation	Izle Jane Gapa, Ruben Tagare Jr	2023	Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity	Scopus
42. An ethnographic probe on the cultural values and symbols of generation Z students: implications for course contextualization	Ruben Tagare Jr	2022	European Online Journal of Natural and Social Sciences	Web of Science
43. Gen Z's Fitness Concepts and Ways to be Fit: Insights to Strengthen Students' Learning	Ruben Tagare Jr	2022	Journal for Educators, Teachers and Trainers	Web of Science

Experiences in Tertiary Physical Education				
44. Teaching tertiary physical education in the new normal: Gains, drawbacks, and suggestions	Datu Ibrahim S Angkay, Ruben Jr Lagunero Tagare	2022	European Online Journal of Natural and Social Sciences	Web of Science
45. Private tertiary students' unspoken thoughts in learning physical education amidst COVID-19 pandemic: Implications for Intervention	Rhealen P Camariñas, Ruben Lagunero Tagare	2022	Edu Sportivo: Indonesian Journal of Physical Education	Peer-reviewed Journal
46. K to 12 transition in action: Threading the opportunities and challenges on the implementation of senior high school sports track in Southern Philippines	Steffany Anne C Poblador, Ruben Lagunero Tagare	2022	Edu Sportivo: Indonesian Journal of Physical Education	ASEAN Citation Index
47. Activity Preferences of Generation Z Students for Tertiary Physical Education: Implications for Curriculum Enhancement	Ruben Jr. L Tagare, Geraldine D. Villaluz	2021	Journal Multidisciplinary Journal for Education, Social and Technological Sciences	Web of Science
48. Probing the delivery of tertiary physical education among the generation Z students in the transition years of Philippine K to 12	Ruben Jr. L Tagare, Geraldine D. Villaluz	2021	International Journal of Physical Education, Sports and Health	Peer-reviewed Journal
49. Probing the delivery of tertiary physical education among the generation Z students in the transition years of Philippine K to 12	Jr. Ruben L. Tagare, Geraldine D. Villaluz	2021	International Journal of Physical Education, Sports and Health	Peer-reviewed Journal
50. The Effectiveness of Existing Teaching Styles in The Teaching of	Ruben Lagunero Tagare Jr	2019	European Journal of Physical Education and Sport Science	Peer-reviewed Journal

Tertiary Physical Education to Generation Z Learners				

Prepared by:

RUBEN L. TAGARE, JR., PhD
College Research Coordinator

Universal Journal of Public Health 13(4): 877-886, 2025 http://www.hrpub.org
DOI: 10.13189/ujph.2025.130411

Examining the Efficacy of Pedometer Use in Enhancing Fitness Level: The Case of Tertiary Students in a State University

Ma. Rosita A. Hernani[1], Jorjie U. Nepangue[2], Jovelito A. Canillas[1], Jerum B. Elumbaring[3], Priscilla P. Dagoc[3], Cheeze R. Janito[3], Marichu A. Calixtro[3], Rajesh Kumar[4], Rolito T. Imperial[5], Mark Anthony B. Rosario[6], Mark Dexter L. Reyes[7], Christine May T. Mangubat[8], Jenie Philip S. Saniel[8], Desiree Ann C. Tenebroso[9], Ruben L. Tagare, Jr.[3,*]

[1]Department of Kinesthetics, Cebu Normal University, Philippines
[2]College of Teacher Education, Cebu Normal University, Philippines
[3]Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Philippines
[4]Department of Physical Education, Osmania University, India
[5]Cebu Technological University - Dumanjug Extension Campus, Philippines
[6]Institute of Education, Far Eastern University, Philippines
[7]College of Teacher Education, Laguna Polytechnic State University, Philippines
[8]College of Arts and Sciences, Davao Del Sur State College, Philippines
[9]College of Arts and Sciences, Mindanao State University – Maguindanao Campus, Maguindanao, Philippines

Received April 18, 2025; Revised May 19, 2025; Accepted June 24, 2025

Cite This Paper in the Following Citation Styles

(a): *[1] Ma. Rosita A. Hernani, Jorjie U. Nepangue, Jovelito A. Canillas, Jerum B. Elumbaring, Priscilla P. Dagoc, Cheeze R. Janito, Marichu A. Calixtro, Rajesh Kumar, Rolito T. Imperial, Mark Anthony B. Rosario, Mark Dexter L. Reyes, Christine May T. Mangubat, Jenie Philip S. Saniel, Desiree Ann C. Tenebroso, Ruben L. Tagare, Jr. , "Examining the Efficacy of Pedometer Use in Enhancing Fitness Level: The Case of Tertiary Students in a State University," Universal Journal of Public Health, Vol. 13, No. 4, pp. 877 - 886, 2025. DOI: 10.13189/ujph.2025.130411.*

(b): *Ma. Rosita A. Hernani, Jorjie U. Nepangue, Jovelito A. Canillas, Jerum B. Elumbaring, Priscilla P. Dagoc, Cheeze R. Janito, Marichu A. Calixtro, Rajesh Kumar, Rolito T. Imperial, Mark Anthony B. Rosario, Mark Dexter L. Reyes, Christine May T. Mangubat, Jenie Philip S. Saniel, Desiree Ann C. Tenebroso, Ruben L. Tagare (2025). Examining the Efficacy of Pedometer Use in Enhancing Fitness Level: The Case of Tertiary Students in a State University. Universal Journal of Public Health, 13(4), 877 - 886. DOI: 10.13189/ujph.2025.130411.*

Abstract This study examines the efficacy of pedometer use in enhancing physical fitness among tertiary students, focusing on its capacity to promote more active and health-conscious lifestyles. In recent years, the global rise in noncommunicable diseases (NCDs) such as cardiovascular disease, diabetes, and obesity has highlighted the critical need to address physical inactivity, especially among the youth. Students in higher education institutions are often at risk of adopting sedentary behaviors due to academic demands, technological distractions, and a lack of structured physical activity. As such, interventions that can be seamlessly integrated into daily routines are essential for promoting healthier habits. Wearable technologies, particularly wireless pedometers, have emerged as promising tools in encouraging individuals to move more throughout the day. Pedometers offer real-time feedback by tracking step counts, thus providing immediate insights into one's physical activity levels. This form of self-monitoring has been shown to improve motivation, raise awareness, and foster a sense of accountability, making pedometers a practical and accessible means to support health promotion among students. Users may feel empowered to incorporate more movement into their everyday lives by setting step goals and monitoring their progress. To assess the impact of pedometer use, this research employed a quasi-experimental design at one of the leading state universities in Cebu City, Philippines, focusing on college students with ages 18-25. Respondents were asked to use pedometers over a specific period, and data were gathered

using structured questionnaires to record demographic details and measure physical activity outcomes. Key metrics examined in the study included weekly step counts, body weight, Body Mass Index (BMI), body fat percentage, and Basal Metabolic Rate (BMR). The findings revealed a significant increase in the number of weekly steps the students took, leading to modest yet meaningful improvements in their health metrics. The results support that pedometer-based interventions can positively influence student behavior, not merely for weight management, but more importantly, to encourage consistent physical activity and reduce sedentary lifestyles.

Keywords Pedometer, Physical Fitness, Wearable Technology, Health Promotion

1. Introduction

The increasing prevalence of non-communicable diseases (NCDs) poses a significant global health challenge in the 21st century [1]. Recognizing physical inactivity as a key risk factor for NCDs emphasizes the need to enhance physical activity levels from a public health standpoint [2]. The 21st century has significantly increased sedentary lifestyles due to technological advancements and urbanization. Modern conveniences such as cars, computers, and automated systems have reduced the necessity for physical exertion in daily life [3]. Wearable technologies, such as wireless pedometers, offer a practical approach to promote walking and increase physical activity levels [4]. Regular walking can positively impact various health markers, including Body Mass Index (BMI), Body Fat percentage, Required Calorie Intake, and Basal Metabolic Rate (BMR) [5]. The recommended daily calorie intake for most adults, the average recommended intake is about 2,000 to 2,500 calories per day for men and 1,800 to 2,200 calories per day for women. These recommendations can help maintain and support overall well-being [6].

The COVID-19 pandemic has worsened the issue of sedentary behavior, particularly among students. Lockdown measures and the shift to remote learning have limited access to outdoor activities such as walking, jogging, and sports, leading to a marked decrease in physical activity levels [7]. These devices provide real-time feedback and motivation, encouraging individuals to meet daily step goals and potentially improve their BMI, reduce body fat, and enhance overall metabolic health [8]. By leveraging wearable technologies like wireless pedometers, public health initiatives can effectively promote physical activity and combat the rising burden of NCDs. The World Health Organization (WHO) recommends that individuals take 10,000 steps daily to maintain health and prevent lifestyle-related diseases. This guideline encourages people to incorporate more physical activity into daily routines [9].

A sedentary lifestyle is strongly associated with an increased risk of noncommunicable diseases (NCDs), including cardiovascular diseases, type 2 diabetes, obesity, and certain types of cancer [10]. Prolonged inactivity contributes to poor metabolic health and can lead to complications such as hypertension and high cholesterol [11]. Pedometers, small electronic devices counting steps, focus on encouraging increased physical activity by providing feedback on daily steps [12]. In physical fitness, technology has evolved, offering gamified exercises, real-time feedback, and immersive experiences. Wearable fitness trackers, like those discussed by Freak-Poli et al. [13], not only monitor performance but also offer personalized recommendations. Integrating technology in physical fitness caters to diverse learning styles, addresses resource disparities, and prepares students for a technologically driven world. Additionally, it nurtures essential lifelong skills such as problem-solving and digital literacy [14]. Incorporating pedometers in physical fitness creates engaging, inclusive environments that facilitate students' holistic physical, cognitive, and socio-emotional growth [15].

In the fitness domain, technology has dramatically improved our ability to monitor and enhance physical activity [16]. Affordable wireless pedometers and smartphone apps have made tracking activity more manageable and cost-effective, providing automated feedback [17]. Pedometers, like wearable devices and virtual reality, engage students and personalize instruction, significantly improving learning outcomes [18]. Educators can tailor instruction by analyzing student performance and fitness levels and tracking progress over time [19]. Online platforms and apps offer interactive resources, virtual challenges, and support self-directed learning [20].

Educational literature has concentrated on gamification due to its utilization and application across various settings to achieve aims and objectives in learning. Gamifying fitness through digital platforms boosts student motivation with elements of competition and rewards [21]. Video analysis software and motion-tracking devices provide real-time feedback on movement mechanics, enhancing skill development [22]. Remote learning tools ensure access to materials and virtual workouts, promoting inclusivity in physical fitness [23]. Integrating pedometers can revolutionize teaching and learning, improving student engagement, skill development, and overall well-being [24].

Despite recognizing the positive impact of pedometers on physical fitness, there's a notable gap in our understanding. Existing studies often lack comprehensive insights into the lasting effects of using pedometers in fitness settings. There is a need for more research on how accessible and inclusive these tools are, along with the effectiveness of teacher training in utilizing them. Almusawi et al. [25] discovered that teachers are open to

integrating wearable digital technologies if these tools enhance, not replace, their preferred teaching methods in physical fitness. There is limited understanding regarding wearable digital technologies in physical education. Professionals in the field are often divided on the ethical, pedagogical, and practical consequences of integrating these technologies into practice [26]. This study highlights how teachers' beliefs influence the role of technology in fitness education and how their perspectives on physical fitness shape the implementation of wearable digital technologies.

In contemporary education, network technology has become indispensable, owing to the rapid advancements in information technology since the turn of the 21st century. Education now emphasizes utilizing cutting-edge information network technology to construct comprehensive systems, enhance teaching resources, and expedite the creation and dissemination of high-quality educational materials [27]. Despite the increasing integration of digital technology into educational settings, its influence on teaching and learning, particularly within physical fitness, remains a topic of ongoing deliberation [28]. While recognizing the exciting potential of technology to facilitate active learning, it is acknowledged that many educators encounter challenges in effectively integrating it into their instructional practices. Mobile apps, easily accessible to users, emerge as a viable solution to this issue. Students are encouraged to engage in various physical activities to minimize the impact of a sedentary lifestyle. These include regular walking or jogging, participating in virtual fitness classes, practicing yoga or stretching exercises, and incorporating short, frequent breaks during study sessions to perform light exercises.

Additionally, cycling, dancing, and home-based strength training can effectively maintain physical fitness [29]. This literature review examines technology's role in physical education, focusing on specialized apps designed for instructional purposes and physical activity engagement. Additionally, it presents a practical illustration of integrating such apps within the framework of the sport education model. Concluding insights propose strategies for seamlessly incorporating mobile apps into physical education programs, thereby assisting educators in leveraging technology to enrich their teaching methodologies [30].

The study aims to examine how using pedometers enhances students' fitness levels, specifically among college students aged 18 to 25. Moreover, it assessed whether the use of a pedometer contributed to improvements in students' step counts, Body Mass Index (BMI), Basal Metabolic Rate (BMR), calorie intake, and body fat percentage. The results of this study will serve as a foundation for enhancing the implementation of the tertiary Physical Education curriculum. Additionally, the findings may guide academic leaders and policymakers in making informed decisions, including the potential investment in fitness-tracking equipment like pedometers to support student health and physical well-being.

1.1. Statement of the Problem

This study aims to examine the efficacy of a pedometer in enhancing the fitness level of college students in state universities. Specifically, these answer the following:

1. What is the fitness level of these students before and after using the pedometer in terms of:
   1.1. Body Mass Index
   1.2. Recommended Calories Intake
   1.3. Total Body Fat
   1.4. Basal Metabolic Rate
   1.5. Total Step Counts
2. Is there a significant difference between the students' BMI before and after using a pedometer?
3. Is there a significant difference between the students' recommended calorie intake before and after using the pedometer?
4. Is there a significant difference between the students' body fat before and after using a pedometer?
5. Is there a significant difference between the Basal Metabolic Rate of the students before and after using the pedometer?
6. Is there a significant difference between the student's total step counts before and after using the pedometer?

2. Materials and Methods

2.1. Research Design and Procedures

The study utilized a correlational-quantitative research design to examine the efficacy of pedometer use in enhancing students' fitness levels. A Correlational-quantitative research design is a well-established methodological approach that enables researchers to analyze data using quantitative methods and to provide a detailed description of the relationships between variables [31]. The capacity of this design to offer comprehensive and statistically sound insights into intricate relationships renders it invaluable in numerous research disciplines. In this case, the data will be correlated before and after using the pedometer.

The study employed a combination of basic step-counting pedometer mobile applications and wearable fitness trackers or smartwatches, such as the Fitbit Inspire, Apple Watch, and Xiaomi Mi Band. Participants, who were college students aged 18 to 25 from various degree programs, were instructed to either download step counter applications on their mobile phones or use their personal smartwatches to monitor their daily physical activity. Each student was required to aim for a minimum of 10,000 steps per day, wearing or carrying their tracking device throughout the day to ensure accurate data recording. For those using mobile applications, the phone had to be carried

or intentionally used during walking or exercise routines. The pedometers were used consistently over a 12-day intervention period, spread across approximately two weeks. While the study did not provide pedometers or smartwatches, it ensured that all participants used either step-counting mobile apps or wearable trackers for uniform data collection.

2.2. Respondents and Sampling

The respondents of this study are college students aged 18 to 25 who are enrolled in various degree programs at the university, including those taking Physical Education courses. This diverse group provides a representative sample of the tertiary student population, allowing the study to assess the impact of pedometer use on students from different academic backgrounds.

The respondents were selected through simple random sampling from a list of officially enrolled college students at the University. Specifically, the sampling frame included students who were taking Physical Education courses and enrolled in various academic degree programs such as education, sciences, and liberal arts. Using a random number generator, participants were selected to ensure that each student in the target population had an equal chance of inclusion. This method minimized selection bias and ensured a representative sample of tertiary-level students, defined as individuals enrolled in post-secondary or higher education institutions.

2.3. Locale

The study was conducted in a prominent state university located in Cebu, Philippines, which caters to a diverse student population across various undergraduate and graduate programs. As a public higher education institution, it offers academic disciplines such as education, nursing, arts and sciences, and public administration, among others. The university serves thousands of students annually, many of whom come from different parts of the Visayas and Mindanao regions. The institution is known for its commitment to academic excellence, research advancement, and community involvement. The student population is primarily composed of young adults aged 18 to 25, aligning with the typical demographic of tertiary-level students in the Philippines. The university maintains a dynamic academic environment that supports holistic student development and prepares graduates for professional and civic engagement.

2.4. Instrumentation

The study utilized a standardized and structured questionnaire developed by Jackson and Howton [32], which was designed to collect both demographic information and physical fitness-related data. This self-reported tool required participants to provide their measurements before and after the pedometer intervention, including Body Mass Index (BMI), recommended calorie intake, body fat percentage, Basal Metabolic Rate (BMR), and total weekly step counts. While the total steps were directly recorded from the pedometer devices, participants were guided in calculating their BMI, BMR, and body fat percentage using provided formulas and reference charts included in the questionnaire. The data collection process was supervised by the researchers to ensure accuracy and consistency in responses. The questionnaire was adapted from previous studies and refined to enhance its relevance to physical fitness education and the use of pedometers as instructional tools in tertiary-level physical education settings.

2.5. Data Analysis

The data were analyzed using the Jamovi online software. Descriptive statistics—including mean, standard deviation, frequency, and percentage—were used to summarize and compare students' Body Mass Index (BMI), body fat percentage, Basal Metabolic Rate (BMR), recommended calorie intake, and total step counts before and after the pedometer intervention. Additionally, inferential statistics were applied to determine whether there were significant differences in these variables between the pre- and post-intervention periods.

3. Results

This presented the BMI, Recommended Calorie Intake, BMR, Body Fat, and total step counts of students of students before and after the use of the pedometer. A pedometer intervention refers to the structured use of a pedometer—a wearable device that counts steps—to encourage individuals to increase their physical activity levels. In educational or health settings, this intervention typically involves setting daily or weekly step goals, monitoring progress, and using the feedback provided by the pedometer to motivate consistent movement. The goal is to promote an active lifestyle, reduce sedentary behavior, and improve overall fitness by making individuals more aware of their daily physical activity.

Table 1 presents students' mean Body Mass Index (BMI) before and after the pedometer intervention. The findings indicate a slight increase in BMI, with a pre-intervention mean of 1.962 and a post-intervention mean of 1.972. While this change is minimal, it suggests that simply increasing step counts alone may not be sufficient to produce significant alterations in BMI. Given that BMI is influenced by various factors such as diet, muscle mass, and overall energy expenditure, future interventions may need to incorporate additional lifestyle modifications, such as nutritional guidance and resistance training, to yield more substantial changes in body composition.

Table 1. BMI before and after Intervention

	Mean	*SD*	*Confidence Interval*
BMI Before	1.962	0.0616	[1.845, 2.080]
BMI After	1.972	0.6088	[1.856, 2.088]

Moreover, the reduction in standard deviation from 0.616 to 0.6088 indicates that post-intervention BMI values were more consistently distributed around the mean. This suggests that the intervention may have contributed to stabilizing weight fluctuations among the respondents. While the slight increase in BMI may raise concerns about weight gain, it is essential to consider that BMI does not differentiate between muscle and fat mass. Thus, future studies should explore complementary health metrics, such as body fat percentage and lean muscle mass, to better understand the intervention's impact on students' overall health and fitness.

Table 2 presents the suggested calorie consumption for students before and after the pedometer intervention. The findings reveal a slight decrease in the mean calorie consumption, from 1804.419 kcal pre-intervention to 1773.494 kcal post-intervention, reflecting a 30.925 kcal reduction. Although this change is minor, it suggests a potential behavioral shift in energy balance, possibly influenced by increased physical activity awareness. However, this decrease alone may not be substantial enough to produce significant changes in overall health, emphasizing the need for a more comprehensive approach that includes dietary modifications alongside increased physical activity.

Table 2. Recommended Calorie Intake before and after Intervention

	Mean	*SD*	*Confidence Interval*
Recommended Calorie Intake before	1804.419	564.471	[1696.961, 1911.876]
Recommended Calorie Intake after	1773.494	394.7779	[1698.341, 1848.648]

The standard deviation decreased from 564.471 to 394.7779, indicating that students' calorie consumption values became more tightly clustered around the mean post-intervention. This suggests that the pedometer intervention may have contributed to a more consistent pattern of energy intake among the respondents. While tracking steps can encourage movement, future interventions could integrate nutritional education and meal planning strategies to enhance the effectiveness of pedometer use in improving students' overall health and fitness outcomes.

Table 3 presents the students' average body fat percentage before and after the pedometer intervention. The findings indicate a slight decrease, with the mean body fat percentage dropping from 0.214 pre-intervention to 0.203 post-intervention. While this reduction may appear minor, it suggests a potential positive impact of increased physical activity on body composition. However, given that body fat percentage is influenced by multiple factors—including diet, metabolism, and exercise intensity—future interventions may need to incorporate additional strategies, such as resistance training and nutritional guidance, to achieve more pronounced and sustainable fat loss.

Table 3. Body Fat before and after Intervention

	Mean	*SD*	*Confidence Interval*
Body Fat before	0.214	0.108	[0.193. 0.234]
Body Fat after	0.203	0.0810	[0.188, 0.219]

Moreover, the standard deviation values decreased from 0.108 to 0.0810, indicating that post-intervention body fat percentage values were more closely clustered around the mean. This reduction in variability suggests a more uniform response among the respondents, potentially reflecting a more consistent engagement with physical activity. While the pedometer intervention demonstrates promise in promoting movement, its effectiveness in significantly altering body fat composition may require a more holistic approach that integrates both aerobic and strength-based activities. Future research should explore long-term effects and the role of individualized activity programs in optimizing fat reduction among students.

The results in Table 4 indicate a slight increase in the mean Basal Metabolic Rate (BMR) following the pedometer intervention. Before the intervention, the mean BMR was 1354.79 kcal/day with a standard deviation of 343.457, whereas post-intervention, the mean BMR increased to 1380 kcal/day with a higher standard deviation of 448.0145. This suggests a modest improvement in metabolic rate, potentially linked to the increased physical activity facilitated by pedometer use.

Table 4. BMR Interval

	Mean	*SD*	*Confidence Interval*
BMR before	1354.790	343.457	[1289.406, 1420.173]
BMR after	1380.198	448.0145	[1294.910, 1645.486]

However, the increased standard deviation post-intervention reflects more significant variability in BMR responses among the respondents. This variability may be attributed to individual differences in metabolism, body composition, and lifestyle factors such as diet and physical activity levels beyond step count increases. While the findings suggest a potential metabolic benefit of pedometer use, further research is needed to explore long-term effects and contributing factors that influence BMR changes in students.

Table 5 illustrates the weekly steps taken before and after the pedometer intervention. The results show a notable increase in the mean weekly step count, rising from 45,656.896 steps pre-intervention to 58,820.292 steps post-intervention. This increase of approximately 13,163 steps per week suggests that pedometer use effectively

encouraged students to be more physically active. The real-time feedback and goal-setting capabilities of pedometers likely played a crucial role in motivating students to increase their step count, aligning with previous research highlighting the efficacy of wearable technology in promoting physical activity.

Table 5. Total Number of Steps in a Week before and after Intervention

	Mean	*SD*	*Confidence Interval*
Total Number of Steps in a Week before	45656.896	11854.961	[43400.085, 47913.708]
Total Number of Steps in a Week after	58820.29	17606.3005	[55468.607, 62171.978

However, the standard deviation also increased from 11,854.961 to 17,606.3005, indicating more significant variability in the number of post-intervention steps. This suggests that while some students significantly increased their physical activity levels, others may have demonstrated more modest changes. Factors such as individual motivation, lifestyle constraints, and environmental conditions could have contributed to these variations. Future interventions could explore personalized goal-setting strategies or incorporate additional behavioral support mechanisms to ensure more consistent engagement and maximize the long-term impact of pedometer use on physical activity levels.

Table 6 presents the correlations between key health variables before and after the pedometer intervention. The findings indicate that only the total step count showed a statistically significant change, with a t-value of -6.944 and a p-value of <0.001, confirming that pedometer use effectively increased students' physical activity levels. This aligns with previous studies suggesting that self-monitoring tools like pedometers can serve as effective motivators for increasing movement and reducing sedentary behavior.

Table 6. Significant Difference in the Variables in the Use of Pedometer

Variables	*T-value*	*P-value*	*Decision Rule*
Recommended Calorie Intake	0.753	0.453	Not Significant
Body Fat	0.984	0.328	Not Significant
BMR	-0.574	0.567	Not Significant
Total Number of Steps	-6.944	<0.001	Significant
BMI	-0.446	0.657	Not Significant

Conversely, the other variables—recommended calorie intake ($t = 0.753$, $p = 0.453$), body fat percentage ($t = 0.984$, $p = 0.328$), basal metabolic rate ($t = -0.574$, $p = 0.567$), and BMI ($t = -0.446$, $p = 0.657$)—did not show statistically significant changes. These results suggest that while pedometer use enhances physical activity, it does not directly influence body composition, metabolism, or dietary habits. This may be due to the multifaceted nature of these health indicators, which are influenced by factors beyond physical activity, such as nutrition, genetics, and overall lifestyle choices. Future interventions could incorporate complementary strategies, such as nutritional guidance and behavioral coaching, to achieve more comprehensive student health improvements.

4. Discussion

Pedometers have been widely recognized as practical tools for increasing physical activity levels, particularly among students who may otherwise lead sedentary lifestyles [33]. The results of this study reinforce previous findings, as the significant increase in mean step count post-intervention suggests that pedometer use serves as an effective behavioral cue for promoting movement. The immediate feedback provided by pedometers encourages students to become more conscious of their activity levels, which can lead to sustained engagement in physical exercise [34]. However, while the increase in step count is promising, individual differences in motivation, environmental factors, and lifestyle habits may explain the variations observed in step count consistency [35].

The study further reveals that while step count significantly increased, other health indicators such as Body Mass Index (BMI), calorie consumption, Basal Metabolic Rate (BMR), and body fat percentage did not show substantial changes [36]. This aligns with prior research suggesting that physical activity alone is often insufficient to produce significant body composition changes without corresponding dietary modifications [37]. Although increased step count may contribute to better cardiovascular and metabolic health, genetic predisposition, nutritional intake, and overall lifestyle behaviors are crucial in shaping long-term health outcomes [38]. Consequently, future interventions should consider integrating dietary education and behavioral counseling to enhance the effectiveness of pedometer-based activity programs [39].

Interestingly, the increase in mean BMR following the intervention suggests a potential shift in metabolic activity, though this effect was not statistically significant [40]. Previous studies have shown that regular physical activity can lead to slight elevations in BMR due to increased muscle engagement and energy expenditure [41]. However, given the relatively short duration of the intervention, more prolonged and intensive physical activity regimens may be required to observe substantial metabolic changes [42]. Additionally, individual metabolic responses vary widely, which may explain the broad confidence intervals in BMR data post-intervention [43].

These findings reinforce the notion that pedometer-based interventions can serve as an effective means of increasing daily physical activity. Still, their impact on other health parameters remains limited without additional lifestyle modifications [44]. While step count is a key metric for assessing activity levels, future research should

incorporate a more holistic approach by evaluating changes in cardiovascular health, muscular endurance, and mental well-being [45]. Moreover, incorporating wearable technology with mobile applications that provide personalized feedback and goal-setting mechanisms could enhance student motivation and adherence [46]. Future studies should explore long-term interventions and integrate multidimensional health strategies to maximize the benefits of pedometer use in academic settings [47].

Beyond increasing physical activity levels, pedometers may also foster behavioral changes by enhancing self-awareness and accountability [48]. The ability to track and visualize step counts in real-time may encourage students to make more conscious decisions about their daily movement, such as opting for stairs instead of elevators or incorporating short walks into their routines [49]. Previous studies have demonstrated that self-monitoring through wearable devices fosters intrinsic motivation, which is critical for sustaining long-term engagement in physical activity [50]. Future research should investigate how additional behavioral reinforcement strategies, such as goal-setting and social incentives, could complement pedometer-based interventions to yield more consistent outcomes [51].

Additionally, while the study found no significant differences in calorie intake, BMR, and BMI, it is essential to recognize the complex interplay of multiple factors that influence these metrics [52]. The lack of significant changes may be attributed to variations in dietary habits, genetics, and metabolic adaptations, which may require more extended intervention periods to observe measurable effects [53]. Furthermore, while step count is an essential indicator of movement, the intensity and duration of activity also influence overall health outcomes [54]. Future studies should incorporate additional measures such as heart rate monitoring, activity intensity tracking, and dietary assessments to provide a more comprehensive evaluation of pedometer-based interventions [55].

Finally, the findings emphasize the importance of designing physical activity interventions adaptable to different individual needs and environments [56]. While pedometers are effective for increasing awareness and encouraging movement, their effectiveness may vary depending on external factors such as accessibility to safe walking spaces, weather conditions, and students' daily schedules [57]. Universities and policymakers should consider implementing structured programs integrating wearable technology with supportive environments and behavioral coaching to maximize engagement and adherence [58]. Future research should explore the long-term effects of pedometer-based interventions and how they can be optimized to support sustainable, lifelong physical activity habits [59].

5. Conclusions

This study demonstrates that pedometer use effectively enhances students' fitness levels by increasing their overall step counts, encouraging more significant physical activity, and fostering a more active lifestyle. The considerable rise in weekly step counts post-intervention highlights the potential of pedometers in promoting movement and reducing sedentary behavior. However, while the intervention successfully influenced mobility and exercise habits, variability in step counts suggests that future strategies should ensure consistent engagement. The findings align with previous research emphasizing pedometers' role in motivating individuals through real-time feedback and goal setting, reinforcing their value in physical activity promotion.

Despite the observed improvements in physical activity, the pedometer intervention did not significantly affect other health indicators such as Body Mass Index (BMI), calorie consumption, Basal Metabolic Rate (BMR), or body fat percentage. Factors beyond physical activity, including nutrition, genetics, and lifestyle habits, influence these health metrics. The lack of significant changes in these parameters underscores the need for a more holistic approach to health and fitness interventions that integrates dietary modifications, strength training, behavioral strategies, and step-tracking initiatives. Future research should explore comprehensive strategies combining pedometer use with other wellness interventions to optimize student health outcomes.

REFERENCES

[1] N. Goswami, "A Dual Burden Dilemma: Navigating the Global Impact of Communicable and Non-Communicable Diseases and the Way Forward," *International Journal of Medical Research*, vol. 1, no. 1, pp. 29–41, Dec. 2024, doi: 10.55489/ijmr.11202412.

[2] F. Luna and V. A. Luyckx, "Why have Non-communicable Diseases been Left Behind?," *Asian Bioeth Rev*, vol. 12, no. 1, pp. 5–25, Mar. 2020, doi: 10.1007/s41649-020-00112-8.

[3] M. Asadi-Lari, A. Ahmadi Teymourlouy, M. Maleki, and M. Afshari, "Opportunities and challenges of global health diplomacy for prevention and control of noncommunicable diseases: a systematic review," *BMC Health Serv Res*, vol. 21, no. 1, p. 1193, Dec. 2021, doi: 10.1186/s12913-021-07240-3.

[4] A. Mokdad, "Global non-communicable disease prevention: Building on success by addressing an emerging health need in developing countries," *Journal of Health Specialties*, vol. 4, no. 2, p. 92, 2016, doi: 10.4103/1658-600X.179820.

[5] D. Iqbal, "Epidemiological Trends and Risk Factors of Non-Communicable Diseases: A Global Perspective," *Journal of Diseases& control*, vol. 1, no. 4, pp. 1–11, 2024.

[6] I. J. Gapa and R. Tagare Jr, "Dropped Interest: Generation Z Students' Demotivating Reasons on Gradual Dislike on Sports and Recreation," *Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity*, vol. 9, no. 1, pp. 98–124, 2023, doi: https://doi.org/10.17979/sportis.2023.9.1.9076.

[7] C. Romero-Blanco, J. Rodríguez-Almagro, M. D. Onieva-Zafra, M. L. Parra-Fernández, M. del C. Prado-Laguna, and A. Hernández-Martínez, "Physical activity and sedentary lifestyle in university students: changes during confinement due to the COVID-19 pandemic," *Int J Environ Res Public Health*, vol. 17, no. 18, p. 6567, 2020.

[8] F. Roggio *et al.*, "One Year of COVID-19 Pandemic in Italy: Effect of Sedentary Behavior on Physical Activity Levels and Musculoskeletal Pain among University Students," *Int J Environ Res Public Health*, vol. 18, no. 16, p. 8680, Aug. 2021, doi: 10.3390/ijerph18168680.

[9] Y. Zheng and A. Xiao, "A structural equation model of online learning: investigating self-efficacy, informal digital learning, self-regulated learning, and course satisfaction," *Front Psychol*, vol. 14, p. 1276266, 2024.

[10] A. Daniele, S. J. E. Lucas, and C. Rendeiro, "Detrimental effects of physical inactivity on peripheral and brain vasculature in humans: Insights into mechanisms, long-term health consequences and protective strategies," *Front Physiol*, vol. 13, Sep. 2022, doi: 10.3389/fphys.2022.998380.

[11] J. H. Park, J. H. Moon, H. J. Kim, M. H. Kong, and Y. H. Oh, "Sedentary Lifestyle: Overview of Updated Evidence of Potential Health Risks," *Korean J Fam Med*, vol. 41, no. 6, pp. 365–373, Nov. 2020, doi: 10.4082/kjfm.20.0165.

[12] M. Armstrong, A. Winnard, N. Chynkiamis, S. Boyle, C. Burtin, and I. Vogiatzis, "Use of pedometers as a tool to promote daily physical activity levels in patients with COPD: a systematic review and meta-analysis," *European Respiratory Review*, vol. 28, no. 154, p. 190039, Dec. 2019, doi: 10.1183/16000617.0039-2019.

[13] R. LA Freak-Poli, M. Cumpston, L. Albarqouni, S. A. Clemes, and A. Peeters, "Workplace pedometer interventions for increasing physical activity," *Cochrane Database of Systematic Reviews*, vol. 2020, no. 7, Jul. 2020, doi: 10.1002/14651858.CD009209.pub3.

[14] R. T. Larsen *et al.*, "Effectiveness of physical activity monitors in adults: systematic review and meta-analysis," BMJ, p. e068047, Jan. 2022, doi:10.1136/bmj-2021-068047.

[15] A. Hodkinson *et al.*, "Accelerometer- and Pedometer-Based Physical Activity Interventions Among Adults With Cardiometabolic Conditions," *JAMA Netw Open*, vol. 2, no. 10, p. e1912895, Oct. 2019, doi: 10.1001/jamanetworkopen.2019.12895.

[16] K. Pascua and R. L. Tagare Jr, "Experiences, Motivation, Commitment, and Suggestions of Physical Education Teachers Amidst COVID-19 Crisis," *Egitim ve Bilim*, vol. 49, no. 219, pp. 187–200, 2024, doi: https://doi.org/10.15390/EB.2024.12095.

[17] M. Milne-Ives, C. Lam, C. De Cock, M. H. Van Velthoven, and E. Meinert, "Mobile Apps for Health Behavior Change in Physical Activity, Diet, Drug and Alcohol Use, and Mental Health: Systematic Review," *JMIR Mhealth Uhealth*, vol. 8, no. 3, p. e17046, Mar. 2020, doi: 10.2196/17046.

[18] K.-J. Brickwood, G. Watson, J. O'Brien, and A. D. Williams, "Consumer-Based Wearable Activity Trackers Increase Physical Activity Participation: Systematic Review and Meta-Analysis," *JMIR Mhealth Uhealth*, vol. 7, no. 4, p. e11819, Apr. 2019, doi: 10.2196/11819.

[19] A. Alam, "Employing Adaptive Learning and Intelligent Tutoring Robots for Virtual Classrooms and Smart Campuses: Reforming Education in the Age of Artificial Intelligence," Advanced Computing and Intelligent Technologies, pp. 395–406, 2022. doi:10.1007/978-981-19-2980-9_32.

[20] R. P. Pangrazi and A. Beighle, *Dynamic physical education for elementary school children*. Human Kinetics Publishers, 2019.

[21] Z. Luo, "Gamification for educational purposes: What are the factors contributing to varied effectiveness?," *Educ Inf Technol (Dordr)*, vol. 27, no. 1, pp. 891–915, Jan. 2022, doi: 10.1007/s10639-021-10642-9.

[22] I. Alomari, H. Al-Samarraie, and R. Yousef, "The Role of Gamification Techniques in Promoting Student Learning: A Review and Synthesis," *Journal of Information Technology Education: Research*, vol. 18, pp. 395–417, 2019, doi: 10.28945/4417.

[23] G. Lampropoulos, E. Keramopoulos, K. Diamantaras, and G. Evangelidis, "Augmented Reality and Gamification in Education: A Systematic Literature Review of Research, Applications, and Empirical Studies," *Applied Sciences*, vol. 12, no. 13, p. 6809, Jul. 2022, doi: 10.3390/app12136809.

[24] A. M. Toda, R. M. C. do Carmo, A. P. da Silva, I. I. Bittencourt, and S. Isotani, "An approach for planning and deploying gamification concepts with social networks within educational contexts," *Int J Inf Manage*, vol. 46, pp. 294–303, Jun. 2019, doi: 10.1016/j.ijinfomgt.2018.10.001.

[25] H. A. Almusawi, C. M. Durugbo, and A. M. Bugawa, "Innovation in physical education: Teachers' perspectives on readiness for wearable technology integration," *Comput Educ*, vol. 167, p. 104185, Jul. 2021, doi: 10.1016/j.compedu.2021.104185.

[26] R. Marttinen, D. Landi, R. N. Fredrick, and S. Silverman, "Wearable Digital Technology in PE: Advantages, Barriers, and Teachers' Ideologies," *Journal of Teaching in Physical Education*, vol. 39, no. 2, pp. 227–235, Apr. 2020, doi: 10.1123/jtpe.2018-0240.

[27] P. S. Aithal and S. Aithal, "How to increase emotional infrastructure of higher education institutions," *International Journal of Management, Technology, and Social Sciences (IJMTS)*, vol. 8, no. 3, pp. 356–394, 2023.

[28] S. Ma, "Research on the Optimization Configuration and Sharing Mechanism of Educational Resources in the Information Age," 2024.

[29] A. Hammami, B. Harrabi, M. Mohr, and P. Krustrup, "Physical activity and coronavirus disease 2019 (COVID-19): specific recommendations for home-based physical training," *Managing Sport and Leisure*, vol. 27, no.

1–2, pp. 26–31, Mar. 2022, doi: 10.1080/23750472.2020.1757494.

[30] Y. Zheng, H. Li, K. Gao, and P. M. Gallo, "Developing a Home-Based Body Weight Physical Activity/Exercise Program," *ACSMs Health Fit J*, vol. 26, no. 2, pp. 20–28, Mar. 2022, doi: 10.1249/FIT.0000000000000746.

[31] M. Hirose and J. W. Creswell, "Applying core quality criteria of mixed methods research to an empirical study," *J Mix Methods Res*, vol. 17, no. 1, pp. 12–28, 2023.

[32] E. M. Jackson and A. Howton, "Increasing Walking in College Students Using a Pedometer Intervention: Differences According to Body Mass Index," *Journal of American College Health*, vol. 57, no. 2, pp. 159–164, Sep. 2008, doi: 10.3200/JACH.57.2.159-164.

[33] M. J. Western, M. Standage, O. J. Peacock, T. Nightingale, and D. Thompson, "Supporting Behavior Change in Sedentary Adults via Real-time Multidimensional Physical Activity Feedback: Mixed Methods Randomized Controlled Trial," *JMIR Form Res*, vol. 6, no. 3, p. e26525, Mar. 2022, doi: 10.2196/26525.

[34] R. L. Tagare, "Back to in-person classes in the Philippine basic education: threading the opportunities and limitations in the teaching of Physical Education," *Retos*, vol. 47, pp. 986–993, 2023, doi: 10.47197/RETOS.V47.95921.

[35] K. Ramar *et al.*, "Sleep is essential to health: an American Academy of Sleep Medicine position statement," *Journal of Clinical Sleep Medicine*, vol. 17, no. 10, pp. 2115–2119, 2021.

[36] S. A. Buckingham, A. J. Williams, K. Morrissey, L. Price, and J. Harrison, "Mobile health interventions to promote physical activity and reduce sedentary behaviour in the workplace: A systematic review," *Digit Health*, vol. 5, Jan. 2019, doi: 10.1177/2055207619839883.

[37] K. A. Varady, S. Cienfuegos, M. Ezpeleta, and K. Gabel, "Clinical application of intermittent fasting for weight loss: progress and future directions," *Nat Rev Endocrinol*, vol. 18, no. 5, pp. 309–321, May 2022, doi: 10.1038/s41574-022-00638-x.

[38] R. Storr, L. Nicholas, K. Robinson, and C. Davies, "'Game to play?': Barriers and facilitators to sexuality and gender diverse young people's participation in sport and physical activity," *Sport Educ Soc*, vol. 27, no. 5, pp. 604–617, 2022, doi: https://doi.org/10.1080/13573322.2021.1897561.

[39] T. M. Barber, S. Kabisch, A. F. H. Pfeiffer, and M. O. Weickert, "The Health Benefits of Dietary Fibre," *Nutrients*, vol. 12, no. 10, p. 3209, Oct. 2020, doi: 10.3390/nu12103209.

[40] F. J. Amaro-Gahete, A. De-la-O, L. Jurado-Fasoli, G. Sanchez-Delgado, J. R. Ruiz, and M. J. Castillo, "Metabolic rate in sedentary adults, following different exercise training interventions: The FIT-AGEING randomized controlled trial," *Clinical Nutrition*, vol. 39, no. 11, pp. 3230–3240, Nov. 2020, doi: 10.1016/j.clnu.2020.02.001.

[41] K. MacKenzie-Shalders, J. T. Kelly, D. So, V. G. Coffey, and N. M. Byrne, "The effect of exercise interventions on resting metabolic rate: A systematic review and meta-analysis," *J Sports Sci*, vol. 38, no. 14, pp. 1635–1649, Jul. 2020, doi: 10.1080/02640414.2020.1754716.

[42] M. Arcon, J. Malone, K. L. Barton, and J. Rocha, "The acute effects of diet-induced energy restriction on physical activity energy expenditure and basal metabolic rate in men and women with overweight and obesity," *Human Nutrition & Metabolism*, vol. 32, p. 200185, Jun. 2023, doi: 10.1016/j.hnm.2023.200185.

[43] F. Naseer *et al.*, "Metabolic adaptation following gastric bypass surgery: results from a 2-year observational study," *Int J Obes*, vol. 48, no. 11, pp. 1577–1586, Nov. 2024, doi: 10.1038/s41366-024-01585-5.

[44] M. Martinez-Ferran, F. de la Guía-Galipienso, F. Sanchis-Gomar, and H. Pareja-Galeano, "Metabolic Impacts of Confinement during the COVID-19 Pandemic Due to Modified Diet and Physical Activity Habits," *Nutrients*, vol. 12, no. 6, p. 1549, May 2020, doi: 10.3390/nu12061549.

[45] E. Caroppo *et al.*, "Will Nothing Be the Same Again?: Changes in Lifestyle during COVID-19 Pandemic and Consequences on Mental Health," *Int J Environ Res Public Health*, vol. 18, no. 16, p. 8433, Aug. 2021, doi: 10.3390/ijerph18168433.

[46] H. W. Kohl III, T. D. Murray, and D. Salvo, *Foundations of physical activity and public health*. Human Kinetics, 2025.

[47] P. L. Valenzuela *et al.*, "Lifestyle interventions for the prevention and treatment of hypertension," *Nat Rev Cardiol*, vol. 18, no. 4, pp. 251–275, Apr. 2021, doi: 10.1038/s41569-020-00437-9.

[48] T. Lindgren, J. Hooper, and Y. Fukuoka, "Perceptions and Experiences of Women Participating in a Digital Technology–Based Physical Activity Intervention (the mPED Trial): Qualitative Study," *JMIR Public Health Surveill*, vol. 5, no. 4, p. e13570, Dec. 2019, doi: 10.2196/13570.

[49] E. E. Bernstein, E. C. Wolfe, B. M. Huguenel, and S. Wilhelm, "Lessons and Untapped Potential of Smartphone-Based Physical Activity Interventions for Mental Health: Narrative Review," *JMIR Mhealth Uhealth*, vol. 12, p. e45860, Mar. 2024, doi: 10.2196/45860.

[50] M. Abdoli *et al.*, "Determinants of physical activity among female students based on the transtheoretical model," *Sci Rep*, vol. 15, no. 1, p. 1496, Jan. 2025, doi: 10.1038/s41598-024-83055-6.

[51] A. Kononova *et al.*, "The Use of Wearable Activity Trackers Among Older Adults: Focus Group Study of Tracker Perceptions, Motivators, and Barriers in the Maintenance Stage of Behavior Change," *JMIR Mhealth Uhealth*, vol. 7, no. 4, p. e9832, Apr. 2019, doi: 10.2196/mhealth.9832.

[52] N. Theodorakis, M. Kreouzi, A. Pappas, and M. Nikolaou, "Beyond Calories: Individual Metabolic and Hormonal Adaptations Driving Variability in Weight Management—A State-of-the-Art Narrative Review," *Int J Mol Sci*, vol. 25, no. 24, p. 13438, Dec. 2024, doi: 10.3390/ijms252413438.

[53] C. Cooney, E. Daly, M. McDonagh, and L. Ryan, "Evaluation of Measured Resting Metabolic Rate for Dietary Prescription in Ageing Adults with Overweight and Adiposity-Based Chronic Disease," *Nutrients*, vol. 13, no. 4, p. 1229, Apr. 2021, doi: 10.3390/nu13041229.

[54] D. Pescari, M. S. Mihuta, A. Bena, and D. Stoian, "Comparative Analysis of Dietary Habits and Obesity Prediction: Body Mass Index versus Body Fat Percentage

Classification Using Bioelectrical Impedance Analysis," *Nutrients*, vol. 16, no. 19, p. 3291, Sep. 2024, doi: 10.3390/nu16193291.

[55] C. M. Prado, J. A. Batsis, L. M. Donini, M. C. Gonzalez, and M. Siervo, "Sarcopenic obesity in older adults: a clinical overview," *Nat Rev Endocrinol*, vol. 20, no. 5, pp. 261–277, May 2024, doi: 10.1038/s41574-023-00943-z.

[56] W. Hardeman, J. Houghton, K. Lane, A. Jones, and F. Naughton, "A systematic review of just-in-time adaptive interventions (JITAIs) to promote physical activity," *International Journal of Behavioral Nutrition and Physical Activity*, vol. 16, no. 1, p. 31, Dec. 2019, doi: 10.1186/s12966-019-0792-7.

[57] I. Renshaw and J.-Y. Chow, "A constraint-led approach to sport and physical education pedagogy," *Phys Educ Sport Pedagogy*, vol. 24, no. 2, pp. 103–116, Mar. 2019, doi: 10.1080/17408989.2018.1552676.

[58] V. Correia, J. Carvalho, D. Araújo, E. Pereira, and K. Davids, "Principles of nonlinear pedagogy in sport practice," *Phys Educ Sport Pedagogy*, vol. 24, no. 2, pp. 117–132, Mar. 2019, doi: 10.1080/17408989.2018.1552673.

[59] R. E. Rhodes, D. McEwan, and A. L. Rebar, "Theories of physical activity behaviour change: A history and synthesis of approaches," *Psychol Sport Exerc*, vol. 42, pp. 100–109, May 2019, doi: 10.1016/j.psychsport.2018.11.010.

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity

Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

Original article. Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among filipino university students. Vol. 11, n. º 3; p. 1-22, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11655

Active lives, fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among Filipino university students

Vidas activas, necesidades satisfechas: actividad física y la tríada de autonomía, competencia y relación entre estudiantes universitarios filipinos

Mark Anthony R. Dalipe[1]., Mark Anthony B. Rosario[2]., Mark Dexter L. Reyes[3]., Steffany Anne C. Poblador[4]., Jinny Chee Kee[4]., Nikki Lou Dumagalagan[4]., Rowel A. Dacanay[5]., Mark E. San Pedro[6]., Carl Wayne S. Villarta[6]., Christine May T. Mangubat[6]., Vinus P. Java[7]., Jerum B. Elumaring[7]., Ruben L. Tagare, Jr[7]

[1]Catanduanes State University, Virac, Catanduanes, Philippines
[2]Institute of Education, Far Eastern University, Philippines
[3]Laguna Polytechnic State University, Laguna, Philippines
[4]Mindanao State University, General Santos City, Philippines
[5]Samar State University, Samar, Philippines
[6]Davao Del Sur State College, Digos City, Philippines
[7]University of Southern Mindanao, Kabacan, Cotabato, Philippines

*Correspondence Author: ., Ruben L. Tagare, Jr. tagareruben@usm.edu.ph

Editorial schedule: *Article received 22/01/2025 Accepted: 10/05/2025 Published: 01/07/2025*
https://doi.org/10.17979/sportis.2025.11.3.11655

To cite this article, use the following reference:
Dalipe, M.A.R.; Rosario, M.A.B.; Reyes, M.D.L.; Poblador, S.A.C.; Chee Kee, J.; Dumagalagan, N.L.; Dacanay, R.A.; San Pedro, M.E.; Villarta, C.W.S.; Mangubat, C.M.T.; Java, V.P.; Elumaring, J.B.; Tagare, R.L. Jr. (2025). Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among Filipino university students. Sportis Sci J, 11 (3), 1-22 https://doi.org/10.17979/sportis.2025.11.3.11655

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

Original article. Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among filipino university students. Vol. 11, n. º 3; p. 1-22, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11655

Authors' contributions: All authors contributed equally to the work.

Funding: The study did not receive funding.

Conflicts of interest: The authors declare that they have no conflict of interest.

Ethical aspects: The study declares the ethical aspects

Abstract
This study investigated the relationship between physical activity engagement and the fulfillment of basic psychological needs among university students, with a specific focus on autonomy, competence, and relatedness. A quantitative research design, specifically descriptive correlation, was employed to examine this relationship. A total of 1,129 respondents were selected using simple random sampling. The study utilized the International Physical Activity Questionnaire (IPAQ) to measure physical activity engagement and a Basic Psychological Needs scale to assess the fulfillment of autonomy, competence, and relatedness. Descriptive and inferential statistics were employed to analyze the data, including the Pearson correlation coefficient. The results revealed significant positive correlations between physical activity engagement and the fulfillment of competence and relatedness, while no significant relationship was found with autonomy. These findings suggest that physical activity has a positive impact on students' psychological well-being, particularly in terms of their competence and connection with others. However, the study also highlights that while physical activity contributes to psychological needs, further attention is needed to explore how specific types of physical activity might influence autonomy. The implications of these results emphasize the importance of fostering environments that encourage physical activity to promote students' psychological health and well-being. Overall, the study concludes that physical activity is crucial in supporting basic psychological needs, especially competence and relatedness, and can be a key factor in enhancing students' overall development and success.
Keywords: physical activity; psychological needs; competence; relatedness; university students.

Resumen
Este estudio tuvo como objetivo explorar la relación entre la participación en la actividad física y las necesidades psicológicas básicas entre los estudiantes universitarios, centrándose en la autonomía, la competencia y la relación. Para examinar esta relación se empleó un diseño de investigación cuantitativa, específicamente correlación descriptiva. Se seleccionó a un total de 1.129 encuestados mediante muestreo aleatorio simple. El estudio utilizó el Cuestionario Internacional de Actividad Física (IPAQ) para medir la participación en la actividad física y una escala de Necesidades Psicológicas Básicas para evaluar el cumplimiento de la autonomía, la competencia y la relación. Para analizar los datos se utilizó estadística descriptiva e inferencial, incluido el coeficiente de correlación de Pearson. Los resultados revelaron correlaciones positivas significativas entre la participación en la actividad física y el cumplimiento de la competencia y la relación, mientras que no se encontró una relación significativa con la autonomía. Estos hallazgos

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

sugieren que la participación en actividad física tiene un impacto positivo en el bienestar psicológico de los estudiantes, particularmente en términos de su competencia y conexión con los demás. Sin embargo, el estudio también destaca que, si bien la actividad física contribuye a las necesidades psicológicas, se necesita más atención para explorar cómo tipos específicos de actividad física podrían influir en la autonomía. En general, el estudio concluye que la actividad física desempeña un papel crucial en el apoyo a las necesidades psicológicas básicas, especialmente la competencia y las relaciones, y puede ser un factor clave para mejorar el desarrollo y el éxito general de los estudiantes.

Palabras clave: actividad física; necesidades psicológicas; competencia; relación; estudiantes universitarios.

Introduction

Basic Psychological Needs refer to fundamental human needs essential for psychological well-being and optimal functioning (Alamer, 2022). According to the Self-Determination Theory, these needs include autonomy, competence, and relatedness (Ryan & Vansteenkiste, 2023). Autonomy refers to the feeling of being in control of one's actions and decisions, while competence is the sense of mastery and effectiveness in one's activities (Martela et al., 2021). Relatedness involves the need to feel connected and supported by others (Capon-Sieber et al., 2022). These three needs are essential for fostering intrinsic motivation, promoting personal growth, and enhancing overall mental health.

Physical activity refers to any bodily movement that results in energy expenditure, including walking, running, cycling, and participating in sports. It is a broad concept encompassing both structured exercise and incidental movements, such as those involved in daily tasks (Dishman et al., 2021). Regular physical activity offers numerous benefits, including improved cardiovascular health, enhanced mood, and improved cognitive function (Westerbeek & Eime, 2021). Physical activity is also linked to the development of skills, personal growth, and social connections, making it a critical aspect of a healthy lifestyle (Collado-Mateo et al., 2021).

Pressing problems related to Basic Psychological Needs and physical activity among students today are interconnected and pose significant challenges (Sotos-Martínez et al., 2024). Many students face difficulties in fulfilling their psychological needs, particularly in the areas of autonomy, competence, and relatedness (Brenner, 2022). Rigid

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

academic structures and high expectations can limit autonomy, while competitive environments can undermine students' sense of competence, leading to feelings of inadequacy (Sadoughi, 2024). Additionally, social disconnection, exacerbated by increased screen time and digital interactions, can impair the need for relatedness, affecting emotional well-being (Anderl et al., 2024). These unmet psychological needs, in turn, are linked to a decline in physical activity, as many students experience barriers such as lack of time, motivation, and access to recreational spaces (Westerskov Dalgas et al., 2024). The growing prevalence of sedentary behaviors further compounds these issues, contributing to poor mental health, physical health problems, and academic struggles (Vally & Helmy, 2023). Addressing Basic Psychological Needs and physical activity is crucial for improving student well-being and performance.

Recent studies have explored the relationship between physical activity and Basic Psychological Needs, highlighting the positive impact of physical engagement on the fulfillment of autonomy, competence, and relatedness. Research suggests regular physical activity enhances students' autonomy by promoting self-directed behaviors and intrinsic motivation (Abdoshahi et al., 2022). Additionally, participation in physical activities provides opportunities for skill development, which supports the need for competence and fosters a sense of achievement (Alkhawaldeh & Khasawneh, 2024). Studies have also indicated that engaging in group sports or fitness activities facilitates social connections, thus fulfilling the need for relatedness and contributing to emotional well-being (Klussman et al., 2021). These findings underscore the importance of incorporating physical activity into educational settings to support students' psychological needs and overall development (Pascua et al., 2024).

Despite numerous studies examining the relationship between physical activity and Basic Psychological Needs, a notable gap in research remains, particularly concerning university students in the Philippines. While existing literature has explored these connections in various contexts, few studies have explicitly focused on the impact of physical activity on the fulfillment of BPN among this demographic. This gap is significant, as understanding how physical activity influences students' autonomy, competence, and relatedness could inform interventions to improve their psychological well-being and academic performance. This study's general research question is: How

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons
Original article. Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among filipino university students. Vol. 11, n. º 3; p. 1-22, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11655

does physical activity engagement relate to the fulfillment of Basic Psychological Needs among university students? The primary purpose of this research is to explore the relationship between physical activity and the three core psychological needs—autonomy, competence, and relatedness—among university students, particularly within the unique context of the Philippines.

This research is essential for understanding how physical activity can contribute to the well-being of university students, offering valuable insights for students themselves, educators, and policymakers. By examining the relationship between physical activity and the fulfillment of Basic Psychological Needs, this study provides an opportunity to enhance student engagement, mental health, and academic success. Additionally, it contributes to the broader body of knowledge by addressing a gap in the literature, particularly in the Philippine context. It can guide future interventions to support students' psychological and physical development. This research can inform practice and policy, ultimately benefiting the broader academic community.

Material and methods

Research design

This research employs a quantitative research design, a systematic investigation focusing on gathering numerical data to understand patterns, relationships, and trends (Thomas & Zubkov, 2020). Specifically, the study utilizes a descriptive correlation design, which aims to examine the relationship between two or more variables without manipulating them, often to determine the strength and direction of the association (Siedlecki, 2020). The use of this design is particularly appropriate for this research as it allows for the exploration of how physical activity engagement correlates with the fulfillment of Basic Psychological Needs among university students, providing a clear understanding of the relationship between these variables without intervention, which is essential for drawing meaningful conclusions based on students' natural behaviors and experiences.

Respondents and sampling

The study involves 1,129 respondents, selected using simple random sampling, a technique where each individual in the population has an equal chance of being chosen (Leedy & Ormrod, 2015). This sampling method is the most appropriate for this study as

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
OPEN ACCESS Creative Commons

it ensures that every university student in the population has an equal opportunity to participate, thus minimizing bias and increasing the sample's representativeness. By using simple random sampling, the study enhances the generalizability of its findings, ensuring that the results reflect the experiences and perspectives of a broad range of students, which is essential for drawing valid conclusions about physical activity and Basic Psychological Needs in the university context.

Furthermore, the sample comprised students from all year levels and a diverse range of academic disciplines, with age and gender distributions taken into account during the data collection process to ensure representativeness. Data were gathered through online forms to increase accessibility and accommodate students' varying schedules and geographic locations. In the Philippine higher education setting, physical education is part of the general curriculum—typically taken during the first two years—while participation in extracurricular physical activities varies depending on on-campus facilities and program offerings. Most universities have limited but functional infrastructures such as gymnasiums, open courts, or designated activity areas, which influence students' opportunities for physical engagement. Moreover, Filipino students often juggle academic demands and part-time work, leaving minimal free time for recreational activities. By detailing the educational structure, infrastructure availability, and lifestyle constraints of Filipino university students, the study provides a concrete and contextual foundation for interpreting the findings and evaluating their relevance across different educational systems and cultural environments.

Research instrument

This research adopted the International Physical Activity Questionnaire (IPAQ) to measure the physical activity levels of the respondents. The IPAQ, developed by Craig et al. (2003), has demonstrated strong reliability with a Cronbach's alpha ranging from 0.74 to 0.93. Additionally, the Basic Psychological Needs (BPN) Scale, developed by Deci & Ryan (2000), assessed the fulfillment of autonomy, competence, and relatedness. The BPN Scale has shown high internal consistency, with a Cronbach's alpha of 0.80, indicating its reliability in measuring the three psychological needs.

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons
Original article. Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among filipino university students. Vol. 11, n. º 3; p. 1-22, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11655

Statistical analysis

This research used descriptive and inferential statistics, including frequency counts, mean, and composite mean, to describe the profile of the respondents, their physical activity levels, and their Basic Psychological Needs. The Pearson Correlation Coefficient was employed to test the relationship between physical activity engagement and the fulfillment of basic psychological needs. This statistical method is appropriate because it measures the strength and direction of the linear relationship between two continuous variables, making it ideal for examining the correlation between physical activity and the three psychological needs. Using Pearson's correlation allows for an accurate analysis of how changes in one variable are related to changes in the other, providing valuable insights into the nature of the relationship.

Results

Table 1 presents the respondents' levels of physical activity engagement, categorized into low, moderate, and high levels of activity. These classifications provide an overview of the distribution of physical activity among the respondents, highlighting varying degrees of engagement. Understanding these levels is essential for analyzing their relationship with the fulfillment of Basic Psychological Needs.

Table 1. Respondents' Physical Activity Engagement

Physical Activity Engagement	Frequency (n=1,129)	Percentage (%)
Low Activity	340	30.11
Moderate Activity	424	37.56
High Activity	365	32.33

Table 2 illustrates the respondents' Basic Psychological Needs, categorized into autonomy, competence, and relatedness. This breakdown highlights the levels of fulfillment for each psychological need, providing insight into the respondents' overall well-being. Analyzing these dimensions is crucial for understanding their relationship to physical activity engagement.

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Original article. Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among filipino university students. Vol. 11, n. º 3; p. 1-22, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11655

Table 2. Basic Psychological Needs among the Respondents in Terms of Autonomy, Competence, and Relatedness

Statements	Mean	Verbal Description
Autonomy		
4. I feel that I can choose how to do things in my life.	3.08	Agree
5. I feel I can make decisions on my own.	3.03	Agree
1. I feel like I have a choice in the way I do things.	3.01	Agree
3. I feel that I am the one who decides what I do.	2.98	Agree
6. I have control over the way I approach tasks.	2.98	Agree
7. I feel that my behavior is self-chosen.	2.98	Agree
2. I feel free to express my ideas and opinions.	2.97	Agree
Composite Mean	**3.00**	**Moderate Level of Fulfillment**
Competence		
1. I am capable of achieving my goals.	3.13	Agree
2. I feel confident in my abilities.	2.94	Agree
6. I feel effective in my activities.	2.93	Agree
4. I am good at what I do.	2.92	Agree
5. I can handle challenging situations.	2.91	Agree
3. I can perform well.	2.89	Agree
Composite Mean	**2.95**	**Moderate Level of Fulfillment**
Relatedness		
1. I feel close to others.	2.75	Agree
2. I feel understood by others.	2.61	Agree
3. I feel that I belong to a group.	2.66	Agree
4. I have meaningful relationships with others.	2.84	Agree
5. I feel a sense of connection to others.	2.80	Agree
Composite Mean	**2.73**	**Moderate Level of Fulfillment**
Grand Mean	**2.91**	**Moderate Level of Fulfillment**

Mean Scale	Verbal Description	Interpretation
4.00-3.50	Strongly Agree	High Level of Fulfillment
3.49-2.50	Agree	Moderate Level of Fulfillment
2.59-1.50	Disagree	Low Level of Fulfillment
1.49-1.00	Strongly Disagree	Very Low Level of Fulfillment

Table 3 tests the relationship between the respondents' physical activity engagement and their Basic Psychological Needs. This analysis examines the correlation between physical activity levels and the fulfillment of autonomy, competence, and relatedness. Understanding this relationship is vital for determining the impact of physical activity on the psychological well-being of the respondents.

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Original article. Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among filipino university students. Vol. 11, n. º 3; p. 1-22, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11655

Table 3. Test of Relationship between the Respondents' Physical Activity Engagement and Basic Psychological Needs

Physical Activity Engagement and…	**Pearson Correlation Coefficient**	**p-value**	**Interpretation α=0.05**
Autonomy	.015	.619	Not Significant
Competence	.143**	.001	Significant
Relatedness	.136**	.001	Significant

Discussion

Respondents' physical activity engagement

Figure 1 shows the students' physical activity engagement. Among the 1,129 respondents, 340 (30.11%) reported low physical activity engagement, 424 (37.56%) had moderate physical activity engagement, and 365 (32.33%) had high physical activity engagement. This means that while a significant portion of students engage in moderate to high physical activity, a substantial number still have low levels of engagement. This implies that physical activity engagement among students is varied, reflecting diverse lifestyle patterns and priorities that may impact their overall well-being and academic performance.

The considerable number of students with low and moderate physical activity engagement is noteworthy and raises concerns. These levels suggest that many students may not engage in sufficient physical activity to support optimal health and psychological well-being. Low physical activity engagement is associated with potential risks, such as reduced physical fitness, higher stress levels, and diminished mental health. Similarly, moderate engagement, although better than low levels, may not be sufficient to reap the benefits of physical activity fully. This situation highlights the challenge of maintaining a balanced and active lifestyle among students amidst their academic responsibilities and other demands.

The findings align with previous studies that indicate varying physical activity levels among students, with a notable proportion reporting insufficient engagement. For instance, studies have highlighted that academic pressures and sedentary behaviors contribute to low physical activity levels among young adults (Chauntry et al., 2022). Additionally, research has shown that students often face barriers, such as a lack of time and motivation, which hinder their consistent engagement in physical activities (Baillot et al., 2021). These patterns underscore the need to understand better the factors

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

influencing students' physical activity to effectively address the gaps (Martins et al., 2021).

Basic psychological needs among the respondents in terms of autonomy, competence, and relatedness

Regarding **Autonomy**, "I feel that I can choose how to do things in my life" received the highest mean of 3.08, with a verbal description of "Agree." This means that respondents generally feel a sense of control and choice in their actions and decisions. This implies that most students perceive themselves as having reasonable independence in managing their personal and academic lives, which is vital for their overall psychological well-being.

The finding that students feel a sense of autonomy aligns with previous research, which emphasizes the importance of autonomy in fostering motivation and well-being among young adults. Studies have shown that when individuals feel empowered to make their own choices, they are more likely to experience greater satisfaction and personal growth (Weber et al., 2023). This sense of autonomy has been linked to better academic performance and mental health, particularly among students balancing academic and personal responsibilities (Sánchez-Hernando et al., 2021).

On the contrary, the statement "I feel free to express my ideas and opinions" garnered the lowest mean of 2.97, with a verbal description of "Agree." This means that while students feel they can make personal choices, they may not feel as comfortable expressing their thoughts and perspectives openly. This implies that underlying factors, such as social or institutional barriers, might limit students' confidence or opportunities to voice their ideas.

The challenge of freely expressing ideas and opinions aligns with findings from other studies, which highlight the influence of external pressures, such as cultural norms or perceived authority, on students' willingness to share their perspectives. For example, research suggests that students may hold back from expressing opinions due to fear of judgment or lack of supportive environments (Grieve et al., 2021). Furthermore, studies have shown that open expression is often tied to the perceived inclusivity of the academic and social environment (Rapp & Corral-Granados, 2024).

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

Original article. Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among filipino university students. Vol. 11, n. º 3; p. 1-22, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11655

This study's overall composite mean for autonomy is 3.00, with a verbal interpretation of a "Moderate Level of Fulfillment." This means that while students generally experience autonomy in their lives, there are areas where this need is not fully met. This implies that autonomy is present to a certain degree, but gaps still prevent students from fully realizing their potential independence and self-direction.

The moderate level of autonomy fulfillment supports prior findings that suggest autonomy is not universally experienced and may vary depending on contextual factors, such as institutional structures or societal expectations. Studies have noted that autonomy is often constrained by external pressures, such as academic demands or cultural expectations, which can limit students' perceived independence (Basri, 2023). Despite these limitations, moderate autonomy still provides a foundation for students' psychological growth and development (Reeve & Cheon, 2021).

In terms of **Competence**, the statement "I am capable of achieving my goals" recorded the highest mean of 3.13, with a verbal description of "Agree." This means that respondents generally perceive themselves as capable of setting and accomplishing their objectives. This implies that most students have confidence in their ability to succeed, which can be crucial for their academic and personal growth.

The finding that students feel capable of achieving their goals is consistent with studies emphasizing the significance of perceived competence in fostering motivation and success. Research highlights that when individuals believe in their abilities, they are more likely to approach challenges with resilience and determination (Kalisch et al., 2021). Additionally, perceptions of competence are linked to higher levels of engagement and academic achievement among students (Lauermann & ten Hagen, 2021).

On the contrary, the statement "I can perform well" garnered the lowest mean of 2.89, with a verbal description of "Agree." This means that while students generally believe in their ability to succeed, they may experience doubts about consistently delivering optimal performance. This implies that external or internal factors may influence students' confidence to meet expectations or standards.

The lower mean for performing well aligns with findings in existing literature that highlight the impact of stress, workload, and self-doubt on students' perceptions of their abilities. Studies suggest that students often face performance-related anxieties, which

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

can erode their confidence in consistently achieving high outcomes (Heckel et al., 2021). Moreover, environmental pressures, such as academic competitiveness, may also shape these perceptions (Hart & Rodgers, 2024).

The overall composite mean for Competence is 2.95, with a verbal interpretation of a "Moderate Level of Fulfillment." This means that students moderately feel competent in their abilities, but there are notable areas where this need is not fully met. This implies that while students have a foundational sense of competence, various factors may hinder its full realization.

The moderate fulfillment of competence is supported by studies emphasizing the dynamic nature of perceived competence, which can fluctuate based on environmental support and personal experiences. Research shows that students' competence is often shaped by their exposure to constructive feedback and opportunities for skill development (Carless, 2022). Despite these challenges, moderate levels of competence still provide a base for students to build on and improve their confidence and capabilities (Tomlinson, 2023).

Regarding **Relatedness**, "I feel close to others" recorded the highest mean of 2.75, with a verbal description of "Agree." This means that respondents generally perceive themselves as having a sense of closeness or meaningful relationships with others. This implies that many students value and maintain interpersonal connections, which may positively affect their emotional well-being.

The finding that students feel close to others aligns with studies emphasizing the importance of relationships in promoting psychological well-being and overall satisfaction. Research indicates that connecting with others enhances motivation, reduces stress, and fosters a sense of belonging in both academic and social contexts (Pedler et al., 2022). Additionally, strong social bonds are associated with better emotional regulation and coping mechanisms among students (Eriksen & Bru, 2023).

On the contrary, the statement "I feel connected to others" received the lowest mean of 2.70, with a verbal description of "Agree." While students generally recognize relationships, some may struggle to feel deeply integrated or emotionally connected to others. This implies that personal insecurities, social dynamics, or environmental conditions might limit students' ability to form strong, fulfilling connections.

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

The lower score on feeling connected to others aligns with findings that suggest social fragmentation or isolation can hinder the formation of deeper, more meaningful relational bonds among students. Studies have shown that environmental pressures, such as academic stress and a lack of communal activities, often reduce opportunities for meaningful connections (Limone & Toto, 2022). Moreover, cultural or contextual factors may also influence how individuals perceive their level of connectedness (Kettner et al., 2021).

The composite mean for Relatedness is 2.73, with a verbal interpretation of a "Moderate Level of Fulfillment." This means that students experience a moderate sense of relatedness, reflecting average satisfaction with their interpersonal relationships. This implies that while some relational needs are being met, others remain unfulfilled, which may influence students' psychological and social experiences.

The moderate fulfillment of relatedness corresponds with studies highlighting the nuanced nature of interpersonal relationships among students. Research suggests that while students often maintain a basic level of social engagement, deeper relational needs may require supportive environments and meaningful interactions (Amerstorfer & Freiin von Münster-Kistner, 2021). Despite these challenges, a moderate sense of relatedness provides a foundation for improving social connections and emotional well-being (Holt-Lunstad, 2024).

Overall, the respondents' Basic Psychological Needs across the three areas—Autonomy, Competence, and Relatedness—achieved a grand mean of 2.91, interpreted as a "Moderate Level of Fulfillment." This means that while students experience a certain level of satisfaction in their psychological needs, there are areas where their needs remain partially unmet. This implies that the respondents may encounter challenges in fully achieving optimal well-being and motivation due to gaps in their basic psychological needs.

The moderate fulfillment of basic psychological needs aligns with studies indicating that many students experience average satisfaction in areas like autonomy, competence, and relatedness. Research suggests that while moderate satisfaction can provide a foundation for functioning, higher levels of need fulfillment are crucial for achieving greater psychological well-being and academic success (Adlaon et al., 2024).

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

Original article. Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among filipino university students. Vol. 11, n. º 3; p. 1-22, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11655

Similarly, moderate scores on psychological needs often reflect the dynamic interplay between environmental factors, personal challenges, and student support systems (Li & Xue, 2023).

Relationship between the respondents' physical activity engagement and basic psychological needs

The relationship between the respondents' physical activity engagement and Basic Psychological Needs revealed that Competence and Relatedness exhibited significant relationships, with Pearson correlation coefficients of 0.143 and 0.136, respectively, and p-values of 0.001. This means that higher engagement in physical activities is positively associated with a greater sense of competence and connectedness among respondents. This implies that physical activity may enhance students' self-perceived abilities and foster a sense of belonging or connection to others, which are critical components of psychological well-being.

The significant relationships between physical activity engagement, competence, and relatedness are consistent with findings from prior studies. Research has demonstrated that physical activity can improve self-efficacy and perceptions of skillfulness, strengthening feelings of competence (Polo-Peña et al., 2021). Similarly, engaging in physical activities often involves social interaction, which enhances connectedness and relatedness among peers (White et al., 2021). These findings align with the theory that physical activity supports the fulfillment of psychological needs through both individual and social dimensions (Gapa & Tagare, 2023).

The significant relationship between physical activity engagement and basic psychological needs, particularly competence and relatedness, suggests that fostering environments that encourage physical activity could support students' psychological well-being. Policies and practices that integrate physical activity into daily routines may enhance students' sense of competence and connection with others, which are essential for mental health and academic success (Tagare & Villaluz, 2021). As such, educational institutions could consider incorporating more opportunities for physical engagement into their curricula or extracurricular activities to promote holistic student development (Tagare Jr., 2019).

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons
Original article. Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among filipino university students. Vol. 11, n. º 3; p. 1-22, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11655

Furthermore, these findings imply that institutions should consider the role of physical activity in addressing students' psychological needs. Enhancing competence through structured physical activities and promoting social connections through group exercises could be effective strategies to bolster students' sense of autonomy, competence, and relatedness (Hensley et al., 2021). In turn, this could improve students' overall well-being and academic outcomes (Tagare & Tagare, 2022).

Conclusion

In conclusion, the respondents' physical activity engagement reflects diverse levels, highlighting the varying degrees to which students incorporate physical activity into their daily lives. While some students engage in high levels of physical activity, a considerable proportion still report low to moderate engagement. This variation underscores the importance of creating environments that encourage consistent and meaningful physical activity to support students' overall well-being and development.

Regarding basic psychological needs, the respondents generally report a moderate level of fulfillment across autonomy, competence, and relatedness. These results suggest that while students experience some degree of satisfaction in meeting their psychological needs, there is room for improvement in fostering environments that fully support their autonomy, competence, and relatedness. Addressing these areas could enhance students' psychological health and engagement in both academic and extracurricular activities.

Finally, the relationship between physical activity engagement and basic psychological needs highlights that physical activity plays a significant role in fulfilling students' needs for competence and relatedness. Although no significant relationship was found with autonomy, the results still suggest that fostering physical activity can contribute positively to meeting students' psychological needs. This connection emphasizes the potential of physical activity as a tool for promoting holistic student development, benefiting their psychological and academic experiences.

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Original article. Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among filipino university students. Vol. 11, n. º 3; p. 1-22, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11655

References

Abdoshahi, M., Gholami, A., & Naeimikia, M. (2022). The correlation between autonomy support and intrinsic motivation, anxiety, and intention to engage in physical activities in children. *Int J Pediatr*, *10*(3), 15623–15629.

Adlaon, G., Kulano, K. S., Crase, E. P., Mangindra, N. M., & Abalos, E. I. R. A. (2024). The Elementary School Teachers' Motivational Types and Their Individual Performance Commitment. *Indonesian Journal of Education Research (IJoER)*, *5*(5), 196–204. https://doi.org/https://doi.org/10.37251/ijoer.v5i5.1128

Alamer, A. (2022). Basic psychological needs, motivational orientations, effort, and vocabulary knowledge: A comprehensive model. *Studies in Second Language Acquisition*, *44*(1), 164–184. https://doi.org/https://doi.org/10.1017/S027226312100005X

Alkhawaldeh, M., & Khasawneh, M. (2024). Designing gamified assistive apps: A novel approach to motivating and supporting students with learning disabilities. *International Journal of Data and Network Science*, *8*(1), 53–60. https://doi.org/https://doi.org/10.5267/j.ijdns.2023.10.018

Amerstorfer, C. M., & Freiin von Münster-Kistner, C. (2021). Student perceptions of academic engagement and student-teacher relationships in problem-based learning. *Frontiers in Psychology*, *12*, 713057. https://doi.org/https://doi.org/10.3389/fpsyg.2021.713057

Anderl, C., Hofer, M. K., & Chen, F. S. (2024). Directly-measured smartphone screen time predicts well-being and feelings of social connectedness. *Journal of Social and Personal Relationships*, *41*(5), 1073–1090. https://doi.org/https://doi.org/10.1177/02654075231158300

Baillot, A., Chenail, S., Barros Polita, N., Simoneau, M., Libourel, M., Nazon, E., Riesco, E., Bond, D. S., & Romain, A. J. (2021). Physical activity motives, barriers, and preferences in people with obesity: A systematic review. *PloS One*, *16*(6), e0253114. https://doi.org/https://doi.org/10.1371/journal.pone.0253114

Basri, F. (2023). Factors influencing learner autonomy and autonomy support in a faculty of education. *Teaching in Higher Education*, *28*(2), 270–285. https://doi.org/https://doi.org/10.1080/13562517.2020.1798921

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Brenner, C. A. (2022). Self-regulated learning, self-determination theory and teacher candidates' development of competency-based teaching practices. *Smart Learning Environments*, *9*(1), 3. https://doi.org/https://doi.org/10.1186/s40561-021-00184-5

Capon-Sieber, V., Köhler, C., Alp Christ, A., Helbling, J., & Praetorius, A.-K. (2022). The role of relatedness in the motivation and vitality of university students in online classes during social distancing. *Frontiers in Psychology*, *12*, 702323. https://doi.org/https://doi.org/10.3389/fpsyg.2021.702323

Carless, D. (2022). From teacher transmission of information to student feedback literacy: Activating the learner role in feedback processes. *Active Learning in Higher Education*, *23*(2), 143–153. https://doi.org/https://doi.org/10.1177/1469787420945845

Chauntry, A. J., Bishop, N. C., Hamer, M., & Paine, N. J. (2022). Sedentary behaviour, physical activity and psychobiological stress reactivity: A systematic review. *Biological Psychology*, *172*, 108374. https://doi.org/https://doi.org/10.1016/j.biopsycho.2022.108374

Collado-Mateo, D., Lavín-Pérez, A. M., Peñacoba, C., Del Coso, J., Leyton-Román, M., Luque-Casado, A., Gasque, P., Fernandez-del-Olmo, M. A., & Amado-Alonso, D. (2021). Key factors associated with adherence to physical exercise in patients with chronic diseases and older adults: an umbrella review. *International Journal of Environmental Research and Public Health*, *18*(4), 2023. https://doi.org/https://doi.org/10.3390/ijerph18042023

Dishman, R. K., Heath, G. W., Schmidt, M. D., & Lee, I.-M. (2021). *Physical activity epidemiology*. Human Kinetics. https://doi.org/https://doi.org/10.5040/9781718243811

Eriksen, E. V., & Bru, E. (2023). Investigating the links of social-emotional competencies: emotional well-being and academic engagement among adolescents. *Scandinavian Journal of Educational Research*, *67*(3), 391–405. https://doi.org/https://doi.org/10.1080/00313831.2021.2021441

Gapa, I. J., & Tagare, R. J. (2023). Dropped Interest: Generation Z Students' Demotivating Reasons on Gradual Dislike on Sports and Recreation. *Sportis.*

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Scientific Journal of School Sport, Physical Education and Psychomotricity, *9*(1), 98–124. https://doi.org/https://doi.org/10.17979/sportis.2023.9.1.9076

Grieve, R., Woodley, J., Hunt, S. E., & McKay, A. (2021). Student fears of oral presentations and public speaking in higher education: a qualitative survey. *Journal of Further and Higher Education*, *45*(9), 1281–1293. https://doi.org/https://doi.org/10.1080/0309877X.2021.1948509

Hart, P. F., & Rodgers, W. (2024). Competition, competitiveness, and competitive advantage in higher education institutions: a systematic literature review. *Studies in Higher Education*, *49*(11), 2153–2177. https://doi.org/https://doi.org/10.1080/03075079.2023.2293926

Heckel, C., Messerschmidt-Grandi, C., & Ringeisen, T. (2021). Learners' characteristics, test anxiety, learning efforts, and performance: validating their structural relationships. *Educational Psychology*, *41*(9), 1117–1138. https://doi.org/https://doi.org/10.1080/01443410.2021.1935468

Hensley, L., Sayers, R., Brady, A., & Cutshall, J. (2021). Supporting autonomy, competence, and relatedness in a learning-to-learn course: College students' insights into effective instruction. *Teaching of Psychology*, *48*(3), 236–247. https://doi.org/https://doi.org/10.1177/0098628320977270

Holt-Lunstad, J. (2024). Social connection as a critical factor for mental and physical health: evidence, trends, challenges, and future implications. *World Psychiatry*, *23*(3), 312–332.

Kalisch, R., Köber, G., Binder, H., Ahrens, K. F., Basten, U., Chmitorz, A., Choi, K. W., Fiebach, C. J., Goldbach, N., & Neumann, R. J. (2021). The frequent stressor and mental health monitoring-paradigm: a proposal for the operationalization and measurement of resilience and the identification of resilience processes in longitudinal observational studies. *Frontiers in Psychology*, *12*, 710493. https://doi.org/https://doi.org/10.3389/fpsyg.2021.710493

Kettner, H., Rosas, F. E., Timmermann, C., Kaertner, L., Carhart-Harris, R. L., & Roseman, L. (2021). Psychedelic communitas: intersubjective experience during psychedelic group sessions predicts enduring changes in psychological wellbeing

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

and social connectedness. *Frontiers in Pharmacology*, *12*, 623985. https://doi.org/https://doi.org/10.3389/fphar.2021.623985

Klussman, K., Langer, J., & Nichols, A. L. (2021). The relationship between physical activity, health, and well-being. *European Journal of Health Psychology*. https://doi.org/https://doi.org/10.1027/2512-8442/a000070

Lauermann, F., & ten Hagen, I. (2021). Do teachers' perceived teaching competence and self-efficacy affect students' academic outcomes? A closer look at student-reported classroom processes and outcomes. *Educational Psychologist*, *56*(4), 265–282. https://doi.org/https://doi.org/10.1080/00461520.2021.1991355

Li, J., & Xue, E. (2023). Dynamic interaction between student learning behaviour and learning environment: Meta-analysis of student engagement and its influencing factors. *Behavioral Sciences*, *13*(1), 59.

Limone, P., & Toto, G. A. (2022). Factors that predispose undergraduates to mental issues: A cumulative literature review for future research perspectives. *Frontiers in Public Health*, *10*, 831349. https://doi.org/https://doi.org/10.3389/fpubh.2022.831349

Martela, F., Gómez, M., Unanue, W., Araya, S., Bravo, D., & Espejo, A. (2021). What makes work meaningful? Longitudinal evidence for the importance of autonomy and beneficence for meaningful work. *Journal of Vocational Behavior*, *131*, 103631. https://doi.org/https://doi.org/10.1016/j.jvb.2021.103631

Martins, J., Costa, J., Sarmento, H., Marques, A., Farias, C., Onofre, M., & Valeiro, M. G. (2021). Adolescents' perspectives on the barriers and facilitators of physical activity: an updated systematic review of qualitative studies. *International Journal of Environmental Research and Public Health*, *18*(9), 4954. https://doi.org/https://doi.org/10.3390/ijerph18094954

Pascua, K., Lagunero Tagare, R., & Tagare, R. L. (2024). Experiences, Motivation, Commitment, and Suggestions of Physical Education Teachers Amidst COVID-19 Crisis. *Egitim ve Bilim*, *49*(219), 187–200. https://doi.org/https://doi.org/10.15390/EB.2024.12095

Pedler, M. L., Willis, R., & Nieuwoudt, J. E. (2022). A sense of belonging at university: Student retention, motivation and enjoyment. *Journal of Further and Higher*

Sportis Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Education, *46*(3), 397–408. https://doi.org/https://doi.org/10.1080/0309877X.2021.1955844

Polo-Peña, A. I., Frías-Jamilena, D. M., & Fernández-Ruano, M. L. (2021). Influence of gamification on perceived self-efficacy: gender and age moderator effect. *International Journal of Sports Marketing and Sponsorship*, *22*(3), 453–476. https://doi.org/https://doi.org/10.1108/IJSMS-02-2020-0020

Rapp, A. C., & Corral-Granados, A. (2024). Understanding inclusive education–a theoretical contribution from system theory and the constructionist perspective. *International Journal of Inclusive Education*, *28*(4), 423–439. https://doi.org/https://doi.org/10.1080/13603116.2021.1946725

Reeve, J., & Cheon, S. H. (2021). Autonomy-supportive teaching: Its malleability, benefits, and potential to improve educational practice. *Educational Psychologist*, *56*(1), 54–77. https://doi.org/https://doi.org/10.1080/00461520.2020.1862657

Ryan, R. M., & Vansteenkiste, M. (2023). Self-determination theory. In *The Oxford Handbook of Self-Determination Theory* (pp. 3–30). Oxford University Press. https://doi.org/https://doi.org/10.1093/oxfordhb/9780197600047.002.0006

Sadoughi, M. (2024). Overparenting and adolescent's trait anxiety: Unraveling the roles of basic psychological needs frustration and emotion dysregulation. *Acta Psychologica*, *251*, 104579. https://doi.org/https://doi.org/10.1016/j.actpsy.2024.104579

Sánchez-Hernando, B., Juárez-Vela, R., Antón-Solanas, I., Gasch-Gallén, Á., Melo, P., Nguyen, T. H., Martínez-Riera, J. R., Ferrer-Gracia, E., & Gea-Caballero, V. (2021). Association between life skills and academic performance in adolescents in the autonomous community of Aragon (Spain). *International Journal of Environmental Research and Public Health*, *18*(8), 4288. https://doi.org/https://doi.org/10.3390/ijerph18084288

Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, *34*(1), 8–12. https://doi.org/https://doi.org/10.1097/NUR.0000000000000493

Sotos-Martínez, V. J., Ferriz-Valero, A., García-Martínez, S., & Tortosa-Martínez, J. (2024). The effects of gamification on the motivation and basic psychological needs

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

of secondary school physical education students. *Physical Education and Sport Pedagogy*, *29*(2), 160–176. https://doi.org/https://doi.org/10.1080/17408989.2022.2039611

Tagare Jr, R. L. (2019). The Effectiveness of Existing Teaching Styles in the Teaching of Tertiary Physical Education to Generation Z Learners. *European Journal of Physical Education and Sport Science*, *5*(12), 74.

Tagare, R. L., & Tagare, R. L. (2022). Gen Z's fitness concepts and ways to be fit: Insights to strengthen students' learning experiences in tertiary physical education. *Journal for Educators, Teachers and Trainers*, *13*(5), 66–77. https://doi.org/10.47750/jett.2022.13.05.007

Tagare, R. L., & Villaluz, G. D. (2021). Probing the delivery of tertiary physical education among the generation Z students in the transition years of Philippine K to 12. *International Journal of Physical Education, Sports and Health*, *8*(4), 355–359. https://doi.org/https://doi.org/10.22271/kheljournal.2021.v8.i4f.2204

Thomas, D., & Zubkov, P. (2020). *Quantitative Research Designs*.

Tomlinson, C. A. (2023). The parallel curriculum model: A design to develop potential & challenge high-ability learners. In *Systems and models for developing programs for the gifted and talented* (pp. 571–598). Routledge. https://doi.org/https://doi.org/10.4324/9781003419426-21

Vally, Z., & Helmy, M. (2023). The prevalence of suicidal behaviour and its associated risk factors among school-going adolescents resident in the United Arab Emirates. *Scientific Reports*, *13*(1), 19937. https://doi.org/https://doi.org/10.1038/s41598-023-47305-3

Weber, E., Hopwood, C. J., Nissen, A. T., & Bleidorn, W. (2023). Disentangling self-concept clarity and self-esteem in young adults. *Journal of Personality and Social Psychology*, *125*(6), 1420. https://doi.org/https://doi.org/10.1037/pspp0000460

Westerbeek, H., & Eime, R. (2021). The physical activity and sport participation framework—a policy model toward being physically active across the lifespan. *Frontiers in Sports and Active Living*, *3*, 608593.

Westerskov Dalgas, B., Elmose-Østerlund, K., & Bredahl, T. V. G. (2024). Exploring basic psychological needs within and across domains of physical activity.

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
OPEN ACCESS Creative Commons

Original article. Active lives fulfilled needs: physical activity and the triad of autonomy, competence, and relatedness among filipino university students. Vol. 11, n. º 3; p. 1-22, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11655

International Journal of Qualitative Studies on Health and Well-Being, *19*(1), 2308994. https://doi.org/https://doi.org/10.1080/17482631.2024.2308994

White, R. L., Bennie, A., Vasconcellos, D., Cinelli, R., Hilland, T., Owen, K. B., & Lonsdale, C. (2021). Self-determination theory in physical education: A systematic review of qualitative studies. *Teaching and Teacher Education*, *99*, 103247. https://doi.org/https://doi.org/10.1016/j.tate.2020.103247

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity

Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes

Disciplina en la práctica y el estudio: un estudio transversal sobre la determinación y el compromiso académico en atletas de deportes de combate

Jet C. Longakit[1], Joseph Lobo[2], Deljun Rodriguez[3], Ruben Tagare Jr[4], Teejay Panganiban[5], Jay Mark Sinag[6], Louie Gula[7], Vlad Adrian Geantă[8], Novri Gazali[9], Jeric Quibral[10], Christian Alex Mondido[10], John Michael Aquino[11]

[1]Department of Physical Education, College of Education, MSU- Iligan Institute of Technology, Philippines
[2] College of Sports, Exercise and Recreation, Bulacan State University, Philippines
[3]College of Arts, Humanities and Social Sciences, Northwestern Mindanao State College of Science and Technology, Philippines
[4]Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Philippines
[5]College of Teacher Education, Batangas State University TNEU, Philippines
[6]College of Education, Physical Education, Bataan Peninsula State University, Philippines
[7]Visayas State University, Baybay City, Leyte, Philippines
[8] Aurel Vlaicu University of Arad, Faculty of Physical Education and Sport, Romania
[9] Department of Physical Education, Faculty of Teacher Training and Education, Universitas Islam Riau, Pekanbaru, Indonesia
[10] Institute of Human Kinetics, Rizal Technological University, Philippines
[11] Laguna State Polytechnic University, Philippines

*Correspondence Author: Jet Longakit jet.longakit@g.msuiit.edu.ph

Editorial schedule: *Article received 19/01/2025 Accepted: 10/05/2025 Published: 01/07/2025*
https://doi.org/10.17979/sportis.2025.11.3.11651

To cite this article use the following reference:
Longakit, J.C.; Lobo, J.; Rodriguez, D.; Tagare, R. Jr; Panganiban, T.; Sinag, J.M.; Gula, L.; Geantă, V.A.; Gazali, N.; Quibral, J.; Mondido, C.A.; Aquino, J.M. (2025). Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Sportis Sci J, 11 (3), 1-23 https://doi.org/10.17979/sportis.2025.11.3.11651

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

Authors contribution: All authors made substantial contributions to the conception, design, data collection, analysis, and interpretation of the study

Funding: This study did not receive any funding.

Conflict of interest: The authors declare that they have no conflict of interest.

Ethical aspects: The study declares the ethical aspect.

Abstract

This study explores the dual role of grit, physical and academic grit in influencing academic engagement among student combat sports athletes. While previous research emphasizes grit within either academic or athletic domains, few studies have examined how these two dimensions interact to affect educational outcomes. The primary aim of this study was to examine the predictive role of physical education grit, specifically physical and academic grit, on academic engagement. A cross-sectional design was employed, involving 496 student combat sports athletes (M = 19.45; SD = 1.89) from various state colleges and universities in the Philippines. Participants were selected through random sampling and completed validated instruments: the Physical Education Grit Scale (PE-GRIT), which includes physical and academic grit subscales, and the Utrecht Work Engagement Scale for Students (UWES-9), which measures vigor, dedication, and absorption. Data were analyzed using bivariate correlations and multiple regression techniques. The results showed that both physical grit ($\beta = 0.328$, $p < .001$) and academic grit ($\beta = 0.242$, $p < .001$) were significant predictors of academic engagement. These findings suggest that grit developed through combat sports practice extends beyond the physical domain and positively influences students' academic behaviors. Thus, physical education grit plays a crucial role in enhancing academic engagement by fostering discipline, persistence, and resilience. Combat sports training may serve as a valuable intervention that supports both physical development and academic success.

Keywords: grit; physical education; engagement; resilience

Resumen

Este estudio explora el papel dual de la determinación (grit), tanto física como académica, en la influencia sobre el compromiso académico de los estudiantes atletas de deportes de combate. Aunque investigaciones previas han enfatizado la determinación en los ámbitos académico o deportivo por separado, pocos estudios han examinado cómo interactúan estas dos dimensiones para afectar los resultados educativos. El objetivo principal de este estudio fue examinar el papel predictivo de la determinación en educación física, específicamente la determinación física y académica, sobre el compromiso académico. Se empleó un diseño transversal con la participación de 496 estudiantes atletas de deportes de combate (M = 19.45; DE = 1.89) de diversas universidades y colegios estatales de Filipinas. Los participantes fueron seleccionados mediante muestreo aleatorio y completaron instrumentos validados: la Escala de Determinación en Educación Física (PE-GRIT), que incluye subescalas de determinación física y académica, y la Escala de

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

Compromiso Académico para Estudiantes de Utrecht (UWES-9), que mide vigor, dedicación y absorción. Los datos fueron analizados mediante correlaciones bivariadas y técnicas de regresión múltiple. Los resultados mostraron que tanto la determinación física ($\beta = 0.328$, $p < .001$) como la determinación académica ($\beta = 0.242$, $p < .001$) fueron predictores significativos del compromiso académico. Estos hallazgos sugieren que la determinación desarrollada a través de la práctica de deportes de combate trasciende el ámbito físico e influye positivamente en las conductas académicas de los estudiantes. Por lo tanto, la determinación en educación física desempeña un papel crucial en la mejora del compromiso académico al fomentar la disciplina, la perseverancia y la resiliencia. El entrenamiento en deportes de combate puede servir como una intervención valiosa que apoye tanto el desarrollo físico como el éxito académico.

Palabras clave: determinación; educación física; compromiso; resiliencia

Introduction

Recently, the concept of grit—characterized by enduring passion and perseverance towards long-term objectives—has attracted interest in educational and psychological research for its potential to forecast success across various areas (Duckworth et al., 2007; Duckworth & Gross, 2014). This non-cognitive attribute is especially pertinent to student-athletes, who are required to sustain unwavering effort and concentration in both academic and athletic pursuits (Christopoulou et al., 2018; Hodge et al., 2017). Despite the increasing interest, research on the functioning of grit in dual roles—academic and physical—remains scarce, especially within the realm of combat sports, which uniquely integrates physical discipline and cognitive engagement (Andreato et al., 2022; Mojtahedi et al., 2023).

Combat sport practitioners constitute a unique population where the integration of mental and physical discipline may provide valuable perspectives on enhancing engagement (Kim, 2023; Xu et al., 2022). Various studies have examined combative sports as both a sport and a discipline, play a pivotal role in fostering resilience, focus, and self-regulation among practitioners (Cao and Lyu, 2024; Chen, 2024). These traits are often linked to improved cognitive and behavioral outcomes, including enhanced problem-solving skills, emotional regulation, and persistence in achieving goals (Hadiana et al., 2022; Xu et al., 2022; Cao and Lyu, 2024). However, the specific mechanisms through which combat sports training contributes to academic engagement remain poorly understood. By combining physical rigor with mental resilience, combat sports may

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

uniquely cultivate both physical grit and academic grit, reflected in perseverance with educational tasks (Lee et al., 2021; Tannoubi et al., 2023; Hadiana et al., 2022). Investigating these dynamics offers an opportunity to uncover how such training translates to higher levels of school engagement and provides actionable insights for leveraging combat sports as a tool for holistic student development.

The Role of Combat Sports in Cultivating Determination and Resilience

Combat sports, including Taekwondo, Karate, and Arnis, are characterized by their physical rigor as well as their focus on mental discipline, self-control, and tenacity (Mojtahedi et al., 2023; Andreato et al., 2022). Such sports necessitate unwavering dedication to intensive training, proficiency in intricate procedures, and the capacity to withstand physical and psychological adversities—elements that intrinsically foster the cultivation of resolve and resilience (Hadiana et al., 2022; Cao & Lyu, 2024). Determination, frequently linked to perseverance, is developed in combat sports through the continuous process of failing, learning, and mastery. Practitioners often encounter circumstances that need perseverance to surmount obstacles, such as competitive loss, physical fatigue, or technological challenges (Lozano-Jiménez et al., 2021). This process reflects the elements of grit delineated by Duckworth et al. (2007), specifically endurance of effort and sustained interest across time. Resilience, characterized as the capacity to rebound from difficulties and adjust favorably to adversity, is a trait deeply rooted in the culture of combat sports (Massey & Whitley, 2023; Blanco-García et al., 2021). Training environments cultivate resilience by necessitating that athletes endure discomfort, regulate emotional reactions under duress, and recover from setbacks (Andreato et al., 2022).

Research indicates that the resilience acquired via combat sports involvement transcends the sport, impacting psychological well-being and coping strategies in academic and social contexts (Kim, 2019; Xu et al., 2022). Moreover, the organized and methodical characteristics of combat sports foster self-regulation and emotional control—essential elements of both determination and resilience (Hadiana et al., 2022; Lozano-Jiménez et al., 2021). A study of Tannoubi et al. (2023) assert that combat sports athletes exhibit elevated levels of intrinsic motivation, goal orientation, and sustained attention

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons
Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

relative to their non-sporting counterparts. These attributes are essential in promoting academic involvement and sustained personal growth.

For student-athletes in higher education, the mental and physical demands of combat sports function as a dual-purpose intervention, improving both physical ability and vital life skills. This twofold advantage establishes combat sports as a distinctive and efficacious channel for cultivating non-cognitive attributes vital for academic achievement and larger life issues.

Physical Education Grit

Grit is characterized as the combination of passion and perseverance directed toward long-term objectives, comprising two components: consistency of interest and perseverance of effort (Duckworth & Gross, 2014; Tannoubi et al., 2023). Consistency of interest denotes the inclination to pursue identical objectives over time, while perseverance of effort signifies the propensity to exert effort despite facing obstacles. The two domains of grit have been examined in various populations, across multiple academic levels (Datu et al., 2021; Dunston et al., 2020). Grit has recently garnered heightened attention in the field of education (Christopoulou et al., 2018; Daniels et al., 2021). Grit is the steadfast and fervent pursuit of long-term objectives, comprising two elements: perseverance of effort, which is the tendency to persistently exert oneself despite encountering obstacles, and consistency of interest, the propensity to sustain the same goals and interests over time (Credé et al., 2017; Muenks et al., 2018). Numerous studies have shown grit as a robust predictor of accomplishment (Hodge et al., 2017; Daniels et al., 2021), whereas conscientiousness and self-control (Zhang et al., 2023; Rutberg et al., 2020) facilitate the sustained pursuit of long-term goals despite setbacks and adversity (Dunston et al., 2020; Wolters & Hussain, 2015). Individuals displaying grit can sustain their focus and resolve over extended durations, even when confronted with challenges or failures (Karlen et al., 2019; Newland et al., 2020; Lobo et al., 2024). Regarded as an essential factor in both personal and professional domains, the qualities of grit enhance individuals' ability to confront challenges and overcome obstacles. Longitudinal data indicated that characteristics of grit increasingly predicted performance across several academic outcomes, including retention, educational attainment, and teaching efficacy (Newland et al., 2020; Disabato et al., 2018).

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

Physical education, compared to other forms of education, primarily emphasizes the physical aspects of the educational process (Guelmami et al., 2022). Consequently, the assessment of athletes' grit should emphasize their specific educational background and content Grit has a beneficial impact on athletes, with elevated levels of grit associated with psychological factors including burnout mitigation and perfectionist tendencies (Fawver et al., 2019; Zhang et al., 2023), optimism (Olefir, 2018), immediate positive effects (Rumbold et al., 2022), and diminished physical anxiety (Costello et al., 2022; Oktavia & Viranda, 2024). The resilience in physical education can influence athletes' psychological aspects, athletic performance, and accomplishments in certain sports.

Academic Engagement

Academic engagement, which includes vigour, devotion, and absorption, is acknowledged as a vital determinant of student success and well-being (Schaufeli et al., 2002a; Cadime et al., 2016). Although many studies have investigated the impact of motivation, emotional support, and learning strategies on academic engagement (Longakit et al., 2025; Fredricks et al., 2016; Upadyaya & Salmela-Aro, 2013), fewer have investigated the contribution of grit cultivated through physical education and sports training, particularly in combat sports (Lee et al., 2021; Tannoubi et al., 2023). Recent studies indicate that student-athletes may cultivate improved resilience, goal orientation, and focus through participation in sports, potentially fostering more engagement in academic environments (Lozano-Jiménez et al., 2021; Kim, 2019).

Numerous studies have highlighted the connection between school engagement and enhanced learning outcomes (Fredricks et al., 2016), increased academic performance (Engels et al., 2021), decreased dropout rates (Schaufeli et al., 2002a), improved emotional well-being (Schaufeli, 2017), and the cultivation of vital life skills, including resilience and self-regulation (Longakit, Lobo, et al., 2025; Carmona-Halty et al., 2019; Schaufeli, 2017). Moreover, involvement has been associated with elevated motivation levels and an enhanced sense of belonging in educational settings (Longakit et al., 2024; Upadyaya & Salmela-Aro, 2013; Schaufeli, 2017). Vigor denotes students' energy and passion towards their academic pursuits (Schaufeli et al., 2002b; Schaufeli, 2017). A student who continuously participates in class discussions and approaches work with determination demonstrates vitality (Roorda et al., 2017). On the other hand, dedication

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons
Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

is employed to describe a student who engages in their academics with exceptional enthusiasm and concentration (Schaufeli et al., 2002b; Schaufeli, 2017). A student who sets clear academic goals, conducts thorough exam preparation, and strives for success in their classes demonstrates dedication (Hughes & Cao, 2018). Moreover, absorption involves a profound focus on academic endeavors, exemplified by a student being unaware of the passage of time while immersed in a research project or solving complex mathematical problems (Schaufeli et al., 2002b; Schaufeli, 2017). These interrelated aspects jointly promote substantial engagement and enrich a thriving academic experience (Engels et al., 2021). The interplay of multiple facets of academic engagement enhances individual performance outcomes and cultivates a supportive and dynamic learning environment. Research has consistently examined the importance of teacher emotional support (Engels et al., 2020), peer influence (Engels et al., 2020), and academic resilience (Fredricks et al., 2016), in augmenting engagement. Nevertheless, intrinsic motivation, such as grit of combat sport athletes within the realm of physical education are scantly examined.

The current study

Notwithstanding these evidences, the processes by which combat sport training enhances academic engagement remain ambiguous. Most current research examines grit or engagement separately or within a singular context, neglecting to encompass the holistic experience of student-athletes who juggle academic responsibilities alongside intensive physical training (Xu et al., 2022; Datu et al., 2021). Moreover, there is a deficiency of empirical data about the interaction between physical and academic grit and its impact on academic performance in higher education. This study examines the predicted influence of physical education grit (both physical and academic) on academic engagement in combat sport athletes.

The study hypothesizes that both physical and academic grit positively influence academic engagement, offering practical implications for education and physical training programs. Specifically, it answers the following hypothesis:

H_{1a}: Physical Grit significantly predict School Engagement

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

***H1b**:* Academic Grit is positively associated with School Engagement

***H1**: P*hysical Education Grit significantly predict School Engagement

Methods

Design and Participants

A total of 496 student martial arts practitioners (338 male and 158 female; M= 19.45, SD = 1.89) participated in the study. Participants included 124 Taekwondo (25%), 151 Karate-do (30.44%), and 221 Arnis (44.56%) student-athletes enrolled in various universities and colleges of 3 cities in Region X, Mindanao (Iligan City, Cagayan de Oro City and Bukidnon), Philippines. The sample size was calculated using Cochran's formula for continuous data in large populations, considering a 5% margin of error, a 95% confidence level (z = 1.96), and an assumed response distribution of 50%, which is a conservative estimate to ensure adequate sample power. The initial recommended minimum was 384 participants. However, to further ensure the reliability of subgroup analyses and account for possible exclusions or incomplete data, the final sample size was increased to 496. This approach enhances statistical power and generalizability while aligning with ethical and logistical considerations in educational and sports research. For this purpose, random sampling was carried out among combat sports student practitioners who are enrolled in the academic year 2024-2025. Participants was recruited based on the following criteria: (1) at least 3 years of participating different sports tournament, and (2) reached regional to national meet in sports. This research applied descriptive correlational design to determine the association of grit and engagement of combat sports student-athletes. The socio demographic characteristics of participants are shown in Table 1.

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

Table 1. Sociodemographic profile of the participants

Variables		*N (%)*	M ± SD	Range
Sex				
	Male	338 (68%)		
	Female	158 (32%)		
Age			19.45 ± .89	18-23
Type of Combat Sports				
	Taekwondo	124 (25%)		
	Karate-do	151 (30.44%)		
	Arnis	221 (44.56%)		
Level of Sports Participation				
	Regional level	315 (63.51%)		
	National level	181 (36.49%)		
Socio-economic status				
	Low income (PHP 9,520 to PHP 21,194)	195 (39.31%)		
	Low-middle income (21,194 and 43,828)	221 (44.56%)		
	Upper-middle income (PHP 76,669 to PHP 131,484)	80 (16.13%)		

Instruments

The school engagement of college students was measured using Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2002). This is a 9-item tool that was established to ascertain engagement level of students and has three factors: vigor (e.g., "When I get up in the morning, I feel like going to class), dedication (e.g., "My studies inspire me"), and absorption (e.g., "I am immersed in my studies"). On a 6-point Likert scale ranging from 0 (never) to 6 (always/every day), respondents were asked to indicate their level of engagement. A higher score indicates greater work engagement. This scale has been used in several studies and has proven to be a reliable and valid instrument (Carmona-Halty et al., 2019; Domínguez-Salas et al., 2022). The overall UWES-9 demonstrates a Cronbach's alpha of 0.93, with its subscales varying between 0.79 (vigor), .89 (dedication), and 0.84 (absorption).

The academic grit of student was measured using PE-GRIT (Guelmami et al., 2022).PE-GRIT is made up of 16-items and has two factors: Physical Grit (e.g., Intense physical exercise never discourages me) and Academic Grit (e.g., I finish my home exercises, no matter how hard they are.). On a 7-point Likert scale ranging from 1

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
OPEN ACCESS Creative Commons
Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

(strongly disagree) to 7 (strongly agree) with a higher score indicating high level of academic grit. PE-GRIT has been validated in various studies (Rumbold et al., 2022; González-Bernal et al., 2022; Zhang et al., 2023). The overall PE-GRIT demonstrate a high internal consistency with 0.902, with its subscale ranging from .83 (Academic Grit) to .85 (Physical Grit).

Data Collection

Prior to the data collection, permission was obtained from the school officials, and the test administration commenced following the approval of the research ethical review committee of the institution. Consent forms were obtained from the subjects. The questionnaires clearly defined the research's objective and guaranteed the anonymity of participants' responses. Participants carefully completed the questionnaire packet under the supervision of designated researchers. The researchers verified that the participants are qualified combat sports athletes with experience competing at a minimum of the regional or national levels, as outlined by the inclusion criteria. The data collected from this study were quantified based on the items chosen by the respondents. Enumerated additional hazards associated with participation in the online survey include potential threats to data privacy stemming from the digital collecting of replies. In response, stringent data protection protocols were established to safeguard participant information. Participants were apprised of the potential for slight psychological pain from certain inquiries, as well as their entitlement to withdraw from the study or request a debriefing at any moment.

Statistical Analysis

Before conducting any statistical procedures, the raw data collected through the survey instruments were manually reviewed for completeness. The researchers checked for missing responses, duplicate entries, and inconsistencies. Incomplete or invalid questionnaires were excluded from the final dataset. After this initial screening, the data were encoded into SPSS (Statistical Package for the Social Sciences) version 20.0 for analysis. Following data entry, a data cleaning process was carried out to ensure accuracy and reliability. This included verifying variable coding, inspecting frequency distributions, and identifying any outliers. Normality checks were conducted using skewness and kurtosis statistics, confirming that the data met the acceptable thresholds

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

(±2), allowing for parametric statistical testing. Reliability of the scales was assessed using Cronbach's alpha, confirming internal consistency across all subscales. Descriptive statistics (means and standard deviations) were generated to summarize participant responses. Pearson's bivariate correlation analysis was then used to examine the relationships among the key study variables. Finally, multiple linear regression was employed to determine the predictive influence of physical and academic grit on academic engagement. All statistical tests were performed with a significance level set at $p < .05$, and the assumptions for each analysis were verified prior to interpretation

Results

The table 2 presents the mean, standard deviations, normality estimates, internal reliability, and bivariate correlations among the constructs. The results demonstrated that the factors of academic engagement were positive correlated to physical grit (r = .289 to .412) and academic grit (r = .144 to .368). Moreover, the skewness and kurtosis values are relatively close to zero, indicating that the data are approximately normal and suitable for parametric statistical analyses.

Table 2. Bivariate correlation among variables

Variable	1	2	3	4	5	6	7
1. Vigor	(.79)						
2. Dedication	.748**	(.89)					
3. Absorption	.729**	.773**	(.84)				
4. PI	.344**	.320**	.289**	(.76)			
5. PE	.393**	.412**	.364**	.835**	(.74)		
6.AI	.144**	.229**	.148**	.228**	.298**	(.78)	
7. AE	.356**	.368**	.317**	.826**	.823**	.319**	(.73)
M	10.66	11.74	10.90	21.25	21.38	19.10	21.48
SD	2.23	2.27	2.41	4.14	4.13	3.24	3.91
Skewness	.088	-.467	-.219	-.703	-.772	-.178	-.775
Kurtosis	.029	.508	.178	.996	1.182	.525	1.569

Legend: PI- physical interest; PE- physical effort; AI- academic interest; AE- academic effort

*Note: Significant at level ** p < .01*

Table 3 showed the results of multiple regression analyses, testing the hypothesis regarding the predictive association of physical and academic grit on academic engagement. The findings confirm that both physical grit ($\beta = 0.328$, $t = 9.883$, $p = <.001$) and academic grit ($\beta = 0.242$, $t = 9.484$, $p = <0.001$) significantly predict academic engagement, with 16.5% and 15.4% of the variance explained, respectively. Thus, $\boldsymbol{H_{1a}}$

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons
Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

and H_{1b} are accepted. Additionally, the overall grit construct also significantly predicts school engagement [F (1,495) = 97.312, p = <.001] with 14.4% variance explained. These results emphasize that consistency of interest and perseverance of effort developed through physical and academic grit are essential in enhancing academic engagement. The combat sport athletes who demonstrate persistence in physical training and academic tasks are more likely to be highly engaged in their academics. Thus, H_1 is accepted.

Table 3. Multiple Regression results and Hypothesis testing

Hypothesis	Regression weights	Beta	R^2	F	t-value	p-value	Decision
H_{1a}	PG → AE	.328	.165	-	9.883	.001	Accepted
H_{1b}	AG → AE	.242	.154	-	9.484	.001	Accepted
H_1	Grit → AE	.144	.165	97.312	-	.001	Accepted

Note: PG- Physical Grit; AG- Academic Grit; AE- Academic engagement

Discussion

This study aimed to examine the physical education grit (e.g., physical & academic grit) of combat sport athletes and how these mechanisms are associated with their engagement in academics. Initially, physical grit significantly influences the academic engagement of combat sport athletes. This indicates that the dedication and resilience gained via consistent physical training transcend to their academic endeavors. A martial artist who persistently trains despite physical exhaustion or obstacles exemplifies a commitment to long-term objectives that parallels the effort necessary for academic excellence (Von Culin et al., 2014; Hadiana et al., 2022; Xu et al., 2022). Such students may exhibit a greater propensity to maintain concentration on their studies, submit assignments punctually, or prepare diligently for examinations, despite encountering distractions or obstacles (Lozano-Jiménez et al., 2021; Cao and Lyu, 2024; Chen, 2024). The disciplined practices and psychological resilience cultivated in combat sports establish a basis for coping with academic stress and sustaining motivation amid academic challenges (Xu et al., 2022; Duckworth & Gross, 2014). The findings suggest that incorporating combat sports programs into educational systems can improve students' capacity to endure academic challenges (Duckworth & Gross, 2014). Educators should underscore this relationship by including introspective exercises that enable students to

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

acknowledge the applicability of their physical resilience to academic settings. Furthermore, the physical resilience developed via combat sports may exemplify a framework for imparting life skills, like goal-setting, emotional management, and perseverance, which are vital for success beyond the educational environment.

Additionally, the findings demonstrate that academic grit substantially affects the academic engagement of combat sport athletes, highlighting the significance of perseverance and interest in attaining long-term academic goals. Combat sport athletes demonstrating significant academic grit often transfer the persistence and focus cultivated during training to their academic pursuits (Von Culin et al., 2014; Lozano-Jiménez et al., 2021). For instance, a student who commits to mastering a complex combat sports technique, despite numerous setbacks, is likely to tackle challenging academic problems with comparable resilience (Lozano-Jiménez et al., 2021; Xu et al., 2022; Cao and Lyu, 2024). This capacity to sustain work and interest over time allows them to excel in completing large studies or preparing for demanding academic related task (Von Culin et al., 2014; Wang et al., 2021). The findings indicate that cultivating academic grit in combat sport athletes boosts their academic engagement and equips them for future difficulties in both academic and professional arenas. Educational institutions and instructors can leverage this by including goal-setting and reflective activities into combative sports curricula to strengthen the association between perseverance and academic achievement. Furthermore, these programs may exemplify a framework for other extracurricular activities, demonstrating how the development of persistence and drive in one area can profoundly influence several aspects of a student's life.

Lastly, findings reveal a positive influence of physical education grit on academic engagement of combat sport athletes. This underscores that the consistency of interest and perseverance of effort developed through combat sports practice extend beyond the physical domain and positively influence students' academic behaviors. Similar studies have found that student-athletes who learns to master complex techniques or achieve consistent progress in training often applies similar persistence to academic tasks (Lozano-Jiménez et al., 2021; Duckworth & Gross, 2014). Moreover, the ability to remain focused under pressure can also enhance concentration during academics related tasks while completing challenging courses (Von Culin et al., 2014; Xu et al., 2022; Kim,

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

2019). This suggests that integrating combat sports into physical education curricula may function as a dual-purpose intervention, enhancing physical fitness and fostering vital life skills, including grit and resilience. Numerous studies have emphasized the advantages of physical education programs in fostering self-regulation (Lozano-Jiménez et al., 2021), goal-setting (Tannoubi et al., 2023), and emotional control (Kim, 2019), which are transferable to academic settings. Moreover, studies have highlighted that physical education grit enhances academic engagement through several interconnected mechanism that bridge the physical and academic domains (Rutberg et al., 2020; Tannoubi et al., 2023; Lee et al., 2021). The self-discipline and perseverance developed via regular physical exercise empower students to tackle intellectual work with same dedication, facilitating effective time management and sustained attention on their academics (Muenks et al., 2018; Tannoubi et al., 2023). Furthermore, the resilience developed via surmounting physical challenges, such as mastering a combat sports technique or surviving rigorous training sessions, prepares students to confront intellectual obstacles with determination and perseverance (Tannoubi et al., 2023; Lee et al., 2021; Newland et al., 2020). Ultimately, the concentration and focus cultivated through combat sports and other physical education pursuits enhance students' attention control, allowing them to maintain engagement during academic endeavors (Lee et al., 2021; Tannoubi et al., 2023). These methods collectively underscore how physical education grit not only fosters physical development but also substantially enhances students' academic engagement and overall achievement. These results support the formulation of comprehensive educational programs that utilize the interaction between physical and cognitive development. Policymakers and educators should contemplate how combat sports programs could focus on at-risk or disengaged children, utilizing the organized discipline of combat sports as a means to re-engage them intellectually. Future research may investigate the long-term effects of these interventions and evaluate how various combat sports disciplines distinctly foster the cultivation of academic grit and engagement. Educational institutions could utilize this by providing organized combat sports classes to develop students' physical and academic resilience. Additionally, educators and policymakers should evaluate how these initiatives can advance overarching educational objectives, including the promotion of a growth mindset and enhancement of long-term academic performance.

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons
Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

These insights also promote future study to investigate how other physical activities may similarly cultivate qualities that enhance academic achievement.

Limitations and future research

Although the present study offers novel insights into the ways in which the nature of physical education grit influences the academic engagement of student martial art practitioners, it is essential to acknowledge its limitations. First, cross-sectional design limits the capacity to establish causal relationships between grit and academic engagement. Despite the identification of substantial relationships, longitudinal or experimental research are required to ascertain the directionality and enduring impacts of grit on academic engagement. Secondly, the study focused on self-report questionnaires, which may be susceptible to social desirability bias or mistakes in participants' self-evaluation. Subsequent study may use observational techniques or external assessments to improve the objectivity of the results. The study exhibits an acceptable level of internal validity, employing validated instruments (PE-GRIT and UWES-9), uniform data collection protocols, and suitable statistical techniques to analyze the interrelations among variables. The researchers guaranteed data quality by implementing thorough sampling, conducting manual reviews of replies, and employing standardized techniques for instrument administration. The external validity of the findings is constrained by the sampling setting. Participants were only selected from combat sports athletes attending college and universities in 3 cities in Region X, Mindanao, Philippines. Consequently, the generalizability to other populations—such as athletes from non-combat sports, private institutions, or diverse cultural or educational contexts—should be undertaken with prudence. Future research may incorporate cross-regional samples or comparative designs across various sports to enhance applicability. Fourth, contextual factors including academic workload, institutional support, and personal motivation were not accounted for and may have affected participants' degrees of grit or involvement. Incorporating these variables into future models may yield a more thorough comprehension of the underlying dynamics. Finally, although the study examined both physical and academic grit, it did not investigate qualitative aspects, such as personal narratives or motivating methods, which could provide more profound insights into how

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

combat sports training influences student behavior and academic perseverance. Addressing these limitations in subsequent research could enhance the comprehension of the relationship between grit, physical education, and academic success across varied educational settings.

Conclusion

This study highlights that both physical and academic grit significantly contribute to academic engagement among combat sports student-athletes. Students who show persistence and discipline in their physical training are also more likely to stay focused, motivated, and involved in their academic work. This suggests that the skills developed in combat sports, such as perseverance and self-control, can support success in school. These findings have significant practical implications for educators, athletic coaches, and educational institutions. The significant influence of both physical and academic grit on academic engagement indicates that combat sports training could function as an effective dual-purpose intervention, enhancing physical fitness while simultaneously cultivating essential psychological attributes that foster academic achievement. By deliberately structuring physical education programs that prioritize goal-setting, tenacity, and emotional regulation, schools may cultivate life skills that transcend athletics and permeate the academic domain. These results are especially pertinent for universities pursuing comprehensive strategies for student development, particularly for groups managing demanding athletic and academic obligations.

References

Alif, M., Komarudin, K., Muhtar, T., & Mulyana, M. (2024). Positive Youth Development (PYD) in Martial Arts Activities: Literature Review. *Int J Disabil Sports Health Sci*, *7*(4), 914–922. https://doi.org/10.33438/ijdshs.1471275

Andreato, L. V., Santos, M. G. dos, & Andrade, A. (2022). What do we know about the effects of mental training applied to combat sports? A systematic review. *Psychology of Sport and Exercise*, *63*, 102267. https://doi.org/10.1016/j.psychsport.2022.102267

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Blanco-García, C., Acebes-Sánchez, J., Rodriguez-Romo, G., & Mon-López, D. (2021). Resilience in Sports: Sport Type, Gender, Age and Sport Level Differences. *International Journal of Environmental Research and Public Health*, *18*(15), 8196. https://doi.org/10.3390/ijerph18158196

Cadime, I., Lima, S., Marques Pinto, A., & Ribeiro, I. (2016). Measurement invariance of the Utrecht Work Engagement Scale for Students: A study across secondary school pupils and university students. *European Journal of Developmental Psychology*, *13*(2), 254–263. https://doi.org/10.1080/17405629.2016.1148595

Cao, X., & Lyu, H. (2024). Motivational drivers and Sense of Belonging: unpacking the persistence in Chinese Martial Arts practice among international practitioners. *Frontiers in Psychology*, *15*. https://doi.org/10.3389/fpsyg.2024.1403327

Carmona-Halty, M. A., Schaufeli, W. B., & Salanova, M. (2019). The Utrecht Work Engagement Scale for Students (UWES–9S): Factorial Validity, Reliability, and Measurement Invariance in a Chilean Sample of Undergraduate University Students. *Frontiers in Psychology*, *10*, 1017. https://doi.org/10.3389/fpsyg.2019.01017

Chen, W. (2024). International Promotion Strategies and Students' Desire to Participate in Martial Arts Program in a Selected University in Beijing, China. *Social Science and Humanities Journal*, *8*(10), 5368–5394. https://doi.org/10.18535/sshj.v8i10.1398

Christopoulou, M., Lakioti, A., Pezirkianidis, C., Karakasidou, E., & Stalikas, A. (2018). The Role of Grit in Education: A Systematic Review. *Psychology*, *09*(15), 2951–2971. https://doi.org/10.4236/psych.2018.915171

Costello, E., Huhn, K., Healey, W. E., Hilliard, M. J., Plack, M. M., & Maring, J. (2022). Exploration of Grit, Self-Reflection and Insight, and Anxiety: A Multisite Study of Doctor of Physical Therapy Students. *Journal of Physical Therapy Education*, *36*(3), 196–204. https://doi.org/10.1097/jte.0000000000000246

Credé, M., Tynan, M. C., & Harms, P. D. (2017). Much ado about grit: A meta-analytic synthesis of the grit literature. *Journal of Personality and Social Psychology*, *113*(3), 492–511. https://doi.org/10.1037/pspp0000102

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

Daniels, B. T., Human, A. E., Gallagher, K. M., & Howie, E. K. (2021). Relationships between grit, physical activity, and academic success in university students: Domains of physical activity matter. *Journal of American College Health*, *71*(6), 1897–1905. https://doi.org/10.1080/07448481.2021.1950163

Datu, J. A. D., Yang, L., & Mateo, N. J. (2021). Are gritty students academically engaged in math and science? *School Psychology*, *36*(3), 190–195. https://doi.org/10.1037/spq0000433

Disabato, D. J., Goodman, F. R., & Kashdan, T. B. (2018). Is grit relevant to well-being and strengths? Evidence across the globe for separating perseverance of effort and consistency of interests. *Journal of Personality*, *87*(2), 194–211. https://doi.org/10.1111/jopy.12382

Domínguez-Salas, S., Rodríguez-Domínguez, C., Arcos-Romero, A. I., Allande-Cussó, R., García-Iglesias, J. J., & Gómez-Salgado, J. (2022). Psychometric Properties of the Utrecht Work Engagement Scale (UWES-9) in a Sample of Active Health Care Professionals in Spain. *Psychology Research and Behavior Management*, *15*, 3461–3472. https://doi.org/10.2147/PRBM.S387242

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, *92*(6), 1087–1101. https://doi.org/10.1037/0022-3514.92.6.1087

Duckworth, A., & Gross, J. J. (2014). Self-control and grit: Related but separable determinants of success. *Current Directions in Psychological Science*, *23*(5), 319–325. https://doi.org/10.1177/0963721414541462

Dunston, E. R., Messina, E. S., Coelho, A. J., Chriest, S. N., Waldrip, M. P., Vahk, A., & Taylor, K. (2020). Physical activity is associated with grit and resilience in college students: Is intensity the key to success? *Journal of American College Health*, *70*(1), 216–222. https://doi.org/10.1080/07448481.2020.1740229

Engels, M. C., Phalet, K., Gremmen, M. C., Dijkstra, J. K., & Verschueren, K. (2020). Adolescents' engagement trajectories in multicultural classrooms: The role of the classroom context. *Journal of Applied Developmental Psychology*, *69*, 101156. https://doi.org/10.1016/j.appdev.2020.101156

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Engels, M. C., Spilt, J., Denies, K., & Verschueren, K. (2021). The role of affective teacher-student relationships in adolescents' school engagement and achievement trajectories. *Learning and Instruction*, *75*, 101485. https://doi.org/10.1016/j.learninstruc.2021.101485

Fawver, B., Cowan, R. L., DeCouto, B., Lohse, K. R., Podlog, L., & Williams, A. M. (2019). Psychological characteristics, sport engagement, and performance in alpine skiers. *Psychology of Sport and Exercise*, *47*, 101616. https://doi.org/10.1016/j.psychsport.2019.101616

Fredricks, J. A., Filsecker, M., & Lawson, M. A. (2016). Student engagement, context, and adjustment: Addressing definitional, measurement, and methodological issues. *Learning and Instruction*, *43*, 1–4. https://doi.org/10.1016/j.learninstruc.2016.02.002

González-Bernal, J., Gonzalez-Bernal, S., Salavera, C., Fernández-Ortega, C., Trigueros Ramos, R., Aguilar-Parra, J., & González-Santos, M. (2022). Adaptation and Testing of the Factorial Structure of the Physical Education Grit Scale for Use in Secondary Education in Spain. *International Journal of Environmental Research and Public Health*, *19*(16), 10008. https://doi.org/10.3390/ijerph191610008

Guelmami, N., Chalghaf, N., Tannoubi, A., Puce, L., Azaiez, F., & Bragazzi, N. L. (2022). Initial Development and Psychometric Evidence of Physical Education Grit Scale (PE-Grit). *Frontiers in Public Health*, *10*. https://doi.org/10.3389/fpubh.2022.818749

Hadiana, O., Subarjah, H., Mamun, A., Mulyana, M., Yuliardi, R., & Nur, L. (2022). Life Skill Development through Pencak Silat Martial Arts Training: An Intentionally Structured Positive Youth Development Program. *International Journal of Human Movement and Sports Sciences*, *10*(4), 660–667. https://doi.org/10.13189/saj.2022.100405

Hodge, B., Wright, B., & Bennett, P. (2017). The Role of Grit in Determining Engagement and Academic Outcomes for University Students. *Research in Higher Education*, *59*(4), 448–460. https://doi.org/10.1007/s11162-017-9474-y

Hughes, J. N., & Cao, Q. (2018). Trajectories of teacher-student warmth and conflict at the transition to middle school: Effects on academic engagement and

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

achievement. *Journal of School Psychology*, *67*, 148–162. https://doi.org/10.1016/j.jsp.2017.10.003

Karlen, Y., Suter, F., Hirt, C., & Maag Merki, K. (2019). The role of implicit theories in students' grit, achievement goals, intrinsic and extrinsic motivation, and achievement in the context of a long-term challenging task. *Learning and Individual Differences*, *74*, 101757. https://doi.org/10.1016/j.lindif.2019.101757

Kim, D.-S. (2023). The role of parenting attitude and motivational climate in the relationship between life skills development and transfer of Taekwondo trainees. *Korean Journal of Sports Science*, *32*(1), 283–297. https://doi.org/10.35159/kjss.2023.02.32.1.283

Kim, K.-T. (2019). A Mediating Effect of Positive Psychological Capital on the Relationship between Academic Grit and Academic Burnout Perceived by High School Students. *Journal of the Korea Convergence Society*, *10*(6), 219–225. https://doi.org/10.15207/JKCS.2019.10.6.219

Lee, J.-H., Cho, J.-H., Kwak, Y.-S., Ko, B.-G., & Cho, E.-H. (2021). The Relationship between Changes in GRIT, Taekwondo Ability, and Academic Achievement of University Students Majoring in Science and Engineering and Participating in Taekwondo Class. *International Journal of Environmental Research and Public Health*, *18*(10), 5361. https://doi.org/10.3390/ijerph18105361

Lobo, J., Balahadia, F., Panganiban, T., Camarador, R., Quibral, J., Longakit, J., Mondido, C. A., Rodriguez, D., Tagare Jr., R., Celestial, E., & Payumo, A. (2024). Driven by grit, inspired by curiosity: Enhancing students' academic engagement in Physical Education in the higher education system. *Sportis. Scientific Technical Journal of School Sport, Physical Education and Psychomotricity, 11*(1), 1–23. https://doi.org/10.17979/sportis.2025.11.1.11204

Longakit, J. C., Rodriguez, D. R., Tagare, R. L., Gula, L. P., Sinag, J. M. D., Quibral, J. P., Camarador, R. A., Panganiban, T. D., & Lobo, J. (2025). How passion fuels student athletes? A Dualistic model approach to engagement in sports. *Physical Culture and Sport. Studies and Research*, *109*. https://doi.org/10.2478/pcssr-2025-0014

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña
A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

Longakit, J., Lobo, J., Gazali, N., Toring-Aque, L., Sayson, M., Aque, F. J., Panganiban, T., Tagare, R. L., Garcia, A. L., Michael, J., Mark, J., & Celestial, E. F. (2025). The influence of teacher emotional support on academic engagement of university students: Examining the mediating role of academic motivation through the lens of Self-determination theory. *Sportis Scientific Journal of School Sport Physical Education and Psychomotricity*, *11*(2), 1–25. https://doi.org/10.17979/sportis.2025.11.2.11328

Longakit, J., Toring-Aque, L., Aque, F. J., Sayson, M., & Lobo, J. (2024). The role of coach-athlete relationship on motivation and sports engagement. *Physical Education of Students*, *28*(5), 268–278. https://doi.org/10.15561/20755279.2024.0503

Lozano-Jiménez, J. E., Huéscar, E., & Moreno-Murcia, J. A. (2021). From Autonomy Support and Grit to Satisfaction With Life Through Self-Determined Motivation and Group Cohesion in Higher Education. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.579492

Massey, W. V., & Whitley, M. A. (2023). Fighting forward: purpose as a form of resilience for combat sport athletes. *Qualitative Research in Sport, Exercise and Health*, *16*(3), 259–270. https://doi.org/10.1080/2159676x.2023.2287497

Mojtahedi, D., Dagnall, N., Denovan, A., Clough, P., Dewhurst, S., Hillier, M., Papageorgiou, K., & Perry, J. (2023). Competition Anxiety in Combat Sports and the Importance of Mental Toughness. *Behavioral Sciences*, *13*(9), 713. https://doi.org/10.3390/bs13090713

Muenks, K., Yang, J. S., & Wigfield, A. (2018). Associations between grit, motivation, and achievement in high school students. *Motivation Science*, *4*(2), 158–176. https://doi.org/10.1037/mot0000076

Newland, A., Gitelson, R., & Legg, W. E. (2020). Examining the Relationship Between Mental Skills and Grit in Senior Olympic Athletes. *Journal of Aging and Physical Activity*, *28*(4), 658–667. https://doi.org/10.1123/japa.2019-0304

Oktavia, A., & Viranda, C. (2024). Self-Regulation and Grit: The Role of Self-Regulation and Grit in Overcoming Thesis Writing Anxiety among Final-Year

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons

Students. *Psikostudia : Jurnal Psikologi*, *13*(3), 348. https://doi.org/10.30872/psikostudia.v13i3.15114

Olefir, V. (2018). Personality resources as a mediator of the relationship between antecedents of stress and pre-competitive anxiety. *Journal of Physical Education and Sport*, *18*(4), 2230–2234. https://doi.org/10.7752/jpes.2018.04335

Roorda, D. L., Jak, S., Zee, M., Oort, F. J., & Koomen, H. M. Y. (2017). Affective Teacher–Student Relationships and Students' Engagement and Achievement: A Meta-Analytic Update and Test of the Mediating Role of Engagement. *School Psychology Review*, *46*(3), 239–261. https://doi.org/10.17105/spr-2017-0035.v46-3

Rumbold, J. L., Dunn, J. G. H., & Olusoga, P. (2022). Examining the Predictive Validity of the Grit Scale-Short (Grit-S) Using Domain-General and Domain-Specific Approaches With Student-Athletes. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.837321

Rutberg, S., Nyberg, L., Castelli, D., & Lindqvist, A.-K. (2020). Grit as Perseverance in Physical Activity Participation. *International Journal of Environmental Research and Public Health*, *17*(3), 807. https://doi.org/10.3390/ijerph17030807

Schaufeli, W. B. (2017). General Engagement: Conceptualization and Measurement with the Utrecht General Engagement Scale (UGES). *Journal of Well-Being Assessment*, *1*, 9–24. https://doi.org/10.1007/s41543-017-0001-x

Schaufeli, W. B., Martínez, I. M., Pinto, A. M., Salanova, M., & Bakker, A. B. (2002). Burnout and Engagement in University Students. *Journal of Cross-Cultural Psychology*, *33*(5), 464–481. https://doi.org/10.1177/0022022102033005003

Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample 22cadèmic22ori factor analytic approach. *Journal of Happiness Studies*, *3*(1), 71–92. https://doi.org/10.1023/a:1015630930326

Tannoubi, A., Quansah, F., Magouri, I., Chalghaf, N., Bonsaksen, T., Srem-Sai, M., Hagan, J. E., Handrianto, C., Azaiez, F., & Bragazzi, N. L. (2023). Modelling the associations between 22cadèmic engagement, study process and grit on 22cadèmic

Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity
Published by: Campus Educa Sportis. Collaborator: University of A Coruña A Coruña. Spain
E-mail: v.arufe@udc.es Web: www.sportisjournal.com
ISSN-e 2386-8333
Creative Commons
Original article. Discipline in practice and study: A cross-sectional study on grit and academic engagement in combat sport athletes. Vol. 11, n. º 3; p. 1-23, July 2025.
https://doi.org/10.17979/sportis.2025.11.3.11651

achievement of physical education and sport university students. *BMC Psychology*, *11*(1), 418. https://doi.org/10.1186/s40359-023-01454-2

Upadyaya, K., & Salmela-Aro, K. (2013). Engagement With Studies and Work. *Emerging Adulthood*, *1*(4), 247–257. https://doi.org/10.1177/2167696813484299

Von Culin, K. R., Tsukayama, E., & Duckworth, A. L. (2014). Unpacking grit: Motivational correlates of perseverance and passion for long-term goals. *The Journal of Positive Psychology*, *9*(4), 306–312. https://doi.org/10.1080/17439760.2014.898320

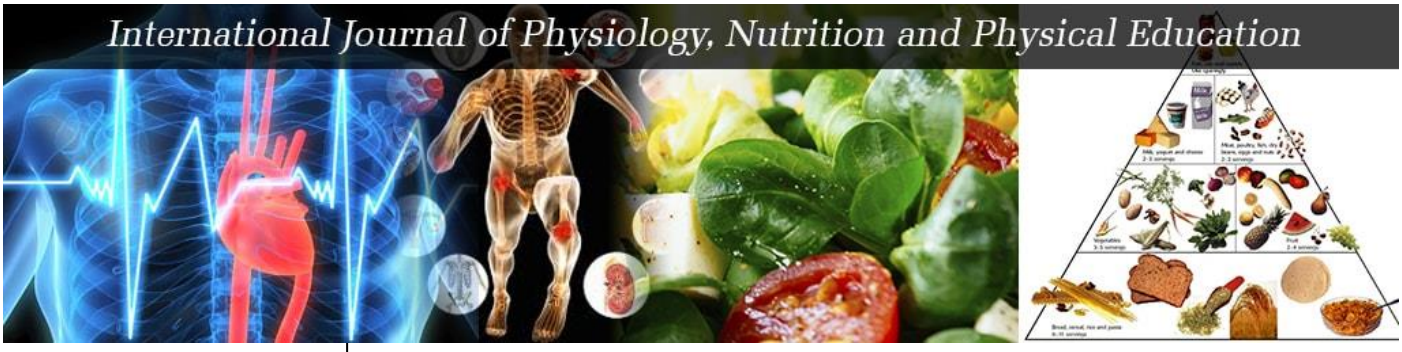
Wang, Y., Derakhshan, A., & Zhang, L. J. (2021). Researching and Practicing Positive Psychology in Second/Foreign Language Learning and Teaching: The Past, Current Status and Future Directions. *Frontiers in Psychology*, *12*(12). https://doi.org/10.3389/fpsyg.2021.731721

Wolters, C. A., & Hussain, M. (2015). Investigating grit and its relations with college students' self-regulated learning and academic achievement. *Metacognition and Learning*, *10*(3), 293–311. https://doi.org/10.1007/s11409-014-9128-9

Xu, T., Li, H., Yan, Z., & Zhang, G. (2022). The effects of self-control on bullying behaviour among martial arts practicing adolescents: based on the analyses of multiple mediation effects. *International Journal of Sport and Exercise Psychology*, *22*(1), 92–105. https://doi.org/10.1080/1612197x.2022.2116470

Zhang, R., Gao, S., & Dou, G. (2023). Preliminary revision of the Physical Education Grit Scale in Chinese athletes. *Frontiers in Psychology*, *14*, 1–6. https://doi.org/10.3389/fpsyg.2023.1136872

.



ISSN: 2456-0057
IJPNPE 2025; 10(1): 236-243

www.journalofsports.com
Received: 08-03-2025
Accepted: 15-04-2025

All author's name and affiliations are given below, after references

The nutritional awareness and eating habits of generation Z students: A cross comparative and correlation analysis

Kenneth D Gallego, Marlene E Orfrecio, Marichu A Calixtro, Gladys Pearl O Ambrocio, Cheeze R Janito, Cristine Joyce B Abadejos, Jomar B Esto, Moreno B Java, Jr. Ruben L Tagare and Jr. Elpedio A Arias

DOI: https://www.doi.org/10.22271/journalofsport.2025.v10.i1d.3049

Abstract
This study aimed to explore the eating habits and nutritional awareness of Generation Z students, who are individuals born between the mid-1990s and the mid-2010s. The study focused on addressing the challenges faced by generation Z students in maintaining healthy eating habits due to their busy schedules and the influence of convenience foods. The researcher emphasized the importance of educating young people about nutrition and healthy eating habits to improve their overall well-being. The objectives of the study were to determine the demographic profile of the respondents, assess their nutritional awareness and eating habits, and determine the relationship between these variables. The study utilized a quantitative comparative correlational approach, with a survey questionnaire as the data collection instrument. Respondents were selected from the University of Southern Mindanao using random sampling technique. Data analysis involved descriptive statistics and inferential statistics such as ANOVA and Spearman's Rho correlation coefficient. The findings of this research could guide interventions and educational programs to promote healthier lifestyles and improve the well-being of Generation Z students. This study on the nutritional awareness and eating habits of Generation Z students aimed to address the challenges they face in maintaining healthy food choices. By examining the relationship between nutritional awareness and eating habits, the study provided valuable insights that could guide interventions and educational programs. The goal was to promote healthier lifestyles and improve the well-being of generation Z students.

Keywords: Generation Z, eating habits and nutritional awareness

Introduction
Generation Z, commonly referred to as Gen Z or Zoomers, consists of individuals born between the mid-1990s and the early 2010s. This generation has been shaped by rapid technological advancements, globalization, and the widespread use of digital platforms, influencing various aspects of their lifestyle, including their approach to health and nutrition. Unlike previous generations, Gen Z students tend to seek convenience in their daily activities, including food consumption, often favoring fast food, instant meals, and processed snacks due to their busy academic and social schedules. Their increased reliance on digital technology also affects their dietary behaviors, as social media plays a significant role in shaping their food choices and perceptions of health. Additionally, economic factors and accessibility to nutritious foods impact their eating habits, further shaping their overall health and well-being. Understanding the characteristics and behaviors of Gen Z is essential in assessing their nutritional awareness and consumption patterns.
Nutritional awareness refers to an individual's knowledge and understanding of the importance of proper nutrition, including the ability to make informed food choices that support overall well-being.
It involves recognizing the role of essential nutrients, understanding food labels, and adopting balanced dietary habits to maintain a healthy lifestyle.

Corresponding Author:
Kenneth D Gallego
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines

On the other hand, eating habits encompass the patterns, choices, and behaviors related to food consumption, including meal frequency, portion sizes, and preferences for specific types of food. Healthy eating habits contribute to overall wellness, while poor eating behaviors such as excessive intake of processed foods, skipping meals, and emotional eating can lead to nutritional deficiencies and long-term health risks. The interplay between nutritional awareness and eating habits determines an individual's ability to sustain a balanced diet and prevent diet-related health problems.

Despite the importance of proper nutrition, Generation Z faces multiple challenges in maintaining a healthy diet due to their modern lifestyle and food consumption behaviors. Studies have shown that many Gen Z students lack sufficient knowledge about proper nutrition, often underestimating the health risks associated with processed food consumption and unbalanced diets (Martinez *et al*., 2025). Additionally, irregular eating habits, such as skipping meals or excessive snacking, have been observed among students, contributing to deficiencies in essential nutrients. Fast food accessibility and the increasing trend of food delivery services further contribute to poor dietary habits, as students prioritize convenience over nutritional value. Furthermore, the prevalence of diet fads and misleading health information on social media has led to misconceptions about nutrition, influencing unhealthy dietary behaviors. These challenges highlight the need for a more comprehensive understanding of Gen Z's nutritional awareness and eating habits.

Several studies have explored the relationship between nutritional awareness and eating habits across different populations. Research has shown that higher nutritional knowledge is linked to healthier food choices, with individuals who are more aware of proper nutrition being more likely to consume balanced meals and limit their intake of unhealthy foods. In contrast, a lack of awareness often results in poor dietary practices, increasing the risk of obesity, diabetes, and cardiovascular diseases. Educational interventions on nutrition have been found to improve dietary behaviors among various groups, demonstrating the importance of promoting nutritional literacy. Additionally, studies have emphasized the role of socioeconomic status and food accessibility in shaping eating habits, as individuals from lower-income backgrounds often struggle with maintaining a nutritious diet due to financial constraints and limited food options. While these studies provide valuable insights, there remains a need to examine how these factors specifically affect Generation Z students.

Despite the growing body of research on nutritional awareness and eating habits, there is a lack of comprehensive studies specifically investigating these factors among Generation Z students. Existing literature primarily focuses on general populations or specific age groups, but limited data is available on how Gen Z navigates their food choices in the context of modern influences such as digital media, food accessibility, and academic pressures. This study aims to address this gap by examining the nutritional awareness and eating habits of Generation Z students, identifying key factors that influence their dietary behaviors, and assessing the correlation between their knowledge of nutrition and their actual food consumption patterns. By conducting a cross-comparative and correlation analysis, this research seeks to provide a clearer understanding of how Gen Z approaches nutrition and what interventions can be developed to improve their dietary habits. This study holds significant importance for various stakeholders. For Generation Z students, it offers insights into their eating behaviors, helping them make more informed dietary choices to promote better health. In the broader academic field, this research contributes to the body of knowledge on youth nutrition, providing a foundation for future studies in health education and public health interventions. Furthermore, its findings can guide policymakers, educators, and healthcare professionals in developing strategies to enhance nutritional literacy and promote healthier lifestyles among young individuals. By addressing these critical issues, this study aims to support the well-being of Generation Z and encourage a more health-conscious approach to food consumption.

Methodology

Research Design

In this study, the researcher employed a quantitative research design that utilized a comparative-correlational approach to examine the relationship between the nutritional awareness and eating habits of every generation z students including the demographic profiles and their nutritional knowledge. This design allowed the researcher to collect and analyze numerical data to identify patterns, relationships, and differences between variables. The comparative-correlational method enabled the researcher to compare the means of distinct groups or identify significant relationships among the nutritional awareness and eating habits of every generation z students. By choosing this design, the researcher was able to effectively determine the significant relationships between variables and compare groups based on specific test factors, which was crucial for the research goals.

Research Respondents

The respondents of this study were the students who were born in 1997 to 2012 or the Generation Z students and currently enrolled at the University of Southern Mindanao, Philippines in the academic year of 2022-2023.

Sampling Procedure

The respondents of the study were chosen through random sampling technique, random sampling is used to select a subset of individuals from a larger population of Generation Z students, where each member of population has an equal chance of being selected.

It involves identifying some gen Z students from a different year levels and colleges in such a way that every generation z has an equal chance of being chosen. Hence, a total of four hundred forty (440) generation z respondents will respond for the completion of this study.

Research Instrument

This research used a survey questionnaire to collect data, entitled "Eating habits and nutritional awareness" which was a questionnaire developed by Sarah (2005) approved by the California University of Pennsylvania the questionnaire has a Cronbach alpha value of .645 which means that it passes the internal consistency test thereby displaying reliability of its items. The questionnaire will be divided into three sections the demographic section requires the subject to answer questions about sex, age, year level, and source of knowledge. The eating habits sections will focus on identifying how often gen Z students ate a particular food item. It consists 18 questions for this selection answers ranged from always, often, rarely to never. For the nutritional awareness, the intent is to test the level of their nutritional awareness for each Gen Z students. This section consists of 29 questions that the

respondents will select among strongly agree, somewhat agree, somewhat disagree, and strongly disagree with each statement.

Data Gathering Procedure

The researcher asked permission first from the dean of Institute of Sports, Physical Education and Recreation to conduct the study. After obtaining permission, the researcher prepared an Informed Consent Form to ensure that all respondents were fully aware about the overall understanding of the study. When the researcher was permitted to conduct, the researcher distributed the questionnaires to all the Gen Z students inside the campus. Thereafter, the researcher gathered the needed data through sampling method mentioned on this paper. After gathering the needed data, the researcher tallied, and classified the raw data for analysis and interpretation.

Statistical Analysis

Descriptive statistics such as frequencies count, percentages, mean, and weighted mean were utilized to describe the demographic profile, nutritional awareness, and eating habits of the respondents. Compare means using ANOVA were utilized to determine the significant difference on the respondents' nutritional awareness and eating habits based on their year levels. Spearman rho`s correlation coefficient will also be used to determine the significant relationship between the nutritional awareness and eating habits.

Results and Discussion

Table 1 presents the demographic profile of the respondents. Based on the data 246 or 55.9% were male respondents, while 194 or 44.1% were female respondents. This means that most of the generation z student respondents who participated in this study were male.

In terms of the respondents' year levels, the highest portion who participated this study were the third-year students with 128 respondents or equivalent to 29.1%, and the 95 or 21.6% got the lowest coming from the first year student respondents.

In terms of the age of the respondents, the highest portion were 23-27 year years old with 269 students or 61.1% followed by the 18-23 years old with 166 or 37.7% student respondents.

On the other hand, the respondents' primary source of nutritional knowledge comes from the nutrition subject got the highest score of 172 students or 39.1% while television has the lowest impact with 10 or 2.3%. This suggests that participants primarily rely on formal education for their nutritional knowledge however, television is less influential in shaping their nutritional understanding

Table 1: Demographic profile of the respondents

Variables	Frequency	Percentage
Gender		
Male	246	55.9%
Female	194	44.1%
Year Level		
First Year College	Data Missing	Data Missing
Second Year College	Data Missing	Data Missing
Third Year College	Data Missing	Data Missing
Fourth Year College	Data Missing	Data Missing
Age		
18-22 Years Old	Data Missing	Data Missing
23-27 Years Old	Data Missing	Data Missing
Source of Knowledge		
Nutrition Subject	95	21.6%
Friends	100	22.7%
Parents	128	29.1%
Television	117	26.6%
Internet	166	37.7%
Coach	269	61.1%
Additional Source Data		
Nutrition Subject	172	39.1%
Friends	75	17.0%
Parents	122	27.7%
Television	10	2.3%
Internet	39	8.9%
Coach	22	5.0%

Table 2 shows the nutritional awareness of generation Z students. The findings revealed that the statement "nutrition affects mental performance" got the highest mean of 3.68 with the verbal description of strongly agree. This means that the respondents strongly believed in the connection between nutrition and mental performance and acknowledge that what they eat can have a significant effect on their cognitive abilities. This means that the quality of nutrition they consume can have an impact on their mental performance. It implies that a well-balanced and nutritious diet can positively influence cognitive functions such as memory, attention, and concentration.

It is highlighted by Firth *et al*. (2020) [10] that proper nutrition is essential for optimal brain function and supporting various cognitive processes such as memory, attention, and problem-solving. Muscaritoli (2021) [25], emphasized that nutrition has a significant impact on mental performance. Adequate nutrition during brain development is crucial, with nutrients like omega-3 fatty acids, B vitamins, and minerals playing a key role. Balanced meals provide a steady supply of glucose, the brain's primary energy source, promoting sustained mental energy and focus.

On the other hand, the statement "overconsumption of protein is beneficial for school performance" got the least mean value

of 3.08 with the verbal description of agree this means that over consumption implies that excessive intake of protein is considered if necessary of optimal health, in contrast, consuming adequate amounts of protein is important for maintaining healthy muscles and organs, but excessive consumption is not beneficial.

Based on the study of Muth and Park (2021) [26], overconsumption of protein may lead to an imbalance in macronutrient intake, potentially displacing other essential nutrients such as carbohydrates and fats. A well-rounded diet that includes a balance of macronutrients, and adequate hydration is generally recommended for optimal cognitive function. Cintineo *et al*. (2018) [6] highlighted that excessive protein intake may lead to imbalances in the overall nutrient composition of the diet, which can have negative effects on overall health and cognitive function, Therefore, it is important to maintain a balanced diet that includes an appropriate amount of protein, along with carbohydrates, fats, vitamins, and minerals, to support overall health and cognitive function. Overconsumption of protein, beyond what is necessary for optimal health, may not provide additional benefits and may even have detrimental effects on school performance.

Overall, the nutritional awareness of the gen z respondents got a composite mean of 3.42 with a verbal description of strongly agree. This means that the respondents have a good understanding of the importance of nutrition and recognize the role of nutrients such as carbohydrates, proteins, vitamins, and minerals in supporting mental performance, physical health, and overall well-being. This reveals that there is a general awareness among the respondents in terms of nutrition.

The findings of this study support the idea of Mamalis *et al*. (2023) [21] which states that generation z are aware of the impact of their food choices on their overall health and are interested in adopting healthier lifestyles. Gen z also places importance on sustainability, choosing environmentally friendly food options and considering the impact of their dietary choices, this generation prioritizes health and well-being, often seeking out nutritious food options and engaging in physical activities. They are conscious of the impact of their food choices on their overall health and are interested in adopting healthier lifestyles.

Furthermore, it is highlighted by the study of Insight (2023), that majority of gen z, have this positive self-perception which aligns with their understanding of healthy food. When they asked to identify the top attributes that define a healthy food, the most common responses among gen z included food that is has good source of nutrients, food that is fresh, and food that contains fruits or vegetables. These preferences indicate that gen z prioritize nutritious and fresh options, emphasizing the importance of a well-rounded diet. By incorporating these elements into their food choices, gen z strived to maintain and promote their overall health and well-being.

Table 2: Respondents' Nutritional Awareness

Statements	Mean	Verbal Description
3. Nutrition affects mental performance.	3.68	Strongly Agree
4. Vitamin C is also known as ascorbic acid.	3.67	Strongly Agree
5. Cereal, bread, bagels, pasta are good sources of carbohydrates.	3.61	Strongly Agree
12. Proteins act to repair and build muscle tissue and make hormones to boost immune system.	3.58	Strongly Agree
13. Proteins are the best and most efficient source of energy.	3.56	Strongly Agree
1. Skipping breakfast can negatively affect school performance.	3.55	Strongly Agree
2. Eating breakfast can improve concentration.	3.55	Strongly Agree
15. Carbohydrates are easier to digest than fats or Proteins.	3.51	Strongly Agree
9. 60% of total calories should come from carbohydrates.	3.48	Strongly Agree
7. Tofu, nuts, beans are good sources of protein.	3.47	Strongly Agree
16. If a diet is lacking in carbohydrates, proteins are then used for energy.	3.47	Strongly Agree
8. Oatmeal, legumes, and fruits are sources of soluble fiber.	3.46	Strongly Agree
14. The recommended amount of fiber is 25 grams.	3.46	Strongly Agree
10. According to food guide pyramid, one should consume 2-3 servings from the meat group.	3.45	Strongly Agree
11. According to food guide pyramid, one should consume 2-4 servings from the dairy group.	3.45	Strongly Agree
18. Average percentage of body fat in females is 20-25%.	3.37	Strongly Agree
20. Anemia is a deficiency of iron.	3.37	Strongly Agree
21. Eating cereals or breads enriched with iron should be eaten with a source of vitamin C to enhance absorption of iron.	3.36	Strongly Agree
6. The pre-event meal should be eaten 3-4 hours prior.	3.35	Strongly Agree
17. Do you tend to consume twice as much proteins as recommended?	3.33	Strongly Agree
19. Carbohydrates are less fattening than fatty foods.	3.33	Strongly Agree
23. Excess vitamin consumption can be toxic.	3.33	Strongly Agree
22. The best sources of iron come from animal products and fish.	3.32	Strongly Agree
28. According to Food Guide Pyramid, one should consume 6-11 servings from the bread, cereal, rice and pasta group.	3.29	Strongly Agree
24. Fats are essential in all diets.	3.25	Agree
27. According to Food Guide Pyramid, one should consume 6-11 servings from the meat group.	3.25	Agree
26. If you are not thirsty, then you must not be dehydrated.	3.24	Agree
25. Calcium excretion from the body increases with alcohol consumption.	3.19	Agree
29. Overconsumption of protein is beneficial for school performance.	3.08	Agree
Weighted Mean	3.42	Strongly Agree

Range	Verbal Description	Interpretation
1.00-1.75	Strongly Disagree	Not Knowledgeable at all
1.76-2.51	Disagree	Knowledgeable
2.52-3.27	Agree	Fairly Knowledgeable
3.28-4.00	Strongly Agree	Highly Knowledgeable

The Table 3 shows the eating habits of generation z students and revealed that respondents prioritize eating breakfast and drinking water, as indicated by their mean values of 3.69 and 3.64 respectively. This suggests that they understand the importance of starting their day with a nutritious meal and staying hydrated throughout the day.

It implies that the generation z exhibits positive eating habits and places importance on making nutritious food choices. They demonstrate a clear understanding of the significance of regular meals and staying hydrated for their overall health and well-being. This suggests that gen z are actively engaged in taking care of their bodies and prioritizing their nutritional needs. By valuing nutritious foods and recognizing the role of regular meals and hydration, generation z is positioning themselves for a healthier lifestyle. These positive eating habits can contribute to their physical well-being, cognitive function, and overall quality of life as they navigate through their daily activities and pursue their goals.

According to the study of Sogari *et al*. (2018) [31], having a positive eating habit, especially when it comes to breakfast is crucial for gen Z students. By eating a nutritious breakfast, students can enhance their memory, concentration, and overall brain function which are essential for academic success. Additionally, breakfast provides an energy boost that helps students stay focused and engaged throughout the day. It serves as the fuel that powers their bodies and minds, enabling them to perform at their best in classes and other activities.

Moreover, it is highlighted by the study of Zimmerman (2019) [36], that the habit of always drinking water further supports the well-being. Staying hydrated throughout the day, especially in the morning, is essential for optimal brain function. Adequate hydration ensures that students can maintain their focus, mental clarity, and cognitive performance. Water is crucial for delivering nutrients to the brain and removing waste products, supporting overall cognitive abilities and memory retention.

On the other hand, the statement "How often do you take mineral supplements?" received the least mean score of 2.18, indicating that gen z individuals tend to take mineral supplements infrequently. The verbal description of "rarely" further supports this finding. This implies that, gen z prioritized obtaining minerals from their regular diet rather than relying on supplements. It reflects a trend among the respondents where they place emphasis on consuming nutrient-rich foods and maintaining a balanced diet to naturally meet their mineral needs. By relying on dietary sources, gen z individuals demonstrate a preference for a holistic approach to nutrition and a desire to obtain nutrients from whole foods rather than relying solely on supplements.

According to the study of Francis (2022), excessive consumption of vitamins and minerals can lead to adverse effects and complications. It is essential for gen Z students to understand that these supplements should be taken in moderation and under the guidance of healthcare professionals. Lieberman *et al*. (2015) [19] also highlighted that prioritizing a balanced and nutritious diet should be the primary focus for gen Z students, as it provides a wide range of essential nutrients naturally. While vitamin and mineral supplements can be beneficial in certain cases, they should not be relied upon as a substitute for a healthy diet. Consulting with healthcare professionals or registered dietitians can ensure that gen z students make informed decisions about their nutrient intake and avoid potential complications associated with excessive supplementation.

Overall, the composite mean of 2.88 with the verbal description of "often" indicates that gen z students have positive eating habits. This implies that they regularly engage in healthy behaviors such as eating breakfast, staying hydrated by drinking water, consuming three balanced meals per day, and incorporating fruits, vegetables, and dairy products into their diet. These habits are associated with a balanced and nutritious eating pattern. The finding suggests that gen z students are conscious of their health and actively make efforts to maintain a healthy eating routine. Most of the respondents prioritize their healthy life style through their dietary choices.

Table 3: Respondents' Eating Habits

Statements	Mean	Verbal description	Interpretation
How often do you eat breakfast?	3.69	Always	Highly Knowledgeable
How often do you drink water?	3.64	Always	Highly Knowledgeable
How often do you eat three base meals per day?	3.30	Always	Highly Knowledgeable
How often do you eat fruits, such as apples, bananas, or oranges?	3.22	Often	Fairly Knowledgeable
How often do you eat vegetables, such as broccoli, tomatoes, carrots, or salad?	2.92	Often	Fairly Knowledgeable
How often do you eat fast foods?	2.91	Often	Fairly Knowledgeable
How often do you eat snack foods like potato chips, candies, doughnuts, or soda?	2.88	Often	Fairly Knowledgeable
How often do you eat dairy products such as milk, yogurt, or cheese?	2.85	Often	Fairly Knowledgeable
How do you seek out nutrition information?	2.85	Often	Fairly Knowledgeable
How often do you eat berry jams, cookies, candies, or other sweets?	2.79	Often	Fairly Knowledgeable
How often do you take vitamin supplements?	2.79	Often	Fairly Knowledgeable
How often do you snack on foods like bagels, yogurt, popcorn, pretzels, or fruits?	2.74	Often	Fairly Knowledgeable
How often do you drink carbonated beverages?	2.72	Often	Fairly Knowledgeable
Based on three per day, how often do you skip at least one meal per day?	2.60	Often	Fairly Knowledgeable
How often do you record what you eat?	2.51	Rarely	Fairly Knowledgeable
How often are you on a diet?	2.38	Rarely	Fairly Knowledgeable
How often do you take mineral supplements?	2.18	Rarely	Fairly Knowledgeable
Weighted Mean	2.88	Often	

Range	Verbal Description	Interpretation
1.00 – 1.75	Never	Very Bad
1.76 – 2.51	Rarely	Bad
2.52 – 3.27	Often	Good
3.28 – 4.00	Always	Very Good

Based on the study of Scalvedi (2021) [29], gen z individuals have a comprehensive understanding of health, recognizing the significance of physical and mental well-being in their overall wellness. Their self-perception of health as excellent or very good reinforces their commitment to maintaining a healthy lifestyle.

Mason (2019) [22] highlighted the study that the gen z focus on health extends beyond physical aspects. They actively seek out health benefits from the foods they consume, beverages they drink, and nutrients they intake.

Table 4 shows the test of significant relationship between the respondents' nutritional awareness and eating habits. Based on the data, the p-value of .000 indicates that the relationship between nutritional awareness and eating habits is statistically significant, as it is less than the standard alpha value of .05 indicates a moderate positive correlation. This suggests that generation z individuals who have higher levels of nutritional awareness tend to have healthier eating habits. They are more likely to make informed choices about their diet and prioritize nutritious food options. This analysis suggests that there is a positive relationship between nutritional awareness and eating habits among Generation Z. Higher levels of nutritional awareness are linked to healthier eating habits in this population.

It is highlighted by Halasi *et al*. (2021) [13] that gen Z students exhibit a strong relationship with their nutritional awareness, showcasing a heightened understanding of the importance of healthy eating and its impact on their overall well-being. Gen z is characterized by a proactive approach to seeking information and staying informed about nutrition. Gen z students actively engage with various sources, including the internet, social media, and educational resources, to deepen their knowledge and expand their understanding of nutrition-related topics. Medina *et al*. (2020) [23], highlighted the study of relationship between gen z students and their nutritional awareness is characterized by a proactive mindset, informed decision-making, and a holistic understanding of the impact of nutrition on their overall health and the world around them. Their commitment to staying informed and making conscious food choices positions them as a generation that values and prioritizes their well-being through nutrition.

Table 4: Test of significant relationship between the respondents' nutritional awareness and eating habits

Variables	Correlation Coefficient	P-Value	Interpretation
Nutritional Awareness	.244**	.000	With Significant
Eating Habits			Relationship

*Statistically Significant if p-value is <.05

The table 5 shows the result of the test of significant difference on the respondents' nutritional awareness based on their year levels. The results of the ANOVA indicate that there is a statistically significant difference in the nutritional awareness of generation z students across different year levels. This finding suggests that the level of nutritional awareness varies among the different groups or year level, indicating potential differences in knowledge and understanding of nutrition based on their academic progression or year level.

This implies that gen z students have a significant difference in terms of their nutritional awareness per year level because of their personal and character development which means that gen z students being mature and gain more independence, they may start making their own food choices and become more conscious of their nutritional needs, younger students may be more influenced by their peers who are more health-conscious and actively discuss nutrition-related topics. As they progress to higher year levels, they may adopt healthier eating habits and become more aware of the importance of nutrition.

Based on the study of Murmura and Sevalle (2022) [24], Personal development plays a crucial role in shaping the nutritional awareness of gen z students as they progress through different year levels. As they mature and gain more independence, they start making their own food choices, which allows them to have a greater sense of control over their nutrition. Gen Z students, who have had more years of personal development, may have had more opportunities to explore different types of diets.

Further, Wu (2022) [34] explained that the access to information plays a pivotal role in shaping the nutritional awareness of gen z students, with significant differences observed based on their year levels. Older students, having spent more time in the educational system, are likely to have encountered a greater volume of nutritional information over the years. Exposure to diverse sources, such as textbooks, online resources, and educational programs, contributes to their comprehensive understanding of nutrition. In contrast, younger students may not have had the same level of exposure, potentially limiting their awareness. The continuous evolution of educational materials and approaches also influences the information available to different age groups, contributing to variations in their nutritional knowledge.

Table 5: Test of significant difference on the respondents' nutritional awareness base on their year levels

ANOVA					
	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	1.032	3	.344	3.601	.014
Within Groups	41.649	436	.096		
Total	42.681	439			

*Statistically Significant if p-value is <.05

Table 6 shows the test of significant difference on the respondents' eating habits based on their year levels. Based on the results, it reveals that there is no significant difference in the eating habits of generation z students across different year levels. The p-value of 0.131 is greater than standard alpha value of 0.05, indicating that the difference observed between the groups is not statistically significant, this implies that the eating habits of generation z students are not significantly influenced by their year levels. This means that regardless of whether they are in their first, second, third, or fourth year, their eating habits remain relatively consistent. This finding highlights the notion that the dietary preferences and choices of generation z students are do not differ by their academic progression. It implies that factors other than education, such as personal preferences, cultural influences, or lifestyle choices, play a more prominent role in shaping their eating habits. Understanding this consistency in eating habits across different year levels can provide valuable insights for educational institutions and policymakers in developing effective strategies to promote healthy eating among generation z students. By recognizing the stability in their dietary patterns, targeted interventions can be designed to address specific needs and preferences, ultimately leading to improved overall health and well-being.

Table 6: Test of significant difference on the respondents eating habits

ANOVA					
	Sum of Squares	**DF**	**Mean Square**	**F**	**Sig.**
Between Groups	.390	3	.130	1.890	.131
Within Groups	29.992	436	.069		
Total	30.382	439			

*Statistically Significant if p-value is <.05

Conclusions

Based on the findings and discussions, it is evident that generation z students have a strong understanding of the importance of nutrition and its impact on their overall health and well-being. They firmly believe in the connection between nutrition and mental performance, recognizing that what they eat can significantly affect their cognitive abilities. Maintaining a well-balanced and nutritious diet positively influences cognitive functions such as memory, attention, and concentration. When it comes to eating habits, this study concludes that generation z students understand the significance of regular meals and hydration for their overall health and well-being. They actively engage in making nutritious food choices, incorporating fruits, vegetables, and dairy products into their diet. However, they tend to rely on obtaining minerals from their regular diet rather than taking mineral supplements.

Further, this study reveals that there is a positive relationship between the nutritional awareness of generation z students and their eating habits. Those with higher levels of nutritional awareness tend to have healthier eating habits, making informed choices about their diet and prioritizing nutritious food options. It is interesting to note that the level of nutritional awareness varies among different year levels of generation z students. As they progress to higher year levels, they adopt healthier eating habits and become more aware of the importance of nutrition.

References

1. Abraham S, Noriega BR, Shin JY. College students eating habits and knowledge of nutritional requirements. J Nutr Human Health. 2018;2(1).
2. Ali S. Nutrition Awareness Level of Al-Balqa Applied University Students. J Biol Agric Healthcare. 2015;4(2). Available from: www.iiste.org
3. Alkerwi A, Sauvageot N, Malan L, Shivappa N, Hébert JR. Association between Nutritional Awareness and Diet Quality: Evidence. Nutrients. 2015;7(4):2823-38. In: Int J Exerc Sci. 9(8):9.
4. Berdahl J, Arrow H, McGrath J. Small groups as complex systems: Formation, coordination, development, and adaptation. Sage Publications, 2020.
5. Brooke N. Relationship between nutrition knowledge and dietary intake. Br J Nutr. 2018;111:1713-1726. DOI: 10.1017/s0007114514000087.
6. Cintineo HP, Arent MA, António J, Arent SM. Effects of protein supplementation on performance and recovery in resistance and endurance training. Front Nutr, 2018, p. 5. https://doi.org/10.3389/fnut.2
7. Chaudhary A, Sudzina F, Mikkelsen BE. Promoting healthy eating among young people. Nutrients. 2020;12(9):2894. https://doi.org/10.3390/nu12092894
8. Ching G, John C, Abraham N. A Study on the relationship between college students' personality and their eating habits. Int J Info Ed Tech. 2015;5(2).
9. Elhassan M, Stevenson C, Tams P. Nutrition knowledge attitude and practices among students of Ahfad University for women. Indian J Sci Res, 2015, p. 25-35.
10. Firth J, Gangwisch JE, Borisini A, Wootton RE, Mayer EA. Food and mood: How do diet and nutrition affect mental wellbeing? BMJ. 2020;370:m2382. https://doi.org/10.1136/bmj.m2382
11. Francis K. Nutrition Awareness Level of Al-Balqa Applied University Students. J Biol Agric Healthcare. 2015;4(2). Available from: www.iiste.org
12. Gunes F, Brown K, Strugnell C. Relation between eating habits and a high body mass index among freshman students: A cross-sectional study, 2014, p. 167-74.
13. Halasi F, Salama T, Song L. The nutritional awareness of functional food among university students in Poland. Rocz P Zakl Hig. 2021;67(2):2. (Vol. 34, No. 8, p. 2).
14. Intiful F, Fang W. Exploring the relationship between the big five personality characteristics and dietary habits among students in a Ghanaian University. BMC Psychol. 2019;7(1):1-7.
15. Insight F. Food and Health Survey Spotlight: Generation Z. Food Insight. 2023;12(18). https://foodinsight.org/spotlight-generationz/
16. Juanico C, Bernardo AK. Changes in Nutrition-Related practices among college students after completing a general education course on nutrition. J Hum Ecol. 2018;7(1).
17. Kim HK, Jung HK. A comparison of health related habits, nutrition knowledge, dietary habits, and blood composition according to gender and weight status of college students. Korean J Nutr. 2016;45(4):336. DOI: 10.4163/kjn.2016.45.4.336.
18. Kim J, Choi OJE, Lee Y, Lee Y, Song KH. A comparison on health-related lifestyle, dietary habits, and depression by exercise frequency of college students. Nutr Res Pract. 2021;15(3):355. https://doi.org/10.4162/nrp.2021.15.3.355
19. Lieberman HR, Marriott BP, Williams C, Judelson D, Glickman EL, Geiselman P, *et al*. Patterns of dietary supplement use among college students. Clin Nutr. 2015;34(5):976-85. https://doi.org/10.1016/j.clnu.2014.10.010
20. Lupi S, Bagordo F, Stefanati A, Grassi T, Piccinni L, Bergamini M, Donno DA. Assessment of lifestyle and eating habits among undergraduate students in northern Italy. PubMed. 2015;51(2):154-61. https://doi.org/10.4415/ann_15_02_14
21. Mamalis S, Kamenidou P, Stavrianea A, Gkagkani D, Pavlidis S. Segmenting generation Z based on organic food decision making: A Preliminary study. In: Springer proceedings in business and economics, 2023, p. 891-903. https://doi.org/10.1007/978-3-031-22749-3_55
22. Mason R. A comparison on health-related lifestyle, dietary habits, and depression by exercise frequency of college students. Nutr. Res Pract. 2019;15(3):355. https://doi.org/10.4162/nrp.2021.15.3.355
23. Medina CR, Urbano MB, Espinosa DJA, López AT. Eating habits associated with nutrition-related knowledge among university students enrolled in academic programs related to nutrition and culinary arts in Puerto Rico. Nutrients. 2020;12(5):1408. https://doi.org/10.3390/nu12051408
24. Murmura F, Sevalle E. The intention to consume healthy food among older Gen-Z: Examining antecedents and mediators. Food.
25. Muscaritoli M. The impact of nutrients on mental health and well-being: Insights from the Literature. Front Nutr,

2021, 8. https://doi.org/10.3389/fnut.2021.656290
26. Muth A, Park SQ. The impact of dietary macronutrient intake on cognitive function and the brain. Clin Nutr. 2021;40(6):3999-4010. https://doi.org/10.1016/j.clnu.2021.04.043
27. Naga M, Stanton J, Riley Jr. T. Comparative study of nutritional awareness of students in different departments of specific education College and its Effect on their Nutritional Status. Volume. 2014;24(3).
28. Sarah PL. Dietary habits and nutritional knowledge of college athletes. California University of Pennsylvania, 2005.
29. Scalvedi ML, Gennaro L, Saba A, Rossi L. Relationship between nutrition knowledge and dietary intake: An assessment among a sample of Italian adults. Front Nutr, 2021, p. 8. https://doi.org/10.3389/fnut.2021.714493
30. Shin N, Hyun WJ, Lee H, Ro MS, Song KH. A study on dietary habits, health related lifestyle, blood cadmium and lead levels of college students. Nutr Res Pract. 2018;6(4):340. https://doi.org/10.4162/nrp.2018.6.4.340
31. Sogari G, Argumedo VC, Gómez MI, Mora C. College students and eating habits: A study using an ecological model for healthy behavior. Nutrients. 2018;10(12):1823.
32. Spronk I, Kullen C, Burdon CA, O'Connor H. Relationship between nutrition knowledge and dietary intake. Br J Nutr. 2014;111(10):17. https://doi.org/10.1017/s0007114514000087
33. Swetaa A, Gayathri R, Priya VV. Awareness on balanced diet and eating practices among college students-A survey. Drug Inven Today. 2018;10(8).
34. Wu Y, Wang S, Shi M, Wang X, Liu H, Guo S, *et al*. Awareness of nutrition and health knowledge and its influencing factors among Wuhan residents. Front Public Health, 2022, p. 10. https://doi.org/10.3389/fpubh.2022.987755
35. Yahia N, Brown CA, Rapley M, Chung M. Level of nutrition knowledge and its association with fat consumption among college students. BMC Public Health. 2019;16(1):1-10.
36. Zimmerman P. The nutritional awareness of functional food among university students in Poland. Rocz P Zakl Hig. 2019;67(2).

Author's Name and Details

Kenneth D Gallego
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines

Marlene E Orfrecio
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines

Marichu A Calixtro
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines

Gladys Pearl O Ambrocio
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines

Cheeze R Janito
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines

Cristine Joyce B Abadejos
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines

Jomar B Esto
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines

Moreno B Java
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines

Jr. Ruben L Tagare
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines

Jr. Elpedio A Arias
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines

International Journal of Human Movement and Sports Sciences 13(2): 435-442, 2025 http://www.hrpub.org
DOI: 10.13189/saj.2025.130221

Stepping Towards Growth: Examining the Relationship Between Physical Activity Engagement and Personal Growth Initiative Among Filipino Students

Jomar B. Esto[1], Vinus P. Java[1], Jerum B. Elumaring[1], Ruben L. Tagare Jr.[1,*], Norge D. Martinez[1], Mark Anthony B. Rosario[2], Mark Dexter L. Reyes[3], Mark Anthony R. Dalipe[4], Mark E. San Pedro[5], Carl Wayn S. Villarta[5], Stephen D. Celestial[5], Jenie Philip S. Saniel[5], Christine May T. Mangubat[5]

[1]Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Philippines
[2]Institute of Education, Undergraduate Studies, Far Eastern University, Philippines
[3]College of Education, Laguna Polytechnic State University, Philippines
[4]College of Education, Catanduanes State University, Philippines
[5]College of Arts and Sciences, Davao Del Sur State College, Philippines

Received January 26, 2025; Revised April 2, 2025; Accepted April 20, 2025

Cite This Paper in the Following Citation Styles

(a): *[1] Jomar B. Esto, Vinus P. Java, Jerum B. Elumaring, Ruben L. Tagare Jr., Norge D. Martinez, Mark Anthony B. Rosario, Mark Dexter L. Reyes, Mark Anthony R. Dalipe, Mark E. San Pedro, Carl Wayn S. Villarta, Stephen D. Celestial, Jenie Philip S. Saniel, Christine May T. Mangubat, "Stepping Towards Growth: Examining the Relationship Between Physical Activity Engagement and Personal Growth Initiative Among Filipino Students," International Journal of Human Movement and Sports Sciences, Vol. 13, No. 2, pp. 435 - 442, 2025. DOI: 10.13189/saj.2025.130221.*

(b): *Jomar B. Esto, Vinus P. Java, Jerum B. Elumaring, Ruben L. Tagare Jr., Norge D. Martinez, Mark Anthony B. Rosario, Mark Dexter L. Reyes, Mark Anthony R. Dalipe, Mark E. San Pedro, Carl Wayn S. Villarta, Stephen D. Celestial, Jenie Philip S. Saniel, Christine May T. Mangubat (2025). Stepping Towards Growth: Examining the Relationship Between Physical Activity Engagement and Personal Growth Initiative Among Filipino Students. International Journal of Human Movement and Sports Sciences, 13(2), 435 - 442. DOI: 10.13189/saj.2025.130221.*

Abstract This study examines the relationship between physical activity engagement and personal growth initiative among Filipino students. Adopting a quantitative research design, particularly descriptive correlation, the study gathered data from 821 respondents using simple random sampling. The instruments utilized for data collection included the International Physical Activity Questionnaire to assess physical activity engagement and the Personal Growth Initiative Scale to measure the respondents' personal growth initiative. Descriptive and inferential statistical analyses, including the Pearson Correlation Coefficient, were employed to evaluate the relationship between the variables. Results revealed significant relationships between certain dimensions of physical activity engagement and specific areas of personal growth initiative, notably in resource usage. These findings suggest that physical activity positively influences certain aspects of personal growth, especially in areas requiring proactive strategies. The study's implications highlight the importance of incorporating physical activity into educational practices to foster holistic development, emphasizing enhancing students' resourcefulness and self-driven behavior. This research contributes to the broader understanding of how physical activity can catalyze personal development and underscores the importance of aligning physical education programs with personal growth objectives. Ultimately, this study emphasizes that integrating physical activity into educational policies and practices can promote greater student well-being and personal advancement, supporting academic and developmental goals.

Keywords Physical Activity Engagement, Personal Growth Initiative, Filipino Students, Quantitative Research, Self-Improvement

1. Introduction

Personal Growth Initiative refers to an individual's active and intentional engagement in self-improvement and personal development. It involves behaviors and attitudes that foster growth through goal setting, self-reflection, and a proactive approach to life's challenges [1]. Personal growth initiative is a dynamic process that requires individuals to take responsibility for their personal development, seek opportunities for change, and embrace a growth mindset [2]. This concept has been linked to improved mental health, higher well-being, and greater life satisfaction, as individuals with a strong personal growth initiative tend to be more resilient and capable of navigating life's challenges [3].

Physical activity refers to any bodily movement produced by skeletal muscles that require energy expenditure, encompassing activities such as walking, running, cycling, and sports [4]. It is fundamental to maintaining physical health, improving cardiovascular function, and enhancing overall well-being [5]. Regular physical activity has been shown to reduce the risk of chronic diseases, boost mood, and improve cognitive function, making it an essential component of a healthy lifestyle [6].

Pressing problems surrounding the Personal Growth Initiative include challenges in fostering consistent self-development behaviors among students, particularly in the face of academic stress and societal pressures [7]. Many students struggle with a lack of self-reflection and difficulty in setting meaningful personal goals, which hinders their overall growth and well-being [8]. Simultaneously, physical activity among students faces significant obstacles, such as time constraints due to academic demands, limited access to facilities, and a growing reliance on sedentary behaviors driven by technology [9]. These barriers contribute to lower physical activity levels, negatively affecting students' mental health, energy levels, and cognitive performance [10].

Several studies have explored the relationship between physical activity and Personal Growth Initiative, highlighting the positive effects of physical engagement on personal development. For instance, a study found that students who regularly participated in physical activity reported higher levels of self-awareness and proactive behavior toward personal growth [11]. Similarly, it demonstrated that individuals who engaged in consistent physical exercise exhibited greater resilience and improved emotional regulation, key components of personal growth initiative [12]. The role of physical activity in enhancing self-esteem and motivation is a crucial element of personal growth, suggesting that physical activity fosters a mindset conducive to self-improvement [13].

Despite the growing body of research examining the individual benefits of physical activity and Personal Growth Initiative, there remains a notable gap in the literature regarding the specific relationship between these two variables. While studies have highlighted the positive effects of physical activity on well-being and personal development, insufficient data exists on how physical engagement directly influences students' proactive efforts toward self-improvement. This gap becomes especially significant within the context of Filipino students, where cultural and socio-economic factors may play a pivotal role in shaping these dynamics. Therefore, this research seeks to answer the general question: 1) How does low, moderate, and high physical activity engagement relate to personal growth initiative among Filipino students? and 2) How does physical activity engagement impact personal growth initiatives regarding readiness for change, planfulness, using resources, and intentional behavior among Filipino students? This study aims to explore this relationship in depth, providing valuable insights that can inform educational strategies and interventions to foster both physical well-being and personal growth among students.

This research is vital for students as it provides a deeper understanding of how physical activity can contribute to their personal growth, potentially enhancing their overall well-being and academic success. For the body of knowledge, this study will fill a significant gap by exploring the relationship between physical activity and Personal Growth Initiative, particularly among Filipino students, offering new insights into how these factors interact. Furthermore, the findings will benefit the wider academic community by informing future research and guiding the development of integrated programs that promote physical health and personal growth in educational settings.

2. Methods

2.1. Research Design

This research utilized a quantitative research design, specifically a descriptive correlation approach, to explore the relationship between physical activity engagement and personal growth initiative among Filipino students. Quantitative research is a systematic investigation involving collecting and analyzing numerical data to identify patterns and relationships [14]. On the other hand, descriptive correlation is research that aims to determine the extent and nature of the relationship between two or more variables without manipulating them [15]. This design is particularly appropriate for the current study as it allows for a clear understanding of how physical activity levels are associated with students' growth initiatives. It offers valuable insights into these variables' connection without experimental manipulation.

2.2. Research Respondents and Sampling

A total of 821 respondents were selected for this study

using simple random sampling. Simple random sampling is a method where every individual in the population has an equal chance of being selected to participate [16]. This technique is the most appropriate for this study because it ensures a fair representation of the student population, minimizing selection bias and allowing for generalizable results. By using simple random sampling, the study guarantees that every respondent, regardless of background or characteristics, has an equal opportunity to contribute, thus enhancing the validity and reliability of the findings.

Simple random sampling for this study was conducted by sending online forms to students from various universities in the country. They came from different regions and provinces with diverse ages, genders, ethnic affiliations, and cultural identities. Each student had an equal chance of being selected to participate, and the forms were distributed randomly among the eligible respondents. This process ensured a fair and unbiased selection, allowing for data collection from a diverse group of students.

2.3. Research Instrument

This research adopted the International Physical Activity Questionnaire (IPAQ) to measure the physical activity engagement of the respondents, which was developed by [17]. The IPAQ has been widely used and highly reliable, with a Cronbach's alpha coefficient of 0.82. Additionally, the Personal Growth Initiative (PGI) Scale was used to assess the respondents' level of personal growth initiative developed by [18]. The scale has shown strong internal consistency, with a Cronbach's alpha coefficient of 0.89, confirming its reliability for this study.

The IPAQ is a standardized self-report instrument that measures physical activity levels across various domains, including work, transportation, household, and leisure-time activities. It has been widely used in research and health assessments due to its reliability and validity in measuring physical activity across different populations. The IPAQ is applicable globally as it was developed to provide a consistent framework for comparing physical activity levels across diverse cultural and national contexts. Since the items in the questionnaire are universally appropriate and do not require modification for specific populations, no revisions were made for this study. As a result, pilot testing was deemed unnecessary, as the IPAQ has already undergone extensive validation in multiple studies and settings, ensuring its applicability without needing further adaptation.

2.4. Statistical Analysis

This research used descriptive and inferential statistics to analyze the data, including frequency counts, mean, and composite mean, to describe the demographic characteristics and overall levels of physical activity engagement and personal growth initiative among the respondents. The Pearson Correlation Coefficient was employed to test the relationship between these two variables. Pearson's correlation is ideal for measuring the strength and direction of the linear relationship between two continuous variables, making it the most appropriate method for determining how physical activity engagement relates to personal growth initiatives. This approach allows for a precise understanding of the degree to which these variables correlate, providing valuable insights into their connection.

3. Results

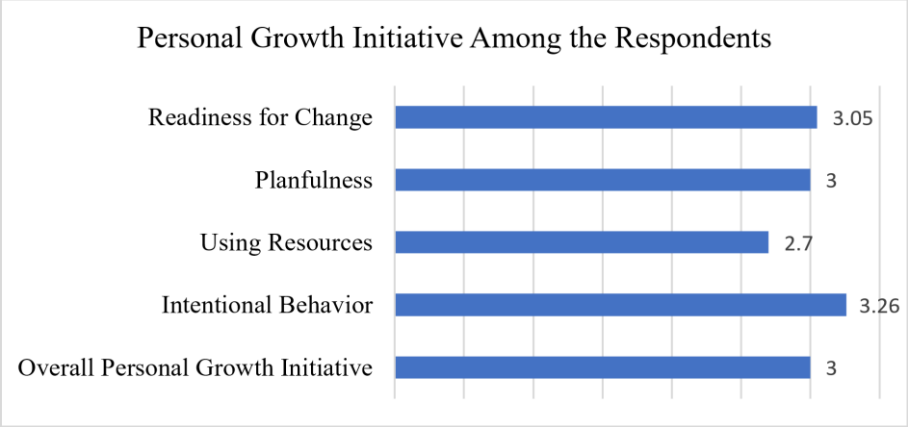
Table 1 presents the respondents' levels of physical activity engagement, categorized into three groups: Low, Moderate, and High. These classifications provide a clear overview of the variation in physical activity participation among the students. The table helps to highlight the distribution of respondents across different activity levels, offering a foundation for further analysis.

Table 1. Respondents' Physical Activity Engagement

Physical Activity Engagement	Frequency (n=821)	Percentage (%)
Low Activity	244	29.72
Moderate Activity	262	31.91
High Activity	315	38.37

Figure 1 illustrates the levels of Personal Growth Initiative among the respondents. It visually represents the distribution of scores, providing insights into the respondents' proactive behaviors toward personal development. This figure is a valuable tool to understand the extent of personal growth initiative among the students in the study.

Table 2 presents the test of the relationship between the respondents' physical activity engagement and their growth initiative. It displays the correlation results, indicating the strength and direction of the relationship between these two variables. This table provides a clear understanding of how physical activity may influence personal growth initiatives among the students.



Legend: 4.00-3.50 – High Personal Growth Initiative; 3.49-2.50 - Moderate Personal Growth Initiative; 2.59-1.50 - Low Personal Growth Initiative; 1.49-1.00 - Very Low Personal Growth Initiative

Figure 1. Personal Growth Initiative Among the Respondents

Table 2. Test of Relationship between the Respondents' Physical Activity Engagement and Personal Growth Initiative

Physical Activity Engagement and…	Pearson Correlation Coefficient	p-value	Interpretation α=0.05
Readiness for Change	-.040	.252	Not Significant
Planfulness	.044	.206	Not Significant
Using Resources	.113**	.001	Significant
Intentional Behavior	.038	.272	Not Significant

4. Discussion

4.1. Respondents' Physical Activity Engagement

Figure 1 shows the students' physical activity engagement. For a total of 821 respondents, 244 (29.72%) are reported to have low physical activity engagement, 262 (31.91%) have moderate physical activity engagement, and 315 (38.37%) have high physical activity engagement. This means that while most students engage in physical activity at a high level, a significant proportion remains with lower activity levels. This implies that although physical activity is prevalent among students, the variability in engagement levels suggests that not all students maximize the potential benefits of regular physical activity.

The implications of these findings suggest that while many students demonstrate high engagement in physical activity, a significant number of students with low and moderate levels of engagement is concerning. This trend indicates that barriers may prevent a substantial portion of students from fully participating in physical activity, adversely affecting their overall health and personal development. The impact of such levels of engagement requires attention, as consistent physical activity is essential not only for physical health but also for fostering personal growth and well-being.

Supporting studies corroborate these findings, as similar trends have been observed in other student populations. Research by [19] highlights that many university students lack physical activity, often due to academic pressures and sedentary lifestyles. Additionally, studies by [20] and [21] suggest that while some students actively participate in physical exercise, many still struggle with incorporating it into their routines, indicating a need for greater awareness of its importance. These findings emphasize the need to understand the factors influencing students' physical activity levels [22].

4.2. Personal Growth Initiative among the Respondents

Regarding **Readiness for Change**, it got a composite mean of 3.05 with a verbal interpretation of Moderate Personal Growth Initiative. This means that the students show a moderate level of readiness to initiate changes for their personal growth. This implies that while students are open to personal development, they may not fully engage or take consistent steps toward significant self-improvement. The moderate score suggests a balance between motivation and potential barriers to achieving higher personal growth initiatives.

Supporting studies align with these findings, indicating that many students exhibit a moderate level of readiness for personal change [23]. Research by [24] suggests that while students acknowledge the importance of personal growth, they often struggle with maintaining the motivation to follow through on their intentions. Similarly, studies show that readiness for change is usually influenced by a

combination of internal and external factors, leading to varying levels of commitment to personal growth across different student populations [8]; [25].

In terms of **Planfulness**, it got a composite mean of 3.00 with a verbal interpretation of Moderate Personal Growth Initiative. This means that the students exhibit moderate strategic thinking and planning in pursuing their personal growth goals. This implies that while students can set structured plans for self-improvement, they may lack consistency or the ability to follow through with these plans effectively. The moderate rating highlights the need to examine potential obstacles hindering their ability to engage in intentional and goal-oriented actions.

Supporting studies validate these findings, suggesting that planfulness is a critical yet often underdeveloped aspect of personal growth among students. According to [26], students frequently recognize the value of planning but struggle with translating their intentions into actionable steps. Similarly, research indicates that while students demonstrate awareness of the need for structured growth efforts, external distractions, and limited self-discipline can impede their ability to plan effectively [27].

In terms of **Using Resources**, it got a composite mean of 2.70 with a verbal interpretation of Moderate Personal Growth Initiative. Students moderately utilize resources such as information, tools, or support systems to facilitate their personal development. This implies that while students recognize the importance of external resources in achieving growth, they may not fully leverage them due to limited awareness or access. The moderate level suggests a potential gap in identifying and utilizing opportunities that could enhance their growth journey.

Supporting studies reinforce these findings, indicating that the use of resources is a crucial yet often underutilized component of personal growth [28]. [29] found that students who effectively harness resources tend to show higher levels of personal growth initiative. Similarly, other scholars highlight that while students know about resource availability, barriers such as limited guidance or lack of motivation often hinder optimal utilization [30].

In terms of **Intentional Behavior**, it got a composite mean of 3.26 with a verbal interpretation of Moderate Personal Growth Initiative. This means that students exhibit a moderate level of deliberate actions and decision-making aimed at fostering personal development. This implies that while they make conscious efforts to improve themselves, these efforts may not be consistent or fully aligned with long-term growth objectives—the moderate level balances proactive behaviors and potential obstacles that limit sustained intentionality.

Supporting studies corroborate these findings, indicating that intentional behavior is pivotal to personal growth [31]. A scholar has noted that individuals with moderate intentionality are often willing to improve but may lack consistent strategies to achieve their goals [32]. While intentional behaviors are evident among students, external pressures and competing priorities can affect their ability to engage in self-improvement activities consistently [33]; [34].

Overall, it got a grand mean 3.00 with a verbal interpretation of Moderate Personal Growth Initiative. Students generally exhibit a moderate capacity to engage in behaviors that support personal development. This implies that students show a balanced but not optimal inclination toward self-improvement across the four areas—Readiness for Change, Planfulness, Using Resources, and Intentional Behavior. While they demonstrate some commitment to growth, certain limitations may hinder their ability to realize their potential fully.

Supporting studies align with these findings, emphasizing that moderate levels of personal growth initiative are common among students navigating academic and personal challenges [35]. While students often aspire for personal development, external pressures, and internal conflicts may temper their initiative [36]; [37]. Scholars have highlighted that moderate engagement across growth dimensions reflects both the potential and the barriers students face in achieving holistic self-improvement [38]; [39].

4.3. Relationship between the Respondents' Physical Activity Engagement and Personal Growth Initiative

The results from Table 1 highlight a significant relationship between Physical Activity Engagement and Using Resources, with a Pearson correlation coefficient of .113** and a p-value of .001. Students actively engaging in physical activities are slightly more likely to utilize available resources effectively to support their growth initiatives. The significant relationship suggests that physical activity engagement could positively influence students' ability to identify and leverage tools, support systems, or strategies for personal development. This implies that engaging in physical activities might help students cultivate skills such as resourcefulness and adaptability, essential for navigating challenges and fostering growth. The findings underscore the potential role of physical activity as a contributing factor in enhancing resource utilization among students, even if the relationship is not strongly pronounced.

The findings are supported by previous studies that emphasize the role of physical activity in promoting resourcefulness and the ability to access and utilize support systems effectively [40]. For instance, research highlights that individuals who regularly engage in physical activities develop better problem-solving skills and resilience, which are crucial for identifying and using resources [41]. Additionally, studies suggest that physical activity contributes to cognitive and emotional regulation, facilitating a proactive approach to personal and academic challenges [42]. These alignments reinforce the notion that physical activity can be a foundation for enhancing students' capability to leverage resources for their growth

initiatives [43].

The results underscore the importance of integrating physical activity programs into educational settings to enhance students' capacity for personal growth through effective resource utilization [44]. Policies promoting regular physical activity can encourage students to develop critical life skills, such as resourcefulness and resilience, essential for academic and personal success [45]. Furthermore, emphasizing the role of physical activity in existing personal development initiatives may strengthen outcomes by fostering an environment that supports holistic growth [46].

Schools and universities can use these findings to design interventions that align physical activity with personal development goals. For instance, incorporating resource-based tasks in physical education programs can help students translate physical engagement into actionable personal growth strategies. This approach reinforces the benefits of physical activity and ensures its integration into broader educational and developmental frameworks [47].

The findings of this research align with several theoretical perspectives on personal growth and development, particularly the Self-Determination Theory, which emphasizes the role of autonomy, competence, and relatedness in fostering intrinsic motivation and personal growth [48]. According to this theory, engaging in physical activities can enhance students' sense of competence and autonomy, thus promoting personal growth initiative. The Social Cognitive Theory also supports that observational learning, self-regulation, and goal setting in physical activity can positively influence students' personal development [49].

5. Conclusions

The findings highlight that students exhibit varying levels of physical activity engagement, with many achieving moderate to high levels. This reflects their capacity to incorporate physical activity into their daily routines, suggesting that physical engagement is integral to their lifestyle. However, the existence of students with lower engagement levels signals the need to understand and address barriers to physical activity, which may impact their overall well-being and personal development.

Personal Growth Initiative among the respondents is moderate across all dimensions, indicating that students possess a foundational ability to recognize and act upon opportunities for self-improvement. This level of initiative suggests that while students can plan and execute personal growth strategies, there remains significant potential for further enhancement. Their moderate readiness for growth signifies a balance between existing capabilities and the opportunity to foster greater self-driven development.

The relationship between physical activity engagement and personal growth initiative reveals meaningful connections, particularly in areas requiring resourcefulness. These findings underscore the complementary roles of physical activity and personal growth, suggesting that engaging in physical activity can support specific dimensions of self-improvement. This interplay highlights the potential of integrating physical activity as a strategic element in fostering personal growth, emphasizing its role in educational and developmental contexts.

REFERENCES

[1] M. Bisri, Y. B. Pertiwi, N. Eva, and T. Chusniyah, "Personal growth initiatives and life satisfaction among elderly people," *Psychology Research on Education and Social Sciences*, vol. 3, no. 2, pp. 43–48, 2022.

[2] P. Saraswati, S. Amalia, and A. P. Arwan, "Forming and strengthening factors of personal growth initiatives in life," *Jurnal Ilmiah Psikologi Terapan*, vol. 11, no. 2, pp. 137–144, 2023.

[3] Y. Soylu, D. M. Siyez, and E. Ozeren, "Gender Perception, Career Optimism, and Career Adaptability Among University Students: The Mediating Role of Personal Growth Initiative.," *International Journal of Progressive Education*, vol. 17, no. 1, pp. 1–15, 2021.

[4] R. K. Dishman, G. W. Heath, M. D. Schmidt, and I.-M. Lee, *Physical activity epidemiology*. Human Kinetics, 2021.

[5] X. Zhu, J. A. Haegele, H. Liu, and F. Yu, "Academic stress, physical activity, sleep, and mental health among Chinese adolescents," *Int J Environ Res Public Health*, vol. 18, no. 14, p. 7257, 2021.

[6] S. L. Battalio, S. E. Huffman, and M. P. Jensen, "Longitudinal associations between physical activity, anxiety, and depression in adults with long-term physical disabilities," *Health Psychology*, vol. 39, no. 6, p. 529, 2020.

[7] S. Axon *et al.*, "The human factor: Classification of European community-based behaviour change initiatives," *J Clean Prod*, vol. 182, pp. 567–586, 2018.

[8] I. K. Weigold, A. Weigold, S. Ling, and M. Jang, "College as a growth opportunity: Assessing personal growth initiative and self-determination theory," *J Happiness Stud*, vol. 22, pp. 2143–2163, 2021.

[9] A. J. B. Nioda and R. L. Tagare, "The Experiences of Non-Physical Education Generalist Teachers in Implementing PE in the Primary Grades: Implications for Capability Development Initiatives," *International Electronic Journal of Elementary Education*, vol. 16, no. 3, pp. 325–335, 2024, doi: 10.26822/iejee.2024.334.

[10] X. Xie *et al.*, "The moderating role of work environment in the relationship between proactive personality and personal growth initiative among nurses: a cross-sectional study," *BMC Nurs*, vol. 23, no. 1, pp. 1–9, 2024.

[11] K. L. Piercy *et al.*, "The physical activity guidelines for Americans," *JAMA*, vol. 320, no. 19, pp. 2020–2028, 2018, doi: https://doi.org/10.1001/jama.2018.14854.

[12] F. Vasilopoulos and M. R. Ellefson, "Investigation of the

associations between physical activity, self-regulation and educational outcomes in childhood," *PLoS One*, vol. 16, no. 5, p. e0250984, 2021.

[13] R. R. Rosenkranz, K. Ridley, J. M. Guagliano, and S. K. Rosenkranz, "Physical activity capability, opportunity, motivation and behavior in youth settings: theoretical framework to guide physical activity leader interventions," *Int Rev Sport Exerc Psychol*, vol. 16, no. 1, pp. 529–553, 2023.

[14] G. R. Ryser, "Qualitative and quantitative approaches to assessment," in *Identifying Gifted Students*, Routledge, 2021, pp. 33–57.

[15] F.-Y. Hong, S.-I. Chiu, D.-H. Huang, and S.-L. Chiu, "Correlations among classroom emotional climate, social self-efficacy, and psychological health of university students in Taiwan," *Educ Urban Soc*, vol. 53, no. 4, pp. 446–468, 2021, doi: https://doi.org/10.1177/0013124520931458.

[16] S. Campbell *et al.*, "Purposive sampling: complex or simple? Research case examples," *Journal of research in Nursing*, vol. 25, no. 8, pp. 652–661, 2020, doi: https://doi.org/10.1177/1744987120927206.

[17] C. L. Craig *et al.*, "International physical activity questionnaire: 12-country reliability and validity," *Med Sci Sports Exerc*, vol. 35, no. 8, pp. 1381–1395, 2003, doi: https://doi.org/10.1249/01.MSS.0000078924.61453.FB.

[18] M. Tomić and I. Macuka, "Validation of the identity style inventory and the personal growth initiative scale," *Zdravstveni glasnik*, vol. 8, no. 2, pp. 11–24, 2022.

[19] J. D. Omura *et al.*, "Surveillance of physical activity and sedentary behavior among youth and adults in the United States: History and opportunities," *J Phys Act Health*, vol. 18, no. S1, pp. S6–S24, 2021.

[20] M. Vaquero-Solís, M. A. Tapia-Serrano, D. Hortigüela-Alcalá, M. J. Sierra-Díaz, and P. A. Sánchez-Miguel, "Physical activity and quality of life in high school students: Proposals for improving the self-concept in physical education," *Int J Environ Res Public Health*, vol. 18, no. 13, p. 7185, 2021.

[21] G. M. de Jesus, R. H. de Oliveira Araujo, L. A. Dias, A. K. C. Barros, L. D. M. dos Santos Araujo, and M. A. A. de Assis, "Attendance in physical education classes, sedentary behavior, and different forms of physical activity among schoolchildren: a cross-sectional study," *BMC Public Health*, vol. 22, no. 1, p. 1461, 2022, doi: https://doi.org/10.1186/s12889-022-13864-9.

[22] C. L. Merlo, "Dietary and physical activity behaviors among high school students—Youth Risk Behavior Survey, United States, 2019," *MMWR Suppl*, vol. 69, 2020.

[23] T. Potapchuk, O. Makaruk, N. Kravets, and N. Annenkova, "Professional Self-Identification of Future Educators as a Form of Personal Growth.," *Journal of History, Culture & Art Research/Tarih Kültür ve Sanat Arastirmalari Dergisi*, vol. 9, no. 2, 2020, doi: https://doi.org/10.7596/taksad.v9i2.2576.

[24] P. Cooper, *The Better Human Blueprint: Self-development strategies for personal growth, success and finding fulfilment*. Right Book Press, 2024.

[25] V. G. Vasoya, *Unleashing Your Potential:: A Journey of Self-Discovery and Personal Growth*. Dr. Vasoya's Healing Homoeopathy, 2023.

[26] A. P. Nayak and Z. Kachhi, "Balancing the Tedious See-Saw of Academic Pressure and Personal Growth," in *Nurturing Student Well-Being in the Modern World*, IGI Global, 2025, pp. 325–352.

[27] M. M. Maurer and D. Daukantaitė, "Revisiting the organismic valuing process theory of personal growth: A theoretical review of Rogers and its connection to positive psychology," *Front Psychol*, vol. 11, p. 1706, 2020.

[28] R. M. Niemiec, "Finding the golden mean: the overuse, underuse, and optimal use of character strengths," in *A second-wave positive psychology in counselling psychology*, Routledge, 2023, pp. 183–201.

[29] A. Alam and A. Mohanty, "Untapped Power of Music-Integrated Pedagogy: Its Role in Enhancement of 'Behaviour and Self-Confidence' among School Students," in *Interdisciplinary Perspectives on Sustainable Development*, CRC Press, 2023, pp. 383–387.

[30] J. Laran, "Self-control: Information, priorities, and resources," *Consumer Psychology Review*, vol. 3, no. 1, pp. 91–107, 2020.

[31] G. R. Foxall, "Intentional behaviorism," in *Contemporary Behaviorisms in Debate*, Springer, 2021, pp. 151–189.

[32] M. Tomasello, "Having intentions, understanding intentions, and understanding communicative intentions," in *Developing theories of intention*, Psychology Press, 2023, pp. 63–76.

[33] A. Bożek, P. F. Nowak, and M. Blukacz, "The relationship between spirituality, health-related behavior, and psychological well-being," *Front Psychol*, vol. 11, p. 1997, 2020.

[34] T. A. Duarte, S. Paulino, C. Almeida, H. S. Gomes, N. Santos, and M. Gouveia-Pereira, "Self-harm as a predisposition for suicide attempts: A study of adolescents' deliberate self-harm, suicidal ideation, and suicide attempts," *Psychiatry Res*, vol. 287, p. 112553, 2020.

[35] L. A. Schreiner, M. C. Louis, and D. D. Nelson, *Thriving in transitions: A research-based approach to college student success*. The National Resource Center for The First-Year Experience, 2020.

[36] M. B. B. Magolda, *Authoring your life: Developing your internal voice to navigate life's challenges*. Taylor & Francis, 2023.

[37] C. S. Conley, J. B. Shapiro, B. M. Huguenel, and A. C. Kirsch, "Navigating the college years: Developmental trajectories and gender differences in psychological functioning, cognitive-affective strategies, and social well-being," *Emerging Adulthood*, vol. 8, no. 2, pp. 103–117, 2020.

[38] M. A. Gregor, I. K. Weigold, G. Wolfe, D. Campbell-Halfaker, J. Martin-Fernandez, and H. V. G. Del Pino, "Positive predictors of career adaptability among diverse community college students," *J Career Assess*, vol. 29, no. 1, pp. 115–128, 2021.

[39] R. L. Tagare, "Back to in-person classes in the Philippine

basic education: threading the opportunities and limitations in the teaching of Physical Education," *Retos*, vol. 47, pp. 986–993, 2023, doi: 10.47197/RETOS.V47.95921.

[40] L. E. R. Peters, G. Shannon, I. Kelman, and E. Meriläinen, "Toward resourcefulness: pathways for community positive health," *Glob Health Promot*, vol. 29, no. 3, pp. 5–13, 2022.

[41] P.-Y. Hsu and C.-F. Liou, "Impact of patient resourcefulness on cancer patients' pain management and medical opioid use: A cross-sectional study," *European Journal of Oncology Nursing*, vol. 74, p. 102771, 2025.

[42] R. Tagare Jr and R. L. Tagare, "An Ethnographic Probe on the Cultural Values and Symbols of Generation Z Students: Implications for Course Contextualization," *European Online Journal of Natural and Social Sciences*, vol. 11, no. 2, p. pp-347, 2022, doi: https://doi.org/10.4995/muse.2021.15492.

[43] L. J. Lieberman, C. Houston-Wilson, and M. Grenier, *Strategies for inclusion: Physical education for everyone*. Human Kinetics, 2025. doi: doi:https://doi.org/10.15390/EB.2024.12095.

[44] D. Siedentop and H. Van der Mars, *Introduction to physical education, fitness, and sport*. Human kinetics, 2022. doi: https://doi.org/10.1111/josh.13030.

[45] A. Kosholap *et al.*, "Neuropsychological bases of self-improvement of own physical health of future teachers in the course of university education," *Brain (Bacau)*, vol. 12, no. 3, pp. 171–190, 2021.

[46] I. Demchenko, B. Maksymchuk, V. Bilan, I. Maksymchuk, and I. Kalynovska, "Training future physical education teachers for professional activities under the conditions of inclusive education," *Brain (Bacau)*, vol. 12, no. 3, pp. 191–213, 2021, doi: https://doi.org/10.18662/brain/12.3/227.

[47] K. Opstoel *et al.*, "Personal and social development in physical education and sports: A review study," *Eur Phy Educ Rev*, vol. 26, no. 4, pp. 797–813, 2020.

[48] R. M. Ryan, E. L. Deci, M. Vansteenkiste, and B. Soenens, "Building a science of motivated persons: Self-determination theory's empirical approach to human experience and the regulation of behavior," *Motiv Sci*, vol. 7, no. 2, p. 97, 2021.

[49] A. Bandura, "Cultivate self-efficacy for personal and organizational effectiveness," *Principles of Organizational Behavior: The Handbook of Evidence-Based Management 3rd Edition*, pp. 113–135, 2023.

Universal Journal of Public Health 13(3): 607-615, 2025
DOI: 10.13189/ujph.2025.130309 http://www.hrpub.org

The Relationship between Social Appearance Anxiety and Holistic Self-Esteem among University Students in Southern Philippines

Joanna Caryl P. Esponja[1], Donnie M. Tulud[1], Jomar B. Esto[1], Jo-Ann D. Santos[2], Carmee Lyn B. Paylangco[2], Jemwell B. Francisco[1], Lara Ivanna C. Nadela[1], Marichu A. Calixtro[1], Priscilla P. Dagoc[1], Ruben L. Tagare Jr.[1,*], Michelle R. Dee[3], Lorralie F. Canape[3], Christian Jude Wariza[3], Desiree Ann C. Tenebroso[4], Lyn Bicodo-Ortele[4]

[1]Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Philippines
[2]University of Southern Mindanao – Kidapawan City Campus, Kidapawan City, Philippines
[3]College of Education and Liberal Arts, Adamson University, Philippines
[4]Mindanao State University – Maguindanao Campus, Maguindanao, Philippines

Received February 12, 2025; Revised April 3, 2025; Accepted April 18, 2025

Cite This Paper in the Following Citation Styles

(a): *[1] Joanna Caryl P. Esponja, Donnie M. Tulud, Jomar B. Esto, Jo-Ann D. Santos, Carmee Lyn B. Paylangco, Jemwell B. Francisco, Lara Ivanna C. Nadela, Marichu A. Calixtro, Priscilla P. Dagoc, Ruben L. Tagare, Jr., Michelle R. Dee, Lorralie F. Canape, Christian Jude Wariza, Desiree Ann C. Tenebroso, Lyn Bicodo-Ortele, "The Relationship between Social Appearance Anxiety and Holistic Self-Esteem among University Students in Southern Philippines," Universal Journal of Public Health, Vol. 13, No. 3, pp. 607 - 615, 2025. DOI: 10.13189/ujph.2025.130309.*

(b): *Joanna Caryl P. Esponja, Donnie M. Tulud, Jomar B. Esto, Jo-Ann D. Santos, Carmee Lyn Paylangco, Jemwell B. Francisco, Lara Ivanna C. Nadela, Marichu A. Calixtro, Priscilla P. Dagoc, Ruben L. Tagare Jr., Michelle R. Dee, Lorralie F. Canape, Christian Jude Wariza, Desiree Ann C. Tenebroso, Lyn Bicodo-Ortele (2025). The Relationship between Social Appearance Anxiety and Holistic Self-Esteem among University Students in Southern Philippines. Universal Journal of Public Health, 13(3), 607 - 615. DOI: 10.13189/ujph.2025.130309.*

Abstract This study investigates the relationship between social appearance anxiety and holistic self-esteem among students at a premier state university in the Southern Philippines. The purpose was to explore how social appearance anxiety, a psychological concern related to the fear of being judged on one's physical appearance, correlates with holistic self-esteem, encompassing security, identity, belonging, purpose, and competence. Using a quantitative research design, specifically descriptive correlation, the study involved 689 respondents selected through simple random sampling. Data were collected using the Social Appearance Anxiety Scale and a holistic self-esteem questionnaire, which were validated for reliability. Descriptive and inferential statistical methods, including the Pearson correlation coefficient, were used to analyze the relationship between the two variables. The results indicated that the respondents experienced moderate levels of social appearance anxiety (mean=2.53) and moderately high holistic self-esteem (mean=3.05). A significant negative correlation (r=-.322; p=.001) was found between social appearance anxiety and holistic self-esteem, suggesting that higher anxiety about one's appearance is linked to lower overall self-worth. These findings have important implications for understanding students' psychological well-being, particularly in terms of how body image issues may impact their broader self-esteem. The study highlights the need for a comprehensive approach to student support, where physical appearance concerns and self-esteem are addressed simultaneously. In conclusion, the research underscores the interconnectedness of body image and self-esteem, calling for further investigation into the factors influencing these variables and the potential for interventions to promote healthier student outcomes.

Keywords Body Image, Holistic Self-Esteem, Relationship, Social Appearance Anxiety, Students

1. Introduction

Social Appearance Anxiety refers to the distress or discomfort individuals experience when they believe others are evaluating their physical appearance. It is a specific type of social anxiety that centers on fears of negative judgments about one's appearance, which can lead to heightened self-consciousness, avoidance of social interactions, and reduced self-esteem [1]. Individuals with high levels of social appearance anxiety often perceive themselves as falling short of societal or peer standards of attractiveness, which may contribute to feelings of inadequacy and vulnerability in social settings [2]. This anxiety is associated with broader psychological issues, such as body dissatisfaction, social withdrawal, and increased risks for depression and eating disorders [3].

Holistic Self-Esteem refers to a multidimensional sense of self-worth encompassing various aspects of an individual's life, including identity, sense of belonging, purpose, competence, and emotional security. Unlike traditional views of self-esteem that may focus solely on individual achievement or self-perception, holistic self-esteem emphasizes a balanced and integrated perspective on personal value. It considers how individuals perceive themselves and how they relate to others and find meaning in their experiences [4]. A healthy level of holistic self-esteem is marked by confidence in one's abilities, a clear sense of identity, acceptance in social groups, and a meaningful direction in life. This integrative approach to self-esteem has been shown to foster resilience, emotional well-being, and effective coping strategies as individuals feel empowered to navigate challenges across multiple domains of their lives [5], [6], [7].

Students today face significant challenges related to Social Appearance Anxiety and Holistic Self-Esteem, both of which are influenced by societal expectations, peer pressure, and the pervasive impact of social media. Social appearance anxiety has become increasingly prevalent among students due to heightened exposure to idealized beauty standards and the pressure to present a curated version of themselves online. This often leads to feelings of inadequacy, social withdrawal, and even mental health issues like depression and anxiety disorders [8], [9], [10]. Concurrently, challenges to holistic self-esteem arise from academic pressures, a lack of emotional support, and an overemphasis on external achievements. Students may struggle to feel secure in their identity, find purpose, or recognize value outside of performance-based metrics [11], [12].

Recent studies over the past decade have explored the multifaceted nature of Social Appearance Anxiety and its implications for various populations, particularly students. Research has consistently highlighted the association between social appearance anxiety and mental health concerns, such as depression, social withdrawal, and body dissatisfaction. For instance, Papapanou et al. [13] demonstrated that individuals with heightened SAA often engage in avoidant behaviors, exacerbating feelings of isolation and hindering social development. Similarly, Yasuhiro et al. [14] found that SAA significantly impacts self-compassion, where students with high levels of anxiety struggle to maintain a positive self-view when faced with perceived appearance-related criticism. Social media has also been identified as a critical factor, with studies showing that constant exposure to idealized body images amplifies appearance-related fears and perpetuates unhealthy comparisons [15].

In recent years, studies on Holistic Self-Esteem have emphasized its importance in promoting overall psychological well-being and resilience among students. Research has shown that HSE, which encompasses not only self-worth but also identity, belonging, purpose, and competence, is crucial for healthy emotional functioning and coping strategies in the face of stressors. For example, a study highlighted the role of self-esteem in academic achievement, showing that students with a strong sense of HSE tend to demonstrate greater persistence and higher motivation in their studies. Additionally, Gillman et al. [16] found that students with higher HSE are more likely to engage in positive interpersonal relationships and experience greater life satisfaction due to a stronger sense of belonging and competence in various areas. Furthermore, a study by Mahon et al. [17] explored the role of HSE in mental health, revealing that students with low HSE are at greater risk of developing anxiety and depression, while those with higher levels of HSE exhibit better resilience and adaptive coping mechanisms.

Despite the growing body of research on Social Appearance Anxiety and Holistic Self-Esteem, there remains a notable gap in studies that explore the correlation between these two constructs, particularly in the context of university students. While numerous studies have investigated the impact of social appearance anxiety on mental health and self-esteem, none have specifically examined how these factors interact in the academic and social environments of students at a premier state university in Southern Philippines. The increasing prevalence of appearance-related anxieties and the challenges associated with developing a balanced sense of self-worth make exploring the relationship between these two variables in this unique setting imperative. This study aims to assess how social appearance anxiety correlates with holistic self-esteem, providing insights into the challenges students face about their identity, social acceptance, and overall self-worth.

This research is of significant importance for the respondents, as it seeks to shed light on the intricate relationship between Social Appearance Anxiety and Holistic Self-Esteem, offering insights into the psychological challenges they face within their academic and social lives. Understanding this relationship can help students better navigate their emotional and social experiences, fostering greater self-awareness, resilience, and overall well-being. For the broader body of knowledge,

this study contributes to the relatively underexplored area of how appearance-related anxiety intersects with a student's sense of self-worth, particularly in a cultural and academic setting unique to a premier state university in Southern Philippines. Moreover, for the wider educational community, this study enhances the existing literature by bridging the gap between social appearance anxiety and holistic self-esteem, creating a foundation for future studies and interventions that can be applied across various educational institutions, mental health programs, and social contexts.

1.1. Statement of the Problem

1. Assess the level of Social Appearance Anxiety among the respondents;
2. Evaluate the level of Holistic Self-Esteem among the respondents;
3. Examine the significant relationship between Social Appearance Anxiety and Holistic Self-Esteem among the respondents.

1.2. Research Question

1. What is the relationship between Social Appearance Anxiety and Holistic Self-Esteem among students of a premier state university in Southern Philippines?

2. Method

2.1. Research Design

This research utilized a quantitative research design, specifically a descriptive correlation approach, to explore the relationship between Social Appearance Anxiety and Holistic Self-Esteem among students. Quantitative research is a systematic investigation that collects numerical data to understand patterns, trends, or relationships between variables [18]. This study employed a descriptive correlation design to assess and describe the relationship between two variables without manipulating any variables. Descriptive correlation aims to determine the extent to which two or more variables are related, enabling the identification of patterns and associations [19].

Using a quantitative research design, specifically the descriptive correlation approach, is the most appropriate for this study because it allows for a precise and objective measurement of the relationship between Social Appearance Anxiety and Holistic Self-Esteem. Using this design, the study can provide an accurate understanding of how these two factors are interconnected among the students at a premier state university. Furthermore, this design is well-suited for analyzing large sample sizes, making it effective for gathering and interpreting data from many respondents.

2.2. Respondents and Sampling

Six hundred eighty-nine respondents were chosen for this study using simple random sampling. Simple random sampling is a technique where each individual in the population has an equal chance of being selected for the study, ensuring that the sample is representative of the larger population [20]. This method was deemed the most appropriate for this study as it allows for unbiased selection, ensuring that every student within the university has an equal opportunity to participate, thus enhancing the generalizability of the findings. Simple random sampling also minimizes the risk of selection bias, making the results more reliable and reflective of the broader student population. This is crucial for accurately assessing the relationship between Social Appearance Anxiety and Holistic Self-Esteem.

2.3. Research Instrument

This research adopted the Social Appearance Anxiety Scale (SAAS) developed by Hart et al. to measure the level of Social Appearance Anxiety among students. The SAAS consists of 16 items and has demonstrated strong reliability with a Cronbach's alpha of 0.89, making it a valid and reliable tool for assessing anxiety related to appearance evaluation. This study also adapted the Holistic Self-Esteem Questionnaire by Rosenberg, which is commonly used to evaluate overall self-esteem. The reliability of this questionnaire was confirmed through a Cronbach's alpha of 0.92, indicating its high internal consistency and suitability for comprehensively measuring self-esteem.

2.4. Statistical Analysis

This research utilized both descriptive and inferential statistics to analyze the data. Descriptive statistics, including the mean and composite mean, were employed to summarize and describe the levels of Social Appearance Anxiety and Holistic Self-Esteem among the respondents. Pearson's correlation coefficient was used to examine the relationship between these two variables. Pearson's correlation is appropriate for this study as it measures the strength and direction of the linear relationship between two continuous variables. This parametric test assumes normality and linearity, allowing for a more precise analysis of how Social Appearance Anxiety and Holistic Self-Esteem interact within the respondent group.

2.5. Ethical Consideration

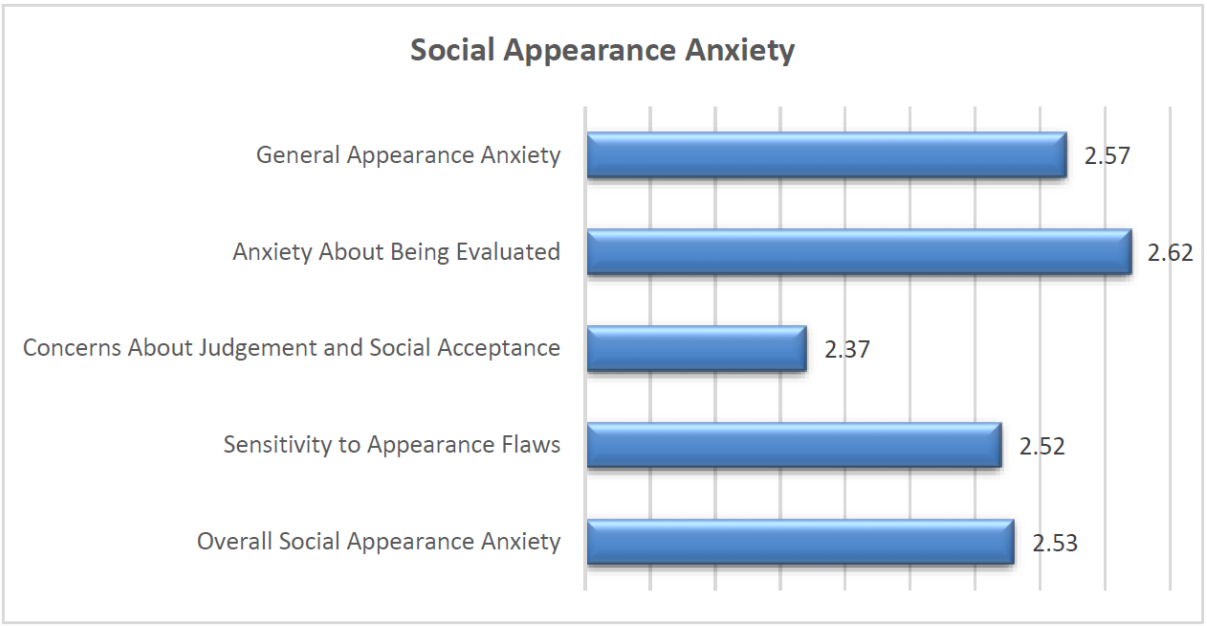
This research adhered to strict ethical guidelines to protect participants' rights and well-being. Before data collection, informed consent was obtained from all respondents, ensuring that they understood the purpose of the study, the voluntary nature of participation, and their right to withdraw at any time without penalty. The

confidentiality and anonymity of the participants were safeguarded by securely storing the data and reporting findings in aggregate form without identifying individual responses. Additionally, the study was conducted in full compliance with ethical standards, ensuring that no harm or distress was caused to the participants and that the research adhered to the ethical principles of respect, integrity, and fairness.

3. Results

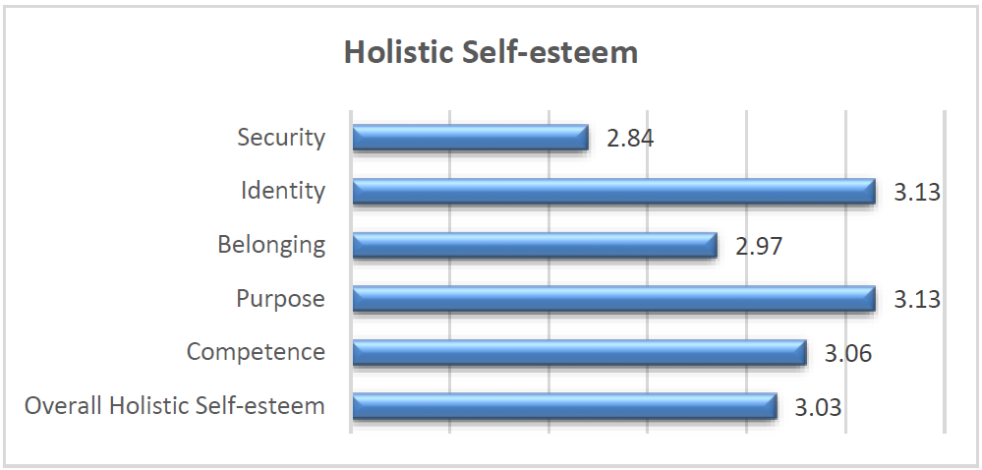
Figure 1 presents the distribution of Social Appearance Anxiety among the respondents. The data highlight the varying levels of anxiety experienced by students regarding their appearance, as measured by the Social Appearance Anxiety Scale. This visual representation provides a clear overview of the respondents' self-reported anxiety levels, allowing for a deeper understanding of the prevalence and intensity of Social Appearance Anxiety within the student population.

Figure 2 illustrates the distribution of Holistic Self-Esteem among the respondents. The data visually represent the respondents' self-assessment of their overall self-worth, as measured by the Holistic Self-Esteem Questionnaire. This figure provides an insightful overview of how students perceive their self-esteem, highlighting the varying levels of confidence and self-worth within the student population.



Legend: 4.00-3.50 - Severe Anxiety; 3.49-2.50 - High Anxiety; 2.59-1.50 - Moderate Anxiety; 1.49-100 - Low Anxiety

Figure 1. Social Appearance Anxiety among the Respondents



Legend: 4.00-3.50 - High Self-Esteem; 3.49-2.50 - Moderately High Self-Esteem; 2.59-1.50 - Moderately Low Self-Esteem; 1.49-100 - Low Self-Esteem

Figure 2. Holistic Self-esteem among the Respondents

Table 1. Test of Relationship between Students' Social Appearance Anxiety and Holistic Self-esteem

Paired Variables	Pearson Correlation Coefficient	p-value	Interpretation α=0.05
Social Appearance Anxiety and Holistic Self-esteem	-.322**	.001	Significant

** Statistically Significant if p < .05

Table 1 tests the relationship between students' Social Appearance Anxiety and Holistic Self-Esteem using Pearson's Correlation Coefficient. The table summarizes the statistical results that indicate the strength and direction of the relationship between these two variables. This analysis helps to understand how students' anxiety regarding their appearance is associated with their overall self-esteem, providing insights into the interconnections between these psychological factors.

4. Discussion

4.1. Social Appearance Anxiety among the Respondents

The **Overall Social Appearance Anxiety** of the respondents is reported to have a composite mean of 2.53, interpreted as "Moderate Anxiety." This means that respondents experience noticeable levels of anxiety about how others perceive their appearance, but it is not overwhelmingly debilitating. This implies that while students may feel conscious of their appearance in social situations, their anxiety might not entirely hinder their social functioning or daily activities.

These findings align with previous studies, such as Jin et al. [3], which identified moderate levels of social appearance anxiety as prevalent among student populations navigating appearance-related pressures. Similarly, Baceviciene [21] highlighted that societal standards and peer influences contribute significantly to students' concerns about their physical appearance, further supporting the observed levels of anxiety in this study.

In terms of **General Appearance Anxiety**, the respondents reported a composite mean of 2.57, interpreted as "Moderate Anxiety." This means that respondents experience a moderate level of concern or unease when their overall appearance is subject to evaluation by others. This implies that while appearance-related worries exist, they do not dominate or overwhelm the respondents' interactions and behaviors.

These findings are consistent with the work of Zimmer-Gembeck et al. [22], which revealed that moderate appearance-related anxiety is commonly observed in academic environments where social interactions are frequent. Furthermore, Merino [23] emphasized that exposure to societal beauty ideals often exacerbates concerns about general appearance, contributing to anxiety levels similar to those identified in this study.

In terms of **Anxiety About Being Evaluated**, it has a composite mean of 2.62, interpreted as "High Anxiety." Respondents often feel uneasy and apprehensive when they perceive that others are assessing their appearance. This implies that such heightened anxiety may hinder their confidence and comfort in social situations, potentially affecting their interactions and participation in group activities.

This finding aligns with research indicating that individuals with higher appearance-based anxiety tend to experience greater psychological distress and social withdrawal [24]. Chakraborty et al. [25] noted that evaluation-related anxiety could adversely impact students' self-esteem and overall well-being, underscoring its significance in academic and social settings.

Concerning **Concerns About Judgment and Social Acceptance**, it has a composite mean of 2.37, interpreted as "Moderate Anxiety." Respondents occasionally feel uneasy about how others perceive and accept them in social situations. This implies that while these concerns are not overwhelming, they may still influence their ability to engage confidently in peer interactions and navigate social environments effectively.

This finding is consistent with earlier studies, such as those by Shen et al. [26], which highlighted that moderate levels of anxiety about judgment could affect interpersonal relationships and emotional resilience. Similarly, findings by Zhao [27] indicated that students often balance self-perception and external validation, with moderate anxiety as both a challenge and a motivator for self-improvement in social contexts.

Concerning **Sensitivity to Appearance Flaws**, it has a composite mean of 2.52, interpreted as "Moderate Anxiety." This means that respondents experience occasional discomfort or self-consciousness regarding perceived imperfections in their physical appearance. This implies that while such sensitivity does not dominate their self-concept, it may still influence their confidence and interactions when appearance is evaluated or highlighted.

This result aligns with findings by Scully et al. [28], who noted that moderate concerns about appearance flaws are common among students, often stemming from societal beauty standards and peer comparison. Additionally, research by Merino [23] emphasized that moderate sensitivity levels can impact self-esteem and social engagement, particularly in environments where physical appearance is highly valued.

4.2. Holistic Self-Esteem among the Respondents

The **overall holistic self-esteem** of the respondents has a composite mean of 3.03, which is interpreted as "Moderately High Self-Esteem." This means that

respondents generally perceive themselves positively, demonstrating confidence in their abilities and self-worth while occasionally facing self-doubt. This implies that while their self-esteem provides a foundation for resilience and adaptability, it may not be consistently robust across all aspects of their lives.

These findings are consistent with research by Saeed [29], which found that students often exhibit moderate to high self-esteem influenced by their social support systems and personal achievements. Similarly, a study by Gapa et al. [30] highlighted that moderate levels of self-esteem allow individuals to navigate challenges effectively. However, they may still seek affirmation in high-stress or evaluative situations.

Concerning respondents' **Security**, it has a composite mean of 2.84, interpreted as "Moderately High Self-Esteem." This means that respondents generally feel confident and secure about their worth, although they may occasionally experience moments of vulnerability. This implies that while their sense of security contributes positively to their self-concept, it may not be consistent across different settings or situations.

These results align with the findings of Fairlamb [31], who noted that moderate to high self-esteem often reflects a balanced sense of self-worth, particularly in academic and social contexts. Similarly, research by Martin Quintana et al. [32] suggested that self-esteem tied to security plays a significant role in fostering resilience. However, it may fluctuate with external pressures and personal challenges.

Concerning respondents' **Identity**, it has a composite mean of 3.13, interpreted as "Moderately High Self-Esteem." This means that respondents generally have a positive understanding of their identity, reflecting confidence in who they are. This implies that their self-perception is largely stable and supportive of personal growth, though occasional uncertainties may arise depending on external or situational factors.

These findings are consistent with the work of Jankowski et al. [33], who found that moderately high self-esteem in terms of identity correlates with increased self-awareness and adaptability. Furthermore, a study by Haktanir et al. [34] highlighted that individuals with a strong sense of identity often demonstrate resilience in handling social and academic pressures, contributing to their overall well-being and self-concept.

Concerning respondents' **Belonging**, it has a composite mean of 2.97, interpreted as "Moderately High Self-Esteem." Respondents generally feel valued and accepted within their social and academic circles. This implies that while they experience a sense of connection and inclusion, there may still be occasional instances of feeling disconnected or uncertain about their place in specific groups or communities.

These findings align with the study of Leary et al. [35], which revealed that a sense of belonging significantly contributes to an individual's self-esteem by reinforcing their perception of social acceptance. Similarly, research by Tagare [36] emphasized that moderately high belongingness fosters a supportive environment for personal and academic growth, as it bolsters feelings of security and mutual respect in interpersonal relationships.

Concerning respondents' **Purpose**, it has a composite mean of 3.13, interpreted as "Moderately High Self-Esteem." This means that respondents generally have a clear sense of direction and meaning. This implies that while they experience fulfillment and clarity about their goals, there may still be occasional uncertainty or lack of conviction regarding their long-term aspirations.

This finding is consistent with the work of Hashmi et al. [37], which found that a moderate sense of purpose contributes to higher self-esteem by offering individuals a framework for their actions and decisions. Similarly, research by Chen [38] suggested that individuals with a strong sense of purpose report higher life satisfaction, indicating that a moderately high sense of purpose enhances overall self-esteem and life outlook.

Concerning respondents' **Competence**, it has a composite mean of 3.06, interpreted as "Moderately High Self-Esteem." This means that respondents generally perceive themselves as capable and skilled in their abilities but may still experience occasional doubts about their competence in certain areas. This implies that while they exhibit confidence in their skills, there are instances when they may feel less confident or face challenges that affect their self-assurance.

This finding aligns with the study of Orth et al. [6], which demonstrated that individuals with moderate competence levels tend to have higher self-esteem as they believe in their abilities and acknowledge their limits. Additionally, research by Estevan et al. [39] suggested that people who perceive themselves as moderately competent are more likely to experience higher levels of life satisfaction and self-worth, highlighting the importance of self-perception competence.

4.3. Relationship between Students' Social Appearance Anxiety and Holistic Self-Esteem

On the Test of Relationship between the Respondents' Social Appearance Anxiety and Holistic Self-esteem, it got a Pearson correlation coefficient of -.132** and a p-value of .001, which is statistically significant. This implies that holistic self-esteem tends to decrease as social appearance anxiety increases, indicating an inverse relationship between the two variables.

This finding is consistent with previous studies that have shown negative correlations between anxiety related to social appearance and overall self-esteem. For instance, a study by Liao et al. [40] found that higher levels of social appearance anxiety were linked to lower self-esteem, particularly in social and academic contexts. Similarly, Merino et al. [23] observed that individuals who experience heightened concerns about their physical appearance often struggle with holistic self-worth as their perception of self

becomes more focused on external validation. Additionally, research by Atik et al. [41] highlighted that students with higher social appearance anxiety tend to experience challenges in their academic and personal lives, further influencing their overall self-esteem.

The results of this study suggest that social appearance anxiety and holistic self-esteem are closely intertwined, with an increase in social appearance anxiety negatively impacting holistic self-esteem. These findings highlight the need for policies and practices that address students' mental and emotional well-being, particularly regarding body image and social anxiety. Educational institutions could consider integrating mental health programs that focus on self-acceptance and body positivity, which have been shown to improve students' self-esteem [42], [43]. Additionally, policies promoting inclusivity and reducing social pressures related to appearance could foster a more supportive environment, ultimately enhancing students' overall well-being [44]. This underscores the importance of a holistic approach to student support, focusing not only on academic achievement but also on students' emotional and psychological development [45].

The findings of the current study align with previous research, indicating a negative relationship between social appearance anxiety and self-esteem; however, differences emerge in the specific population and contextual factors examined. Unlike prior studies focusing on adolescents and sports management students, this study investigates university students in a broader academic setting, providing new insights into how social appearance anxiety and holistic self-esteem interact beyond sports-related contexts. Additionally, while previous research highlighted significant variations in social appearance anxiety based on demographic factors, the current study emphasizes a more comprehensive assessment of self-esteem dimensions, offering an understanding of students' psychological well-being.

5. Conclusions

The findings regarding social appearance anxiety among the respondents indicate that students experience moderate levels of anxiety related to how their appearance is evaluated and judged in social contexts. This suggests that concerns about physical appearance and societal expectations remain significant factors influencing students' mental health and well-being. It highlights the importance of addressing the pressures of body image and appearance, which are crucial aspects of students' overall psychological state and can impact their academic performance and social interactions.

Regarding students' holistic self-esteem, the respondents exhibit a moderately high sense of self-worth, with notable strengths in security, identity, and purpose. These results indicate that while students generally maintain a positive self-image, there are still areas for potential growth. The finding emphasizes the importance of fostering a balanced sense of self-worth that is not solely dependent on external validation but rooted in a strong internal foundation.

The relationship between social appearance anxiety and holistic self-esteem reveals a significant negative correlation, implying that higher levels of anxiety related to social appearance are associated with lower levels of overall self-esteem. This relationship underscores the interconnectedness of physical and emotional well-being, where anxiety about one's appearance can diminish broader aspects of self-worth. It calls for a holistic approach to student support, where appearance-related issues and self-esteem are addressed to promote healthier and more resilient student populations.

Future research should explore the underlying factors contributing to the relationship between social appearance anxiety and self-esteem, particularly in different cultural and educational contexts. Longitudinal studies could help clarify the impact of these variables over time while examining interventions aimed at improving self-esteem and reducing appearance-related anxiety among students. Further investigations could also assess the role of peer influence, social media, and institutional policies in shaping these experiences and outcomes.

5.1. Limitations of the Study

This study is limited by its reliance on self-reported data, which may be subject to social desirability bias and individual misinterpretation of questionnaire items. Additionally, the sample is confined to a specific group of respondents, limiting the generalizability of the findings to broader populations. The study also does not account for potential external factors, such as cultural influences or past experiences, which may affect Social Appearance Anxiety and Holistic Self-Esteem. Future research could explore these variables in more diverse populations and incorporate longitudinal designs to assess changes over time.

REFERENCES

[1] M. Duyan, M. Ilkim, and T. Çelik, "The effect of social appearance anxiety on psychological well-being: a study on women doing regular pilates activities," *Pakistan Journal of Medical & Health Sciences*, vol. 16, no. 02, p. 797, 2022.

[2] S. E. McComb and J. S. Mills, "The effect of physical appearance perfectionism and social comparison to thin-, slim-thick-, and fit-ideal Instagram imagery on young women's body image," *Body Image*, vol. 40, pp. 165–175, 2022.

[3] Y. Jin *et al.*, "Symptom association between social anxiety disorder, appearance anxiety, and eating disorders among Chinese university students: a network analysis to conceptualize comorbidity," *Front Public Health*, vol. 10, p. 1044081, 2022.

[4] A. Y. A. Bakar, "Effects of character education program on gifted and talented students' self-esteem," *Journal of Gifted Education and Creativity*, vol. 7, no. 3, pp. 115–120, 2020.

[5] H.-C. Lin and C.-C. Chen, "Disease prevention behavior during the COVID-19 pandemic and the role of self-esteem: an extended parallel process model," *Psychol Res Behav Manag*, pp. 123–135, 2021.

[6] U. Orth and R. W. Robins, "Is high self-esteem beneficial? Revisiting a classic question.," *American psychologist*, vol. 77, no. 1, p. 5, 2022.

[7] H. S. Kim, "The relationship among personality type, self-esteem and mental health of nursing students," *Journal of Korean Academy of Psychiatric and Mental Health Nursing*, vol. 12, no. 4, pp. 385–393, 2024.

[8] V. Boursier, F. Gioia, and M. D. Griffiths, "Do selfie-expectancies and social appearance anxiety predict adolescents' problematic social media use?," *Comput Human Behav*, vol. 110, p. 106395, 2020.

[9] P. Duru and Ö. Örsal, "The effect of acne on quality of life, social appearance anxiety, and use of conventional, complementary, and alternative treatments," *Complement Ther Med*, vol. 56, p. 102614, 2021.

[10] T. Hawes, M. J. Zimmer-Gembeck, and S. M. Campbell, "Unique associations of social media use and online appearance preoccupation with depression, anxiety, and appearance rejection sensitivity," *Body Image*, vol. 33, pp. 66–76, 2020.

[11] S. Singhal and N. Prakash, "Relationship between self-esteem and psychological well-being among Indian college students," *J. Interdiscip. Cycle Res*, vol. 12, pp. 748–756, 2021.

[12] L. Holopainen, K. Waltzer, N. Hoang, and K. Lappalainen, "The relationship between students' self-esteem, schoolwork difficulties and subjective school well-being in finnish upper-secondary education," *Int J Educ Res*, vol. 104, p. 101688, 2020.

[13] T. K. Papapanou *et al.*, "Strong correlations between social appearance anxiety, use of social media, and feelings of loneliness in adolescents and young adults," *Int J Environ Res Public Health*, vol. 20, no. 5, p. 4296, 2023.

[14] K. Yasuhiro, T. Su-Hie, and S. Neary, "Mental health of Malaysian university students: UK comparison, and relationship between negative mental health attitudes, self-compassion, and resilience," *High Educ (Dordr)*, vol. 81, no. 2, pp. 403–419, 2021.

[15] S. Nguyen, "The Impact of Societal Ideals on Men's Body Image," 2024.

[16] J. C. Gillman, M. J. Turner, and M. J. Slater, "The role of social support and social identification on challenge and threat cognitive appraisals, perceived stress, and life satisfaction in workplace employees," *PLoS One*, vol. 18, no. 7, p. e0288563, 2023.

[17] C. Mahon, A. Fitzgerald, A. O'Reilly, and B. Dooley, "Profiling third-level student mental health: Findings from My World Survey 2," *Ir J Psychol Med*, vol. 41, no. 2, pp. 202–210, 2024.

[18] H. Taherdoost, "What are different research approaches? Comprehensive Review of Qualitative, quantitative, and mixed method research, their applications, types, and limitations," *Journal of Management Science & Engineering Research*, vol. 5, no. 1, pp. 53–63, 2022.

[19] G. R. Ryser, "Qualitative and quantitative approaches to assessment," in *Identifying Gifted Students*, Routledge, 2021, pp. 33–57.

[20] S. Noor, O. Tajik, and J. Golzar, "Simple random sampling," *International Journal of Education & Language Studies*, vol. 1, no. 2, pp. 78–82, 2022.

[21] M. Baceviciene and R. Jankauskiene, "Changes in sociocultural attitudes towards appearance, body image, eating attitudes and behaviours, physical activity, and quality of life in students before and during COVID-19 lockdown," *Appetite*, vol. 166, p. 105452, 2021.

[22] M. J. Zimmer-Gembeck, J. Rudolph, H. J. Webb, L. Henderson, and T. Hawes, "Face-to-face and cyber-victimization: A longitudinal study of offline appearance anxiety and online appearance preoccupation," *J Youth Adolesc*, pp. 1–13, 2021.

[23] M. Merino, J. F. Tornero-Aguilera, A. Rubio-Zarapuz, C. V. Villanueva-Tobaldo, A. Martín-Rodríguez, and V. J. Clemente-Suárez, "Body perceptions and psychological well-being: A review of the impact of social media and physical measurements on self-esteem and mental health with a focus on body image satisfaction and its relationship with cultural and gender factors," in *Healthcare*, MDPI, 2024, p. 1396.

[24] M. Brekalo, "Longitudinal study of social anxiety symptoms and appearance rejection in predicting body dysmorphic symptoms: Appearance-based rejection sensitivity as a mediator," *Body Image*, vol. 42, pp. 440–446, 2022.

[25] A. Chakraborty, "Exploring the root causes of examination anxiety: effective solutions and recommendations," *International Journal of Science and Research (IJSR)*, vol. 12, no. 2, pp. 1096–1102, 2023.

[26] Y. Shen, "Mitigating students' anxiety: the role of resilience and mindfulness among Chinese EFL learners," *Front Psychol*, vol. 13, p. 940443, 2022.

[27] C. Zhao and Y. Wang, "A comprehensive assessment of self-leadership among students in China's ethnic regions: insights and implications for higher education," *Studies in Higher Education*, pp. 1–23, 2024.

[28] M. Scully, L. Swords, and E. Nixon, "Social comparisons on social media: Online appearance-related activity and body dissatisfaction in adolescent girls," *Ir J Psychol Med*, vol. 40, no. 1, pp. 31–42, 2023.

[29] K. M. Saeed, A. S. Ahmed, Z. M. Rahman, and N. A. Sleman, "How social support predicts academic achievement among secondary students with special needs: the mediating role of self-esteem," *Middle East Current Psychiatry*, vol. 30, no. 1, p. 46, 2023.

[30] I. J. Gapa and R. J. Tagare, "Dropped Interest: Generation Z Students' Demotivating Reasons on Gradual Dislike on Sports and Recreation," *Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity*, vol. 9, no. 1, pp. 98–124, 2023, doi: 10.17979/sportis.2023.9.1.9076.

[31] S. Fairlamb, "We need to talk about self-esteem: The effect

of contingent self-worth on student achievement and well-being.," *Scholarsh Teach Learn Psychol*, vol. 8, no. 1, p. 45, 2022.

[32] J. C. Martín Quintana, P. F. Alemán Ramos, and P. Morales Almeida, "The influence of perceived security in childhood on adult self-concept: The mediating role of resilience and self-esteem," in *Healthcare*, MDPI, 2023, p. 2435.

[33] T. Jankowski, W. Bak, and Ł. Miciuk, "Adaptive self-concept: Identifying the basic dimensions of self-beliefs," *Self and Identity*, vol. 21, no. 7, pp. 739–774, 2022.

[34] A. Haktanir *et al.*, "Resilience, academic self-concept, and college adjustment among first-year students," *J Coll Stud Ret*, vol. 23, no. 1, pp. 161–178, 2021.

[35] M. R. Leary and S. Gabriel, "The relentless pursuit of acceptance and belonging," in *Advances in motivation science*, vol. 9, Elsevier, 2022, pp. 135–178.

[36] R. L. Tagare, "Gen Z's Fitness Concepts and Ways to be Fit: Insights to Strengthen Students' Learning Experiences in Tertiary Physical Education," 2022.

[37] F. Hashmi *et al.*, "The role of self-esteem, optimism, deliberative thinking and self-control in shaping the financial behavior and financial well-being of young adults," *PLoS One*, vol. 16, no. 9, p. e0256649, 2021.

[38] R. Chen, Y.-F. Liu, G.-D. Huang, and P.-C. Wu, "The relationship between physical exercise and subjective well-being in Chinese older people: The mediating role of the sense of meaning in life and self-esteem," *Front Psychol*, vol. 13, p. 1029587, 2022.

[39] I. Estevan, F. Bardid, T. Utesch, C. Menescardi, L. M. Barnett, and I. Castillo, "Examining early adolescents' motivation for physical education: Associations with actual and perceived motor competence," *Phys Educ Sport Pedagogy*, vol. 26, no. 4, pp. 359–374, 2021.

[40] J. Liao, T. Xia, X. Xu, and L. Pan, "The effect of appearance anxiety on social anxiety among college students: sequential mediating effects of self-efficacy and self-esteem," *Behavioral Sciences*, vol. 13, no. 8, p. 692, 2023.

[41] E. Atik, M. M. Önde, S. Domnori, S. Tutar, and O. C. Yiğit, "A comparison of self-esteem and social appearance anxiety levels of individuals with different types of malocclusions," *Acta Odontol Scand*, vol. 79, no. 2, pp. 89–95, 2021.

[42] E. Jain, A. Vajpayee, and P. Sanghani, "Beauty ideals and beyond: understanding the impact of negative body image on adolescent self-esteem and interventions," *Korea Rev. Intern. Stud*, vol. 16, no. 51, pp. 44–67, 2023.

[43] R. L. Tagare, "An Ethnographic Probe on the Cultural Values and Symbols of Generation Z Students: Implications for Course Contextualization," *European Online Journal of Natural and Social Sciences*, vol. 11, no. 2, p. pp-347, 2022, [Online]. Available: http://www.european-science.com

[44] K. Pascua, R. L. Tagare, "Experiences, Motivation, Commitment, and Suggestions of Physical Education Teachers Amidst COVID-19 Crisis," *Egitim ve Bilim*, vol. 49, no. 219, pp. 187–200, 2024, doi: 10.15390/EB.2024.12095.

[45] E. Gkintoni, C. Halkiopoulos, I. Dimakos, and G. Nikolaou, "Emotional Intelligence as Indicator for Effective Academic Achievement within the School Setting: A Comprehensive Conceptual Analysis," Preprints, 2023. doi: 10.20944/preprints202310.2029.v2

International Journal of Evaluation and Research in Education (IJERE)
Vol. 14, No. 3, June 2025, pp. 2438~2449
ISSN: 2252-8822, DOI: 10.11591/ijere.v14i3.32804

Suggestions for a better tertiary physical education experience: insights from students at a rural state university

Ruben L. Tagare, Jr.[1,2], Marlene E. Orfrecio[1], Eduard S. Sumera[1], Marlon A. Mancera[1], Marichu A. Calixtro[1], Cheeze R. Janito[1], Helen Grace D. Lopez[1], Priscilla P. Dagoc[1]
[1]Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Cotabato, Philippines
[2]College of Education and Liberal Arts Graduate School Adamson University, Manila, Philippines

Article Info

Article history:

Received Sep 11, 2024
Revised Feb 14, 2025
Accepted Feb 24, 2025

Keywords:

Concerns
Educational enrichment
Generation Z
Instructional adjustment
Rural communities
Suggestions

ABSTRACT

This study explored the concerns and suggestions of generation Z students in rural communities to improve the newly implemented tertiary physical education (PE) program in the Philippines - physical activity towards health and fitness (PATHFit). Employing a qualitative-ethnographic approach, data were gathered from 20 generation Z students who were selected and participated in purposive interviews using open-ended questions validated by experts. The findings highlighted several themes following the data analysis using the Colaizzi method: PE should be engaging and fun, moving beyond traditional books and materials; a more flexible curriculum is needed, one that does not feel like a rigid prescription; student-centered activities should be prioritized to promote active involvement; lectures should be limited, with a greater focus on interactive, hands-on experiences; access to sports equipment through a borrowing system is crucial for student participation; and high-quality teaching, characterized by clear communication and practical demonstrations, is essential for a more meaningful learning experience. The study concludes and implies that generation Z students in rural communities desire a more engaging, flexible, and interactive PATHFit program that aligns with their interests and needs. Their insights provide valuable direction for enhancing the curriculum, promoting active student involvement, and ensuring that teaching is clear, practical, and engaging.

Corresponding Author:

Ruben L. Tagare, Jr.
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao
Kabacan, Cotabato, Philippines
Email: tagareruben@usm.edu.ph

1. INTRODUCTION

Generation Z, born from 1995 to the early 2010s, significantly influenced societal standards, cultural landscapes, and educational frameworks in terms of generational dynamics [1]. Often known as Gen Z, this refers to the first group born in the twenty-first century. They are accustomed to living in a society greatly influenced by the extensive accessibility of information, globalization, and technological progress [2]. Cilliers [3] emphasized the importance of comprehending their beliefs, concerns, and ideas for educators, legislators, and academic leaders dedicated to customizing educational programs to meet this generation's distinct needs and interests.

Researchers from the United States have identified a unique set of values that distinguishes generation Z from earlier generations. This is because they grew up during a time when digital technology, such as cell phones, social media, and rapid connectedness, was the prevailing influence [4]. Their innate technical aptitude has impacted their communication strategies, craving instant access to information,

interactive educational experiences, and a global outlook [5]. Gen Z is distinguished by their pragmatism and tenacity, shaped by their encounters with economic instabilities, geopolitical changes, and a rapidly changing labor market. A deep desire for the inclusion of all persons, fairness, and genuineness characterizes this generation. Their principles are based on a firm conviction in social action, fairness, inclusivity, and ecological sustainability [6].

In addition, the present generation's dependence on digital technology might lead to reduced physical activity and increased sedentary habits among young people. Conventional physical education (PE) programs, mainly consisting of in-person exercises guided by instructors, face difficulties adapting to this situation [7]. Rural communities with low technology and internet access tend to have a higher prevalence of traditional PE techniques, prioritizing outdoor activities, sports, and group exercises. To effectively resolve the difference between generation Z's inclination towards digital platforms and the conventional PE methods in rural areas, it is imperative to introduce inventive strategies that integrate technology-driven educational experiences, including gamification, mobile applications, and online resources [8]. These initiatives aim to encourage physical exercise and improve the well-being of young individuals, taking into account the specific cultural and environmental challenges and recommendations in rural locations.

However, the implementation of PE in many tertiary educational institutions in the Philippines has faced considerable obstacles [9]. The barriers encompass inadequacies in the curriculum, inadequate teacher preparation, and a lack of attention to the subject matter, often seen as having more significant political rather than cultural importance. According to Lynch and Ovens [10], the historical backdrop indicates that issues beyond pedagogical considerations have impacted tertiary PE. The academic discussion on these issues highlights the significance of a thorough improvement strategy. Abbasov and Mavlyanov [11] stressed the crucial importance of improving the quality and effectiveness of PE by allocating additional resources, such as investing in the training of staff and upgrading school infrastructure.

To deal with these crucial matters, the Philippine Commission on Higher Education (CHED) has made it obligatory for all higher education institutions (HEIs) to adopt and offer the new tertiary PE program, physical activity towards health and fitness (PATHFit), as specified in CHED Memorandum Orders (CMO) no. 39, series of 2021. PATHFit is a proactive solution that addresses the need for consistent teaching approaches. It is mainly intended to offer a complete and uniform curriculum. The framework prioritizes holistic development, essential life skills, and physical well-being. Further, the curriculum aligns with the demands of the present educational system by incorporating pioneering approaches that can enhance the overall caliber and efficacy of PE in higher education [12].

The main goal of PATHFit is to exceed traditional frameworks and enhance the state of PE in Philippine higher education. This will be achieved by executing a complete program that combines the cultivation of crucial life skills and physical fitness to tackle long-lasting difficulties [13]. The CMO no. 39 (s. 2021) further explains the curriculum's aim to offer students a thorough educational experience focusing on physical health, teamwork, proficient communication, and holistic growth. PATHFit aims to enhance the caliber and effectiveness of higher education in PE by integrating cutting-edge techniques and adjusting to present educational requirements. This ensures that graduates have the knowledge and skills to participate in societal endeavors and uphold their overall welfare actively.

Numerous studies have explored the landscape of generation Z, examining their activities in several educational and industrial settings. Bhore and Pandita [14] did a comparative analysis of the characteristics and behaviors of generation Z and generation Y. It was shown that social media exerts a significant influence on the professional choices made by individuals belonging to generation Z. Ajmain [15] emphasized the need of establishing efficient communication methods and the impact of technology on the social communication skills of generation Z. Shorey *et al.* [16] conducted a review to determine the learning styles, preferences, and needs of healthcare students belonging to generation Z. The need of integrating technology and self-care practices into the teaching of these students was emphasized. Arkhipova *et al.* [17] found that generation Z students had a favorable view of using technology in school. This suggests that their academic performance may be enhanced by effectively using technology. Giunta [18] highlighted the trust and reliance on social media among college students of generation Z. This emphasizes the necessity for instructors to comprehend and adjust to their students' distinctive problems and preferences.

Furthermore, recent studies conducted in the tertiary PE sector of the Philippines have concentrated on evaluating the effectiveness of the current curriculum [19], instructional approaches [20], and the overall quality of the educational experience. The study examined the influence of technology on PE, teaching methodologies, curriculum development, and student involvement [21]. Panganiban [22] has highlighted the significance of program curriculum adaptation and thorough quality evaluation. Meanwhile, Graciano [23] has identified students' specific preferences and attitudes towards PE to guarantee that it aligns with their needs and interests. Furthermore, Lobo *et al.* [24] underscored the importance of student concerns and ideas, highlighting the necessity for inventive strategies to enhance the teaching process.

Although there have been several studies on generation Z and tertiary PE, there is a notable gap in understanding the concerns and suggestions of generation Z students, particularly in rural communities in the Philippines. Therefore, this study aimed to address this inadequacy by examining the concerns of students in rural areas. This research enhances the broader academic conversation by providing valuable perspectives on educational practices and student involvement. This research aimed to answer a general question: What are these students' concerns and suggestions for improving their PE experience? This presents a novel perspective by focusing specifically on university students' unique problems and suggestions in rural settings. Unlike existing research that often generalizes student experiences, this study highlights localized insights that can inform curriculum development and teaching practices in PE.

2. METHOD

2.1. Research design

This study employed a qualitative research design, specifically the ethnographic approach. According to Levitt [25], qualitative research is a method that seeks to comprehend human events by thoroughly examining evidence not expressed in numerical form. Ethnographic research is a qualitative research approach where the researchers fully immerse themselves in the natural environment of a specific social group or culture to comprehend and study their behavioral patterns [26]. Ethnographic research seeks a comprehensive understanding of the customs, beliefs, behaviors, and routines of the society being studied by immersing oneself in the culture, conducting interviews, and engaging in participant observation.

Günel *et al.* [27] described this method as involving thorough and detailed on-site research. This approach enables researchers to build a strong relationship with participants, obtain an inside viewpoint, and uncover insights that would not be evident using other methods. The ethnographic study delves into the social connections and symbolic importance inherent in the lives of the persons being researched to have a thorough grasp of culture [28]. This research utilized this method because of it is appropriateness for comprehending the concerns and suggestions of the local populace and it is capacity to portray the many sorts of students in rural locations comprehensively. This inquiry aimed to improve the implementation of the PATHFit program. To ensure that the curriculum aligns with the distinct educational goals of generation Z students in rural communities, ethnography was employed to comprehend the local concerns and suggestions comprehensively.

2.2. Sampling method (locale, population, and technique)

The study utilized purposive sampling to choose 20 generation Z individuals as the primary data source. As described by Campbell *et al.* [26], purposive sampling is a method of selecting participants based on their relevant experiences and viewpoints. This selection strategy is commonly used in research initiatives that aim to gain a thorough understanding from persons with distinct or specialized skills. This ensures that the selected participants may make essential contributions to the research topic. To qualify for the research, individuals must satisfy specific requirements, including belonging to generation Z (born between 1995 and 2010), currently enrolled in PATHFit classes, and living in rural communities.

The chosen sample size for the research on generation Z students in the Cotabato Province of the Philippines was considered adequate to accurately represent this particular concerns and suggestions. The main objective of qualitative research is to obtain extensive and detailed data from each participant rather than aiming for a broad representation. The selection criteria were precise in targeting individuals with common concerns and recommendations while allowing for some variation within these boundaries. Although the sample size of 20 participants may seem limited, it adequately captures Cotabato's rural generation Z community's many viewpoints, experiences, and backgrounds. This aligns with the qualitative character and purpose of the inquiry.

2.3. Research instrument

The primary research instrument in this study was a set of open-ended questions specifically designed to capture the diverse perspectives of generation Z students. These questions allowed participants to freely and thoroughly express their views, enabling an in-depth analysis of their concerns and suggestions. To ensure validity, the open-ended questions underwent a rigorous validation process by subject matter experts, who assessed content relevance and appropriateness.

Supplementary resources, including a camera and voice recorder, were employed to capture verbal expressions, facial cues, and environmental context. These multimedia tools enriched the data quality by holistically portraying the participants' responses. While technical or privacy issues could potentially impact the effectiveness of these tools, measures were taken to mitigate such concerns. All participants were informed of the purpose and handling of multimedia recordings, and written consent was obtained, ensuring both ethical adherence and participant comfort. Furthermore, technical checks and secure data storage

protocols were implemented to prevent data loss and unauthorized access, thereby enhancing the overall data integrity and participant trust in the study.

2.4. Data analysis

The study utilized the Colaizzi method [29] for data analysis and interpretation. This approach entailed careful and systematic data analysis, including reducing, categorizing, and abstracting information to derive meaningful and essential findings from the participants' experiences. The Colaizzi method involves transcribing interviews or data and identifying crucial comments and phrases pertinent to the research inquiries. The following steps entail extracting the meanings and patterns from these statements, categorizing these patterns into groups, and finally creating a thorough representation of the studied topic.

The Colaizzi method was chosen for this study due to it is compatibility with the exploratory character of the research, which aims to comprehend the problems and ideas of generation Z students in rural communities. The acquired data was methodically and meticulously analyzed to understand the participants' experiences and viewpoints fully. The method's flexibility enabled the identification of themes derived from participants' views, which is crucial for capturing generation Z students' varied and plentiful insights in rural contexts.

3. RESULTS AND DISCUSSION

Table 1 provides an organized summary of the insights shared by generation Z students regarding their PE experiences. This outlines the main concerns raised by students, along with their suggestions for improving the PATHFit program to meet their educational and engagement needs better. The table highlights critical areas where students feel the curriculum and teaching approaches could be enhanced by categorizing their feedback into specific themes. It offers a clear perspective on the elements that generation Z students in rural communities consider essential for a more relevant, motivating, and inclusive PE environment.

Table 1. Students' concerns and suggestions for better tertiary PE experience

	Themes	Description	Sample transcript
i).	Engaging and fun-it should be beyond books and materials)	Emphasizes incorporating interactive and practical activities to make PE more engaging and enjoyable.	– "*…as Gen Z, PE should be fun because it is not restricted to books alone*." – "*…it should not be boring and should not just engage the mind, ears, and eyes, but the whole body…*"
ii).	Curriculum that does not feel like a prescription given to us	Advocates for a flexible curriculum that adapts to students' interests rather than feeling like a rigid requirement.	– "*…we were academically inclined. So, at some point, we crave things that we enjoy…*" – "*…it would be great if there were groups where you could choose the activities you want to join…*"
iii).	More student-centered activities	Focuses on increasing activities tailored to students' preferences and needs to enhance their participation and enjoyment.	– "*…PE should be the subject that helps us escape from books and lectures…*" – "*…we can put down our phones and play like students, and we enjoy it…*"
iv).	Limit lectures	Highlights the need to reduce lecture time in favor of more hands-on, practical experiences in PE.	– "*…most of it should be on physical aspects or sports because it is enjoyable…*" – "*…PATHFit should focus more on practical activities and reduce the lectures…*"
v).	Students can borrow sports equipment	Supports the availability of sports equipment for students to borrow, facilitating more frequent and varied participation.	– "*…it would also be great if students could borrow sports equipment if they want to play…*" – "*…if I want to play basketball but didn't bring a ball, I should be able to borrow one…*"
vi).	Quality teaching	Stresses the importance of effective teaching practices that ensure clear explanations and long-term understanding of PE concepts.	– "*…quality teaching is essential. It should focus on teaching what needs to be learned and ensuring that knowledge is retained…*" – "*…proper handling and instruction are not provided, which is a factor that makes it difficult for students…*"

3.1. Students' concerns and suggestions for better tertiary PE experience

3.1.1. Engaging and fun-it should be beyond books and materials

This theme emphasizes that generation Z students in rural communities believe PE should be more than just theoretical knowledge. They want PE classes to be dynamic and interactive, moving beyond textbooks and materials to include engaging, hands-on activities that involve the whole body. They feel that

making PE fun and participative will help students, especially those struggling with traditional sports skills, find more enjoyment and value in the subject.

> "*…as Gen Z, PE should be fun and not limited to books alone. It shouldn't be boring; it should engage the whole body, not just the mind, ears, and eyes…*" (Bebe)
> "*…the PE curriculum should be fun because when students see that it is more than just the usual topics, they become more engaged and participative. We must understand the subject's importance, as it benefits us…*" (Yan)

This implies that when PE classes include more interactive and hands-on activities, students are likelier to feel excited and involved. This can lead to increased physical activity and better skill development, as students are more engaged in learning through practice rather than just theory. Focusing on fun and active learning also helps create a more positive attitude towards PE, bridging the gap between theoretical knowledge and practical experience. Further, Sierra-Díaz *et al.* [30] highlighted that PE must be engaging, fun, and extend beyond traditional books because it fosters active participation and enthusiasm in students. When PE is interactive and enjoyable, it motivates students to engage in physical activity, develop lifelong fitness habits, and appreciate the benefits of a healthy lifestyle [31]. By incorporating various activities and experiences rather than focusing solely on theoretical knowledge, PE can better address different learning styles, keep students interested, and enhance their overall well-being and social skills [32].

3.1.2. Curriculum that does not feel like a prescription given to us

This theme highlights that generation Z students in rural communities want PE to be more engaging and fun. Participants expressed that PE should go beyond traditional methods of showing materials or using books. They believe PE should engage the mind, ears, and eyes and involve the whole body to make it more enjoyable and participative. By making PE more interactive and practical, students feel that it can help those who are not very sporty or skilled in executing physical skills and enhance their overall learning experience. Based on the research participants:

> "*…I hope the curriculum isn't one-size-fits-all, like a prescription handed to us. We should have choices in PATHFit activities. Our teachers are considerate-they won't fail you if you do your best, even if you can't meet all the requirements. This understanding is crucial because we're already overwhelmed with tasks from other subjects. PATHFit should be considerate, giving us flexibility and recognizing our time and capabilities…*" (Lynn)

This denotes that when the curriculum is flexible and responsive to students' interests and needs, it helps them feel more connected and invested in their learning. This approach can reduce the sense of education as a rigid, one-size-fits-all model and promote a more dynamic and relevant educational environment. As a result, students may experience higher motivation and satisfaction as the learning process becomes more aligned with their personal preferences and goals. Furthermore, PE should go beyond the four corners of the classroom to provide students with diverse, real-world experiences that promote physical health, teamwork, and social interaction [33]. Outdoor and varied settings allow students to engage in different activities that develop their physical skills, expose them to new environments, and break the monotony of indoor learning [34]. This approach makes PE more enjoyable and stimulating and encourages a more holistic understanding of fitness and well-being [35].

3.1.3. More student-centered activities

This theme emphasizes that generation Z students in rural communities want PE to include more student-centered activities. Participants expressed a desire for PE to focus more on activities rather than just lectures, as they find lectures tiring and want PE to offer a break from academic work. They feel that having options to choose between different activities, like dance or sports, and engaging in physical activities that allow them to play and move their bodies would make PE more enjoyable. They also wish for PE to help them reconnect with fun, physical activities that they enjoyed during their childhood but missed out on as they became more focused on academics. According to them:

> "*…In PE, there should be more physical activities. Lectures are fine, but they should still focus on activities because the whole week is already tiring with lectures from other subjects. PE should be the subject that helps us escape from books and lectures…*" (Nica)

"*…I hope our PE is synchronized with other activities, allowing us to choose between dance or sports. Those who want to dance can do so, while others focus on sports. I also hope we can experience all sports or, at the very least, be exposed to a variety of them…*" (Bryan)

This indicates that when activities are designed with students' interests and preferences, they are more likely to participate actively and enjoy their learning experiences. This approach not only makes PE more enjoyable but also supports better skill development and learning retention. By focusing on student-centered activities, the curriculum can foster a more inclusive and motivating environment, which helps students connect more deeply with the subject and take greater ownership of their learning. Moreover, Kettler and Taliaferro [36] said that PE should use a learner-centered approach because it prioritizes each student's needs, interests, and abilities, making learning more personalized and effective. This method fosters greater engagement and motivation by allowing students to participate actively in their learning process, choose activities that interest them, and set personal fitness goals [37]. A learner-centered approach also accommodates diverse learning styles and paces, encouraging students to develop confidence, autonomy, and a lifelong appreciation for physical activity [38].

3.1.4. Limit lectures

This theme highlights that generation Z students in rural communities prefer PE to minimize lecture time and focus more on practical activities. Participants expressed a desire for PE to emphasize sports, exercises, and hands-on activities rather than spending much time on lectures. They believe PE should engage through direct experience with sports and physical activities rather than just theoretical learning. They feel that limiting lecture time and increasing active participation can make PE more enjoyable and effective. Based on them:

"*…PATHFit should prioritize practical activities and reduce lectures. While lectures are important, having more physical activities and ensuring active student engagement in PE is crucial. We need fewer lectures and more activities…*" (Jako)
"*…PE should be engaging, and we should experience the sports firsthand, not just through printed materials. For example, if there's a lesson on volleyball, there should be minimal lecture time to cover the fundamental rules, followed by actual demonstrations and activities…*" (Tamz)

This suggests that students will likely become more involved and enthusiastic about the subject by reducing the time spent on theoretical instruction and increasing hands-on activities. This shift helps to maintain students' interest and motivation by allowing them to directly experience and practice skills rather than passively listening to lectures. As a result, students may develop a deeper understanding and appreciation of PE through practical application and active participation. Additionally, PE should limit lectures and focus on practical experiences because active participation is crucial for developing physical skills and fitness [39]. Practical experiences engage students more effectively, helping them learn by reinforcing skills and concepts better than passive listening [40]. This hands-on approach makes PE more enjoyable and dynamic, fostering a positive attitude towards physical activity and promoting lifelong healthy habits. By prioritizing movement and real-world application, students can better understand the importance and benefits of physical fitness [41].

3.1.5. Students can borrow sports equipment

This theme highlights that generation Z students in rural communities want access to sports equipment to enhance their physical activities. Participants expressed a desire for sports equipment to be available for borrowing so they can enjoy sports or other activities even if they do not have their equipment. They believe that having the option to borrow equipment, like basketballs or other gear, would allow them to participate more freely and have fun during their free time. They also hope for opportunities to focus on activities they are interested in, whether sports or dance, with access to the necessary equipment. As they said:

"*…there should be available sports equipment for enjoyment, and if you're interested in something, you should be able to focus on it. For example, if you like sports, you should do sports; if you enjoy dancing, you should dance. It would be great to have groups where you can choose the activities you want to join…*" (Andrew)
"*…it would also be great if students could borrow sports equipment to play. There should be available equipment for fun and play in our free time. For example, if I want to play basketball but don't bring a ball, I should be able to borrow one…*" (Jasmin)

Allowing students to borrow sports equipment can significantly increase their opportunities to engage in physical activities and practice skills. Access to equipment, when needed, can encourage more frequent participation and exploration of different sports or activities, even if students do not own the necessary gear. This availability supports greater inclusivity, ensuring that all students have the resources to participate actively. Also, facilities and equipment are vital in school PE because they provide the resources needed for a diverse and effective PE program [42]. Quality facilities and appropriate equipment ensure that students can safely participate in a wide range of physical activities, which enhances their learning experience and skill development [43]. Well-maintained and varied resources also help to engage students, make activities more enjoyable, and accommodate different fitness levels and interests. This infrastructure supports the delivery of a comprehensive PE curriculum that promotes physical health and well-being [44].

3.1.6. Quality teaching

This theme underscores that generation Z students in rural communities value receiving quality teaching in PE. Participants expressed that effective teaching should include clear explanations and proper instruction rather than just jumping into practical exercises. They believe quality teaching should ensure students understand and retain the knowledge long-term, not just focus on passing exams. Students want to be guided thoroughly and motivated to learn in a way that supports their understanding and development over time. Based on their responses:

> "*…it should also be important that students are motivated and receive quality teaching. It feels like we go straight into practical exercises without proper explanations. Proper handling and instruction are not provided, which is a factor that makes it difficult for students…*" (Christmas)
> "*…quality teaching is essential. It should focus on teaching what needs to be learned and ensuring that knowledge is retained rather than just helping students pass and get a diploma. The aim should be for students to carry the learning with them in the long term. Quality teaching should be prioritized, ensuring that students are not just left to fend for themselves, but are guided in understanding concepts thoroughly…*" (Namikazee)

When teachers provide clear explanations proper guidance, and focus on long-term understanding rather than just passing exams, students are more likely to grasp and retain essential concepts. This approach enhances students' ability to apply what they learn in practical situations and fosters a deeper engagement with the subject. As a result, students can achieve a more comprehensive understanding and appreciation of PE, contributing to their overall educational success. Consequently, schools need to ensure quality teaching in PE because it directly influences students' engagement, skill development, and lifelong fitness habits [45]. Effective PE teachers use innovative methods to create enjoyable, inclusive educational experiences catering to diverse learning needs. Quality teaching helps students understand the importance of physical activity, develop essential motor skills, and build confidence [46]. It also fosters positive attitudes toward health and fitness, encouraging students to maintain active lifestyles that contribute to their overall well-being [47].

This research highlights the insights of generation Z students in rural communities regarding their experiences and preferences within the PE curriculum, echoing findings from similar studies that emphasize the importance of engagement and interaction in PE. For instance, studies by Yannier *et al.* [48] indicate that hands-on, interactive methods are more effective at sustaining student interest and participation in PE, particularly among younger generations. This alignment suggests that curricula integrating active learning and experiential approaches better cater to the learning preferences of generation Z, promoting higher levels of motivation and engagement. The practical implications for educational practice include the potential for PE programs that incorporate student-centered and hands-on activities to foster a sense of ownership in students over their learning process. By implementing these methods, educators can enhance learning outcomes and support students' physical well-being beyond the classroom.

Furthermore, providing accessible sports equipment aligns with the work of Roe *et al.* [49], who noted the positive impact of resource availability on students' engagement in physical activity outside school hours. This contribution is particularly relevant in rural settings, where students often have fewer opportunities for extracurricular physical activity. As a methodological contribution, this study demonstrates the effectiveness of utilizing multimedia tools such as cameras and voice recorders to capture verbal and non-verbal feedback despite potential technical and privacy concerns. Addressing these limitations, researchers ensured data accuracy and confidentiality through pre-established agreements and secure data handling protocols, which other researchers might consider when investigating sensitive topics with generation Z or similar demographics.

From a policy perspective, this study offers practical insights for curriculum reform by advocating for more adaptable and flexible PE frameworks in rural tertiary institutions. Similar calls for flexibility are noted in recent policy-oriented research by Aboagye and Dlamini [50], which suggests that rigid, prescriptive curricula are less effective in engaging students with diverse needs. By applying these insights, policymakers can craft PE curricula that reflect students' interests and preferences, supporting broader health and wellness objectives in rural educational contexts. Theoretical contributions include the study's emphasis on the unique learning preferences of generation Z, which foregrounds autonomy and experiential learning, offering curriculum designers a foundation for developing PE models that prioritize dynamic, student-centered learning over traditional lecture-based methods.

3.2. Limitations

The authors acknowledge certain limitations in this study. First, the research focused exclusively on generation Z students from rural communities, which may limit the generalizability of the findings to other populations, such as urban students or those from different educational contexts. Additionally, the study primarily relied on student self-reports, which could be subject to personal biases and may not fully capture all dimensions of their PE experiences. Future research could benefit from incorporating broader, more diverse participant samples and additional data sources, such as teacher perspectives or direct observations, to provide a more comprehensive understanding of the issues raised.

4. CONCLUSION

Generation Z students in rural communities have provided valuable insights on enhancing the PATHFit program to better address their needs and preferences. They suggest a shift towards making PE more engaging and interactive, focusing on hands-on activities rather than relying solely on traditional lectures and materials. They advocate for a flexible curriculum that echoes their interests, moving away from a rigid, prescriptive approach. Increased opportunities for student-centered activities and the availability of sports equipment for borrowing are crucial for fostering greater participation and enjoyment. Also, students emphasize the importance of high-quality teaching characterized by clarity, practical guidance, and genuine engagement.

Future research should explore the long-term effects of implementing the suggested changes to the PE curriculum, particularly in rural communities. Investigating how student-centered approaches and flexible curricula impact student engagement and satisfaction, physical fitness outcomes, and overall academic performance would provide valuable insights. Additionally, studies could focus on the perspectives of educators and policymakers to understand the challenges and strategies involved in integrating these recommendations into existing educational frameworks. Expanding the research to include diverse demographic groups and different geographical contexts would also enrich the understanding of effectively tailoring PE programs to meet the varied needs of students across the Philippines.

The authors acknowledge certain limitations in this study. First, the research focused exclusively on generation Z students from rural communities, which may limit the generalizability of the findings to other populations, such as urban students or those from different educational contexts. Additionally, the study primarily relied on student self-reports, which could be subject to personal biases and may not fully capture all dimensions of their PE experiences. Future research could benefit from incorporating broader, more diverse participant samples and additional data sources, such as teacher perspectives or direct observations, to provide a more comprehensive understanding of the issues raised.

ACKNOWLEDGEMENTS

The authors would like to thank the participants in this study. Their participation and insightful contributions were invaluable to the research. The authors also thank everyone who supported this research, making its successful completion possible.

FUNDING INFORMATION

Authors state no funding involved.

AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Ruben L. Tagare, Jr.	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	
Marlene E. Orfrecio	✓			✓	✓			✓	✓	✓	✓		✓	
Eduard S. Sumera	✓	✓		✓	✓		✓			✓	✓	✓		
Marlon A. Mancera	✓	✓	✓		✓		✓		✓	✓	✓		✓	
Marichu A. Calixtro	✓					✓		✓	✓			✓		
Cheeze R. Janito	✓	✓		✓	✓		✓		✓					
Helen Grace D. Lopez	✓			✓					✓					
Priscilla P. Dagoc	✓	✓			✓	✓	✓			✓				

C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
Va : **Va**lidation
Fo : **Fo**rmal analysis
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration
Fu : **Fu**nding acquisition

CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

INFORMED CONSENT

We have obtained informed consent from all individuals included in this study.

ETHICAL APPROVAL

The research related to human use has been complied with all the relevant national regulations and institutional policies in accordance with the tenets of the Helsinki Declaration and has been approved by the authors' institutional review board or equivalent committee.

DATA AVAILABILITY

The authors confirm that the data supporting the findings of this study are available within the article.

REFERENCES

[1] A. Dolot, "The characteristics of generation Z," *E-mentor*, no. 74, pp. 44–50, Oct. 2018, doi: 10.15219/em74.1351.
[2] C. Seemiller and M. Grace, *Generation Z*. London: Routledge, 2018, doi: 10.4324/9780429442476.
[3] E. J. Cilliers, "The challenge of teaching generation Z," *PEOPLE: International Journal of Social Sciences*, vol. 3, no. 1, pp. 188–198, Jun. 2017, doi: 10.20319/pijss.2017.31.188198.
[4] T. Francis and F. Hoefel, "'True gen': generation Z and its implications for companies," *McKinsey and Company*, vol. 12, no. 2, pp. 1–10, 2018.
[5] M.-C. Iorgulescu, "Generation Z and its perception of work," *Cross-Cultural Management Journal*, vol. 18, no. 1, pp. 47–54, 2016.
[6] K. A. J. Mohr, "Understanding generation Z students to promote a contemporary learning environment," *Journal on Empowering Teaching Excellence*, vol. 1, no. 1, pp. 84–94, 2017.
[7] E. L. Kenney and S. L. Gortmaker, "United States adolescents' television, computer, videogame, smartphone, and tablet use: associations with sugary drinks, sleep, physical activity, and obesity," *The Journal of Pediatrics*, vol. 182, pp. 144–149, Mar. 2017, doi: 10.1016/j.jpeds.2016.11.015.
[8] R. L. Tagare Jr., "An ethnographic probe on the cultural values and symbols of generation Z students: implications for course contextualization," *European Online Journal of Natural and Social Sciences*, vol. 11, no. 2, pp. 347–361, 2022.
[9] J. Judith, B. Junio, and J. A. Liwag, "Factors affecting students' performance in physical education class in lyceum of the Philippines University-Laguna," *LPU-Laguna Journal of Multidisciplinary Research*, vol. 4, no. 4, pp. 52–67, 2016.
[10] S. Lynch and A. Ovens, "Critical pedagogy in physical education," in *Encyclopedia of Teacher Education*, M. A. Peters, Ed., Singapore: Springer Nature Singapore, 2022, pp. 315–319, doi: 10.1007/978-981-16-8679-5_417.
[11] B. A. Abbasov and F. A. Mavlyanov, "Issues of improvement of the form of physical education in health promotion," *Theoretical and Applied Science*, vol. 78, no. 10, pp. 659–661, Oct. 2019, doi: 10.15863/TAS.2019.10.78.123.
[12] R. S. J. Peromingan, E. S. Misil, M. F. J. M. Andajao, and E. M. Labad, "Adapted new tertiary physical activities for students with disabilities," pp. 1–15, 2023, doi: 10.2139/ssrn.4408513.
[13] L. Velez, "Explicit instruction in fitness exercise for PATHFit II (physical activities towards health and fitness)," *Indonesian Journal of Research in Physical Education, Sport, and Health (IJRPESH)*, vol. 1, no. 1, pp. 30–43, Feb. 2023, doi: 10.17977/um086v1i12023p30-43.

[14] M. Bhore and D. Pandita, "An exploratory study of the gen Z and E generation in the digital era for the modern business environment," in *2022 7th International Conference on Business and Industrial Research (ICBIR)*, May 2022, pp. 406–410, doi: 10.1109/ICBIR54589.2022.9786526.
[15] T. Ajmain, "Impacts and effective communication on generation Z in industrial revolution 4.0 era," *JETAL: Journal of English Teaching and Applied Linguistic*, vol. 1, no. 2, pp. 82–87, Apr. 2020, doi: 10.36655/jetal.v1i2.204.
[16] S. Shorey, V. Chan, P. Rajendran, and E. Ang, "Learning styles, preferences and needs of generation Z healthcare students: scoping review," *Nurse Education in Practice*, vol. 57, p. 103247, Nov. 2021, doi: 10.1016/j.nepr.2021.103247.
[17] M. V. Arkhipova, E. E. Belova, Y. A. Gavrikova, T. N. Pleskanyuk, and A. N. Arkhipov, "Reaching generation Z. Attitude toward technology among the newest generation of school students," in *Perspectives on the use of New Information and Communication Technology (ICT) in the Modern Economy*, 2019, pp. 1026–1032, doi: 10.1007/978-3-319-90835-9_114.
[18] C. Giunta, "An emerging awareness of generation Z students for higher education professors," *Archives of Business Research*, vol. 5, no. 4, pp. 90–104, Apr. 2017, doi: 10.14738/abr.54.2962.
[19] H. S. Coronel and J. A. Ferrater-Gimena, "Instructional management skills and effectiveness of physical education instructors in higher education institutions in Cebu City, Philippines," *JPAIR Institutional Research*, vol. 9, no. 9, pp. 69–84, Jan. 2017, doi: 10.7719/irj.v9i9.493.
[20] J. C. M. Tanucan, M. R. A. Hernani, and F. Diano Jr., "Filipino physical education teachers' technological pedagogical content knowledge on remote digital teaching," *International Journal of Information and Education Technology*, vol. 11, no. 9, pp. 416–423, 2021, doi: 10.18178/ijiet.2021.11.9.1544.
[21] E. L. Escomes, C. J. P. Gutierrez, I. P. C. Sarabia, E. A. Morbo, and V. L. Calixtro Jr., "Factors affecting distance learning of the physical education students of Sultan Kudarat State University, Mindanao, Philippines," *Indonesian Journal of Educational Research and Technology*, vol. 1, no. 3, pp. 87–94, Sep. 2021, doi: 10.17509/ijert.v1i3.41413.
[22] T. D. C. Panganiban, "Quality assessment of physical education program of state universities in the Philippines," *Jurnal SPORTIF : Jurnal Penelitian Pembelajaran*, vol. 5, no. 2, pp. 166–174, Jun. 2019, doi: 10.29407/js_unpgri.v5i2.12983.
[23] M. T. Graciano, "Activity preference, demographic characteristics, and attitudes of the students toward physical education at the University of Eastern Philippines," *Asian Journal of Education and Social Studies*, vol. 31, no. 1, pp. 12–27, Aug. 2022, doi: 10.9734/ajess/2022/v32i130759.
[24] J. Lobo, G. Dimalanta, and C. Bautista, "An investigation on the factors affecting students' interest in physical education using principal component analysis (PCA) at a Local City College in Angeles City, Pampanga, Philippines," *American Journal of Multidisciplinary Research and Innovation*, vol. 1, no. 2, pp. 63–69, May 2022, doi: 10.54536/ajmri.v1i2.291.
[25] H. M. Levitt, "Qualitative generalization, not to the population but to the phenomenon: reconceptualizing variation in qualitative research," *Qualitative Psychology*, vol. 8, no. 1, pp. 95–110, Feb. 2021, doi: 10.1037/qup0000184.
[26] S. Campbell *et al.*, "Purposive sampling: complex or simple? Research case examples," *Journal of Research in Nursing*, vol. 25, no. 8, pp. 652–661, Dec. 2020, doi: 10.1177/1744987120927206.
[27] G. Günel, S. Varma, and C. Watanabe, "'A manifesto for patchwork ethnography' member voices," *Fieldsights*, vol. 51, pp. 1–9, Feb. 2020.
[28] A. K. Murphy, C. Jerolmack, and D. Smith, "Ethnography, data transparency, and the information age," *Annual Review of Sociology*, vol. 47, no. 1, pp. 41–61, Jul. 2021, doi: 10.1146/annurev-soc-090320-124805.
[29] K. R. Praveena and S. Sasikumar, "Application of Colaizzi's method of data analysis in phenomenological research," *Medico Legal Update*, vol. 21, no. 2, pp. 914–918, Mar. 2021, doi: 10.37506/mlu.v21i2.2800.
[30] M. J. Sierra-Díaz, S. González-Víllora, J. C. Pastor-Vicedo, and G. F. López-Sánchez, "Can we motivate students to practice physical activities and sports through models-based practice? A systematic review and meta-analysis of psychosocial factors related to physical education," *Frontiers in Psychology*, vol. 10, p. 2115, 2019, doi: 10.3389/fpsyg.2019.02115.
[31] C. Ryan-Jean, "Pedagogies in physical education and wellness: how teachers promote secondary student engagement in physical education and wellness," M.S. thesis, Concordia University of Edmonton, Edmonton, Canada, 2022.
[32] S. Beni, D. Ní Chróinín, and T. Fletcher, "A focus on the how of meaningful physical education in primary schools," *Sport, Education and Society*, vol. 24, no. 6, pp. 624–637, Jul. 2019, doi: 10.1080/13573322.2019.1612349.
[33] M. Quennerstedt, "Physical education and the art of teaching: transformative learning and teaching in physical education and sports pedagogy," *Sport, Education and Society*, vol. 24, no. 6, pp. 611–623, Jul. 2019, doi: 10.1080/13573322.2019.1574731.
[34] K. Magro, "Teachers' perspectives towards outdoor learning with local year 3 students," Ph.D. dissertation, University of Malta, Msida, Malta, 2023.
[35] M. Pasek *et al.*, "Physical fitness as part of the health and well-being of students participating in physical education lessons indoors and outdoors," *International Journal of Environmental Research and Public Health*, vol. 17, no. 1, p. 309, Jan. 2020, doi: 10.3390/ijerph17010309.
[36] T. Kettler and C. Taliaferro, *Personalized learning in gifted education*. New York: Routledge, 2022, doi: 10.4324/9781003237136.
[37] J. M. P. Díaz, "Student-centred learning in CLIL physical education," M.S. thesis, Universidad de Jaén, Jaén, Spain, 2020.
[38] N. Struhár, "Learner-centered coach education in Vierumäki: a case study on the presence of the learner-centered educational approach," M.S. thesis, Haaga-Helia University of Applied Sciences, Helsinki, Finland, 2023.
[39] P. Invernizzi, M. Crotti, A. Bosio, L. Cavaggioni, G. Alberti, and R. Scurati, "Multi-teaching styles approach and active reflection: effectiveness in improving fitness level, motor competence, enjoyment, amount of physical activity, and effects on the perception of physical education lessons in primary school children," *Sustainability*, vol. 11, no. 2, p. 405, Jan. 2019, doi: 10.3390/su11020405.
[40] P. Race, *The lecturer's toolkit*, 5th ed. New York: Routledge, 2019, doi: 10.4324/9780429060205.
[41] M. Salam, D. N. A. Iskandar, D. H. A. Ibrahim, and M. S. Farooq, "Service learning in higher education: a systematic literature review," *Asia Pacific Education Review*, vol. 20, no. 4, pp. 573–593, Dec. 2019, doi: 10.1007/s12564-019-09580-6.
[42] L. E. Kelly, *Adapted physical education national standards*, 3rd ed. Champaign, IL: Human Kinetics, 2019.
[43] I. Demchenko, B. Maksymchuk, V. Bilan, I. Maksymchuk, and I. Kalynovska, "Training future physical education teachers for professional activities under the conditions of inclusive education," *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, vol. 12, no. 3, pp. 191–213, Aug. 2021, doi: 10.18662/brain/12.3/227.
[44] A. S. D. Hanggara, Soegiyanto, and Sulaiman, "Learning infrastructure facilities for physical education, sports and health public elementary schools," *Journal of Physical Education and Sports*, vol. 8, no. 1, pp. 26–32, 2019.
[45] W. K. Y. Ho *et al.*, "Towards developing and validating quality physical education in schools-the Asian physical education professionals' voice," *PLOS ONE*, vol. 14, no. 8, p. e0218158, Aug. 2019, doi: 10.1371/journal.pone.0218158.

[46] C. Francesco, D. Coco, G. Frattini, P. Vago, and C. Andrea, "Effective teaching competences in physical education," *Journal of Physical Education and Sport*, vol. 19, pp. 1806–1813, 2019, doi: 10.7752/jpes.2019.s5265.
[47] S. T. Abdullateef, "Remote learning: fostering learning of 21st century skills through digital learning tools," *Arab World English Journal*, vol. 7, no. 1, pp. 190–201, 2021, doi: 10.24093/awej/call7.14.
[48] N. Yannier *et al.*, "Active learning: 'hands-on' meets 'minds-on,'" *Science*, vol. 374, no. 6563, pp. 26–30, Oct. 2021, doi: 10.1126/science.abj9957.
[49] A. Roe, M. Blikstad-Balas, and C. P. Dalland, "The impact of COVID-19 and homeschooling on students' engagement with physical activity," *Frontiers in Sports and Active Living*, vol. 2, p. 589227, Jan. 2021, doi: 10.3389/fspor.2020.589227.
[50] E. Aboagye and S. N. Dlamini, *Global citizenship education: challenges and successes*. Toronto: University of Toronto Press, 2021.

BIOGRAPHIES OF AUTHORS

Ruben L. Tagare, Jr. serves as an associate professor IV at the University of Southern Mindanao (USM) in Kabacan, Cotabato, Philippines. He earned his bachelor of PE from USM in 2016 and completed his master of arts in education, majoring in PE from the University of San Carlos in 2020. Currently, he is a candidate for the doctor of philosophy in education with a specialization in PE and sports at Adamson University-Manila. Assoc. Prof. Tagare is dedicated to teaching, community service, and research, focusing on PE, sports pedagogy, curriculum, and assessment, particularly in qualitative research design. He was a recipient of two international student exchange programs and contributed to several published articles in Scopus and Web of Science. He also actively presents his research outputs in various international research forums. He can be contacted at email: tagareruben@usm.edu.ph.

Marlene E. Orfrecio is an associate professor III at the University of Southern Mindanao with 16 years of dedicated service in higher education. Specializing in physical education, fitness, sports science, and sports psychology, she combines her expertise to foster a comprehensive approach to health and well-being. Her work emphasizes the importance of physical fitness, mental resilience, and effective sports training practices. Through her teaching and mentorship, her contributes significantly to the development of future professionals in physical education and sports, promoting a balanced and holistic approach to fitness and sports sciences. She can be contacted at email: meorfrecio@usm.edu.ph.

Eduard S. Sumera is an assistant professor IV at the University of Southern Mindanao, with 9 years of dedicated service in the field of fitness. With a focus on promoting physical wellness and an active lifestyle, he is committed to equipping students with the knowledge and skills needed for lifelong fitness. His teaching emphasizes practical fitness strategies and techniques, fostering a culture of health and well-being within the university community. Through his work, he continues to inspire students to prioritize physical fitness as an essential part of their lives. He can be contacted at email: essumera@usm.edu.ph.

Marlon A. Mancera is an assistant professor III at the University of Southern Mindanao with 14 years of experience in sports coaching and sports pedagogy. His expertise lies in developing effective coaching methods and pedagogical strategies that enhance athletic performance and foster student engagement in sports. Through his commitment to both teaching and practical coaching, assistant professor Mancera plays a pivotal role in preparing future sports professionals, emphasizing the value of skill development, discipline, and strategic learning in sports. His contributions continue to strengthen the university's sports programs and inspire aspiring coaches and educators alike. He can be contacted at email: mamancera@usm.edu.ph.

Marichu A. Calixtro is an assistant professor IV at the University of Southern Mindanao, with 14 years of dedicated service in the fields of physical education and dance. Her expertise lies in promoting movement, rhythm, and physical wellness, fostering a love for dance and fitness among her students. Assistant professor Calixtro's passion for teaching and commitment to developing creative, engaging learning experiences have made her a valued member of the university's faculty. She continues to inspire students to explore self-expression through dance and maintain a healthy lifestyle through physical education. She can be contacted at email: macalixtro@usm.edu.ph.

Cheeze R. Janito is an instructor 3 at the University of Southern Mindanao, bringing 5 years of experience in physical education, health education, tertiary curriculum development, and sports coaching. With a passion for fostering student engagement and promoting a healthy lifestyle, her contributes to the academic and athletic development of her students. Her expertise in curriculum design and sports coaching plays a vital role in preparing students for success in both education and sports, making him a valued member of the university's faculty. She can be contacted at email: crjanito@usm.edu.ph.

Helen Grace D. Lopez an associate professor IV at the University of Southern Mindanao, holds a doctorate in physical education. With expertise in dance, sports pedagogy, and qualitative research, she brings a unique blend of creativity, academic rigor, and research skill to her teaching and mentorship. Her work emphasizes the value of expressive movement and effective teaching methodologies in physical education. Through her dedication to fostering a deeper understanding of dance and sports, she has inspired countless students and contributed significantly to the academic community at USM. She can be contacted at email: hglopez@usm.edu.ph.

Priscilla P. Dagoc an associate professor II at the University of Southern Mindanao, has dedicated 34 years to advancing physical education. With a wealth of experience and expertise in PE, she is committed to promoting physical fitness and active lifestyles within the university community. Her decades-long service reflects her dedication to both her students and the field of physical education, inspiring countless individuals to appreciate the importance of health and wellness. Her contributions continue to have a lasting impact on the academic and personal growth of her students. She can be contacted at email: ppdagoc@usm.edu.ph.

International Journal of Evaluation and Research in Education (IJERE)
Vol. 14, No. 3, June 2025, pp. 1844~1855
ISSN: 2252-8822, DOI: 10.11591/ijere.v14i3.33530

In the zone or out of bounds? How sports and physical activity anxiety affects life satisfaction among students

Marlon A. Mancera[1], Eduard S. Sumera[1], Ruben L. Tagare, Jr.[1,2], Gilbert E. Lopez[2,3], Irish M. Orgeta[2,4], Yashier T. Haji Kasan[2,5], Harold Deo Cristobal[2,6], Armand G. Aton[2,7], Gauvin Adlaon[8]

[1]Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Cotabato, Philippines
[2]College of Education and Liberal Arts, Adamson University, Manila, Philippines
[3]Department of Education, Bicol University Gubat Campus, Sorsogon, Philippines
[4]College of Education Abaño Campus, Camarines Norte State College, Daet, Philippines
[5]College of Arts and Sciences, Mindanao State University–Maguindanao, Datu Odin Sinsuat, Philippines
[6]Department of General Education, Dr. Filemon C. Aguilar Memorial College of Las Piñas, Las Piñas, Philippines
[7]Department of Physical Education, Cavite State University Imus Campus, Cavite City, Philippines
[8]Department of Physical Education, Bicol University, Tabaco City, Philippines

Article Info

Article history:

Received Oct 5, 2024
Revised Feb 14, 2025
Accepted Feb 27, 2025

Keywords:

College students
Life satisfaction
Mental health
Physical activity
Sports anxiety

ABSTRACT

This study aims to explore the relationship between sports and physical anxiety and life satisfaction among college students in a leading Philippine state university. Employing a quantitative research design, specifically descriptive correlation, data were collected from 2,043 respondents using simple random sampling. The research utilized the physical activity and sport anxiety scale and the life satisfaction index to measure the respective constructs, with analyses conducted using Spearman's rho correlation coefficient to assess relationships between variables. Results indicated a significant relationship between sports and physical anxiety and life satisfaction, revealing that higher levels of anxiety corresponded to lower life satisfaction. These findings highlight the importance of addressing sports and physical anxiety to improve overall well-being. Implications suggest that institutions should implement mental health and wellness initiatives aimed at reducing anxiety and promoting supportive environments in physical education settings. By fostering a culture that prioritizes psychological well-being alongside physical engagement, institutions can enhance students' life satisfaction and overall quality of life.

Corresponding Author:

Ruben L. Tagare, Jr.
Department of Sports, Physical Education, and Recreation, University of Southern Mindanao
Kabacan, Cotabato, Philippines
Email: tagareruben@usm.edu.ph

1. INTRODUCTION

Life satisfaction is generally defined as an individual's overall assessment of their quality of life based on personal goals, values, and expectations. It encompasses a subjective judgment about one's well-being, reflecting how individuals perceive the fulfillment of their needs and desires in various life domains, such as relationships, achievements, and daily activities [1]. Life satisfaction is often influenced by a combination of internal factors, such as self-esteem and resilience, and external factors, such as social relationships and environmental conditions [2]. For students today, life satisfaction plays a critical role in their academic and personal development. The unique pressures faced by students-ranging from academic expectations to social connectivity through digital platforms-create complex environments that affect their

sense of satisfaction [3]. Life satisfaction among students is thus not only an indicator of their well-being but also a crucial factor impacting their academic performance, mental health, and overall motivation, underscoring the need to understand the specific variables that contribute to or hinder satisfaction in this demographic [4].

On the other hand, sports and physical anxiety is a form of situational anxiety that emerges in contexts involving physical performance, athletic activities, or physical education, often characterized by heightened stress, fear of judgment, and concerns about physical capability [5]. This type of anxiety may stem from several sources, such as self-comparison, past experiences, perceived social expectations, or the fear of failure, which can trigger psychological responses like nervousness, self-doubt, and even avoidance behaviors [6]. For students, sports and physical anxiety can significantly impact their educational and social experiences, particularly in settings where physical activity is integrated into the curriculum. Students with high levels of sports-related anxiety may exhibit reluctance or even refusal to participate in activities, which can hinder their physical development, reduce their social interactions, and limit their opportunities for growth in teamwork and leadership skills [7]. Moreover, this anxiety can detract from their overall academic experience, as the stress associated with physical performance may carry over into other aspects of school life, affecting focus, motivation, and confidence [8].

Life satisfaction among students is increasingly affected by a combination of academic pressures, social dynamics, and mental health challenges, with sports and physical activity anxiety emerging as a notable contributing factor [9]. Research indicates that students facing high levels of anxiety related to physical activities often report lower life satisfaction, as the stress associated with these activities can create a sense of inadequacy and self-doubt. This anxiety may be compounded by the heightened scrutiny of physical performance in a group setting, where students are frequently concerned about peer judgment and fear of failure [10]. Such anxieties not only deter students from engaging in physical activities but may also negatively impact their overall self-esteem and sense of well-being, which are crucial components of life satisfaction [11]. In an era where students face amplified academic and social pressures, the psychological burden of sports-related anxiety can worsen feelings of stress and dissatisfaction, affecting both their academic performance and interpersonal relationships [12].

A growing body of research has investigated life satisfaction among students, revealing that it is influenced by various academic, social, and personal factors. Studies have consistently shown that supportive relationships, a sense of academic achievement, and effective coping skills are strong predictors of higher life satisfaction among students [13]. For example, in a study on life satisfaction and academic success, Maele and Houtte [14] found that students who experienced a supportive learning environment reported higher levels of life satisfaction, underscoring the importance of school culture and teacher-student relationships. Moreover, additional research highlights the role of mental health, with findings suggesting that students who experience lower levels of stress and anxiety tend to report greater life satisfaction [15]. Another study [16] revealed that involvement in extracurricular activities, including sports, positively correlates with students' life satisfaction, as these activities foster social connections and a sense of purpose.

Further, research on sports and physical activity anxiety has focused on a range of demographics, revealing the complex psychological and physiological impacts of this form of anxiety. Studies on professional athletes, for example, have shown that performance anxiety, often referred to as “choking under pressure”, is a common phenomenon that affects both individual and team performance levels. Study by Xinru and Ahmad [17] found that this anxiety often arises from the fear of negative evaluation, perfectionism, and high expectations, which can impede concentration and motor function, ultimately affecting performance outcomes. In a broader population, researchers have also studied sports and physical activity anxiety among amateur athletes and fitness enthusiasts, where anxiety is linked not only to performance but also to self-esteem and body image concerns [18]. For instance, a study by Özyol [19] indicated that amateur athletes experiencing social physique anxiety-worry over how others perceive their physical appearance-are more likely to avoid engaging in physical activities, thereby impacting their overall health and well-being. Additionally, physical activity anxiety has been examined in clinical populations, where individuals with anxiety disorders often exhibit heightened anxiety around physical exertion due to physiological symptoms such as increased heart rate, which they may interpret as panic symptoms [20].

Despite the extensive body of literature examining life satisfaction and sports or physical activity anxiety, a notable gap remains in understanding how these two variables intersect, particularly within student populations in the Philippine context. Much of the existing research on life satisfaction focuses on academic stressors, social relationships, or mental health [21]–[23], while studies on sports and physical anxiety have predominantly targeted professional athletes or clinical populations rather than general student groups [24], [25]. Moreover, studies that do address these factors often overlook how sports and physical anxiety specifically influence life satisfaction, a critical component of well-being among students navigating academic and social pressures. This paper addresses this gap by providing an answer on how sports and physical activity anxiety affects life satisfaction among students in a leading Philippine State University.

The novelty of this research lies in its focus on Filipino college students, a group subject to unique academic demands and cultural influences that may shape the dynamics of physical anxiety and life satisfaction differently than in other populations. By investigating this relationship, the study offers insights into how sports and physical activity anxiety uniquely affects Filipino students' life satisfaction, providing a foundation for culturally responsive interventions that support both mental health and physical engagement in educational settings.

Furthermore, this research is significant as it addresses an underexplored yet critical aspect of student well-being by examining how sports and physical anxiety influences life satisfaction in the context of a leading Philippine State University. By focusing on the unique academic, social, and cultural experiences of Filipino college students, this study contributes valuable insights to the global understanding of student mental health and quality of life. The findings are expected to inform educators, policymakers, and mental health practitioners on how to better support students facing anxiety related to sports and physical activities, thereby fostering an environment that promotes both physical engagement and psychological well-being. This research not only fills a critical gap in the literature but also underscores the importance of a holistic approach to student development, highlighting the need for programs and policies that consider the factors impacting student life satisfaction. Through this study, the broader educational community may gain a deeper understanding of how addressing physical anxiety can enhance overall student satisfaction and success in both academic and non-academic realms.

2. METHOD

2.1. Research design

This research utilized a quantitative research design, specifically a descriptive correlation approach, to explore the relationship between sports and physical anxiety and life satisfaction among college students at a leading Philippine State University. Quantitative research is a systematic method that relies on quantifiable data to understand phenomena, drawing conclusions based on statistical analysis and numerical data. By applying structured data collection and analysis techniques, quantitative research enables objective measurements and generalizable findings, making it suitable for studies that aim to quantify relationships and test hypotheses [26].

In particular, the descriptive correlation method examines the association between variables without manipulating them, focusing on observing, describing, and quantifying relationships. Unlike experimental research, which establishes causation, descriptive correlation allows researchers to understand the degree and direction of relationships between variables as they naturally occur. This approach is commonly used in social sciences to explore how two or more variables are connected, providing insights into associations rather than causative factors [27].

This design and approach are appropriate for this study as they align with the objectives of assessing both the sports and physical anxiety and life satisfaction levels of students and exploring the relationship between these two variables. Given that this study aims to identify correlations without influencing or manipulating any variables, a descriptive correlation approach provides a framework for capturing the natural association between sports anxiety and life satisfaction. This method allows the research to draw evidence-based conclusions about the presence and strength of relationships between these variables in the targeted population, offering insights that are both reliable and relevant to the context of Philippine college students.

2.2. Research respondents and sampling

This research included a total of 2,043 respondents, who were selected through simple random sampling from a population of college students at a leading Philippine State University. This sampling technique ensured that each student had an equal chance of being chosen, thereby promoting a representative and unbiased sample of the larger student population. The respondents were asked to complete a structured questionnaire assessing their levels of sports and physical anxiety as well as their life satisfaction.

Simple random sampling is a probability sampling method that provides everyone within the population an equal chance of selection. This approach minimizes sampling bias and enhances the generalizability of the findings, which is critical when the goal is to assess broad trends and relationships within a large population [28]. The sample size of 2,043 is both sufficient and statistically strong, allowing for reliable correlation analysis and ensuring that the data gathered is representative of the university's student body. Large sample sizes, such as this one, also help improve the statistical power of the study, reducing the margin of error and supporting the precision of the correlation results between sports anxiety and life satisfaction.

2.3. Research instrument

This study utilized two primary instruments to measure sports and physical activity anxiety as well as life satisfaction among college students. The physical activity and sport anxiety scale (PASAS), developed by Norton *et al*. [29] was employed to assess students' levels of anxiety related to sports and physical activities. PASAS specifically gauges anxiety triggered by various factors in physical activity settings, such as performance, social interactions, and self-perceptions of physical ability. With a Cronbach's alpha value of 0.86, the PASAS demonstrates high internal consistency, making it a reliable tool for evaluating sports and physical anxiety across diverse populations.

Additionally, the life satisfaction index (LSI), developed by Neugarten *et al*. [30] titled "measurement of life satisfaction", was used to assess the overall life satisfaction of the respondents. The LSI is a well-established instrument that evaluates key aspects of life satisfaction, including zest for life, alignment between personal goals and achievements, mood, and self-concept. The instrument has shown a high Cronbach's alpha value ranging from 0.79 to 0.89, indicating strong internal consistency and reliability. Its application in various population groups, including students, makes it an essential tool for measuring life satisfaction in this research.

2.4. Statistical analysis

This study utilized descriptive statistics, including mean and composite mean, to summarize and describe the respondents' levels of sports and physical activity anxiety as well as life satisfaction. The mean provides an average score, representing the central tendency of each variable, while the composite mean offers an overall measure by aggregating the individual item means within each variable, providing a clearer understanding of students' general anxiety levels in physical activities and their life satisfaction. To examine the relationship between variables, Spearman's rho correlation coefficient was employed. Spearman's rho is a non-parametric measure of rank correlation, which assesses the strength and direction of a monotonic relationship between two variables. This approach is particularly useful when dealing with ordinal data or when the assumptions of normality are not met, as it does not require the data to be normally distributed [31]. Spearman's rho was chosen for this study to effectively capture the degree of association between sports and physical activity anxiety and life satisfaction, addressing the primary research objective.

3. RESULTS

Table 1 presents the levels of sports and physical activity anxiety reported by the respondents. The data highlights key aspects of anxiety experienced in sports and physical activity contexts, providing insight into the prevalence and intensity of anxiety-related factors among students. These findings serve as a foundation for understanding how physical activity anxiety may relate to overall life satisfaction in this population.

Table 1. Sports and physical activity anxiety among the respondents

Statements	Weighted mean	Verbal description
1. I feel nervous if other people watch me when I am exercising/working out	2.60	Agree
2. I usually get nervous when I play sports in front of even a few people watching	2.56	Agree
3. I am afraid that people will find fault with my performance while playing sports	2.54	Agree
4. Sometimes I think I am too concerned with what other people think about my performance while exercising/working out	2.51	Agree
5. I feel self-conscious when playing sports	2.43	Disagree
6. 1. I worry about what people will think of me while playing sports, even though it will not make any difference	2.39	Disagree
7. I am usually worried about what kind of impression I make while playing sports	2.37	Disagree
8. I pass the ball to a teammate when I get nervous	2.34	Disagree
9. I rarely worry about what kind of impression I am making on someone while exercising/working out	2.28	Disagree
10. I avoid exercising/working out where others can see me	2.26	Disagree
11. Other people's opinions of how well I play sports do not bother me	2.25	Disagree
12. I could not care less if an audience was watching me perform	2.18	Disagree
13. I feel that I will humiliate myself when I play sports	2.16	Disagree
14. I feel I will humiliate myself when I exercise/work out	2.15	Disagree
15. I avoid social gatherings if I think they will involve an athletic activity	2.10	Disagree
16. I don't want the ball to come to me when I play team sports	2.09	Disagree
Overall mean	2.33	Low sports and physical activity anxiety

4.00–3.50= Strongly agree (High sports and physical activity anxiety)
3.49–2.50= Agree (Moderate sports and physical activity anxiety)
2.49–1.50= Disagree (Low sports and physical activity anxiety)
1.49–1.00= Strongly disagree (No sports and physical activity anxiety)

Table 2 presents an overview of the life satisfaction levels reported by the respondents. The data are derived from a series of statements designed to assess various dimensions of life satisfaction, providing an understanding of how these students perceive their overall well-being. The results are summarized in terms of composite means and verbal descriptions, highlighting the average levels of satisfaction across the sample and the variations in responses to specific statements.

Table 3 displays the results of the test for a significant relationship between respondents' levels of sports and physical activity anxiety and their life satisfaction. The correlation analysis identifies the strength and direction of the association between these two variables. This table offers valuable insights into whether and how sports-related anxiety influences life satisfaction among the students.

Table 2. Life satisfaction among the respondents

Statements	Weighted mean	Verbal description
1. I expect some interesting and pleasant things to happen to me in the future	3.31	Agree
2. I feel old and somewhat tired	2.95	Agree
3. Compared to other people my age, I've made a lot of foolish decisions in my life	2.85	Agree
4. The things I do are as interesting to me as they ever were	2.83	Agree
5. When I think back over my life, I didn't get most of the important things I wanted	2.77	Agree
6. My life could be happier than it is now	2.76	Agree
7. I feel my age, but it does not bother me	2.76	Agree
8. As I grow older, things seem better than I thought they would be	2.74	Agree
9. I would not change my past life even if I could	2.69	Agree
10. In spite of what people say, the lot of the average man is getting worse, not better	2.68	Agree
11. As I look back on my life, I am fairly well satisfied	2.68	Agree
12. I have made plans for things I'll be doing a month or a year from now	2.65	Agree
13. I am just as happy as when I was younger	2.64	Agree
14. Compared to other people, I get down in the dumps too often	2.61	Agree
15. I have gotten more of the breaks in life than most of the people I know	2.59	Agree
16. This is the dreariest time of my life	2.56	Agree
17. I've gotten pretty much what I expected out of life	2.55	Agree
18. These are the best years of my life	2.51	Agree
19. Compared to other people my age, I make a good appearance	2.49	Disagree
20. Most of the things I do are boring or monotonous	2.44	Disagree
Composite mean	2.70	Moderate life satisfaction

4.00–3.50=Strongly agree (High life satisfaction)
3.49–2.50=Agree (Moderate life satisfaction)
2.59–1.50=Disagree (Low life satisfaction)
1.49–1.00=Strongly disagree (Very low life satisfaction)

Table 3. Test of significant relationship between the respondents' sports and physical anxiety and life satisfaction

Paired variables	Spearman rho correlation coefficient	p-value	Interpretation α=0.05
Sports and physical anxiety and life	-0.114**	0.000	Significant

**Statistically significant at α<0.05

4. DISCUSSION

4.1. Sports and physical activity anxiety among the respondents

Table 1 presents the levels of sports and physical activity anxiety among the respondents, revealing a composite mean score of 2.33, which is interpreted as "low sports and physical activity anxiety." This indicates that, on average, the respondents experience minimal anxiety in sports and physical activity contexts, suggesting that most students feel relatively at ease when engaging in such activities. A low level of sports and physical anxiety implies that these students may have fewer psychological barriers to participation, which could positively impact their willingness to engage in physical activities and promote a healthier lifestyle. This result also sets a foundation for understanding how their comfort with physical activities may relate to other aspects of their well-being, such as life satisfaction.

This implies that having a low sports and physical activity anxiety among students suggests favorable conditions for promoting active engagement in physical activities without the hindrance of performance-related stress or social discomfort. This low anxiety level may support better participation rates in sports and exercise, which in turn can enhance physical health, mental resilience, and social connection. Reduced anxiety in physical activity settings could foster positive attitudes toward lifelong fitness and well-being, as students are less likely to avoid these activities due to fear or self-consciousness. Consequently, low sports and physical anxiety can contribute not only to individual health benefits but also to a more active and engaged student community.

Further, overcoming sports and physical activity anxiety is crucial for students as it fosters physical, mental, and social well-being. Reducing anxiety allows them to engage more confidently in physical activities, which can improve their overall health, boost self-esteem, and build resilience [32]. When they can participate without fear or apprehension, students are more likely to enjoy the benefits of exercise, including reduced stress, enhanced concentration, and better emotional regulation [33]. Sports provide an avenue for developing teamwork, leadership, and communication skills [34]. Addressing and overcoming this anxiety empowers young individuals to lead active, balanced lifestyles and cultivates lifelong habits that positively impact their quality of life and social interactions [35].

Furthermore, the statement "I feel nervous if other people watch me when I am exercising/working out" received the highest mean value of 2.60, with a verbal description of "agree". This indicates that, despite an overall low level of sports and physical activity anxiety, a notable number of respondents still feel self-conscious or uneasy when being observed during physical activities. This suggests that social evaluative anxiety, or the fear of being judged by others, remains a significant factor impacting students' comfort levels in fitness settings. Such feelings may deter some students from participating fully in group exercises or public workouts, potentially limiting their engagement in beneficial physical activities and pointing to the need for more supportive, judgment-free environments in exercise spaces.

Moreover, being judged by others can significantly impact sports and physical activity participation by instilling fear of negative evaluation and leading to heightened anxiety. This fear can deter individuals from trying new activities or participating in sports, as they may worry about their performance, appearance, or skill level in front of peers [36]. Such concerns can create a cycle of avoidance, where the anxiety surrounding judgment reinforces feelings of inadequacy and discourages engagement [37]. Consequently, this can limit opportunities for social interaction, skill development, and the physical and mental health benefits that come from regular participation in sports and physical activities [38].

On the other hand, the statement "I don't want the ball to come to me when I play team sports" received the lowest mean score of 2.09, with a verbal description of "disagree". This suggests that most respondents do not experience significant anxiety or apprehension when it comes to actively participating in team sports. Their disagreement with this statement indicates a willingness to engage in gameplay and take on roles that require ball handling or involvement, reflecting a level of confidence in their abilities. This positive attitude towards participation in team sports can foster a sense of camaraderie and collaboration among peers, ultimately enhancing both social interaction and overall enjoyment of physical activities.

Many youths today experience less anxiety or apprehension about participating in team sports due to a more supportive and inclusive culture surrounding physical activity [39]. With increased emphasis on teamwork, cooperation, and personal growth over competition, young athletes often feel encouraged to participate regardless of their skill level [40]. The rise of social media and digital platforms allows youths to connect and share their experiences, reducing feelings of isolation and judgment (Escobar-Viera). Programs promoting mental health awareness also help normalize discussions about anxiety, equipping young people with coping strategies and fostering a sense of community [41]. Together, these factors create a more positive environment that empowers youths to engage actively in team sports without significant anxiety.

4.2. Life satisfaction of respondents

Table 1 presents the results regarding the respondents' life satisfaction levels. The composite means of 2.70, described as "moderate life satisfaction", indicates that respondents experience a balanced sense of contentment in their lives, though not exceptionally high. This score suggests that while many students find certain aspects of their lives satisfying, there are other areas where they feel neutral or only somewhat fulfilled. The findings reveal that the respondents likely experience a mix of positive and less satisfying experiences, reflecting a moderate outlook on their overall life satisfaction. This balanced score points to an average level of well-being, where students may feel neither strongly satisfied nor deeply dissatisfied with their current life situations.

This moderate life satisfaction suggests that students are meeting basic expectations and having some positive experiences, but there may be unmet needs affecting their motivation and mental health. It indicates that respondents might be more vulnerable to stress or dissatisfaction in difficult situations. Their sense of fulfillment may not offer enough protection against external pressures.

Despite the advancements of modernization, many youths today report only moderate life satisfaction. This paradox arises as modernization, while offering greater access to technology and educational opportunities, also introduces unique pressures [42]. The pervasive influence of social media and high academic expectations often leads to increased stress and anxiety, adversely affecting well-being [43]. The fast-paced lifestyle associated with contemporary society can lead to feelings of isolation and

dissatisfaction, making it challenging for youths to achieve a balanced and fulfilling life amidst complex social, economic, and personal expectations [44].

Among the survey items, the statement "I expect some interesting and pleasant things to happen to me in the future" received the highest mean score of 3.31, with a verbal description of "agree". This suggests that respondents generally maintain an optimistic outlook and anticipate positive experiences. Their strong expectations for future enjoyment and personal achievements reflect that, despite a moderate overall satisfaction, many students hold a hopeful perspective on their futures. This optimism may serve as a motivational factor, encouraging them to pursue goals and remain engaged in activities aligned with their personal growth and aspirations.

Moreover, today's youths tend to cultivate a positive outlook for the future, driven by diverse opportunities and a global awareness of social progress. Modern education, technology, and social media platforms empower young people to connect, learn, and mobilize around causes that resonate with them, fostering a sense of agency and hope [45]. These movements inspire many youths to focus on critical issues like climate action and social justice, reinforcing their belief in a more equitable and sustainable world. Such factors cultivate optimism, motivating young individuals to envision and work toward a future that aligns with their ideals and aspirations.

Conversely, the statement "most of the things I do are boring or monotonous" received the lowest mean score of 2.44, with a verbal description of "disagree". This finding suggests that respondents generally do not perceive their daily activities as dull or repetitive, indicating a level of engagement and interest in their routines. While some elements of routine exist, most students feel that their activities provide enough variety and stimulation to avoid boredom. This low score implies that respondents find meaning or enjoyment in their daily tasks, which positively contributes to their overall life satisfaction.

Furthermore, finding meaning in daily activities significantly enhances life satisfaction, fostering a sense of purpose and fulfillment [46]. When individuals perceive their daily tasks as meaningful, they experience greater motivation and engagement, improving overall well-being [47]. Meaningful activities align personal values with actions, creating a positive feedback loop that promotes resilience and satisfaction, even in routine tasks [48]. This sense of purpose can act as a buffer against stress, providing a stable foundation for a satisfying and enriched life, as individuals feel that their efforts contribute to a greater purpose beyond immediate outcomes [49].

4.3. Relationship between the respondents' sports and physical anxiety and life satisfaction

In the analysis of the relationship between respondents' sports and physical anxiety and their life satisfaction, the Spearman rho correlation coefficient was calculated to be -0.114, with a p-value of 0.000. This indicates a statistically significant inverse relationship between the two variables at the alpha level of 0.05. The negative correlation suggests that as levels of sports and physical anxiety increase, life satisfaction tends to decrease among the respondents. This finding highlights the potential impact that anxiety related to physical activity can have on students' overall well-being.

This implies that students who experience higher levels of anxiety when engaging in sports and physical activities may also report lower levels of life satisfaction. The significance of this relationship underscores the importance of addressing sports-related anxiety, as it could be a contributing factor to diminished life satisfaction. Such anxiety may lead to avoidance behaviors, reduced participation in physical activities, and subsequently limit the benefits of exercise on mental health and well-being, including feelings of accomplishment and social connection.

Further, the negative correlation suggests that interventions aimed at reducing sports and physical anxiety may be beneficial not only for improving students' comfort and performance in physical activities but also for enhancing their overall life satisfaction. Creating supportive environments that foster a sense of belonging and competence in sports may mitigate anxiety and encourage participation, thereby promoting a more fulfilling and satisfying life experience for students. This highlights the need for programs that address both the psychological aspects of physical activity and the promotion of mental well-being among students, contributing to a holistic approach to health and wellness in educational settings.

Furthermore, sports and physical anxiety negatively affect life satisfaction by creating a barrier to participation in physical activities, leading to feelings of inadequacy and stress [50]. When individuals are anxious about their performance or appearance in sports, they may avoid these activities, missing out on the social interaction, physical fitness, and emotional benefits associated with exercise. This avoidance can result in lower self-esteem and a sense of isolation, reducing overall life satisfaction [51]. Additionally, the chronic stress linked to performance anxiety can affect mental health, further diminishing feelings of happiness and fulfillment [52]. Ultimately, the inability to engage in sports and physical activity can hinder personal growth and well-being, leading to decreased life satisfaction [53].

Moreover, the findings of this research, which reveal a significant inverse relationship between sports and physical anxiety and life satisfaction among students, have important implications for policy and practice within educational institutions. Given the negative correlation identified, it is essential for schools and universities to prioritize the development of programs and policies that address the psychological barriers associated with sports and physical activity. Implementing targeted mental health and wellness initiatives can provide students with coping strategies to manage anxiety related to physical activity. This could include workshops on stress management, anxiety reduction techniques, and resilience training. For instance, evidence suggests that mindfulness practices and cognitive-behavioral strategies can significantly reduce anxiety and improve mental well-being among students [54].

In addition, policies that promote inclusive and supportive environments in physical education and sports programs are crucial. This can involve training educators and coaches to recognize and address anxiety among students, as well as fostering an atmosphere of encouragement rather than competition. Research indicates that supportive social climates can enhance students' self-efficacy and motivation, which may mitigate feelings of anxiety [55]. By creating environments where students feel safe and valued, institutions can help alleviate performance-related stress, encouraging greater participation and enjoyment in physical activities.

Along with that, the findings highlight the need for schools to integrate mental health resources within their sports programs. Accessible counseling services and support groups specifically for students experiencing sports and physical anxiety can be invaluable. Studies have shown that providing mental health support in conjunction with physical activity programs can improve both psychological and physical outcomes for students [56]. Institutions should consider policy frameworks that prioritize student well-being holistically, encompassing both physical and mental health dimensions. This could involve incorporating life satisfaction metrics into program evaluations to better understand the impact of physical activity initiatives on students' overall well-being. By adopting a more integrated approach that considers both psychological and physical factors, educational institutions can develop more effective strategies to enhance students' life satisfaction and overall quality of life.

5. CONCLUSION

In The investigation into sports and physical activity anxiety among students reveals significant psychological barriers that hinder their participation in physical activities. Many students experience anxiety in public exercise settings, limiting their willingness to engage in sports. This highlights the need for educational institutions to implement mental health support systems and targeted interventions to reduce anxiety, fostering an inclusive environment that encourages physical activity and improves overall well-being. Additionally, the study shows a moderate level of life satisfaction, indicating that while students meet basic expectations, unfulfilled aspirations remain. Institutions should prioritize holistic development that promotes emotional and social well-being alongside academic achievement to nurture resilience and support students in both their academic and personal lives.

The inverse relationship between sports anxiety and life satisfaction underscores the interconnectedness of these factors, suggesting that addressing physical activity anxiety can enhance overall life satisfaction. By integrating mental health and physical education initiatives, schools can create a supportive framework that empowers students to engage in physical activities and improve life satisfaction. Future research should explore the longitudinal effects of sports anxiety on life satisfaction, expanding the scope to include diverse student populations and investigating mediating factors like self-efficacy and social support. Experimental studies on interventions to reduce anxiety and enhance life satisfaction, along with qualitative research, could offer valuable insights to better understand students' challenges and improve their overall well-being.

ACKNOWLEDGEMENTS

The authors would like to thank the participants in this study. Their participation and insightful contributions were invaluable to the research. The authors also thank everyone who supported this research, making its successful completion possible.

FUNDING INFORMATION

Authors state no funding involved.

AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Marlon A. Mancera	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	
Eduard S. Sumera	✓	✓		✓				✓	✓	✓	✓		✓	
Ruben L. Tagare, Jr.		✓		✓			✓			✓	✓	✓		
Gilbert E. Lopez		✓	✓				✓			✓	✓		✓	
Irish M. Orgeta	✓	✓				✓		✓	✓			✓		
Yashier T. Haji Kasan	✓	✓		✓	✓		✓		✓					
Harold Deo Cristobal	✓	✓		✓					✓					
Armand G. Aton	✓	✓				✓	✓		✓					
Gauvin Adlaon	✓	✓		✓					✓			✓	✓	

C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
Va : **Va**lidation
Fo : **Fo**rmal analysis
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration
Fu : **Fu**nding acquisition

CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

INFORMED CONSENT

We have obtained informed consent from all individuals included in this study.

ETHICAL APPROVAL

The research related to human use has been complied with all the relevant national regulations and institutional policies in accordance with the tenets of the Helsinki Declaration and has been approved by the authors' institutional review board or equivalent committee.

DATA AVAILABILITY

The authors confirm that the data supporting the findings of this study are available within the article.

REFERENCES

[1] A. Parvizi *et al.*, "A systematic review of life satisfaction and related factors among burns patients," *International Wound Journal*, vol. 20, no. 7, pp. 2830–2842, Sep. 2023, doi: 10.1111/iwj.14120.

[2] D. B. Yaden *et al.*, "A meta-analysis of religion/spirituality and life satisfaction," *Journal of Happiness Studies*, vol. 23, no. 8, pp. 4147–4163, Dec. 2022, doi: 10.1007/s10902-022-00558-7.

[3] C. Quintana-Orts, S. Mérida-López, L. Rey, and N. Extremera, "A closer look at the emotional intelligence construct: how do emotional intelligence facets relate to life satisfaction in students involved in bullying and cyberbullying?" *European Journal of Investigation in Health, Psychology and Education*, vol. 11, no. 3, pp. 711–725, Jul. 2021, doi: 10.3390/EJIHPE11030051.

[4] X. Li, X. Zhang, and H. Lyu, "The longitudinal relationship between future time perspective and life satisfaction among Chinese adolescents," *Personality and Individual Differences*, vol. 202, p. 111998, Feb. 2023, doi: 10.1016/j.paid.2022.111998.

[5] C. D. Spielberger, "Stress and anxiety in sports," in *Anxiety in Sports: An International Perspective*, D. Hackfort and C. D. Spielberger, Eds., New York: Taylor & Francis, 2021, pp. 3–17, doi: 10.4324/9781315781594-2.

[6] F. Ehrlenspiel and C. Mesagno, "Anxiety in sport," in *Sport and Exercise Psychology: Theory and Application*, J. Schüler, M. Wegner, H. Plessner, and R. C. Eklund, Eds., Cham: Springer International Publishing, 2023, pp. 281–320, doi: 10.1007/978-3-031-03921-8_12.

[7] G. Chi and L. Wang, "The association of sports participation with depressive symptoms and anxiety disorder in adolescents," *Frontiers in Public Health*, vol. 10, p. 860994, Jun. 2022, doi: 10.3389/fpubh.2022.860994.

[8] D. Hackfort and P. Schwenkmezger, "Measuring anxiety in sports: perspectives and problems," in *Anxiety in Sports: An International Perspective*, D, Hackfort and C. D. Spielberger, Eds., New York: Taylor & Francis, 2021, pp. 55–74, doi: 10.4324/9781315781594-6.

[9] M. F. Ali, S. Kundra, M. A. Alam, and M. Alam, "Investigating stress, anxiety, social support and sex satisfaction on physical education and sports teachers during the COVID-19 pandemic," *Heliyon*, vol. 7, no. 8, pp. 1–8, Aug. 2021, doi: 10.1016/j.heliyon.2021.e07860.

[10] K. Pascua and R. L. Tagare Jr., "Experiences, motivation, commitment, and suggestions of physical education teachers amidst COVID-19 crisis," *Egitim ve Bilim*, vol. 49, no. 219, pp. 187–200, Jul. 2024, doi: 10.15390/EB.2024.12095.
[11] T. Rehab, "Effects of test anxiety, distance education on general anxiety and life satisfaction of university students," *Psycho-Educational Research Reviews*, vol. 10, no. 1, pp. 107–117, 2021.
[12] T. Slavinski, D. Bjelica, D. Pavlović, and V. Vukmirović, "Academic performance and physical activities as positive factors for life satisfaction among university students," *Sustainability*, vol. 13, no. 2, p. 497, Jan. 2021, doi: 10.3390/su13020497.
[13] T. Cruwys, N. W. K. Ng, S. A. Haslam, and C. Haslam, "Identity continuity protects academic performance, retention, and life satisfaction among international students," *Applied Psychology*, vol. 70, no. 3, pp. 931–954, Jul. 2021, doi: 10.1111/apps.12254.
[14] D. van Maele and M. van Houtte, "The quality of school life: teacher-student trust relationships and the organizational school context," *Social Indicators Research*, vol. 100, no. 1, pp. 85–100, Jan. 2011, doi: 10.1007/s11205-010-9605-8.
[15] A. M. Rogowska, C. Kuśnierz, and A. Bokszczanin, "Examining anxiety, life satisfaction, general health, stress and coping styles during COVID-19 pandemic in Polish sample of university students," *Psychology Research and Behavior Management*, vol. 13, pp. 797–811, Sep. 2020, doi: 10.2147/PRBM.S266511.
[16] A. E. King, F. A. E. McQuarrie, and S. M. Brigham, "Exploring the relationship between student success and participation in extracurricular activities," *SCHOLE: A Journal of Leisure Studies and Recreation Education*, vol. 36, no. 1–2, pp. 42–58, Jul. 2021, doi: 10.1080/1937156X.2020.1760751.
[17] G. Xinru and A. Ahmad, "Factors affecting performance anxiety among media & arts college students: theoretical review," *IjmrapCom*, vol. 6, no. 1, pp. 6–14, 2023.
[18] P. Petrovics *et al.*, "Examination of self-esteem, body image, eating attitudes and cardiorespiratory performance in adolescents," *International Journal of Environmental Research and Public Health*, vol. 18, no. 24, p. 13172, Dec. 2021, doi: 10.3390/ijerph182413172.
[19] F. C. Özyol, "The determinants of social anxiety in lower secondary education student athletes: a case of competitive swimming environment," *International Journal of Psychology and Educational Studies*, vol. 7, no. 2, pp. 98–110, May 2020, doi: 10.17220/ijpes.2020.02.009.
[20] A. Kandola and B. Stubbs, "Exercise and anxiety," in *Physical Exercise for Human Health*, J. Xiao, Ed., Singapore: Springer Singapore, 2020, pp. 345–352, doi: 10.1007/978-981-15-1792-1_23.
[21] L. J. Labrague, "Resilience as a mediator in the relationship between stress-associated with the COVID-19 pandemic, life satisfaction, and psychological well-being in student nurses: a cross-sectional study," *Nurse Education in Practice*, vol. 56, p. 103182, Oct. 2021, doi: 10.1016/j.nepr.2021.103182.
[22] R. A. Egcas, R. M. F. Oducado, J. V. Cleofas, J. S. Rabacal, and S. M. Lausa, "After over a year of pandemic: mental well-being and life satisfaction of Filipino college students," *Pertanika Journal of Social Sciences and Humanities*, vol. 29, no. 4, pp. 2401–2416, Dec. 2021, doi: 10.47836/pjssh.29.4.17.
[23] E. F. I. Mallari and C. F. Delariarte, "Academic stress mediates the relationship between satisfaction with travel and psychological well-being," *North American Journal of Psychology*, vol. 23, no. 3, pp. 397–414, 2021.
[24] M. K. Blando, "The moderating effects of social support on athletic identity and student-athletes' psychological well-being," Ph.D. dissertation, De La Salle University, Manila, Philippines, 2024.
[25] G. I. Juezan and R. I. M. Osorno, "Sports performance anxiety and sports confidence among college athletes: the moderating effect of friendship quality," *European Journal of Physical Education and Sport Science*, vol. 8, no. 1, pp. 24–62, Feb. 2022, doi: 10.46827/ejpe.v8i1.4170.
[26] D. Thomas and P. Zubkov, "Quantitative research designs," in *Quantitative Research for Practical Theology*, Berrien Springs, MI: Andrews University, 2020, pp. 103–114.
[27] S. L. Siedlecki, "Understanding descriptive research designs and methods," *Clinical Nurse Specialist*, vol. 34, no. 1, pp. 8–12, Jan. 2020, doi: 10.1097/NUR.0000000000000493.
[28] M. M. Rahman, M. I. Tabash, A. Salamzadeh, S. Abduli, and M. S. Rahaman, "Sampling techniques (probability) for quantitative social science researchers: a conceptual guidelines with examples," *SEEU Review*, vol. 17, no. 1, pp. 42–51, Jun. 2022, doi: 10.2478/seeur-2022-0023.
[29] P. J. Norton, D. A. Hope, and J. W. Weeks, "The physical activity and sport anxiety scale (PASAS): scale development and psychometric analysis," *Anxiety, Stress & Coping*, vol. 17, no. 4, pp. 363–382, Dec. 2004, doi: 10.1080/10615800512331328786.
[30] B. L. Neugarten, R. J. Havighurst, and S. S. Tobin, "The measurement of life satisfaction," *Journal of Gerontology*, vol. 16, no. 2, pp. 134–143, Apr. 1961, doi: 10.1093/geronj/16.2.134.
[31] K. Okoye and S. Hosseini, "Correlation tests in R: Pearson Cor, Kendall's Tau, and Spearman's rho," in *R Programming*, K. Okoye and S. Hosseini, Eds., Singapore: Springer Nature Singapore, 2024, pp. 247–277, doi: 10.1007/978-981-97-3385-9_12.
[32] E. Ekeland, F. Heian, K. B. Hagen, J. Abbott, and L. Nordheim, "Exercise to improve self-esteem in children and young people," *Campbell Systematic Reviews*, vol. 1, no. 1, pp. 1–52, Jan. 2005, doi: 10.4073/csr.2005.4.
[33] P. C. Broderick, M. Kabat-Zinn, and J. Kabat-Zinn, *Learning to breathe : a mindfulness curriculum for adolescents to cultivate emotion regulation, attention, and performance.* Oakland, CA: New Harbinger, 2013.
[34] R. N. Lussier and D. C. Kimball, *Applied sport management skills*, 4th ed. Champaign, IL: Human Kinetics, 2024.
[35] M. Pulimeno, P. Piscitelli, S. Colazzo, A. Colao, and A. Miani, "School as ideal setting to promote health and wellbeing among young people," *Health Promotion Perspectives*, vol. 10, no. 4, pp. 316–334, Nov. 2020, doi: 10.34172/hpp.2020.50.
[36] X. Wang and Y. Sugiyama, "Enhancing social skills through college physical education," *Journal of Physical Education and Sport*, vol. 14, no. 2, pp. 158–163, 2014, doi: 10.7752/jpes.2014.02025.
[37] A. Martín-Rodríguez *et al.*, "Sporting mind: the interplay of physical activity and psychological health," *Sports*, vol. 12, no. 1, p. 37, Jan. 2024, doi: 10.3390/sports12010037.
[38] N. Eather, L. Wade, A. Pankowiak, and R. Eime, "The impact of sports participation on mental health and social outcomes in adults: a systematic review and the 'Mental Health through Sport' conceptual model," *Systematic Reviews*, vol. 12, no. 1, p. 102, Jun. 2023, doi: 10.1186/s13643-023-02264-8.
[39] R. Storr, L. Nicholas, K. Robinson, and C. Davies, "'Game to play?': barriers and facilitators to sexuality and gender diverse young people's participation in sport and physical activity," *Sport, Education and Society*, vol. 27, no. 5, pp. 604–617, Jun. 2022, doi: 10.1080/13573322.2021.1897561.
[40] Y. Zhong, K. Guo, J. Su, and S. K. W. Chu, "The impact of esports participation on the development of 21st century skills in youth: a systematic review," *Computers and Education*, vol. 191, p. 104640, Dec. 2022, doi: 10.1016/j.compedu.2022.104640.
[41] C. J. Wiedermann, V. Barbieri, B. Plagg, P. Marino, G. Piccoliori, and A. Engl, "Fortifying the foundations: a comprehensive approach to enhancing mental health support in educational policies amidst crises," *Healthcare*, vol. 11, no. 10, p. 1423, May 2023, doi: 10.3390/healthcare11101423.
[42] K. Zhang, J. Pei, S. Wang, K. Rokpelnis, and X. Yu, "Life satisfaction in China, 2010–2018: trends and unique determinants,"

Applied Research in Quality of Life, vol. 17, no. 4, pp. 2311–2348, Aug. 2022, doi: 10.1007/s11482-021-10031-x.
[43] M. Chen and X. Xiao, "The effect of social media on the development of students' affective variables," *Frontiers in Psychology*, vol. 13, p. 1010766, Sep. 2022, doi: 10.3389/fpsyg.2022.1010766.
[44] H. Zhang and X. Su, "Lifestyle migration and the (un) making of ideal home," *Geoforum*, vol. 115, pp. 111–119, Oct. 2020, doi: 10.1016/j.geoforum.2020.07.001.
[45] S. M. Rosen, "'So much of my very soul': how youth organizers' identity projects pave agentive pathways for civic engagement," *American Educational Research Journal*, vol. 56, no. 3, pp. 1033–1063, Jun. 2019, doi: 10.3102/0002831218812028.
[46] M. C. Schippers and N. Ziegler, "Life crafting as a way to find purpose and meaning in life," *Frontiers in Psychology*, vol. 10, p. 2778, Dec. 2019, doi: 10.3389/fpsyg.2019.02778.
[47] S. A. Hooker, K. S. Masters, K. M. Vagnini, and C. L. Rush, "Engaging in personally meaningful activities is associated with meaning salience and psychological well-being," *Journal of Positive Psychology*, vol. 15, no. 6, pp. 821–831, Nov. 2020, doi: 10.1080/17439760.2019.1651895.
[48] N. N. Mahmoud and D. Rothenberger, "From burnout to well-being: a focus on resilience," *Clinics in Colon and Rectal Surgery*, vol. 32, no. 6, pp. 415–423, Nov. 2019, doi: 10.1055/s-0039-1692710.
[49] G. N. Pfund and N. A. Lewis, "Aging with purpose: developmental changes and benefits of purpose in life throughout the lifespan," in Personality *and Healthy Aging in Adulthood: New Directions and Techniques*, P. L. Hill and M. Allemand, Eds., Cham: Springer, 2020, pp. 27–42, doi: 10.1007/978-3-030-32053-9_3.
[50] S. Meyer, A. Grob, and M. Gerber, "No fun, no gain: the stress-buffering effect of physical activity on life satisfaction depends on adolescents' intrinsic motivation," *Psychology of Sport and Exercise*, vol. 56, p. 102004., 2021, doi: 10.1016/j.psychsport.2021.102004.
[51] A. Zartaloudi *et al.*, "Body image, social physique anxiety levels and self-esteem among adults participating in physical activity programs," *Diseases*, vol. 11, no. 2, p. 66, 2023, doi: 10.3390/diseases11020066.
[52] N. Misra and S. Srivastava, "Happiness at work: a psychological perspective," in *Happiness and Wellness - Biopsychosocial and Anthropological Perspectives*, F. Irtelli and F. Gabrielli, Eds., London: IntechOpen, 2022, pp. 95–110, doi: 10.5772/intechopen.108241.
[53] D. X. Marquez *et al.*, "A systematic review of physical activity and quality of life and well-being," *Translational Behavioral Medicine*, vol. 10, no. 5, pp. 1098–1109, 2020, doi: 10.1093/tbm/ibz198.
[54] G. González-Valero, F. Zurita-Ortega, J. L. Ubago-Jiménez, and P. Puertas-Molero, "Use of meditation and cognitive behavioral therapies for the treatment of stress, depression and anxiety in students. A systematic review and meta-analysis," *International Journal of Environmental Research and Public Health*, vol. 16, no. 22, p. 4394, 2019, doi: 10.3390/ijerph16224394.
[55] F. Y. Hong, S. I. Chiu, D. H. Huang, and S. L. Chiu, "Correlations among classroom emotional climate, social self-efficacy, and psychological health of university students in Taiwan," *Education and Urban Society*, vol. 53, no. 4, pp. 446–468, 2021, doi: 10.1177/0013124520931458.
[56] J. Thomas, K. Thirlaway, N. Bowes, and R. Meyers, "Effects of combining physical activity with psychotherapy on mental health and well-being: a systematic review," *Journal of Affective Disorders*, vol. 265, pp. 475–485, 2020, doi: 10.1016/j.jad.2020.01.070.

BIOGRAPHIES OF AUTHORS

Marlon A. Mancera is an assistant professor III at the University of Southern Mindanao with 14 years of experience in sports coaching and sports pedagogy. His expertise lies in developing effective coaching methods and pedagogical strategies that enhance athletic performance and foster student engagement in sports. Through his commitment to both teaching and practical coaching, assistant professor Mancera plays a pivotal role in preparing future sports professionals, emphasizing the value of skill development, discipline, and strategic learning in sports. His contributions continue to strengthen the university's sports programs and inspire aspiring coaches and educators alike. He can be contacted at email: maancera@usm.edu.ph.

Eduard S. Sumera is an assistant professor IV at the University of Southern Mindanao, with 9 years of dedicated service in the field of fitness. With a focus on promoting physical wellness and an active lifestyle, Mr. Sumera is committed to equipping students with the knowledge and skills needed for lifelong fitness. His teaching emphasizes practical fitness strategies and techniques, fostering a culture of health and well-being within the university community. Through his work, he continues to inspire students to prioritize physical fitness as an essential part of their lives. He can be contacted at email: essumera@usm.edu.ph.

Ruben L. Tagare, Jr. serves as an associate professor IV at the University of Southern Mindanao (USM) in Kabacan, Cotabato, Philippines. He earned his bachelor of PE from USM in 2016 and completed his master of arts in education, majoring in PE from the University of San Carlos in 2020. Currently, he is a candidate for the doctor of philosophy in education with a specialization in PE and Sports at Adamson University-Manila. Assoc. Prof. Tagare is dedicated to teach, community service, and research, focusing on PE, sports pedagogy, curriculum, and assessment, particularly in qualitative research design. He was a recipient of two international student exchange programs and contributed to several published articles in Scopus and Web of Science. He also actively presents his research outputs in various international research forums. He can be contacted at email: tagareruben@usm.edu.ph.

Gilbert E. Lopez is an instructor III at Bicol University Gubat Campus, specializing in physical education, sports, and dance research. With a strong commitment to advancing knowledge and skills in these areas, Gilbert actively engages students in innovative learning experiences. He is passionate about promoting physical fitness and artistic expression through dance, believing in their integral roles in a well-rounded education. He can be contacted at email: gelopez@bicol-u.edu.ph.

Irish M. Orgeta is an assistant professor II at Camarines Norte State College, specializing in physical education and sports. With a strong passion for promoting physical fitness and wellness, Irish is dedicated to inspiring students to lead active lifestyles. She employs innovative teaching strategies to enhance student engagement and foster a deeper understanding of the principles of physical education and sports. Through her commitment to education, Irish aims to contribute positively to her students' academic and personal development. She can be contacted at email: irishorgeta@cnsc.edu.ph.

Yashier T. Haji Kasan is an associate professor V at Mindanao State University-Maguindanao, where he has dedicated over 10 years to the field of physical education and sports. With a strong commitment to fostering physical fitness and sportsmanship among students, he integrates innovative teaching methods to enhance learning outcomes. Yashier is passionate about promoting a healthy lifestyle and believes in the transformative power of sports in education. He can be contacted at email: kasanyashier@gmail.com.

Harold Deo Cristobal is an instructor I at the Polytechnic University of the Philippines Parañaque Campus and Dr. Filemon C. Aguilar Memorial College of Las Piñas, bringing 15 years of experience in the field of education. His expertise spans physical education, sports science, dance, and curriculum development, with a focus on educational management. Harold is dedicated to enhancing student engagement through innovative teaching practices and believes in the importance of a well-rounded education in physical fitness and the arts. He can be contacted at email: hdbcristobal@pup.edu.ph; cristobal.harold@dfcamclp.edu.ph.

Armand G. Aton is an instructor III at Cavite State University, where he has dedicated 4 years to teaching physical education, dance, and recreation. Armand is committed to fostering a love for physical activity and creative expression among his students, employing engaging and dynamic teaching methods. His expertise in dance and recreation enriches the educational experience, encouraging students to embrace a healthy and active lifestyle. He can be contacted at email: armand.aton@cvsu.edu.ph.

Gauvin Adlaon is a graduate of the bachelor of Elementary Education Program at the University of Southern Mindanao. He has made significant contributions to the field of education through his published research on teachers' motivation and individual performance scores. Gauvin has also presented his research findings at international research forums, showcasing his dedication to advancing educational practices and understanding the factors that influence teacher performance. His work reflects a commitment to improving the educational landscape and supporting fellow educators. He can be contacted at email: gadlaon@usm.edu.ph.

HEALTH AND ADDICTIONS/SALUD Y DROGAS
ISSN 1578-5319 - ISSNe 1988-205X

Vol. 25. Núm.1, 106-121 (2025)
DOI: https://doi.org/10.21134/958
RECIBIDO: 19/04/2024 ACEPTADO: 06/11/2024

IT'S HARD TO QUIT: THE EXPLORATION OF THE REASONS FOR TROUBLE WITHDRAWAL WITH SMOKING HABITS AMONG FILIPINO EARLY ADULT MEN

ES DIFÍCIL DEJAR DE FUMAR: EXPLORACIÓN DE LAS RAZONES POR LAS CUALES ES PROBLEMÁTICO DEJAR DE FUMAR ENTRE HOMBRES FILIPINOS EN LA ADULTEZ JOVEN

Junalyn N. Suminguit
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines
jnsuminguit@usm.edu.ph
https://orcid.org/0009-0009-8986-8466

Ruben L. Tagare, Jr.*
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines
tagareruben@usm.edu.ph
https://orcid.org/0000-0003-1628-6229

Cheeze R. Janito
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines
jnsuminguit@usm.edu.ph
https://orcid.org/0009-0009-8986-8466

Marlene E. Orfrecio
Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines
meorfrecio@usm.edu.ph
https://orcid.org/0000-0001-6451-7007

*Autor de correspondencia

Como citar: Suminguit, J. L., Tagare, R. L., Janito, C. R., & Orfecio, M. E. (2025). It's hard to quit: The exploration of the reasons for trouble withdrawal with smoking habits among filipino early adult men. *Health and Addictions/Salud y Drogas, 25*(1), 106-121. https://doi.org/10.21134/958

Resumen

Introducción. El tabaquismo es un problema que perjudica a las personas y a las comunidades. Varias organizaciones han estado tratando de diseñar iniciativas proactivas, pero todavía luchan por encontrar soluciones para prevenir enfermedades y muertes causadas por el tabaquismo. A pesar de los numerosos intentos por dejar de fumar, muchas personas todavía luchan por abandonar esta adicción. Por lo tanto, este estudio se realizó para explorar las razones por las cuales dejar de fumar es un desafío para los hombres en la adultez joven. **Métodos.** Utilizando un diseño de investigación fenomenológico cualitativo, veinte participantes de la investigación expresaron sus razones a través de entrevistas en profundidad. **Resultados.** Este estudio revela que los hombres adultos jóvenes continúan fumando a pesar de conocer los riesgos para la salud debido al papel percibido del tabaquismo para completar el día, ayudar a la digestión después de las comidas y proporcionar una sensación engañosa de relajación. Además, las dificultades para dejar de fumar se atribuyen al temor a desarrollar enfermedades relacionadas con el tabaquismo, la adaptación del cuerpo a los efectos adictivos de la nicotina, la influencia de los compañeros, los antojos intensos y los desafíos para regular las respuestas psicológicas y emocionales durante la abstinencia. Estos hallazgos resaltan la compleja interacción de factores psicológicos, sociales y habituales que sustentan los hábitos de fumar entre los hombres adultos tempranos. **Conclusiones.** El estudio concluye que dejar de fumar se ve obstaculizado por una combinación de rutinas diarias arraigadas, influencias sociales e intensas dependencias físicas y psicológicas. Las intervenciones eficaces para dejar de fumar deben abordar estos desafíos, incorporando estrategias de regulación emocional, apoyo de pares y terapias personalizadas para mitigar los antojos y los síntomas de abstinencia. Al comprender y abordar las razones específicas para seguir fumando y las dificultades para dejar de fumar, se pueden desarrollar estrategias de salud pública más efectivas para reducir las tasas de tabaquismo y mejorar los resultados de salud en este grupo demográfico.

Palabras clave

Cesación; narrativas de fumadores; Patrones de fumar; Desencadenantes del tabaquismo; Tabaco.

Abstract

Introduction. Smoking is a long-standing problem that harms people and communities. Various agencies have been trying to design proactive initiatives, but they still struggle to find solutions to prevent illnesses and deaths caused by smoking. Despite numerous attempts to quit, many individuals still struggle to withdraw from this addiction. Hence, this study was conducted to explore the reasons why quitting smoking is challenging for early adult men. **Methods**. Using a qualitative phenomenological research design, twenty research participants expressed their reasons through in-depth interviews. **Results.** This study reveals that early adult men continue to smoke despite knowing its health risks due to smoking's perceived role in completing their day, aiding digestion after meals, and providing a deceptive sense of relaxation. Additionally, the difficulties in withdrawing from smoking are attributed to fears of developing smoking-related diseases, the body's adaptation to nicotine's addictive effects, peer influence, intense cravings, and challenges in regulating psychological and emotional responses during withdrawal. These findings highlight the interplay of psychological, social, and habitual factors that sustain smoking habits among early adult men. **Conclusions.** The study concludes that a combination of ingrained daily routines, social influences, and intense physical and psychological dependencies hinders smoking cessation. Effective smoking cessation interventions must address these challenges, incorporating strategies for emotional regulation, peer support, and tailored therapies to mitigate cravings and withdrawal symptoms. By understanding and targeting the specific reasons for continued smoking and difficulties in cessation, more effective public health strategies can be developed to reduce smoking rates and improve health outcomes in this demographic.

Key Words

Cessation; Smokers' Narratives; Smoking Patters; Smoking Triggers; Tobacco.

1. Introduction

Smoking is widely recognized as one of the most pressing public health issues globally (Jafari et al., 2021). According to the World Health Organization (WHO, 2021), smoking is responsible for approximately 6 million deaths each year, a number projected to increase to 8 million by 2030 if current trends continue. This alarming statistic highlights the severe health impacts of smoking, which include a wide range of diseases such as lung cancer, heart disease, and chronic obstructive pulmonary disease (Gallucci et al., 2020). Additionally, smoking does not only harm the smoker; it also poses significant risks to non-smokers through second-hand smoke exposure (Zhao et al., 2022). Each year, an estimated 600,000 non-smokers die due to health complications arising from second-hand smoke, which can lead to severe conditions such as respiratory infections, heart disease, and lung cancer (Lee et al., 2022).

On the other hand, early adult men face significant challenges when attempting to quit smoking due to a complex interplay of psychological, physiological, and social factors (Abdelrahim et al., 2018). Psychologically, smoking often serves as a coping mechanism for stress, anxiety, and emotional discomfort, making it difficult to abandon without addressing these underlying issues (Caponnetto et al., 2020). Physiologically, nicotine addiction creates intense cravings and withdrawal symptoms, such as irritability, restlessness, and difficulty concentrating, which can be overwhelming and demotivating (Tsai et al., 2020). Socially, smoking can be deeply ingrained in daily routines and social interactions, with triggers such as social gatherings, mealtimes, and specific routines reinforcing the habit (Hoek et al., 2022). Additionally, early adult men may face societal pressures and cultural norms that glamorize smoking or view it as a rite of passage or a symbol of maturity and independence (Wellman et al., 2018).

Further, Kong et al. (2021) explained that smokers are willing to quit but have difficulty doing so; when they attempt to quit, many obstacles cause them to return to smoking, such as anxiety if they cannot smoke for even a short period, insomnia, and weight gain. In the general population, those who face numerous obstacles to quitting smoking are less motivated to complete smoking withdrawal. According to Villanti et al. (2016), quitting smoking is a difficult decision for adult smokers. As a result of peer pressure, when they attempt to stop or alter their smoking behavior, they feel different from their peers and are concerned with what their peers think of them. Men in early adulthood have a difficult time quitting smoking because they recognize that it can be beneficial on stressful days (Torres & O'Dell, 2016).

Despite the concerted efforts of the World Health Organization (WHO, 2020) and national governments to achieve smoke-free communities worldwide, present data reveal that early adult men continue to have difficulty quitting smoking (Wellman et al., 2018). In the Philippines, where tobacco control measures have been in place since 1987, including the enactment of Republic Act 9211, these efforts have not been sufficient to reduce smoking among young adult men. Clinical studies indicate that women generally have a higher likelihood of quitting smoking compared to men, who may perceive smoking as enhancing their image (Giulietti et al., 2020). Smoking in the Philippines poses a severe threat to public health, resulting in a high number of deaths and an increase in various diseases. Based on national statistics reports, over 112,000 Filipinos die from tobacco-related diseases each year, of which about 23% are male and 10% are female. Further, over 20% of non-communicable disease-related deaths, such as ischemic heart disease, stroke, diabetes, and lung cancer in the Philippines are attributable to tobacco use (Amul & Pang, 2018).

With this, the Philippine government is responsible for discouraging citizens from smoking and protecting public health. However, these measures primarily focus on protecting minors, leaving young adults more vulnerable to smoking initiation and maintenance. The implementation of Republic Act 9211 faces numerous challenges, including enforcement difficulties and the persistent accessibility of tobacco products for adults. Additionally, completely prohibiting tobacco for the entire population is not feasible due to potential narcotraffic issues. Therefore, it is crucial to develop and implement targeted strategies that protect young adults, who are at a critical stage of habit formation, by addressing both the accessibility of tobacco and the socio-cultural factors that perpetuate smoking behavior.

While previous studies suggest that lack of emotional regulation and the need to avoid withdrawal symptoms are primary causes for early adult men struggling to quit smoking, there is a need to examine whether these factors fully explain the difficulty in smoking cessation (Minian et al., 2020). Some interventions have focused on teaching emotional regulation strategies and coping mechanisms for withdrawal symptoms (Hendricks et al., 2016). For instance, Spears et al. (2017) implemented programs incorporating cognitive-behavioral therapy (CBT) to enhance emotional regulation and stress management techniques. Additionally, nicotine replacement therapies (NRT) and other pharmacological aids have been used to alleviate withdrawal symptoms (Aubin et al., 2014). Despite these interventions, relapse rates among early adult men remain notably high (Barrington-Trimis et al., 2020). Research indicates that even when individuals are equipped with emotional regulation skills and effective withdrawal coping strategies, the persistence of smoking behavior suggests other underlying factors (Rogers et al., 2019). These may include deep-seated habits, social influences, and psychological dependencies not adequately addressed by current interventions (Juranić et al., 2018). This gap highlights the necessity for a more comprehensive understanding of the complex challenges faced by early adult men in quitting smoking and the development of more targeted strategies that encompass these additional dimensions.

This study seeks to investigate the underlying reasons why early adult men face difficulties in quitting smoking, with a particular focus on their experiences and challenges during the smoking cessation process. Specifically, it aims to understand two key aspects: why these individuals continue smoking despite being aware of its harmful effects and what factors make it difficult for them to withdraw from their smoking habits.

To achieve these objectives, the study adopts a qualitative research design, using in-depth interviews with participants to capture their experiences, struggles, and the psychological and physiological factors influencing their smoking behavior. This design is particularly suited to provide rich, detailed insights into the participants' perspectives, enabling a more comprehensive understanding of their quitting challenges (Smith et al., 2018).

By exploring these experiences, this research contributes to the development of effective intervention strategies to support smoking cessation efforts in early adult men. Additionally, it offers valuable insights for public health policymakers, healthcare professionals, and future researchers looking to design targeted interventions or expand knowledge regarding smoking withdrawal. The study thus plays a vital role in deepening understanding and shaping future research and policy directions, regardless of the results obtained.

2. Method

2.1. Research Design

This study employed a qualitative research design, specifically the phenomenological approach, to examine the reasons and experiences of early adult men who have a hard time quitting their smoking habits. Qualitative research focuses on an overall or idealistic approach that can be understood and is used to comprehend a population's beliefs, experiences, ideas, and behavior (Merriam & Grenier, 2019).

Further, a phenomenological approach is a methodological approach used to explore and describe phenomena in a detailed and holistic manner (Williams, 2021). It aims to comprehensively understand a particular topic or phenomenon by collecting rich, non-numerical data. This research design is often used when the goal is to gain insights into the participants' beliefs, experiences, perspectives, and behaviors (Käufer & Chemero, 2021). The researcher employed a phenomenological qualitative research design as the most suitable and powerful method to understand the experiences and different perspectives among the research participants on their stories of struggle in quitting their smoking habits.

2.2. Participants and Materials

This research employed a purposive sampling technique to identify the exact participants of this study. The identification of participants includes a preliminary assessment in rural communities in Kabacan, Cotabato, Philippines, as to what area has the most common early adult men who have a smoking habit. Then, a preliminary interview was done to ask whether they had tried quitting their habits and if they had trouble when they attempted

to withdraw. The participants have unsuccessful withdrawal from their smoking habits. Data saturation was considered in the number of early adult men who participated in this study, which was achieved in the 20th participant. Hence, this study has a total of Twenty (20) participants.

The materials used in this study were a list of validated guide questions and underwent in-depth examination by qualitative research experts with extensive experience conducting phenomenological analysis. Sample questions in the interview include "Why do you still smoke even knowing that it is bad for your health? And what are the reasons why you have trouble withdrawing from your smoking habits?". The interviews lasted approximately one hour for every participant. Also, audio recorders and cameras were used to document all undertakings to facilitate a more accurate analysis of findings.

2.3. Data Collection

After obtaining the necessary permits and ethics clearance, a preliminary assessment in rural communities in Cotabato, Philippines, was done to assess what area has the most common early adult men with a smoking habit. Then, a preliminary interview was done to ask whether they had tried quitting their habits and if they had trouble when they attempted to withdraw. The participants have unsuccessful withdrawal from their smoking habits. After identifying rightful participants, the researcher acquired an informed consent form to prove that all parties involved in the study consented and were granted permission. Informed consent emphasized that participants were entirely aware of and informed about the study's undertakings. The researcher conducted In-depth Interviews (IDI) with the participants to obtain more accurate data and forecast the participants' honesty and impartiality.

To validate the research findings, the researcher employed member checks. This process involves returning to the research participants to present their transcribed responses and obtain their consent, ensuring the accuracy and authenticity of the data. This step is crucial for confirming that the participants' perspectives were accurately captured and interpreted (Moser & Korstjens, 2018). Following the member checks, peer debriefing was conducted, which involved engaging colleagues or other researchers to review and discuss the data, interpretations, and conclusions. This process provides an additional layer of scrutiny and helps to identify any biases or inconsistencies that may have arisen during the research. Peer debriefing enhances the credibility and trustworthiness of the study by incorporating diverse viewpoints and ensuring that the findings are robust and well-substantiated (Iivari, 2018).

2.4. Data Analysis

This study employed Colaizzi's (1978) method of data analysis using a manual coding process. This method is effective for understanding and interpreting the experiences of research participants, making it well-suited for exploring the reasons for the difficulties in quitting smoking among early adult men.

The process began with familiarization, where the researcher read and re-read the transcribed interviews to immerse himself in the participants' descriptions and gain an overall sense of their experiences. This initial step ensured a deep understanding of the data, setting the stage for thorough analysis. Next, significant statements were identified and extracted from the transcriptions. These statements are phrases or sentences that directly relate to the participants' experiences with smoking and their challenges in quitting. Extracting these statements helped isolate the most relevant data points for further analysis.

The researcher then interpreted these significant statements to formulate meanings. This step involved distilling the essence of each statement to understand the underlying meanings and implications. The researcher carefully ensured that these formulated meanings remained true to the participants' original expressions, maintaining the authenticity of their perspectives. Following this, the formulated meanings were organized into clusters of themes. This step involved grouping similar meanings to identify broader themes representing common patterns or experiences across the participants. These clusters provided a structured way to capture key elements of the participants' experiences and facilitated a clearer understanding of the overarching themes.

The researcher developed an exhaustive description of the experiences from the clusters of themes. This comprehensive narrative encapsulated the essence of the participant's experiences and the complexities involved in their struggles to quit smoking. The exhaustive description provided a detailed account of the key themes and their interconnections. The fundamental structure of the phenomenon was then distilled from the thorough description. This step involved summarizing the essential aspects of the experience into a concise description that captured its core elements. This fundamental structure served as a clear and concise representation of the participants' challenges and experiences.

3. Results

The findings of this study reveal a complex portrait of smoking behavior among early adult men, categorized into two main aspects: perceived "positive" aspects of smoking and the adverse effects associated with it. This classification provides valuable insights into why these individuals continue to smoke despite their awareness of the health risks.

Participants articulated several reasons for their continued smoking that they perceived as beneficial to their daily lives. These aspects justify maintaining the habit, contributing to a sense of fulfillment and routine. For instance, many participants noted that smoking is integral to their daily structure, providing them with a perceived sense of completion to their day. Additionally, some expressed that smoking alleviates discomfort after meals, suggesting a reliance on cigarettes as a coping mechanism for digestive issues. Lastly, the misleading sense of relaxation associated with smoking was highlighted, indicating that participants often mistake this temporary relief for genuine tranquility, complicating their cessation efforts.

Table 1 presents the reasons cited by participants for continuing to smoke despite their awareness of smoking's harmful effects. These reasons highlight the personal, psychological, and social factors that contribute to their smoking behavior, providing insights into the challenges they face in attempting to quit.

Table 1
Participants' Reasons Why They Still Smoke Despite Knowing that Smoking is Harmful to Them

Essential Themes	Categories	Excerpts and Core Ideas
Smoking "Completes" My Day	Deceptive Sense of Routine and Fulfillment	"...I always think about smoking because my day feels incomplete if I don't smoke…if I can't smoke, I still salivate a lot in the entire day…"- RQ2M1 "…when I can't smoke, I feel that my day is incomplete …"- RQ2M7 "I know that smoking is harmful to all of us, but cigarette completes my day. I can't function without smoking, and it helps relieve stress in my mind."- RQ2M15 "…it seems like it has already become a part of my life…" - RQ3M18
Smoking Aids my Grossness Feeling After a Meal	After-Meal Smoking Satisfaction	"It's very potent and feels good, especially when you've just finished eating. It also helps relieve grossness feeling after you've finished eating."- RQ2M20 "It's just normal, something to get rid of the fullness feeling after eating."-RQ2M13 "…that is a breath freshener for me because, after a meal, I feel like there is something in my sense of taste that causes grossness...."- RQ2M4
Smoking Deceives me with the Feeling of Relaxation.	Illusion of Relaxation	"…I feel more relaxed when I smoke, and it helps me focus on my work without thinking about stress. Smoking gives me a sense of relaxation even though I know that it only deceives me…"- RQ2M6 "…I've got used to smoking with my friends, and we all feel relaxed when we smoke together, though it just only deceives us since it has a lot of bad effects on our health"- RQ2M8

Conversely, the study also identified significant challenges and negative consequences that arise during attempts to quit smoking. Participants reported intense cravings that manifest at specific times, such as after meals or during moments of anxiety. This craving not only disrupts their daily activities but also hinders their withdrawal efforts, as the physical and psychological dependence on nicotine becomes overwhelming. Furthermore, participants expressed

anxiety regarding the potential onset of smoking-related diseases during withdrawal, which exacerbates the difficulties they face. The influence of social circles was also noted as a critical factor, with peer pressure contributing to relapse and complicating the quitting process. Together, these adverse effects illustrate the psychological and social dimensions that entrap individuals in their smoking habits.

Table 2 outlines the reasons participants find it challenging to quit their smoking habits. These reasons reveal the complex interplay of physical cravings, psychological dependence, social influences, and emotional struggles that contribute to their difficulty in sustaining smoking cessation efforts.

Table 2
Participants' Reasons Why They Have Difficulty Withdrawing from Their Smoking Habits

Essential Themes	Categories	Excerpts and Core Ideas
Fear of Prevailing Diseases During Withdrawal Process	Health-Related Anxiety in Withdrawal	"My body gets used to it, and quitting might bring withdrawal symptoms like a cold or cough, making me want to smoke again after recovery…" - RQ3M3 "When I stopped smoking, all my illnesses appeared. That's why I cannot think of quitting smoking again…"- RQ3M14 "…stopping smoking causes me to feel sick, which makes it difficult for me to quit…" RQ3M12
My Body Got Used to Its Addictive "Satisfying" Effects	Dependence on Addictive Satisfaction	"…it's very addictive. That is why I struggle to quit. When I smoke, it satisfies and calms me. That is why I've got used to it…" - RQ3M2 "…the common reason is that it satisfies my taste buds. After I eat, I crave a cigarette because it's like a sound in my head…"- RQ3M5 "…my mouth craves it, especially after eating. I look for a cigarette. Also, my friends smoke, so I tend to crave it too..."- RQ3M12 "…my body craves cigarettes, especially after I eat, and a few minutes later, I start to salivate, which makes me think of smoking…"- RQ3M2
Peer Influence Makes it Harder to Quit Smoking!	Impact of Social Influence	"Since most of my friends smoke, I often join in. If you don't have one, they'll offer, and it's hard to refuse." - RQ3M4 "…even if you try to quit and when you see people smoking around you, it will make you want to smoke again..."- RQ3M7 "…when you're with your friends, and they smoke, and you don't, you might feel left out, so you end up smoking with them…"-RQ3M17
Continuous Feeling of Extreme Cravings for Smoking	Persistent Cravings as a Barrier to Cessation	"…I crave smoking, that's why it's tough for me to quit…"- RQ3M6 "…It's hard to quit because wherever I go, I crave to smoke..."- RQ3M18 "It's difficult to quit smoking because I crave it. If I don't smoke, I feel like I starve myself like being on a diet."- RQ3M4
Difficulty in Regulating Psychological and Emotional Responses during Smoking Withdrawal Process	Emotional Strain in the Withdrawal Process	"…I'm scared to quit because I feel like I'll always be irritable. It's easy for me to get angry…"- RQ3M5 "…my mood changes when I don't have something to satisfy me, like when I can't get what I want or when I'm at work and can't concentrate. I get easily distracted and lose focus. That is why it is hard for me to quit..."- RQ3M6 "…I suppose it's just what I'm used to, and it's hard to quit smoking because I tend to become moody and irritable if I tend to quit..."-RQ3M13

4. Discussion

Reasons Why Early Adult Men Continue to Smoke Despite Knowing that It is Harmful to Their Health

Theme 1: Smoking "Completes" My Day

This theme illustrates that for some individuals, smoking is an integral part of their daily routine that provides a sense of energy and accomplishment. Research participants perceive smoking as a coping strategy for managing stress, anxiety, and other emotional issues. For some, smoking is viewed as relaxing, taking a break from work, or engaging socially with fellow smokers. This indicates that smoking fulfills various psychological and social functions, reinforcing its place in their everyday lives.

This theme highlights the role smoking plays in the daily lives of the research participants, providing them with a sense of energy and accomplishment daily. For these young adult men, smoking is a regular part of their day that makes them feel happy and complete. This indicates that their addiction to smoking is not solely physical but also psychological, as they have a strong emotional connection to the habit (Caponnetto et al., 2020). This emotional tie can make cessation efforts particularly challenging, as quitting smoking involves addressing both the physical dependency and the emotional fulfillment that smoking provides (Kosendiak et al., 2021).

Pokhrel et al. (2021) found that social and contextual factors, including the belief that smoking completes one's day, contribute significantly to smoking behavior among men, and it suggests that the emotional attachment to smoking may be heightened in specific occupational and social contexts. Similarly, Jussila et al. (2020) found that the perception that smoking completes one's day is associated with smoking behavior as it highlights that the emotional and social attachment to smoking is a significant factor in continued smoking behavior, even when individuals are aware of the health risks associated with smoking.

Theme 2: Smoking Aids My Grossness Feeling After Meal

This theme explores the experiences of research participants who believe that smoking alleviates their feelings of discomfort and grossness after meals. Participants reported that smoking helps them manage the unpleasant sensations that often follow eating, such as bloating or indigestion. For many, smoking after a meal relieves digestion, making it an integral part of their post-meal routine. This habit underscores the psychological and physiological role that smoking plays in their lives, as participants find that smoking after meals helps them feel more comfortable and satisfied. The association between smoking and the alleviation of post-meal discomfort highlights how deeply ingrained this behavior is for some individuals, reflecting its importance in their daily routines and overall well-being.

This theme implies that smoking is deeply integrated into the daily routines of early adult men. This underscores the need to address not only nicotine addiction but also the psychological and habitual aspects of smoking related to post-meal comfort. The association between smoking and relief from digestive discomfort makes cessation particularly challenging, emphasizing the importance of understanding and addressing these specific beliefs and behaviors in smoking cessation programs.

Liyen Cartelle et al. (2023) found that smoking after meals can worsen upper abdominal discomfort in individuals with functional dyspepsia, suggesting the need to avoid smoking, particularly post-eating. Ahmed and Hassan (2021) observed that quitting smoking significantly alleviated after-meal symptoms such as bloating, discomfort, and vomiting in people with gastroesophageal reflux disease, indicating improvements in digestive health post-cessation. Additionally, King et al. (2023) demonstrated that a family-based approach to smoking cessation increased quitting success rates and enhanced family relationships and communication.

Theme 3: Smoking Deceives Me with the Feeling of Relaxation

This theme describes how participants experience a feeling of relaxation when they smoke. They say smoking helps them focus on work and become more productive. Despite this perceived benefit, participants

acknowledge that the sense of relaxation they get from smoking is deceptive. They are aware that while smoking seems to provide temporary relief and mental clarity, it ultimately has detrimental effects on their health. This awareness creates a conflict between the immediate sensation of relaxation and the long-term understanding of the harm caused by smoking. Participants recognize that the feeling of relaxation is short-lived and does not address the underlying stress or anxiety. Yet, they continue to rely on smoking as a quick fix for their immediate needs. This ongoing reliance underscores the psychological grip that smoking has on their routines and mental state.

This implies that the reliance on smoking for relaxation creates a deceptive sense of well-being that masks the severe health risks associated with tobacco use. Over time, this false sense of relaxation can contribute to the development of chronic diseases such as cardiovascular disease, respiratory issues, and various forms of cancer. The psychological dependency formed by associating smoking with relaxation makes it harder for individuals to quit, perpetuating a cycle of addiction and health deterioration.

The relaxing effect of smoking is a complex and often deceptive issue, with conflicting views on its physiological and psychological mechanisms (El-Sherbiny & Elsary, 2022). Dimitriadis et al. (2022) acknowledge the stimulating effect of nicotine on the sympathetic nervous system, suggesting that any perceived relaxation is inconsistent. Torres and O'Dell (2016) further elucidate this inconsistency by explaining that while smoking is often used as a coping strategy for stress, it can contribute to increased stress levels over time. This is because the apparent relaxation from smoking may be due to the alleviation of withdrawal symptoms, such as tension and irritability, rather than a genuine calming effect (Pawlina et al., 2015).

Reasons Early Adult Men Have Difficulty Withdrawing from Their Smoking Habits

As shown in Table 2, the following theme discusses the reasons that early adult men have difficulty withdrawing from their smoking habits.

Theme 1: Fear of Prevailing Diseases During Withdrawal Process

This theme explores the general anxiety experienced by individuals attempting to quit smoking due to the fear of developing smoking-related diseases. Derived from the firsthand experiences of individuals who have tried to quit but encountered significant challenges, it underscores the profound impact of health concerns on smoking cessation efforts. The fear of falling ill during the withdrawal process serves as a barrier to quitting, amplifying the already daunting task of breaking the habit. Participants express deep-seated apprehension regarding the potential adverse health effects of quitting, fearing that the cessation process itself may worsen existing health issues or unveil previously undetected illnesses. This fear is compounded by concerns about withdrawal symptoms, such as weight gain, irritability, and depression, which not only threaten their physical well-being but also contribute to heightened stress and anxiety. The apprehension surrounding the potential health consequences of quitting smoking perpetuates a cycle of fear and uncertainty, further complicating the journey toward smoking cessation.

This implies that the fear amplifies the already challenging process of breaking the habit and contributes to heightened stress and uncertainty. The apprehension regarding the onset or exacerbation of smoking-related diseases during withdrawal underscores the urgent need for comprehensive support mechanisms to address both the physical and psychological aspects of smoking cessation. Failure to effectively address these fears may lead to continued smoking behavior, perpetuating the cycle of tobacco addiction and increasing the risk of developing severe health complications among early adult men.

This confirms the study conducted by the American Psychiatric Association (2013) in which they explained the unbearable nature of nicotine withdrawal symptoms, which can severely impede successful cessation efforts, ultimately leading to relapse. Sadock (2015) further supports this by identifying a positive correlation between the severity of withdrawal symptoms and the level of nicotine dependence. Moreover, Gould (2015) suggests that individuals with higher levels of nicotine dependence are more prone to relapse following a period of abstinence.

Theme 2: My Body Got Used to Its Addictive "Satisfying" Effects

This theme captures the participants' experiences of struggling to withdraw from their smoking habits due to the profoundly ingrained satisfaction they derive from smoking. Participants describe a strong physical and psychological dependency, where their bodies have become accustomed to the pleasurable and addictive effects of nicotine. Despite a genuine desire to quit, they find cessation challenging because smoking provides a sense of immediate satisfaction and relief that their bodies have come to rely on. This dependency creates a cycle where the perceived benefits, such as reduced stress and enhanced mood, reinforce the habit. The participants highlight that their consistent exposure to nicotine has conditioned their bodies to crave its effects, making the withdrawal process not only difficult but also daunting. This theme underscores the powerful hold that the addictive properties of nicotine have on their daily lives, illustrating the internal conflict between the desire to quit and the compelling need to satisfy their cravings.

This implies that the physical and psychological reliance on nicotine creates a formidable barrier to quitting, as the participants' bodies and minds are conditioned to seek the immediate satisfaction that smoking provides. The participants' experiences reflect the powerful grip of nicotine addiction, emphasizing the need for targeted interventions that address both the physical cravings and the psychological conditioning associated with smoking. Understanding this dependency is crucial for developing effective smoking cessation programs that can provide the necessary support to help individuals break free from their addiction and manage the challenging withdrawal process. Without addressing these deeply rooted addictive effects, attempts to quit smoking are likely to face significant hurdles, underscoring the importance of comprehensive treatment strategies that encompass both medical and psychological support.

Further, Kohut (2017) provides a comprehensive analysis of nicotine's mechanisms of action, highlighting how it stimulates the release of dopamine and other neurotransmitters that produce feelings of pleasure and reward. This biochemical process underscores nicotine's high addictiveness, as evidenced by the fact that over 70% of smokers who attempt to quit relapse within a week. Similarly, Froeliger et al. (2013) found that smokers who abstained for 24 hours exhibited increased activity in brain regions associated with reward when compared to their brain activity while smoking. This finding illustrates the strong, rewarding effects of smoking, which significantly contribute to its addictive nature.

Theme 3: Peer Influence Makes It Harder to Quit Smoking!

This theme explores the significant impact of social pressures and peer influence on the difficulty of quitting smoking. Participants described how their smoking behavior is deeply intertwined with their social relationships and interactions. They frequently felt pressured by friends, family, and coworkers to continue smoking, particularly in social settings where smoking is prevalent. This social pressure undermines their efforts to quit, making it challenging to resist the urge to smoke. For many participants, smoking offered social benefits, such as forming friendships and a sense of belonging, which they missed after attempting to quit. The struggle to balance the desire to quit with the need for social connection highlights the influential role of social norms and expectations in maintaining smoking habits. Participants emphasized that the social acceptance and reinforcement of smoking behaviors made it even more challenging to break free from the addiction. Understanding the role of social influence is crucial for developing effective smoking cessation programs that address these social dynamics and provide supportive environments for individuals trying to quit.

This implies that the persistent social pressures and peer influences that make quitting smoking difficult can lead to prolonged smoking habits, which in turn significantly increase the risk of developing chronic health conditions. The social reinforcement of smoking behavior creates a cycle where the need for social acceptance and belonging continues the addiction. Over time, this can result in a deeply entrenched smoking habit that is hard to break, even when the individual is fully aware of the health risks. The psychological impact of social isolation or loneliness that may occur when attempting to quit smoking can lead to increased stress and mental health issues, further complicating cessation efforts.

Baffuno et al. (2020) highlight that peer influence and the environment play crucial roles in maintaining smoking behavior, and interventions incorporating social support from peers are more effective in promoting smoking

cessation. Adkison et al. (2014) found that early adult men are more likely to use alternative nicotine products, such as electronic nicotine delivery systems, if their friends or family members use them, indicating the strong influence of social circles on smoking behavior. Similarly, Harakeh et al. (2014) revealed that both peer and parental factors significantly affect smoking habits; notably, stricter parental rules against smoking are associated with a lower risk of adolescent smoking. Additionally, Song et al. (2014) showed that exposure to smoking in movies increases the likelihood of early adults starting and continuing to smoke, further emphasizing the influential role of media and social influence on smoking behavior.

Theme 4: Continuous Feeling of Extreme Cravings for Smoking

This theme captures the persistent and intense cravings that participants experience when attempting to quit smoking, which is a hallmark of nicotine addiction. Participants reported both physical and psychological cravings that severely hinder their ability to concentrate, sleep, and engage in daily activities. These cravings are often triggered by specific situations, such as being around other smokers, consuming alcohol, or encountering stressful circumstances. The participants described these cravings as overwhelming and challenging to manage, emphasizing that the constant desire to smoke is a significant barrier to quitting. This theme illustrates the powerful and relentless nature of nicotine cravings, which dominate their thoughts and actions, making the process of cessation extremely challenging.

This implies that the persistent and intense cravings experienced by the participants not only impede their immediate efforts to quit but also pose a substantial risk for relapse, prolonging the cycle of addiction. The constant struggle with cravings also has psychological implications, contributing to stress, anxiety, and a diminished quality of life. The inability to successfully quit smoking due to these cravings can result in feelings of frustration and helplessness, negatively impacting mental health.

Tidey & Miller (2015) found that certain types of cigarettes can deliver higher levels of nicotine, potentially leading to stronger cravings and making quitting more difficult. Krishnan-Sarin et al. (2014) demonstrated that behavioral impulsivity predicts treatment outcomes in adolescent smoking cessation programs, indicating that managing impulsivity and cravings is vital for success. Weinberger et al. (2017) highlighted that smoking is associated with an increased risk of relapse into substance use disorders, likely due to persistent cravings for nicotine and other substances. Zhou et al. (2014) showed that smoking cravings can be triggered by exposure to cigarette-related cues, underscoring the importance of identifying and avoiding these triggers. These findings align with participants' experiences of intense and continuous cravings, highlighting the need for strategies that specifically address cravings to support successful long-term smoking cessation.

Theme 5: Difficulty in Regulating Psychological and Emotional Responses during Smoking Withdrawal Process

This theme emphasizes the psychological and emotional challenges faced by early adult men attempting to quit smoking. Participants described experiencing intense symptoms such as anxiety, depression, and trouble concentrating, which were difficult to manage. They feel overwhelmed by their emotional responses, including heightened irritability and anger, making it challenging to maintain control over their behavior. These emotional struggles often led to a sense of frustration and helplessness, further complicating their efforts to quit smoking. Participants also noted that the emotional instability they experienced during the withdrawal process made it hard to stay motivated and committed to cessation. The difficulty in regulating these psychological and emotional responses was a significant barrier, as the participants often found themselves turning back to smoking to cope with these intense feelings. This theme highlights the profound emotional and psychological toll of smoking withdrawal, which can undermine efforts to quit and sustain long-term abstinence.

This implies that the emotional and psychological challenges during smoking withdrawal significantly hinder the participant's ability to quit successfully. The intense symptoms of anxiety, depression, and difficulty concentrating create a sense of distress and overwhelm, making it exceedingly difficult for individuals to maintain control over their emotions and behaviors. This heightened emotional instability not only undermines their motivation and commitment to cessation but also increases the risk of relapse as individuals seek relief from

their emotional turmoil through smoking. The persistent struggle to regulate these responses may worsen feelings of frustration and helplessness, further impeding progress toward long-term abstinence.

Weinstein et al. (2015) demonstrated that mindfulness training can improve stress attribution, coping mechanisms, and emotional well-being, crucial aspects for individuals struggling to regulate their emotions during smoking cessation. Additionally, Klucharev et al. (2013) found that down-regulation of the posterior medial frontal cortex, involved in emotion regulation, can reduce social conformity, potentially mitigating the impact of social norms on smoking behavior. These findings suggest that interventions incorporating emotion regulation strategies, such as mindfulness-based interventions and targeting social influences through cognitive approaches, may effectively support individuals quitting smoking.

4.1. Limitations

The study has several limitations that should be considered when interpreting its findings. Firstly, purposive sampling may introduce bias and limit the generalizability of the results to other populations. Additionally, the geographical restriction to a specific location in the Philippines and the age range limitation of 22-35 years may further constrain the applicability of the findings. The study's exclusive focus on early adult men overlooks potential differences in experiences among other demographics. Resource constraints and potential researcher influence during data collection also pose limitations. Further, this study does not include an analysis of sociodemographic factors within the sample, which limits the understanding of how variables such as socioeconomic status, education level, and cultural background might influence smoking behaviors and cessation efforts.

4.2. Conclusions

The findings of this study offer valuable insights into the complex dynamics surrounding smoking behavior among early adult men. Despite their awareness of the harmful health consequences associated with smoking, participants continue to engage in this behavior for various reasons. Smoking serves as an integral part of their daily routine, providing a sense of completion and satisfaction, which aligns with previous research on habitual smoking (Struik et al., 2018). Additionally, many participants rely on smoking to alleviate discomfort after meals or to create a deceptive sense of transient relaxation, echoing findings from Benedict et al. (2022) that emphasize the psychological aspects of smoking addiction.

These insights underscore the nature of smoking addiction, highlighting its psychological, social, and habitual components that contribute to its persistence. Furthermore, this study reveals significant challenges faced by early adult men in their attempts to withdraw from smoking. The addictive nature of nicotine, coupled with peer influence, emerges as a daunting barrier to cessation. Participants struggle with intense cravings and have difficulty regulating their emotional and psychological responses during the withdrawal process, reflecting the broader struggles documented in the literature (Bechara et al., 2019).

This research emphasizes the necessity for comprehensive and tailored interventions to support smoking cessation efforts among this demographic. Effective strategies should aim not only to educate individuals about the health risks of smoking but also to address the underlying psychological, social, and environmental factors that sustain these habits. Proposed interventions may include mindfulness training to manage cravings, cognitive-behavioral therapy to enhance emotional regulation, and peer support programs to counteract social influences. By addressing the challenges identified in this study, policymakers, healthcare providers, and public health professionals can work towards reducing smoking prevalence and improving health outcomes for early adult men and the broader population.

Overall, this study contributes to the understanding of smoking behavior among early adult men, highlighting the intricate interplay of factors influencing their addiction and withdrawal experiences. The insights provided here can serve as a foundation for future research and intervention development to effectively reduce smoking rates within this population.

Conflict of Interest

The authors declare no conflict of interest.

Authors' contributions

Junalyn N. Suminguit: Conceptualization, Methodology, Validation, Formal Analysis, Research, Data Curation, Project Management. Ruben L. Tagare, Jr.: Conceptualization, Methodology, Formal Analysis, Data Curation, Writing - Review and Editing, Supervision, Project Management. Cheeze R. Janito: Conceptualization, Supervision, Project Management. Marlene E. Orfrecio: Conceptualization, Supervision, Project Management.

Declaration of Data Availability

All data relevant to this study are fully available within this article. Additional materials and information supporting the findings can be provided upon reasonable request.

5. References

Abdelrahim, A., Balmer, C., Jones, J., Mehanna, H., & Dunn, J. (2018). Considerations for a head and neck smoking cessation support programme; A qualitative study of the challenges in quitting smoking after treatment for head and neck cancer. *European Journal of Oncology Nursing*, *35*, 54-61.

Adkison, S. E., O'Connor, R. J., Bansal-Travers, M., Hyland, A., Borland, R., Yong, H. H., ... & Fong, G. T. (2014). Electronic nicotine delivery systems: international tobacco control four-country survey. *American journal of preventive medicine*, 44(3), 207-215. https://doi.org/10.1016/j.amepre.2012.10.018

Ahmed Hussein Ahmed, H., & Hassan Saied Khalil, H. (2021). Impact of educational program for patients with gastroesophageal reflux disease on lifestyle change and home remedies. *Egyptian Journal of Nursing and Health Sciences*, *2*(2), 338-362.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*: DSM-5 (Vol. 5, No. 5). Washington, DC: American Psychiatric Association. https://doi.org/10.1176/appi.books.9780890425596

Amul, G. G. H., & Pang, T. (2018). The state of tobacco control in ASEAN: framing the implementation of the FCTC from a health systems perspective. *Asia & the Pacific Policy Studies*, 5(1), 47-64. https://doi.org/10.1002/app5.218

Aubin, H. J., Luquiens, A., & Berlin, I. (2014). Pharmacotherapy for smoking cessation: pharmacological principles and clinical practice. *British journal of clinical pharmacology*, *77*(2), 324-336.

Bafunno, D., Catino, A., Lamorgese, V., Del Bene, G., Longo, V., Montrone, M., ... & Galetta, D. (2020). Impact of tobacco control interventions on smoking initiation, cessation, and prevalence: *A systematic review. Journal of Thoracic Disease,* 12(7), 3844. https://doi.org/10.21037/jtd.2020.02.23

Barrington-Trimis, J. L., Braymiller, J. L., Unger, J. B., McConnell, R., Stokes, A., Leventhal, A. M., ... & Goodwin, R. D. (2020). Trends in the age of cigarette smoking initiation among young adults in the US from 2002 to 2018. *JAMA network open*, *3*(10), e2019022-e2019022.

Benedict, C., Walsh, E. A., & Penedo, F. J. (2022). Psychosocial interventions in cancer. *Psychological aspects of cancer: A guide to emotional and psychological consequences of cancer, their causes, and their management*, 159-196.

Bechara, A., Berridge, K. C., Bickel, W. K., Morón, J. A., Williams, S. B., & Stein, J. S. (2019). A neurobehavioral approach to addiction: implications for the opioid epidemic and the psychology of addiction. *Psychological Science in the Public Interest*, *20*(2), 96-127.

Caponnetto, P., Inguscio, L., Saitta, C., Maglia, M., Benfatto, F., & Polosa, R. (2020). Smoking behavior and psychological dynamics during COVID-19 social distancing and stay-at-home policies: A survey. *Health psychology research*, *8*(1).

Dimitriadis, K., Narkiewicz, K., Leontsinis, I., Konstantinidis, D., Mihas, C., Andrikou, I., ... & Tsioufis, K. (2022). Acute effects of electronic and tobacco cigarette smoking on sympathetic nerve activity and blood pressure in humans. *International Journal of Environmental Research and Public Health*, *19*(6), 3237.

Ekpu, V. U., & Brown, A. K. (2015). The Economic Impact of Smoking and Reducing Smoking Prevalence: Review of Evidence. *Tobacco Use Insights*, 8, TUI-S15628. https://doi.org/10.4137/TUI.S15628

El-Sherbiny, N. A., & Elsary, A. Y. (2022). Smoking and nicotine dependence in relation to depression, anxiety, and stress in Egyptian adults: A cross-sectional study. *Journal of Family and Community Medicine*, *29*(1), 8-16.

Froeliger, B., Kozink, R. V., Rose, J. E., Behm, F. M., Salley, A. N., & McClernon, F. J. (2013). Hippocampal and striatal gray matter volume are associated with a smoking cessation treatment outcome: Results of an exploratory voxel-based morphometric analysis. *Nicotine & Tobacco Research*, 15(6), 1042-1048.

Gallucci, G., Tartarone, A., Lerose, R., Lalinga, A. V., & Capobianco, A. M. (2020). Cardiovascular risk of smoking and benefits of smoking cessation. *Journal of thoracic disease*, *12*(7), 3866.

Giulietti, F., Filipponi, A., Rosettani, G., Giordano, P., Iacoacci, C., Spannella, F., & Sarzani, R. (2020). Pharmacological approach to smoking cessation: an updated review for daily clinical practice. *High Blood Pressure & Cardiovascular Prevention*, *27*(5), 349-362.

Gould, T. J., Wilkinson, D. S., Yildirim, E., Blendy, J. A., & Adoff, M. D. (2015). Dissociation of tolerance and nicotine withdrawal-associated deficits in contextual fear. *Brain Research*, 1559, 1-10. https://doi.org/10.1016/j.brainres.2014.02.038

Kong, G., Bold, K. W., Cavallo, D. A., Davis, D. R., Jackson, A., & Krishnan-Sarin, S. (2021). Informing the development of adolescent e-cigarette cessation interventions: A qualitative study. *Addictive Behaviors*, *114*, 106720.

Kosendiak, A., Król, M., Ściskalska, M., & Kepinska, M. (2021). The changes in stress coping, alcohol use, cigarette smoking and physical activity during COVID-19 related lockdown in medical students in Poland. *International journal of environmental research and public health*, *19*(1), 302.

Harakeh, Z., Scholte, R. H., De Vries, H., & Engels, R. C. (2014). Parental rules and communication: their association with adolescent smoking. *Addiction*, 100(6), 862-870. https://doi.org/10.1111/j.1360-0443.2005.01067.x

Hendricks, P. S., Hall, S. M., Tyus, L. R., Thorne, C. B., Lappan, S. N., McMurray, M. V., ... & Baker, T. B. (2016). Withdrawal exposure with withdrawal regulation training for smoking cessation: a randomized controlled pilot trial. *Drug and Alcohol Dependence*, *164*, 28-37.

Hoek, J., Edwards, R., & Waa, A. (2022). From social accessory to societal disapproval: smoking, social norms and tobacco endgames. *Tobacco Control*, *31*(2), 358-364.

Iivari, N. (2018). Using member checking in interpretive research practice: A hermeneutic analysis of informants' interpretation of their organizational realities. *Information Technology & People*, *31*(1), 111-133.

Jafari, A., Rajabi, A., Gholian-Aval, M., Peyman, N., Mahdizadeh, M., & Tehrani, H. (2021). National, regional, and global prevalence of cigarette smoking among women/females in the general population: a systematic review and meta-analysis. *Environmental health and preventive medicine*, *26*, 1-13.

Jussila, H., Pelto, J., Korja, R., Ekholm, E., Pajulo, M., Karlsson, L., & Karlsson, H. (2020). The association of maternal-fetal attachment with smoking and smoking cessation during pregnancy in The FinnBrain Birth Cohort Study. *BMC pregnancy and childbirth*, *20*, 1-13.

Juranić, B., Mikšić, Š., Rakošec, Ž., & Vuletić, S. (2018). Smoking habit and nicotine effects. In *Smoking Prevention and Cessation*. IntechOpen.

Käufer, S., & Chemero, A. (2021). *Phenomenology: an introduction*. John Wiley & Sons.

King, D. K., Patten, C. A., Koller, K. R., Prochaska, J. J., Sinicrope, P. S., McDonell, M. G., ... & Thomas, T. K. (2023). Aniqsaaq (To Breathe): Study protocol to develop and evaluate an Alaska Native family-based financial incentive intervention for smoking cessation.

Klucharev, V., Munneke, M. A., Smidts, A., & Fernández, G. (2013). Downregulation of the posterior medial frontal cortex prevents social conformity. *Journal of Neuroscience*, 31(33), 11934-11940. https://doi.org/10.1523/JNEUROSCI.1869-11.2011

Kohut, S. J. (2017). Interactions between nicotine and drugs of abuse: a review of preclinical findings. *The American journal of drug and alcohol abuse*, 43(2), 155-170. https://doi.org/10.1080/00952990.2016.1209513

Krishnan-Sarin, S., Reynolds, B., Duhig, A. M., Smith, A., Liss, T., McFetridge, A., ... & Potenza, M. N. (2014). Behavioral impulsivity predicts treatment outcome in a smoking cessation program for adolescent smokers. *Drug and alcohol dependence*, 88(1), 79-82. https://doi.org/10.1016/j.drugalcdep.2006.09.006

Lee, J. W., Yang, W., Kim, Y. S., Kim, Y., Yoo, H. S., & Kang, H. T. (2022). Exposure to second-hand smoke and a tobacco-specific carcinogen in non-smokers. *Korean Journal of Family Medicine*, *43*(2), 117.

Liyen Cartelle, A., Bocchino, R. L., Shah, I., Yakah, W., Ahmed, A., Freedman, S. D., ... & Sheth, S. G. (2023). Smoking is associated with worse clinical outcomes in chronic pancreatitis. *Digestive Diseases and Sciences*, *68*(6), 2667-2673.

Merriam, S. B., & Grenier, R. S. (Eds.). (2019). *Qualitative research in practice: Examples for discussion and analysis*. John Wiley & Sons.

Minian, N., Corrin, T., Lingam, M., deRuiter, W. K., Rodak, T., Taylor, V. H., ... & Selby, P. (2020). Identifying contexts and mechanisms in multiple behavior change interventions affecting smoking cessation success: a rapid realist review. *BMC Public Health*, *20*, 1-26.

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European journal of general practice*, *24*(1), 9-18.

Pawlina, M. M. C., Rondina, R. D. C., Espinosa, M. M., & Botelho, C. (2015). Depression, anxiety, stress, and motivation over the course of smoking cessation treatment. *Jornal Brasileiro de Pneumologia*, *41*, 433-439.

Pickard, H. (2016). Denial in addiction. *Mind & Language*, *31*(3), 277-299.

Pokhrel, P., Ing, C., Kawamoto, C. T., Laestadius, L., Buente, W., & Herzog, T. A. (2021). Social media's influence on e-cigarette use onset and escalation among young adults: What beliefs mediate the effects?. *Addictive behaviors*, *112*, 106617.

Rogers, A. H., Bakhshaie, J., Garey, L., Piasecki, T. M., Gallagher, M. W., Schmidt, N. B., & Zvolensky, M. J. (2019). Individual differences in emotion dysregulation and trajectory of withdrawal symptoms during a quit attempt among treatment-seeking smokers. *Behaviour research and therapy*, *115*, 4-11.

Sadock, B. J. (2015). Kaplan & Sadock's synopsis of psychiatry: behavioral sciences/clinical psychiatry (Vol. 2015, pp. 648-655). Philadelphia, PA: Wolters Kluwer.

Smith, A. L., Carter, S. M., Dunlop, S. M., Freeman, B., & Chapman, S. (2018). Revealing the complexity of quitting smoking: a qualitative grounded theory study of the natural history of quitting in Australian ex-smokers. *Tobacco Control*, *27*(5), 568-576.

Song, H., Kim, J., & Kim, S. Y. (2014). Smoker identity among social smokers: theory-based approaches for anti-smoking interventions. *Journal of Substance Use*, *19*(5), 346-350.

Spears, C. A., Hedeker, D., Li, L., Wu, C., Anderson, N. K., Houchins, S. C., ... & Wetter, D. W. (2017). Mechanisms underlying mindfulness-based addiction treatment versus cognitive behavioral therapy and usual care for smoking cessation. *Journal of consulting and clinical psychology*, *85*(11), 1029.

Struik, L. L., Bottorff, J. L., Baskerville, N. B., & Oliffe, J. L. (2018). The crush the crave quit smoking app and young adult smokers: qualitative case study of affordances. *JMIR mHealth and uHealth*, *6*(6), e9489.

Tidey, J. W., & Miller, M. E. (2015). Smoking cessation and reduction in people with chronic mental illness. *Bmj*, 351. https://doi.org/10.1136/bmj.h4065

Torres, O. V., & O'Dell, L. E. (2016). Stress is a Principal Factor that Promotes Tobacco Use in Females. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 65, 260- 268. https://doi.org/10.1016/j.pnpbp.2015.04.005

Villanti, A. C., Bover Manderski, M. T., Gundersen, D. A., Steinberg, M. B., & Delnevo, C. D. (2016). Reasons to Quit and Barriers to Quitting Smoking in US Young Adults. *Family Practice*, 33(2), 133-139. https://doi.org/10.4088/JCP.15m10062

Weinberger, A. H., Platt, J., Esan, H., Galea, S., Erlich, D., & Goodwin, R. D. (2017). Cigarette smoking is associated with increased risk of substance use disorder relapse: a nationally representative, prospective longitudinal investigation. *The Journal of Clinical Psychiatry*, 78(2), 19746. https://doi.org/10.4088/JCP.15m10062

Weinstein, N., Brown, K. W., & Ryan, R. M. (2015). A multi-method examination of the effects of mindfulness on stress attribution, coping, and emotional well-being. *Journal of research in personality*, 43(3), 374-385. https://doi.org/10.1016/j.jrp.2008.12.008

Wellman, R. J., O'Loughlin, E. K., Dugas, E. N., Montreuil, A., Dutczak, H., & O'Loughlin, J. (2018). Reasons for Quitting Smoking in Young Adult Cigarette Smokers. *Addictive Behaviors*, 77, 28-33. https://doi.org/10.1016/j.addbeh.2017.09.010

Williams, H. (2021). The meaning of "Phenomenology": Qualitative and philosophical phenomenological research methods. *The Qualitative Report*, *26*(2), 366-385.

World Health Organization. (2021). WHO global report on trends in prevalence of tobacco use 2000–2025.

World Health Organization. (2020). Smoking and COVID-19: Scientific brief.

Zhao, B., Bai, L., Wan, R., Wang, Y., Qin, L., Xiao, Q., ... & Jiang, J. (2022). Exposure to second-hand smoke is an independent risk factor of small airway dysfunction in non-smokers with chronic cough: a retrospective case-control study. *Frontiers in Public Health*, *10*, 912100.

Zhou, S., Rosenthal, D. G., Sherman, S., Zelikoff, J., Gordon, T., & Weitzman, M. (2014). Physical, behavioral, and cognitive effects of prenatal tobacco and postnatal second-hand smoke exposure. *Current problems in pediatric and adolescent health care*, *44*(8), 219-241.

Tsai, M., Byun, M. K., Shin, J., & Crotty Alexander, L. E. (2020). Effects of e-cigarettes and vaping devices on cardiac and pulmonary physiology. *The Journal of physiology*, *598*(22), 5039-5062.

realia
Research in Education and learning Innovation Archives

Universitat de València (January – June) No. 34. Pp. 27-42 / eISSN: 2959-9031 / DOI: 10.7203/realia.34.28114

ARTÍCULOS / OPEN ACCESS

Navigating Excellence in Physical Education: Insights and Suggestions of Teachers Towards an Improved PATH-Fit Implementation in Philippine Higher Education

Navegando por la excelencia en educación física: ideas y sugerencias de los profesores hacia una mejor implementación de PATH-Fit en la educación superior filipina

Navegant per l'excel·lència en educació física: idees i suggeriments dels professors cap a una implementació millorada de PATH-Fit a l'educació superior filipina

Ruben Jr. Lagunero Tagare

Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines. College of Education and Liberal Arts, Adamson University, Manila, (Philippines)
tagareruben@usm.edu.ph

Received: 03/01/2024 | **Accepted:** 28/10/2024 | **Published:** 28/01/2025

ABSTRACT: This research investigates the insights and suggestions of teachers in implementing the reformed Physical Education (PE) program in the Philippine Higher Education Institutions (HEI) called "Physical Activity Towards Health and Fitness" (PATH-Fit). Employing a qualitative descriptive approach, 14 participants were purposefully selected as the primary source of data. The main data-gathering tool was a series of in-depth interviews complemented by expert-validated guide questions. The study revealed six essential themes: the demand for continuous retooling activities, the prioritization of facilities and equipment, the amplification of PE's significance, the call to reduce paper and pen activities, the importance of seniors' support and guidance, and the need for clear learning references. These themes underscore the complex opportunities in implementing PATH-Fit, and it suggest that investing in continuous professional development, optimizing learning environments, and refining teaching approaches are crucial for the success of PE in higher education. The findings of this study contribute to an understanding of PATH-Fit implementation, which has implications for educators, administrators, and policymakers seeking to enhance the quality and effectiveness of PE in higher education programs in the country.

KEYWORDS: Improvement; opportunities; reform; tertiary education; threat

RESUMEN: Esta investigación investiga las ideas y sugerencias de los profesores en la implementación del programa reformado de Educación Física (EF) en las Instituciones de Educación Superior (IES) de Filipinas llamado "Actividad física hacia la salud y el fitness" (PATH-Fit). Empleando un enfoque descriptivo cualitativo, se seleccionaron intencionalmente 14 participantes como fuente principal de datos. La principal herramienta de recopilación de datos fue una serie de entrevistas en profundidad complementadas con preguntas guía validadas por expertos. El estudio reveló seis temas esenciales: la demanda de actividades continuas de reequipamiento, la priorización de instalaciones y equipos, la ampliación de la importancia de la educación física, el llamado a reducir las actividades con papel y bolígrafo, la importancia del apoyo y la orientación de las personas mayores, y la necesidad de unas políticas claras. referencias de aprendizaje. Estos temas subrayan las complejas oportunidades que ofrece la implementación de PATH-Fit y sugieren que invertir en

Citation: Ruben Jr. Lagunero Tagare. (2025). Navigating Excellence in Physical Education: Insights and Suggestions of Teachers Towards an Improved PATH-Fit Implementation in Philippine Higher Education. *Research in Education and Learning Innovation Archives*, 34, 27- 42. 10.7203/realia.34.28114

Sponsor / Funding: No funding declared in this research.

desarrollo profesional continuo, optimizar los entornos de aprendizaje y perfeccionar los enfoques de enseñanza son cruciales para el éxito de la educación física en la educación superior. Los hallazgos de este estudio contribuyen a comprender la implementación de PATH-Fit, que tiene implicaciones para los educadores, administradores y formuladores de políticas que buscan mejorar la calidad y eficacia de la educación física en los programas de educación superior del país.

PALABRAS CLAVE: Mejora; oportunidades; reforma; educación terciaria; amenaza

RESUM: Aquesta investigació investiga les idees i els suggeriments dels professors per implementar el programa reformat d'Educació Física (PE) a les institucions d'educació superior (HEI) filipines anomenat "Activitat física cap a la salut i la forma física" (PATH-Fit). Utilitzant un enfocament descriptiu qualitatiu, 14 participants van ser seleccionats intencionadament com a font principal de dades. La principal eina de recollida de dades va ser una sèrie d'entrevistes en profunditat complementades amb preguntes de guia validades per experts. L'estudi va revelar sis temes essencials: la demanda d'activitats de reequipament contínues, la priorització d'instal·lacions i equipaments, l'amplificació de la importància de l'educació física, la crida a reduir les activitats de paper i bolígraf, la importància del suport i l'orientació de la gent gran i la necessitat d'una claredat. referents d'aprenentatge. Aquests temes subratllen les complexes oportunitats en la implementació de PATH-Fit i suggereixen que la inversió en el desenvolupament professional continu, l'optimització dels entorns d'aprenentatge i el perfeccionament dels enfocaments docents són crucials per a l'èxit de l'educació física a l'educació superior. Els resultats d'aquest estudi contribueixen a entendre la implementació de PATH-Fit, que té implicacions per als educadors, els administradors i els responsables polítics que busquen millorar la qualitat i l'eficàcia de l'educació física en els programes d'educació superior del país.

PARAULES CLAU: Millora; oportunitats; reforma; l'educació terciària; amenaça

Practitioner notes

What is already known about this topic

- PATH-Fit aims to provide a comprehensive and standardized curriculum for physical education in higher education institutions across the Philippines. This program is designed to align with contemporary educational needs, integrating physical fitness with the development of essential life skills to ensure holistic student growth and well-being.
- Despite its goals, the implementation of PATH-Fit has faced significant challenges. These include issues with curriculum adaptation, teacher training, and the overall readiness of institutions to embrace the new framework. Teachers and administrators often struggle with the shift from traditional methods to the innovative approaches proposed by PATH-Fit.
- There is a recognized need for continuous professional development and support for educators implementing PATH-Fit. Effective implementation requires that teachers not only understand the new curriculum but also receive adequate training and resources to adapt their teaching methods accordingly. This highlights the importance of ongoing mentorship, clear learning references, and robust support systems to facilitate a smooth transition.

What this paper adds

- The study highlighted the critical need for ongoing retooling and professional development for PE teachers. This finding underscores the importance of equipping educators with updated skills and knowledge to effectively deliver the reformed PE curriculum, addressing gaps in training and ensuring that teachers are well-prepared to meet the demands of PATH-Fit.
- A significant finding was the prioritization of facilities and equipment. The availability and quality of physical education facilities and resources directly impact the successful implementation of PATH-Fit. This suggests a need for investment in and upgrading of PE infrastructure to create conducive learning environments that support physical activities and health education.
- The study found a strong call to reduce paper and pen activities in PE classes. This reflects a shift towards more practical, hands-on learning experiences that align with the goals of PATH-Fit. By reducing traditional assessment methods, educators can focus more on experiential learning, which enhances student engagement and better promotes physical fitness and life skills.

(*continued*)

Implications for practice and/or policy

- Educational institutions should prioritize continuous professional development and retooling activities for PE teachers. This involves organizing regular training sessions, workshops, and seminars to update teachers on the latest pedagogical strategies, fitness trends, and curriculum innovations. By investing in teacher development, schools can ensure that educators are equipped with the necessary skills and knowledge to effectively implement PATH-Fit and adapt to its evolving requirements.
- There is a clear need for higher education institutions to invest in and upgrade their PE facilities and equipment. Providing modern, well-maintained, and adequate resources is essential for creating a supportive environment for physical education. This investment will not only facilitate effective teaching and learning but also encourage greater student participation and engagement in physical activities, thereby enhancing the overall quality of the PATH-Fit program.
- Schools should reduce reliance on traditional paper and pen activities and integrate more experiential, hands-on learning approaches in PE classes. This shift will better align with the goals of PATH-Fit by promoting physical literacy and practical knowledge. Teachers can employ various strategies such as active learning exercises, fitness challenges, and real-life applications of physical activities to foster a more dynamic and engaging PE curriculum that enhances students' physical and mental well-being.

1. INTRODUCTION AND REVIEW OF THE LITERATURE

The Philippine education system is a comprehensive framework designed to provide accessible and quality education to its citizens (Eduardo and Gabriel, 2021). It consists of various levels, including early childhood education, elementary education, secondary education, and higher education. Governed by the Department of Education (DepEd) and the Commission on Higher Education (CHED), the system aims to promote holistic development, instill values, and prepare learners for global citizenship (Hagos and Dejarme, 2008). With a blend of public and private institutions catering to diverse needs, the Philippine education system is characterized by a commitment to fostering critical thinking, creativity, and lifelong learning skills among its students (Tindowen et al., 2017).

At the core of the Philippine education system lies physical education (PE), an integral component dedicated to nurturing physical fitness, sportsmanship, and overall well-being among students across all levels. Embedded within the national educational framework, it reflects the country's dedication to fostering total development among learners. Mandated from primary to secondary levels, PE plays a vital role in promoting healthy lifestyles and instilling values of fairness and well-being (Habyarimana et al., 2022). With the major educational reforms done in the country's education history, DepEd ensures a comprehensive approach to health and wellness by mandating a diverse PE curriculum encompassing various physical activities, team sports, and fitness exercises (Cruz, 2022). Likewise, specialized programs in higher education accentuate ongoing efforts to adapt PE to contemporary educational needs, reflecting a dynamic response to evolving pedagogical demands (Zhang et al., 2018).

Over the years, the implementation of PE in Philippine Higher Education Institutions (HEI) has encountered significant challenges (Panganiban, 2019). These encompass various issues, including curriculum implementation difficulties, inadequate teacher training, and a perceived lack of importance attributed to the subject, with its purpose often regarded as more political than cultural. This historical context suggests that the landscape of PE in higher education has been shaped by factors beyond mere pedagogical concerns (Cariaga, 2014). The scholarly dialogue surrounding these challenges underscores the necessity of a holistic approach to improvement.

Abbasov and Mavlyanov (2019) emphasize the pivotal role of increased resources, such as investments in human workforce development and school facilities, in enhancing PE's overall quality and effectiveness.

To address these significant challenges, the CHED took a proactive step by mandating all HEI to implement the new PE, also known as PATH-Fit, through the CHED Memorandum Order (CMO) number 39, series of 2021. This represents a substantial reform in the setting of the PE in the country, aiming to offer a comprehensive and standardized curriculum in response to pressing issues identified in the field. PATH-Fit is designed to provide a structured framework that emphasizes physical fitness and the development of essential life skills and holistic growth. This initiative signifies a concerted effort by educational leaders to address the challenges faced in PE implementation, particularly the need for standardized teaching approaches and curriculum alignment with current educational needs. PATH-Fit introduces innovative approaches that have the potential to enhance the overall quality and effectiveness of PE in higher education, marking a significant step forward in the evolution of PE programs in the country (Peromingan et al., 2023).

PATH-Fit represents a transformative initiative aimed at reforming, redefining, and enhancing the PE in Philippine higher education. Its primary goal is to transcend traditional frameworks by offering a comprehensive program that not only emphasizes physical fitness but also integrates the development of essential life skills, addressing long-standing challenges in the field (Velez, 2023). The curriculum is designed to provide students with a well-rounded educational experience, prioritizing physical health, teamwork, communication, and whole growth. By aligning with present educational needs and introducing innovative approaches, PATH-Fit aims to elevate the quality and effectiveness of PE in higher education. This initiative is motivated by a recognition of the evolving demands of the educational landscape and a commitment to equipping graduates with the knowledge and skills necessary for personal well-being and active participation in society (Cimene et al., 2020).

However, since its implementation in 2021, the PATH-Fit program has faced numerous concerns, particularly in program implementation and curriculum content. One notable issue is the need for PE teachers to engage in continuous retooling activities to effectively navigate the innovative aspects of the PATH-Fit curriculum as educators have expressed difficulty adapting to the program's new teaching approaches, lessons, and assessments (Palomaria and Aquino, 2023). Concerns have also been raised about the availability and adequacy of learning facilities and equipment, impeding the smooth delivery of quality PE and the need for standardized teaching approaches, with educators emphasizing the importance of references to ensure program uniformity (Velez, 2023). Recent research in the Philippines has examined the implementation and impact of the new PE program as scholars have investigated the challenges encountered by educators and institutions during implementation, as well as the effectiveness of the curriculum in promoting physical fitness and overall well-being among tertiary students. Researchers have also assessed how well PATH-Fit aligns with the current educational landscape and the needs of today's students.

Despite the existing literature mentioned, there is a significant gap in studies investigating the insights and suggestions of teachers as they implement the new PE in higher education curricula. Little focus has been on understanding educators' perspectives, experiences, and concerns, which play an essential role in shaping the learning environment. Bridging this gap is critical to fully capture the realities and potential improvements that can inform policies, practices, and future developments in PE in higher education in the Philippines.

This study extends the current state of the art by examining the experiences of teachers within the context of these reform initiatives, shedding light on the insights and suggestions inherent in implementing innovative approaches to PE. By framing

the analysis within the broader discussion on innovation in this subject, this research contributes to a deeper understanding of the curriculum reforms and underscores the importance of adaptive strategies in enhancing the quality and effectiveness of PE programs. These challenges resonate beyond national borders, as evidenced by similar issues in education systems worldwide. Recognizing the international impact, the study highlights the importance of developing relevant and adequate support processes to facilitate teachers' adaptation to curriculum changes.

Further, this research benefits teachers by addressing their needs, which can help them grow professionally, gain confidence, and be more effective in delivering the PATH-Fit program. The findings also can impact the quality of education that students receive, as understanding the insights and suggestions associated with implementing PATH-Fit can lead to changes that improve the overall learning experience.

Furthermore, understanding these aspects will enable the development of a more responsive, dynamic, and effective curriculum aligned with contemporary educational goals. This research can also help educational administrators understand the necessary support systems for teachers, as this knowledge can be used to guide resource allocation, policy development, and strategic planning to ensure success in PATH-Fit implementation. This research will benefit the entire PE community by contributing to the ongoing discussion about the future of PE in higher education in the Philippines and laying the groundwork for further studies and similar investigations. The identified themes and challenges will provide potential avenues for further research, allowing future researchers to build on this work and contribute to the country's evolving field of higher education.

2. MATERIALS AND METHODS

2.1. Research Design

This study used a qualitative research design, specifically the interpretative phenomenological analysis, to investigate the insights and suggestions of PE teachers regarding implementing the PATH-Fit program. Qualitative research aims to explore and understand the complexities of social phenomena by capturing the varieties and context of human experiences (Creswell and Poth, 2016). Qualitative research seeks to uncover underlying meanings, patterns, and perspectives that contribute to a more complete understanding of a subject (Creswell and Clark, 2004).

Further, interpretative phenomenological analysis is a qualitative research methodology that explores and understands individuals' experiences. It involves an in-depth examination of how people make sense of their personal experiences and the meanings they attach to them (Smith, 2011). This approach aims to uncover participants' subjective perspectives and interpretations through a detailed analysis of their narratives, focusing on themes, patterns, and underlying meanings (Larkin et al., 2019). This approach emphasizes the importance of understanding each participant's unique context and subjective reality, allowing researchers to gain insight into complex human experiences and phenomena (Eatough and Smith, 2017).

This design is appropriate for this research as it focuses on understanding individuals' experiences and perspectives, aligning with the study's aim to explore teachers' insights and suggestions in implementing the reformed PE curriculum. This qualitative approach allows for a deep exploration of the subjective meanings and interpretations teachers attach to their experiences, providing rich insights into the complexities of their perspectives.

2.2. Research Procedures

The research procedures commenced with obtaining informed consent from the participants, ensuring their voluntary participation, and understanding the study's

objectives. Participants engaged in individual in-depth interviews. Each interview session ranged from approximately 45 minutes to 1 hour, allowing in-depth exploration of participants' experiences and perspectives. The interviews were conducted by the researcher, who has undergone extensive training in interviews as part of qualitative research methodologies and has a track record of publishing numerous articles in reputable databases employing qualitative research designs. The questions were intentionally crafted in an open-ended format to encourage participants to express their perspectives freely and provide detailed insights into their experiences and perceptions.

During the interviews, the researcher ensured a safe and private environment, emphasizing the confidentiality and anonymity of participants' responses. Measures were implemented to safeguard the data, including using pseudonyms and de-identifying sensitive information during transcription. Audio recordings and transcripts were stored securely on password-protected devices, accessible only to the researcher.

2.3. Research Participants and Sampling Procedure

A total of 14 research participants were selected using a purposeful sampling technique, aligning with the specific criteria outlined to meet the research objectives (Kalu, 2019). Participants were chosen based on their employment in a higher education institution, current involvement in teaching PATH-Fit courses, and at least two years of experience teaching the subject. This targeted approach ensured that the insights gathered were from educators with firsthand experience implementing the program, providing a comprehensive understanding of the subject matter grounded in practical teaching experiences. The information on the demographic characteristics of the participants is described below:

Table 1. *Demographic Profile of the Participants*

Characteristics	Frequency (N=14)	Percentage (%)
Gender		
Male	7	50.0
Female	7	50.0
Age		
21-25 Years Old	2	14.0
26-30 Years Old	4	29.0
31-35 Years Old	4	29.0
36-40 Years Old	2	14.0
41 Years Old – Above	2	14.0
Level of Education:		
With Ongoing Master's Units	5	36.0
Master's Degree Holder	6	43.0
With Ongoing Doctorate Units	3	21.0

2.4. Research Instrument and Materials

This study's primary data collection tool was a series of in-depth interviews using a carefully constructed list of guide questions to elicit the perspectives, experiences, and insights of the 14 research participants. PE and qualitative research experts thoroughly reviewed and assessed the questions, contributing to the instrument's refinement. This expert validation process aimed to improve the collected data's quality and ensure the guide questions' validity, reliability, and acceptability.

In addition, this research used a set of necessary materials to aid in data collection, such as voice recorders, cameras, and notepads. Voice recorders were used to capture detailed verbal responses during interviews, ensuring accuracy in transcription and subsequent qualitative data analysis. Cameras were used to record any relevant visual information that could supplement or enhance the participants' experiences, and note pads were used as an additional means for researchers to record immediate impressions and contextual details during data collection sessions.

2.5. Data Analysis

Data analysis and interpretation in this study adhered to the framework established by Miles and Huberman (1994), encompassing data reduction, data display, and conclusion drawing and verification. Initially, extensive qualitative data from interviews underwent systematic transcribing and refinement during data reduction, aimed at condensing, selecting, and simplifying information without compromising its essence. Raw data transcriptions were meticulously reviewed to identify key themes, patterns, and recurring elements pertinent to the study's objectives. This resulted in a refined dataset that preserved the richness of participants' responses.

Subsequently, the study progressed to data display, where transcribed data were visually presented using charts and tables to facilitate comprehensive understanding and synthesis of qualitative data. This visualization aided in identifying patterns, relationships, and variations in participants' experiences using a manual coding approach with no software involvements. Finally, drawing and verifying conclusions involved deriving meaningful interpretations and insights from the condensed and visually presented data, ensuring accuracy through a comprehensive verification process. In this phase, triangulation was employed through the convergence of multiple data sources, reinforcing the credibility and reliability of the findings. Debriefing sessions with subject matter experts was also done to enhance the findings' credibility and integrity.

3. RESULTS

To generate the themes, the researcher conducted a thorough data analysis following the framework proposed by Miles and Huberman (1994). Initially, the raw data, comprising transcripts of interviews underwent data reduction, where the researcher condensed the information into manageable units for analysis. This involved systematically identifying key phrases, quotes, and text segments that encapsulated the essence of participants' responses.

Subsequently, the condensed data were subjected to data display techniques, such as manual thematic coding or organizing the data into charts and tables. This process facilitated the identification of patterns, connections, and recurring themes across the dataset.

Further, the core ideas extracted from participants' responses were the foundation for the identified themes. These core ideas, often represented by interview excerpts, functioned as supporting evidence for each theme. By aligning participants' words with the essential themes, the researcher ensured that the analysis remained grounded in the experiences and perspectives of the participants. This approach enhanced the credibility and trustworthiness of the findings, as the participants' voices directly supported the themes. Incorporating participants' responses as support for the themes added depth and richness to the analysis, providing concrete examples and illustrations that explained the meaning and significance of each theme.

Table 2. *Insights and Suggestions of Teachers in Philippine Higher Education Towards an Improved PATH-Fit Implementation*

Essential Themes	Core Ideas
Retool PE Teachers	• We have no exposure to the subject so much
	• I suggest having workshops or seminars for PATH-Fit courses
	• We should have seminars or workshops that specifically focus on PATH-Fit courses
Prioritize Facilities and Equipment for PATH-Fit	• The school should provide the necessary equipment and facilities
	• Complete facilities and equipment can help students to have hands-on experiences
	• Institutions should provide the necessary resources, equipment, and facilities for students
Amplify the Significance of PE in an Academic Curriculum	• Students nowadays don't realize that PE has exceptional cases in terms of instruction
	• Students underestimate PE
	• Students overlook the unique aspects of PE
Lesser Paper and Pen Activities	• Many paper-and-pencil activities don't seem suitable for PE
	• Students are doing more written work than physical activities in PATH-Fit
Intensify Seniors' Support and Guidance	• New teachers need support and guidance from senior teachers
	• Teachers need guidance from more experienced seniors who are experts in the field
	• There should be meetings among the teachers
Clear Learning References	• It's essential to have a well-organized syllabus
	• Leaders should ideally provide teachers with organized materials to ensure clarity
	• PATH-Fit content should be informed to avoid confusion

4. DISCUSSION

4.1. Theme 1: Retool PE Teachers

This theme delves into the pressing need among PE teachers for comprehensive retooling activities tailored to the PATH-Fit implementation requirements. According to the participants' responses, they are dealing with the challenges posed by the reformed PE in higher education, which stem from the novel nature of the lessons, activities, assessments, and approaches incorporated into this educational framework. Their demand for retooling initiatives starts from a desire for standardization or uniformity in their teaching methodologies. Because of the unfamiliarity with the new aspects of the program, there is an urgent need for structured support mechanisms that can assist teachers in aligning their instructional techniques with the complexities of PATH-Fit. Educators hope to streamline their teaching approaches by providing the necessary retooling activities and fostering consistency and coherence in lesson delivery, as evidenced by their responses below:

> *"...since PATH-Fit is entirely new to us, we have no exposure to the subject so much. So, I suggest having workshops or seminars for PATH-Fit courses. This would help standardize our approach to PATH-Fit with other institutions and improve the delivery and instruction of PATH-Fit..." – P13*
>
> *"...it would be great if we could have seminars or workshops that specifically focus on the different areas of the PATH-Fit courses." – P11*

Further, pursuing standardized teaching methods is more than just an organizational endeavor, as it can significantly boost teachers' confidence. Educators will likely feel more confident in their instructional abilities as they gain proficiency in their teaching subjects. The theme also emphasizes the mutual relationship between retooling initiatives and the effectiveness of PE in higher education as the emphasis on standardized teaching approaches not only addresses the challenges that educators face but also guarantees to improve the quality of the learning journey for students, resulting in a more effective and rewarding PE experience.

Furthermore, education, including PE, is constantly evolving because of advances in pedagogical theories, technology, and societal changes. Hence, frequent retooling allows educators to stay proactive in these transformations, ensuring that their teaching methodologies remain relevant and effective (Kulshrestha and Pandey, 2013). Initiatives like these will ensure that the tools and strategies are aligned with their goals and expectations (Matuk et al., 2016), and they can potentially improve the quality and effectiveness of teaching, thereby improving student learning. It also has the potential to improve teachers' knowledge, particularly when combined with teacher training activities (de Sousa et al., 2020), and can help with the organizational learning required to implement change in teacher education. Designing retooling activities for teachers is essential for their professional development and the overall improvement of the educational system (Anagnostopoulos et al., 2018).

4.2. Theme 2: Prioritize Facilities and Equipment for PATH-Fit

This theme is centered on teachers' suggestions to prioritize investment in facilities and equipment for the smooth implementation of PATH-Fit. The research participants' insights focus on the negative impact of inadequate learning facilities on the effective delivery of quality PE, influencing students' overall learning experiences and appreciation of the subject. Teachers emphasize the importance of students engaging in firsthand experiences rather than relying solely on descriptive explanations of these essential tools within the PATH-Fit framework, highlighting the critical need for prioritizing the acquisition and accessibility of facilities and equipment. Teachers agree that improving the learning environment through prioritizing facilities and equipment addresses existing challenges and paves the way for an enhanced educational experience, fostering a deeper understanding and engagement with the PATH-Fit curriculum. Based on the research participants:

> *"…for PATH-Fit courses, it would be great if the school could provide the necessary equipment and facilities. This way, students can have hands-on experiences with various sports and activities rather than just hearing about them." – P10*
>
> *"The institutions should prioritize providing the necessary resources, particularly equipment, and suitable facilities for students' learning…" – P14*
>
> *"…as for facilities, we don't have a gymnasium, and there's no outdoor area for activities. We are limited to using classrooms, which are not spacious, so we end up assigning more written activities to the students because there's no room for physical activities…" – P7*

This theme implies that the compelling recommendation from educators emphasizes these resources' critical role in providing high-quality PE. Participants' insights highlight the vital impact of inadequate learning facilities on effective instruction delivery and students' overall learning experiences, directly influencing their appreciation of the subject matter. Adequate facilities and equipment are critical because they directly influence the quality and effectiveness of the learning experience. PE is

inherently practical in requiring students to participate in various physical activities to develop motor skills, fitness, and overall well-being. Access to appropriate facilities, such as sports fields, gymnasiums, and specialized equipment, fosters a hands-on learning environment, allowing students to apply theoretical concepts in real-world settings.

This theme is congruent with the findings of Ananomo et al. (2020), who discusses that adequate facilities and equipment in PE are crucial for the quality of teaching and learning. The maintenance of these resources is equally important, with administrative policy, finance, and teacher aptitude playing critical roles in the educational process. The condition and quality of sports infrastructure in schools can impact the learning process, with a need for optimization and standardization (Irawan and Prasetyo, 2019). Therefore, ensuring the availability and proper maintenance of facilities and equipment in PE is essential for effective teaching and learning. Moreover, equipped facilities improve the safety and efficiency of physical activities and enable a wide range of exercises that cater to individual needs and abilities. Adequate facilities and equipment are more than just logistical requirements; they are foundational elements that foster a positive attitude toward physical activity, promote skill development, and contribute to student's holistic growth and lifelong well-being.

4.3. Theme 3: Amplify the Significance of PE in an Academic Curriculum

Insights from research participants highlight the critical role of teachers as designers and facilitators of learning in this realization of the importance of PE within the school curriculum. In today's academic environment, students need to see PE as more than just a required subject to fulfil attendance requirements; it is an intrinsic and valuable component of their educational journey. As educational guides, teachers play an essential role in changing this perception. They instill in students the understanding that PE contributes to holistic development, mental well-being, and the acquisition of life skills and physical fitness. Encouraging students to see PE as an integral part of their educational pursuits rather than just a requirement will pave the way for cultivating a mindset that recognizes the long-term benefits of a well-rounded education. To wit:

> *"...students underestimate PE. They don't realize that PE has special cases in terms of instruction, activities, and exam guidelines. These aspects aren't as clearly defined as in general education subjects, where it's mostly classroom based. This can lead to overlooking the unique aspects of PE." – P8*

This theme implies that PE is critical in addressing students' overall development beyond the traditional emphasis on physical fitness. In an era of sedentary lifestyles and increased screen time, PE is a cornerstone for encouraging regular physical activity, combating health issues, and instilling lifelong habits for overall well-being. Furthermore, PE allows for social interaction, teamwork, and essential life skills such as communication and leadership. Recognizing and appreciating PE in the school curriculum promotes a healthy lifestyle and fosters a comprehensive understanding of the interplay between physical and mental health, resulting in well-rounded individuals capable of success in academic and life pursuits.

In the current educational landscape, the significance of PE exceeds traditional notions, now strengthened by insights from neuroscience and neuroeducation that underscore its pivotal role in promoting mental and social well-being and enhancing academic performance (Serice, 2022). Li (2020) reinforces this perspective by highlighting the direct correlation between the quality of PE programs and students'

physical fitness and mental health, which are integral to their overall learning experience. PE is a cornerstone for developing practical knowledge, providing a compelling intrinsic rationale for its inclusion in the curriculum. Complementing this, Chelnokova et al. (2018) emphasize cultivating a genuine appreciation for physical culture and sports among students through fostering a conscious appreciation for physical exercise and enhancing socio-cultural status.

4.4. Theme 4: Lesser Paper and Pen Activities

This theme delves into a noteworthy suggestion by PE teachers advocating for fewer paper and pen activities in the PATH-Fit curriculum. Their viewpoint is based on the belief that PE should provide a dedicated space for active engagement, recreation, and a break from the stress caused by demanding schedules and academic workloads. The research participants' insights highlight concerns about specific chapters in PATH-Fit that rely heavily on lectures and traditional pen-and-paper exercises, which deviate from the essence and goal of PE. As articulated by the participants, the primary purpose of PE is to provide a platform for students' holistic growth through movement education, emphasizing the need for a curriculum recalibration to align more seamlessly with the dynamic, experiential nature inherent in PE. As research participants have expressed:

> *"... there's a significant focus on discussions and many paper-and-pencil activities, which don't seem suitable for a PE subject." – P2*
>
> *"Chapters one and two primarily involve discussions and these activity types, which don't include physical exercises. Students have asked, 'Sir, aren't we in a PE class? Why are our activities mostly on paper?' Instead of doing physical activities, the students do more written work." – P9*

This theme implies that the teachers' viewpoints represent a fundamental shift in pedagogical approach as it reveals concerns about aspects of PATH-Fit that heavily emphasize traditional teaching methods, deviating from the essence of PE. This infers a transformative reevaluation of teaching methods and curriculum design, indicating a shift toward a more student-centered, engaging, and holistic approach that improves learning outcomes and aligns with PE's broader goals of fostering holistic growth and well-being.

With the principles of embodied learning and the theory of enactivism, these perspectives emphasize the importance of active engagement with the environment and the body's role in shaping cognition and learning. As highlighted by Herold and Waring (2017), there is a growing recognition of the need to reduce paper and pen activities in PE, aligning with the shift towards practical knowledge acquisition and promoting physical literacy (Giblin et al., 2017). This shift necessitates a more hands-on approach to learning, which traditional paper and pen activities may hinder. Westlund Stewart et al. (2015) underscore the importance of active, experiential learning in the subject. By reducing paper and pen activities, educators can better align with these pedagogical shifts, fostering a more engaging and practical learning experience in PE.

4.5. Theme 5: Intensify Seniors' Support and Guidance

This theme emphasizes research participants' perspectives on the importance of senior faculty members' unwavering support and guidance in successfully implementing the new PE in higher education curriculum. There are areas that novice teachers have yet to fully comprehend, which is especially important as they navigate the complexities of the teaching profession. Support and guidance from experienced

faculty members can take many forms, including regular meetings, consultations, and informal discussions. While these interactions may appear ordinary, they are profoundly important to novice teachers, providing valuable insights, mentorship, and camaraderie on their professional journey. These insignificant gestures contribute significantly to the development and confidence of emerging educators by creating a supportive environment. As the research participants said:

> *"...we also need support from senior teachers, especially regarding guidance. As novice teachers, we may not always know how to handle certain situations. We still need guidance from our more experienced seniors, who are experts in the field..." – P1*
>
> *"...there should also be meetings among the teachers who teach these courses to ensure uniformity in our programs and activities." – P6*

For new PE teachers exploring the teaching profession, the consistent support and guidance of senior faculty members and leaders is critical. In translating theoretical knowledge into effective classroom practices, novice educators frequently face challenges and uncertainties; that is why mentorship and support from more experienced colleagues will provide invaluable insights, strategies, and camaraderie which are all essential for professional growth. Senior faculty members act as mentors, imparting wisdom gained through years of experience, assisting in decision-making, and providing constructive feedback. This consistent support accelerates novice teachers' learning curves and boosts their confidence and resilience in facing challenges. It also promotes a positive and collaborative culture within the educational institution, encouraging a shared commitment to the continuous improvement of PE instruction and, as a result, enriching students' overall learning experience.

This finding parallels the study of Squires (2019), which emphasizes the importance of a structured support system, with mentors playing an essential role in assisting new teachers in establishing themselves within the school. Whalen et al. (2019) emphasizes the value of experienced teacher mentors in helping new teachers as they navigate the challenges of their first year, while Schwan et al. (2020) emphasize the positive impact of mentor experience, time spent with a mentor, and the quality of mentor interactions on new teachers' self-efficacy and reflection. Etzkorn and Braddock (2020) add that the attitudes of school leaders, who frequently choose senior faculty members as mentors, can significantly impact the mentorship's effectiveness. Senior faculty members and experts' support and mentoring of new teachers is critical for their successful integration into the teaching profession.

4.6. Theme 6: Clear Learning References

This theme emphasizes the teachers' suggestions, emphasizing the importance of clear and well-organized learning references in the new PE in higher education. According to research participants, structured references, including comprehensive syllabi, are vital because they are indispensable tools for refining teaching methodologies and tracking progress within specified timeframes. While teachers may address challenges encountered during PATH-Fit implementation, consistency in program delivery becomes critical, and having clear learning references is vital to achieving this consistency, as they provide a standardized foundation for the PE in higher education. These references not only help educators maintain consistency, but they also contribute to a more systematic and efficient approach to PATH-Fit delivery, ultimately improving the overall quality of the educational experience for both teachers and students as evidenced by the responses of the research participants:

> *"... it's essential to have a well-organized syllabus, a structured way of teaching, and monitoring logs that need to be addressed within a specific timeframe. Our leaders should ideally provide us with organized materials such as syllabi, to ensure clarity, and our content should be consistent to avoid confusion." – P3*
>
> *"...sometimes, there's uncertainty, and we must devise ways to deliver the content because what's given to us isn't properly conceptualized. It seems like it's taken directly from the book without any organization. This leads to confusion because PE has various branches..." – P5*
>
> *"... we should have clear learning references so we can have a unified approach to the delivery of topics to the students, ensuring that we are all on the same page in terms of what PATH-Fit is and what should be done for PATH-Fit." – P11*

In PE, having clear and well-crafted learning materials is critical for fostering effective teaching and maximizing student learning outcomes. These materials, which include structured lesson plans, comprehensive syllabi, and engaging resources, serve as a road map for educators to consistently organize, present, and assess content. Clear learning materials assist teachers in managing their lessons and contribute to standardizing instructional approaches, ensuring a consistent learning experience for all students.

This idea is supported by the findings of Quennerstedt (2013), which emphasizes the development of practical knowledge, which can be enhanced by using references to support and expand on the material being taught. Redelius et al. (2015) emphasize the importance of setting specific goals that can be reinforced with relevant literature and research references. Pill and SueSee (2017) emphasize the importance of critical thinking in PE, with references used to stimulate and support this cognitive process. Clear references in PE boost the credibility of the taught content and lay the groundwork for practical knowledge, goal-setting, and critical thinking.

5. CONCLUSIONS

This study delves into crucial themes, highlighting the insights and suggestions for implementing the new PE in Philippine higher education. The themes, which range from the need for ongoing teacher retooling to the importance of prioritizing facilities and equipment, reveal complex insights beyond immediate concerns and have extensive implications for the educational landscape.

Hence, this study concludes that teachers' demand for retooling activities reflects the fluid nature of educational frameworks, especially when confronted with reforms in the curricula such as PATH-Fit. It reveals educators' desire for standardization and uniformity in teaching methodologies, indicating a desire for more cohesive and effective program delivery. The call to prioritize facilities and equipment also reveals an essential aspect of the learning environment, with insufficient resources as a barrier to providing quality PE.

Further, this study concludes that teachers play a critical role in reshaping students' perceptions, especially in cultivating an appreciation of PE. This goes beyond meeting mandatory requirements but emphasizes the subject's transformative potential in contributing to student's holistic development and well-being. The call for fewer paper and pen activities within PATH-Fit also aligns with current educational philosophies that promote experiential learning and active engagement as it suggests recalibrating teaching methods to reflect the dynamic, experiential nature of PE, resulting in a more immersive and impactful learning experience for both teachers and students.

Furthermore, this study concludes the importance of senior support and clear learning references in PE success. It emphasizes the significance of mentorship and guidance in helping teachers overcome professional challenges and the necessity of well-structured learning materials to ensure consistency and effectiveness in program delivery.

Moreover, this study concludes that the successful implementation of PATH-Fit requires continuous and joint efforts as it requires ongoing support and guidance for educators, a conducive learning environment, and a curriculum that faultlessly aligns with the goals of PE. This goes beyond the immediate challenges discussed in each theme, contributing to a more comprehensive understanding of how these elements interact to shape the future of PE in higher education. As educators, administrators, and policymakers consider the study's findings and recommendations, they are encouraged to adopt a holistic perspective that goes beyond the superficial challenges, fostering an environment where PATH-Fit can thrive so students can experience a transformative educational journey.

6. LIMITATIONS

The study's focus on a specific group of teachers within the Philippine context may limit the generalizability of findings to other educational settings or cultural contexts. Future research endeavors could benefit from expanding the sample size to include a more diverse range of participants, such as administrators, students, and parents, to gain a more comprehensive understanding of the program's impact.

Further, longitudinal studies could be conducted to assess the long-term effects of the PATH-Fit program on student outcomes and teacher practices. Comparative studies across different educational systems could provide valuable insights into the transferability of strategies for curriculum implementation and teacher support.

7. REFERENCES

Abbasov, B. A., and Mavlyanov, F. A. (2019). Issues of Improvement of the Form of PE in Health Promotion. *Theoretical and Applied Science*, (10), 659-661. https://doi.org/10.15863/TAS.2019.10.78.123

Anagnostopoulos, D., Levine, T., Roselle, R., and Lombardi, A. (2018). Learning to redesign teacher education: A conceptual framework to support program change. *Teaching Education*, *29*(1), 61-80. https://doi.org/10.1080/10476210.2017.1349744

Ananomo, L. E., Umeasiegbu, S. N., and Madueke, J. C. (2020). Global Education: The Challenges of Physical Education Teaching and Learning in Nigeria. *International Journal of Engineering And Computer Science, 7*(4), 84-98.

Cariaga, J. N. (2014). The PE program of state universities in Isabela: An assessment. *Research Journal of PE Sciences. 2320*, 9011.

Chelnokova, E. A., Agaev, N. F., and Tumaseva, Z. I. (2018). Formation of Students' Motivation for Physical Culture and Sports in Higher Education. *Vestnik of Minin University*, *6*(1), 6. https://doi.org/10.26795/2307-1281-2018-6-1-6

Cimene, F. T., Paster Jr, M. C., Llumuljo, R. P., Aguaviva, A. A., Cabrillos, D. H., and Mahinay, C. D. (2020). Physical education and stress: a person-environment fit perspective. *Geocarto International*, *3*(1), 18-25.

Creswell, J. W., and Clark, V. L. P. (2004). Principles of qualitative research: Designing a qualitative study. *Office of Qualitative and Mixed Methods Research, University of Nebraska, Lincoln.*

Creswell, J. W., and Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches.* Sage publications.

Cruz, A. B. (2022). Post-primary School Students' Attitudes Toward PE and Physical Activity Preferences: Philippines' K-12 Program. *The Asia-Pacific Education Researcher*, *31*(5), 507-517. https://doi.org/10.1007/s40299-021-00598-2

de Sousa, J. R., Gusmão, T. C. R. S., Font, V., and Lando, J. C. (2020). Task (re) design to enhance the didactic-mathematical knowledge of teachers. *Acta Scientiae*, *22*(4), 98-120. https://doi.org/10.17648/acta.scientiae.5711

Eatough, V., and Smith, J. A. (2017). Interpretative phenomenological analysis. *The Sage handbook of qualitative research in psychology*, 193-209.

Eduardo, J. P., & Gabriel, A. G. (2021). Indigenous peoples and the right to education: The dumagat experience in the provinces of Nueva Ecija and Aurora, in the Philippines. *Sage Open*, *11*(2), 21582440211009491.

Etzkorn, K. B., and Braddock, A. (2020). Are you my mentor? A study of faculty mentoring relationships in US higher education and the implications for tenure. *International Journal of Mentoring and Coaching in Education*, *9*(3), 221-237.

Giblin, S., Collins, D. J., Button, C., and MacNamara, A. (2017). Practical precursors to reconsidering objective for physical activity in PE. *British Journal of Sports Medicine*, *51*(21), 1572-1572. https://doi.org/10.1136/bjsports-2017-098238

Habyarimana, J. D. D., Tugirumukiza, E., and Zhou, K. (2022). Physical education and sports: A backbone of the entire community in the twenty-first century. *International Journal of Environmental Research and Public Health*, *19*(12), 7296.

Herold, F., & Waring, M. (2017). Is practical subject matter knowledge still important? Examining the Siedentopian perspective on the role of content knowledge in physical education teacher education. *Physical Education and Sport Pedagogy*, 22(3), 231-245.

Hagos, L. C., & Dejarme, E. G. (2008, January 1). *Enhancing curriculum in Philippine schools in response to global community challenges.* [Conference presentation]. EDU-COM International Conference, Edith Cowan University. https://ro.ecu.edu.au/ceducom

Irawan, F. A., and Prasetyo, F. E. (2019). Sport infrastructure for PE in senior high school. *International Journal of Multicultural and Multireligious Understanding*, *6*(1), 66-70. https://doi.org/10.18415/ijmmu.v6i1.491

Kalu, M. E. (2019). Using emphasis-purposeful sampling-phenomenon of interest–context (EPPiC) framework to reflect on two qualitative research designs and questions: A reflective process. *The Qualitative Report*, *24*(10), 2524-2535.

Kulshrestha, A. K., and Pandey, K. (2013). Teachers training and professional competencies. *Voice of research*, *1*(4), 29-33.

Larkin, M., Shaw, R., and Flowers, P. (2019). Multiperspectival designs and processes in interpretative phenomenological analysis research. *Qualitative research in psychology*, *16*(2), 182-198.

Li, M. (2020). Cultivation Methods of Students' Lifelong PE Consciousness in High School PE. *Insight-Sports Science*, *2*(1). https://doi.org/10.18282/iss.v2i1.336

Matuk, C., Gerard, L., Lim-Breitbart, J., and Linn, M. (2016). Gathering requirements for teacher tools: Strategies for empowering teachers through co-design. *Journal of Science Teacher Education*, *27*(1), 79-110. https://doi.org/10.1007/s10972-016-9459-2

Miles, M. B., and Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. sage.

Palomaria, J. A. R., and Aquino, J. M. D. (2023). Improving PE in higher education institutions in the Philippines: Examining teachers' roles and perceptions in implementing CHED Memo No. 39, S. 2021. *Edu Sportivo: Indonesian Journal of PE , 4(2), 97–113.* https://doi.org/10.25299/es:ijope.2023.vol4(2).11788

Panganiban, T. D. C. (2019). Quality assessment of physical education program of state universities in the Philippines. *Jurnal SPORTIF: Jurnal Penelitian Pembelajaran*, *5*(2), 166-174.

Peromingan, R. S. J., Misil, E. S., Andajao, M. F. J. M., and Labad, E. M. (2023). Adapted New Tertiary Physical Actvitites for Students with Disabilities. *Available at SSRN 4408513*. https://doi.org/10.2139/ssrn.4408513

Pill, S., and SueSee, B. (2017). Including critical thinking and problem solving in PE. *Journal of PE, Recreation and Dance*, *88*(9), 43-49. https://doi.org/10.1080/07303084.2017.1367741

Quennerstedt, M. (2013). Practical epistemologies in PE practice. *Sport, Education and Society*, *18*(3), 311-333. https://doi.org/10.1080/13573322.2011.582245

Redelius, K., Quennerstedt, M., and Öhman, M. (2015). Communicating aims and learning goals in PE: Part of a learning subject?. *Sport, Education and Society*, *20*(5), 641-655. https://doi.org/10.1080/13573322.2014.987745

Schwan, A., Wold, C., Moon, A., Neville, A., and Outka, J. (2020). Mentor and new teacher self-perceptions regarding the effectiveness of a statewide mentoring program. *Critical Questions in Education*, *11*(3), 190-207.

Serice, L. (2022). *Neuroeducation and Exercise: A Teaching Framework for Multidimensional Well-Being and Exercise Sustainability* (Doctoral dissertation, Johns Hopkins University).

Smith, J. A. (2011). Evaluating the contribution of interpretative phenomenological

Squires, V. (2019). The well-being of the early career teacher: A review of the literature on the pivotal role of mentoring. *International journal of mentoring and coaching in education*, *8*(4), 255-267.

Tindowen, D. J. C., Bassig, J. M., & Cagurangan, J. A. (2017). Twenty-first-century skills of alternative learning system learners. *Sage Open*, *7*(3), 2158244017726116.

Velez, L. (2023). Explicit instruction in fitness exercise for PATHFit II (physical activities towards health and fitness). *Indonesian Journal of Research in PE, Sport, and Health (IJRPESH)*, *1*(1), 30-43.

Westlund Stewart, N., Divine, A., O, J., and Law, B. (2015). Considerations for conducting imagery interventions in PE settings. *Journal of Imagery Research in Sport and Physical Activity*, *10*(1), 31-47. https://doi.org/10.1515/jirspa-2015-0001

Whalen, C., Majocha, E., and Van Nuland, S. (2019). Novice teacher challenges and promoting novice teacher retention in Canada. *European Journal of Teacher Education*, *42*(5), 591-607.

Zhang, Q., Liao, H., and Hao, Y. (2018). Does one path fit all? An empirical study on the relationship between energy consumption and economic development for individual Chinese provinces. *Energy*, *150*, 527-543. https://doi.org/10.1016/j.energy.2018.02.106

The International Journal of Interdisciplinary Educational Studies
ISSN: 2327-011X (Print), ISSN: 2327-2570 (Online)
Volume 20, Issue 2
https://doi.org/10.18848/2327-011X/CGP/v20i02/151-172

Original Research

Preparing for Face-to-Face Classes after COVID-19: Experiences and Best Practices of Elementary School Teachers

Marc Angielou L. Alagao, University of Southern Mindanao, Philippines
Ruben L. Tagare, Jr., University of Southern Mindanao, Philippines
Marlene E. Orfrecio, University of Southern Mindanao, Philippines
Helen Grace D. Lopez, University of Southern Mindanao, Philippines
Priscilla P. Dagoc, University of Southern Mindanao, Philippines
Norge D. Martinez, University of Southern Mindanao, Philippines
Moreno B. Java, Jr., University of Southern Mindanao, Philippines
Jomar B. Esto, University of Southern Mindanao, Philippines

Received: 08/24/2024; ***Accepted:*** 10/18/2024; ***Published:*** 01/08/2025

Abstract: This study explores the preparatory measures, challenges, and best practices employed by elementary teachers during the full implementation of face-to-face classes in the post-pandemic era. Following the disruptions caused by the COVID-19 pandemic, schools faced the daunting task of transitioning back to in-person learning. Seven elementary school teachers participated in open-ended interviews to share their experiences. Using Colaizzi's qualitative data analysis method, key themes were identified in three areas: preparatory measures, challenges, and best practices. The results revealed that teachers prepared by fixing school equipment and facilities, maintaining strong communication with parents, and developing self-equipped teaching skills. However, they also encountered significant challenges, including ensuring safe school environments, personal financial sacrifices due to limited government support, addressing student learning gaps, and dealing with insufficient parental involvement. Despite these challenges, teachers demonstrated resilience by motivating themselves, fostering optimism, engaging in effective communication with parents, and promoting cooperation among school personnel. This study highlights the crucial role of elementary teachers in managing the transition back to full face-to-face instruction and provides insights into their experiences. While the study fills a gap in the literature on post-pandemic education, its limitations include a small sample size and regional focus, suggesting further research to validate the findings in other settings. The insights gained from this study are valuable for educational leaders and policymakers to develop more effective strategies for supporting teachers and students in the evolving educational landscape.

Keywords: *Best Practices of Elementary Teachers, Challenges, and Preparation*

Introduction

The return to face-to-face classes after the prolonged disruption caused by the COVID-19 pandemic marks a significant transition in the education sector. In the post-pandemic era, schools across the globe are gradually restoring in-person instruction, which many educators

believe to be essential for fostering social interaction and promoting active learning (Paudel 2021). The unprecedented shift to modular and online remote learning altered traditional educational delivery methods (Bumblauskas and Vyas 2021; Bozkurt et al. 2020). As schools reopened, they faced the challenge of addressing learning gaps accumulated over years of remote instruction, particularly for younger learners. Elementary school students just beginning to grasp fundamental academic skills were especially vulnerable to interruptions in their learning progress (Andarwulan et al. 2021). The current post-pandemic era offers a critical opportunity for educational systems to recalibrate and provide robust, in-person educational experiences that respond to these challenges.

Teachers, especially elementary-level teachers, have encountered numerous difficulties in this transition. During the pandemic, they had to quickly adapt to various learning modes, often with limited resources and training (Rasmitadila et al. 2020). Returning to full face-to-face teaching, they face new challenges, including managing diverse learning needs, addressing significant learning loss, and ensuring that students are adequately prepared for their grade level (Widodo et al. 2020; Rahmawati 2022). Moreover, elementary teachers now have to navigate classrooms where students' engagement levels, social skills, and foundational knowledge may vary widely due to their differing experiences during remote learning (Eika 2021). These challenges underscore the complexity of classroom management in the current educational landscape.

Several studies have investigated the preparations undertaken by schools for the resumption of face-to-face classes, including logistical planning, health protocols, and curriculum adjustments (Aquino 2024). These preparations were crucial for ensuring a safe and effective learning environment, but little has been explored regarding how teachers, particularly at the elementary level, have managed these transitions. Teachers have reported difficulties implementing new teaching strategies, modifying lesson plans, and addressing students' heightened emotional and social needs upon their return to the classroom (Rasmitadila et al. 2020). While some research has begun to address these issues, such as in the case of a study conducted in Sorsogon, Philippines, which highlighted the challenges teachers faced in utilizing different learning modalities (Aquino 2024), there remains a lack of comprehensive exploration into the ongoing challenges of fully adopting face-to-face instruction.

Despite the growing body of research related to the educational impacts of the pandemic, a significant gap exists in the literature regarding the specific experiences of elementary teachers during the transition to full face-to-face classes. While much attention has been given to the logistical and health aspects of reopening schools, there has been insufficient focus on the strategies, challenges, and best practices from the teachers' perspective. This study fills that gap by thoroughly examining elementary teachers' experiences as they navigate the complexities of fully implementing in-person learning. The novelty of this study lies in its focus on the firsthand experiences of elementary teachers during this crucial transition period, an area that has been

largely overlooked. The urgency of this research is underscored by the pressing need for schools to learn from the experiences of these educators to improve teaching strategies and prevent further damage to the education system in the event of future disruptions.

This research is particularly significant in the current body of knowledge, as it contributes to understanding how elementary school teachers are coping in a post-pandemic era. As educational systems worldwide strive to recover from the long-term effects of remote learning, it is essential to gather insights from teachers on the front line of this transition. Their experiences offer valuable information for educational policymakers, curriculum developers, and school administrators, providing a clearer understanding of the challenges and opportunities in returning to face-to-face learning. Furthermore, this study provides essential information that could inform the design of more effective support systems for teachers in future.

In addition to contributing to the academic literature, this study offers practical implications for educational leaders. Highlighting elementary teachers' experiences underscores the need for tailored interventions to support these educators in addressing the varied learning needs of their students. Based on the insights gathered from this study, proactive measures could help mitigate future disruptions in education and provide a more resilient foundation for the basic education system moving forward.

Ultimately, this research is essential for addressing the immediate needs of teachers and students in the aftermath of the pandemic and advancing the long-term development of knowledge in education. Focusing on the unique challenges elementary teachers face when returning to complete in-person instruction, this study aims to provide a deeper understanding of how educational systems can better support teachers and ensure that students receive the quality education they deserve. It offers a timely contribution to ongoing discussions about how best to navigate post-pandemic challenges in education.

Methods and Materials

Research Design

This study utilized a descriptive qualitative research design to investigate and examine the preparations of public primary teachers, drawing from the lived experiences of diverse individuals. This approach provides insights into the fundamental structures and meanings associated with adaptability in a post-pandemic context. Qualitative research adopts a holistic perspective to understand a population's beliefs, experiences, ideas, and behaviors (Creswell et al. 2014).

Additionally, a qualitative-descriptive research design serves as a methodological framework to comprehensively explore the preparations, challenges, and best practices of public elementary school teachers. This approach aims to thoroughly understand a particular topic or phenomenon by collecting rich, non-numerical data. It helps gain insights into

participants' beliefs, experiences, perspectives, and behaviors. The researcher selected a descriptive qualitative research design as the most appropriate and effective method to capture the experiences and diverse perspectives of the participants regarding their struggles in preparing for the transition to full face-to-face classes.

Research Participants and Materials

The study involved seven elementary teachers who participated in open-ended interviews. The primary instrument used for data collection was a set of guide questions specifically developed by the researchers to explore teachers' experiences during the transition to face-to-face classes. To ensure the reliability and validity of the instrument, a panel of experts in the field of education underwent a rigorous validation process. This process included thorough examination and refinement of the questions to ensure they were clear, relevant, and capable of eliciting meaningful responses. Additionally, the instrument was pre-tested, and expert feedback was incorporated to enhance its effectiveness further. All data collection activities were carefully documented using audio and video recording devices to maintain the accuracy and integrity of the data.

Data Analysis

This research employed Colaizzi's (Edward and Welch 2011) method of data analysis, a well-established qualitative research approach that draws out and organizes participants' lived experiences into clear, actionable insights. Colaizzi's seven-step process begins with thoroughly reading the interview transcripts, identifying significant statements, formulating meanings, and then organizing these meanings into thematic clusters. By using this method, the researchers were able to distill the raw interview data into central themes that reflect the teachers' experiences and challenges during the transition to full face-to-face classes. This structured approach ensured no meaningful detail was overlooked, making the analysis comprehensive and systematic.

Colaizzi's method was particularly appropriate for this study as it emphasizes the participants' authentic experiences and allows for a deep understanding of their perspectives. Given the exploratory nature of this research, which seeks to capture elementary teachers' unique challenges and preparations during the post-pandemic return to face-to-face classes, Colaizzi's method provided a robust framework for interpreting the data. The method's systematic approach also ensured that the findings were grounded in the participants' actual words and experiences, thereby maintaining the richness of the qualitative data while generating trustworthy and relevant insights into the field of education.

Results

Table 1: Preparatory Measures for Elementary Face-to-Face Classes

Essential Themes	*Categories*	*Core Ideas*
Fixing School Equipment and Facilities	Maintenance and Repairs	- Primary teachers repair damages - Primary teachers prepare themselves and the school for the possible effects of the pandemic -Primary teachers prepare the physical features of the classroom
Communication Through Updating the Parents/Guardians of Elementary Students	Ensuring Transparent Communication	- Primary teachers update parents by contacting them - Primary teachers inform parents of important matters - Primary teachers call for parents' meeting
Progressive Teaching to Children	Effective Teaching Strategies	- Primary teachers teach essential topics to students
Develop Self-equipped Teaching Skills	Teacher Professional Development	- Primary teachers practice self-equipping in teaching

Table 2: Challenges Encountered by Primary Teachers in the Preparation of Full Implementation of Face-to-Face Classes

Essential Themes	*Categories*	*Core Ideas*
Ensuring Safe and Successful School Environments	Safety Protocols and Measures	- Primary teachers find it challenging to prepare the learning environment for the students - Primary teachers prepare everything, including classrooms and themselves
Personal Financial Sacrifices for Lack of Government Support	Financial Strain and Sacrifices	- Primary teachers spend personal money to sustain students' needs - Primary teachers do not rely on donations - Primary teachers have more significant personal expenses
Poor Academic Skills of Children	Lack of Educational Foundation at Home During the Pandemic	- Primary teachers observed poor academic skills of students
Insufficient Parental Support	Insufficient Parental Support to teachers	- Primary teachers receive small help from parents
Addressing Learning Gaps in Children	Identified Learning Gaps	- Primary teachers observed learning gaps in students

Table 3: Best Practices for Elementary Teachers in Preparation for Face-to-Face Classes

Essential Themes	*Categories*	*Core Ideas*
Motivate oneself to overcome challenges	Personal Motivation for Success	- Primary teachers motivate themselves - Primary teachers face challenges despite the struggles
Maintaining an optimistic outlook	Positive Mindset Development	- Primary teachers develop a positive mindset
Proper communication with parents/guardians	Effective Parental Engagement	- Primary teachers communicate properly to parents
Facing challenges responsibly	Responsible Problem-Solving	- Primary teachers take responsibility for their profession
Cooperation among school personnel	Team Collaboration in Education	- Primary teachers work together with school personnel

Discussion

Preparatory Measures for Elementary Face-to-Face Classes

It Was Fixing School Equipment and Facilities

Primary school teachers prepared for the return to face-to-face classes by conducting maintenance and repairs on school equipment and facilities. This included fixing desks, chairs, whiteboards, and other classroom furnishings to ensure a safe and functional learning environment. They also organized classroom layouts to enhance student engagement. These efforts aimed to create conducive spaces for effective teaching and learning as schools transitioned back to in-person education. This idea is expressed by research participants 1 and 6:

> What I did was repair the children's tables if they were broken, and I also fixed the designs inside and outside our room, including the flowerpots and other items that required design. (RQ1P1)

> We need to start by cleaning the things inside and repairing any broken equipment in the classroom. This way, when the students return, everything will be in order. Then, I arranged my room, setting the chairs apart to allow social distancing among the students. (RP6)

The primary school teachers' efforts in maintaining and repairing school equipment and facilities have significant implications for the overall educational experience. Teachers address immediate safety concerns and foster a more engaging and effective classroom setting by ensuring a safe and functional learning environment. Organizing classroom layouts to enhance student interaction further supports active learning and collaboration. These

preparatory measures are crucial for a smooth transition back to face-to-face education, ultimately contributing to improved student outcomes and a positive school atmosphere.

This finding, supported by the studies of Berris and Miller (2011), emphasizes that a learning environment should be inviting to children, fostering a sense of safety and promoting an atmosphere conducive to learning. Moreover, Estrellado (2021) highlights this preparation as a pivotal move in preparing for the return to physical classrooms.

Communication Through Updating the Parents/Guardians of Elementary Students

This theme highlighted the importance of effective communication with parents and guardians of elementary students. The participants repeatedly stressed the need for clear, timely, and thorough communication to address concerns, share essential information, and reassure parents about the safety and logistics of fully implementing face-to-face classes in primary schools. As stated by participants 1 and 5,

> Prepare students by providing updates and information through contacting their parents. (RQ1P1)

> Before the classes started, I called a meeting for the parents and informed them to teach their children writing at home. (RQ1P5)

This theme implies that effective communication is crucial when addressing essential matters and issues with parents or guardians. It suggests that, given that students may not have fully learned reading, writing, and all topics in the modules, teachers must proactively arrange meetings and provide updates to parents and guardians to support their children's learning at home.

The finding is supported by Ozmen et al. (2016), who state that parent–teacher communication offers diverse advantages to teachers, the school, and parents. Fostering collaboration between schools and families is a focal point in educational discourse among scholars. The study by Buza and Hysa (2020) showed that establishing a partnership with parents is essential for enhancing the quality of education, as families significantly influence children's learning process and development.

Develop Self-Equipped Teaching Skills

This theme highlights the importance of teachers being lifelong learners, continually developing and refining their skills. It focuses on professional growth, teaching methods, classroom management, educational technology, curriculum development, reflective practice, emotional intelligence, and collaboration with parents. Together, these elements help create self-equipped teachers who are better prepared to adapt to the changing needs of their students and the education system. Participant 5 stated:

> Then, for me, we need to be equipped. You should be ready so that when the students return, and you face them, you are full of energy. (RQ1P5)

This finding implies that maintaining personal well-being is essential for teachers to be adequately prepared and energetic in the classroom. Given that many students are returning to school with weak educational foundations and high expectations, teachers strive to be well-equipped to meet these demands. However, this focus on preparedness may cause them to overlook the considerable adjustments they have had to make during and after the pandemic.

The result is supported by the study of Elas et al. (2019), which states that possessing knowledge and skills related to technology leads to more effective teaching, enabling educators to be better equipped in their approach. Even amid the pandemic, primary teachers make a concerted effort to exude energy in front of their pupils, aiming to uplift the mood and alleviate any apprehension about returning to school. Baser et al. (2016) emphasize that teachers undergo self-transformation by cultivating positive perspectives, attitudes, and dedicated efforts to acquire knowledge, ultimately enhancing their teaching methods significantly. This internal evolution toward positivity and continuous learning contributes to their ability to deliver more impactful and impressive teaching experiences for their students.

On the other hand, UNESCO (2018) highlights the importance of training teachers to fulfill their mediating and transformative roles, helping students become productive, ethical, and responsible citizens in a rapidly changing, interconnected world. Worldwide, educational systems rely on teachers to develop responsible citizens who can contribute to national prosperity.

Challenges Encountered by Primary Teachers for Face-to-Face Classes

Ensuring Safe and Successful School Environments in Post–COVID-19

In ensuring safe and successful school environments post–COVID-19, educators, administrators, and parents come together to emphasize the importance of maintaining safety and a positive school atmosphere. This involves adapting health protocols, supporting mental well-being, implementing flexible learning models, and fostering stakeholder collaboration. The key insights stress the importance of adaptable strategies that balance safety measures, with creating an effective learning environment. As stated by P1 and P4:

> What I mean is to determine if the school is ready for face-to-face interactions, as this poses the most significant challenge. Being adequately prepared for face-to-face learning is crucial for enabling students to learn easily. (RQ2P1)

> The preparation of the internal and external learning materials within the classroom needs to be clean and in good condition for the students, as that's the main problem we encounter. (RQ2P4)

This theme suggests that adapting health protocols for the safety of learners presents significant challenges. Teachers have struggled primarily with keeping schools and classrooms clean and safe to meet the standards set for the return of face-to-face classes. Preparing internal and external learning materials has also been a major challenge, requiring significant adjustments to create a conducive learning environment.

In response to the extensive trauma induced by the worldwide COVID-19 pandemic, it is increasingly imperative for educational institutions to actively seek methods to cultivate secure, trauma-sensitive, and rehabilitative learning environments (Brown 2021). Findings underscored the readiness of public schools at the beginning of the academic year, reflected in their preparedness and organization before class commencement. The study highlighted that these institutions adhered to safety protocols aligned with the Department of Health's mandates, demonstrating compliance among public schools. Consequently, the study of Gildo et al. (2023) concluded that public schools effectively executed and implemented school improvement and safety plans tailored explicitly for limited face-to-face classes, as evidenced by the observed protocols and strategies.

Personal Financial Sacrifices for Lack of Government Support

Within the theme of personal financial sacrifices due to lack of government support, participants shared their experiences, highlighting the economic difficulties and sacrifices they faced because of insufficient aid. The discussion explored the emotional and practical impacts of managing financial uncertainties independently. These narratives provided insights into the strategies used, the role of community support, and the resilience shown in the face of these challenges. The goal is to understand these sacrifices' human aspects better and advocate for better support systems. As stated by participants 5 and 6,

> The government budget falls short, particularly from the MOOE, as it struggles to cover and sustain all students' needs. As a teacher, it's disheartening when you can't supplement these limitations for the students and classroom's improvement. (RQ2P5)

> Before the class starts, I intend to complete the classroom setup for the students. Additionally, I've taken the initiative to construct a personal comfort room for the students, leveraging donations from others while also contributing as a teacher. (RQ2P6)

This theme suggests that, due to inadequate government funding for school repairs, primary teachers frequently have to use their money to cover these costs. The return to face-to-face classes post-pandemic has revealed a complex set of challenges, with primary teachers facing persistent financial difficulties as they try to fulfill their obligations.

To back up the findings, Fernando and Arrieta (2023) suggest that school leaders should examine these financial challenges and consider incorporating a financial literacy initiative into the in-service training teachers provide. This would assist in enhancing their financial management skills—the emotional toll of personal losses experienced during the pandemic, exacerbated by economic instability (Pascua and Tagare 2024). Teachers adapted to new teaching norms and balancing work-life demands while navigating reduced resources and increased pressures. In addition, Singh et al. (2021) emphasized that understanding these themes is crucial, revealing the importance of support networks, professional development, and strategies to foster resilience amid profound personal and professional upheavals.

Poor Academic Skills of Children. This theme focuses on understanding how the pandemic has impacted children's academic skills in reading, writing, and numeracy. Teachers have observed a decline in these skills, with students showing lower capabilities. As schools return to face-to-face classes, this issue has become a significant challenge for educators. Participant 2 stated:

> The struggles students face are largely due to the pandemic's impact. They've had difficulty learning fundamental skills like reading, writing, and numeracy. With the return to face-to-face classes, it's evident that their academic skills have significantly deteriorated. (RQ2P2)

This theme implies that primary teachers face challenges teaching some students with poor academic skills due to remote learning. The reopening of schools in the Philippines after the pandemic has seen concerning student academic performance. The learning outcomes have shown poor results despite returning to face-to-face classes.

This poses a significant challenge for the education system, highlighting the need for targeted interventions and support to enhance student learning in the post-pandemic scenario (Amora et al. 2023). Aguaded et al. (2023) stated that while learning loss occurred during phases of physical separation between teachers and students, the pandemic brought about an unforeseen shift in which the gap between them became primarily digital. Moreover, Wahyuni et al. (2023) highlighted several challenges students face when solving math problems, including difficulties with understanding reading texts, using mathematical terminology, making connections between issues, decision-making, uncertainty in problem-solving, time constraints, carelessness, and boredom.

Insufficient Parental Support

There is inadequate parental involvement in supporting teachers with restoring and cleaning school facilities during the return of face-to-face classes. The conversation delves into the difficulties of insufficient parental support, including the strain on school resources, compromised hygiene standards, and limited maintenance efforts. Participants discuss the importance of parental engagement in ensuring a safe and clean learning environment, emphasizing shared responsibility and the role of community collaboration. As P3 stated:

> I took it as a challenge because only a few helped me. (RQ2P3)

This implies that primary teachers encountered difficulties contacting parents to request assistance with school-related issues. The reopening of classes for the 2020 to 2021 school year, amid health risks and stringent protocols from concerned agencies, has emphasized the critical role of parental involvement in ensuring a safe and effective return to face-to-face learning.

Samoy et al. (2021) highlight the necessity for parents to actively engage with schools to navigate the challenges posed by health measures, underscoring the collaborative effort required between families and educational institutions during this post-pandemic transition. Dotterer and Wehrspann (2015) found that social and economic factors limit parental involvement in schooling. The study revealed that schools are often challenging for parents to reach. While there is consensus on the benefits of parental engagement, differing views exist on its purpose. Importantly, involvement in school activities serves social functions, but engaging parents in facilitating learning at home significantly impacts learning outcomes. Contrary to the findings, Novianti and Garzia (2020) found that 81.7% of parents supervise their children's study time, 80.4% assist with learning, 71.8% monitor study schedules, 69% identify learning difficulties, and 64.8% provide learning resources. While most parents are actively involved in online education, some face challenges with time management, attention, and explaining lessons.

Addressing Learning Gaps in Children

This discussion examines the learning gaps in children following the pandemic. It focuses on pinpointing specific areas of deficiency, such as core subjects, social skills, and emotional development. Teachers have noted persistent learning gaps, which make it challenging for students to keep up with lessons. Consequently, primary teachers view this as a significant challenge in transitioning back to face-to-face classes. P7 specified:

> So, in other words, learning gaps are the cause, and until now, they continue to be the students' problem. (RQ2P7)

This theme implies that primary teachers encounter significant challenges due to learning gaps in children following the lockdown. It suggests that schools' primary goal is to foster a love for reading and build a solid literacy culture post pandemic. However, developing this culture is challenging as students struggle to keep up with lessons, which has a noticeable impact on the educational system.

Tabroni et al. (2022) emphasize the crucial role of parental involvement in building a child's literacy culture, highlighting the collaborative effort needed between schools and parents to achieve this goal in the face of post-pandemic educational shifts. Moreover, Alejo et al. (2023) identified five key measures to address COVID-19 disruptions: ensuring universal access to education and attendance, regularly evaluating learning levels, focusing on fundamental skills, improving instructional effectiveness, and promoting psychosocial health and well-being.

Furthermore, De Vera et al. (2020) noted that issues such as the availability of materials and students' weak prerequisite skills are not directly addressed by Learning Action Cell (LAC) sessions, as these are more related to budgetary constraints and academic performance. However, LAC sessions can invite experts to help bridge these gaps. Through LAC sessions, teachers can gain new concepts and strategies to address learning gaps among students. Lastly, the study by Magcanta (2023) describes Consultation and Remediation through Virtual Enhancement (CARVE) as a technology-based intervention where teachers and students meet online twice a week. Its goal is to offer a platform for students to seek clarification and assistance with their lessons. At the same time, teachers provide remediation, highlighting teachers' innovations in addressing the pressing learning gaps among students.

Best Practices for Elementary Teachers in Preparation for Face-to-Face Classes

Motivate Oneself to Overcome Challenges

This theme highlights motivation as a critical strategy for primary teachers to overcome challenges. Participants demonstrated confidence in their self-reliance, believing their progress depended on their efforts. As stated by participants 1 and 3:

> Motivation and going with the flow are crucial because, ultimately, I'm the one who must help myself. If I don't confront my problems, they won't resolve themselves. Self-motivation is key, and it's something I consistently rely on. (RQ3P1)

> I faced all the tasks, despite the struggles and exhaustion, because there was no option but to complete the work. Eventually, I managed to overcome those challenges. (RQ3P1)

The finding implies that self-motivation is crucial for primary teachers to overcome challenges, especially when transitioning back to face-to-face classes. It suggests that educators must be self-motivated to address obstacles such as adapting to new teaching methods, managing classroom dynamics, and ensuring student engagement while following health and safety protocols.

In support, Baiza (2022) highlights the importance of self-motivation to extend beyond personal needs and prioritize the well-being of students. This call-to-action underscores educators' crucial role in meeting academic needs and fostering a supportive and caring student environment. Glickman (2024) emphasizes that empathy, dedication, and a commitment to students' well-being are crucial as teachers navigate the challenges of the post-pandemic educational landscape, viewing these challenges as learning opportunities. Amid the public health crisis of the COVID-19 pandemic, Nguyen (2021) stated that shifting from face-to-face to online modes of learning and teaching is deemed essential. It has been recognized that employing strategies to enhance motivation can assist in overcoming the associated challenges.

Maintaining an Optimistic Outlook

This theme captures teachers' resilience, adaptability, and innovative strategies to navigate unprecedented circumstances and continue providing quality education to children amid the pandemic. It highlights the importance of their role in shaping academic growth and students' emotional and psychological well-being during these trying times. Participant 2 stated:

> Simply be an optimistic, passionate, and consistently enthusiastic individual. (RQ3P2)

This theme indicates that a positive outlook can assist in overcoming challenges. A positive mindset helps individuals tackle difficulties with resilience, optimism, and determination. For teachers, fostering and maintaining a positive attitude can be an effective strategy for overcoming obstacles and teaching students successfully.

Despite the challenges of the pandemic and the return to face-to-face teaching, teachers have shown remarkable resilience, hope, and optimism (Nioda and Tagare 2024). Their determination to adapt to new methods and support students amid uncertainties highlights their resilience. Their hopeful and optimistic outlook has inspired colleagues and students as they navigate the post-pandemic educational landscape (Josefsson and Menham 2022). According to Finnegan (2022), effective teaching practices linked to students' hope include acknowledging and accepting negative emotions while maintaining a positive perspective.

Proper Communication with Parents/Guardians

This theme highlights the importance of effective communication with parents or guardians during the post-pandemic educational phase. Ensuring a smooth transition and addressing concerns requires open communication channels, providing essential information, and promptly addressing any issues. Schools can enhance students' education and well-being by fostering a supportive partnership with parents. Participant 4 stated:

> Engage in a polite and respectful conversation with parents regarding cleaning the internal and external areas of the classroom for the students. (RQ3P4)

This theme implies effective communication with students' parents or guardians. As schools resume in-person learning, clear and transparent communication is crucial for a smooth reintegration process for students, teachers, and families. It highlights that fostering partnership, trust, and cooperation between schools and families is essential during the transition to face-to-face classes. Prioritizing clear and timely communication can enhance parent engagement, support student success, and create a safe and effective learning environment for all.

El Cid (2018) explored the potential of teacher-initiated communication to enhance student learning and strengthen home-school connections. The study examined how this communication impacts relationships between home and school, student academic achievement, and motivation. Asmarani (2022) found that teachers and parents are essential as primary educators, with parents playing a pivotal role in guiding their children's behavioral, mental, and emotional development. Parents help motivate, discipline, and build confidence in their children. This underscores the need to develop effective communication channels with parents. Tantowi et al. (2022) revealed that enhancing student learning outcomes required fostering a strong connection between the school, teachers, and parents. This was accomplished through meticulous and systematic planning involving all school parties to ensure the best possible results.

Facing Challenges Responsibly

Facing challenges responsibly involves overcoming obstacles and embracing opportunities for growth, innovation, and resilience. It is about ensuring the well-being of both educators and students while maintaining educational quality and support in a rapidly changing academic landscape. Participant 5 stated:

> Stay consistently responsible and don't dwell on problems or challenges, as they can be overcome. Embrace your profession with love and always strive to maintain happiness. (RQ3P5)

This theme entails the continuity of education while facing challenges responsibly. The authors aim to shed light on responsible problem-solving. It reflects an approach that prioritizes problem-solving with a sense of responsibility and accountability. Moreover, the theme highlights the resilience, commitment, adaptability, collaboration, and student-centered focus necessary for maintaining continuity in education while responsibly addressing challenges. Educators and stakeholders can navigate obstacles effectively by adopting responsible problem-solving strategies, ensuring educational continuity, and promoting positive student learning outcomes.

Sá and Serpa (2020) focus on providing insights into the challenges and opportunities posed by COVID-19 for higher education. They advocate for rediscovering teaching approaches, leadership strategies, and communication channels within the digital landscape. This digital transformation is considered integral to advancing sustainable educational development, emphasizing the importance of adapting teaching practices to meet evolving needs, and embracing innovation to drive positive change. During crises, the dynamics of teaching and learning go through notable shifts (Tagare 2023). Be it natural disasters or human-made incidents, schools and colleges need resilience, adapting through innovative means to sustain teaching and learning activities. Consequently, ensuring the continuity of education presents a significant challenge to educators (Chang-Richards et al. 2013).

Cooperation Among School Personnel

This theme underscores the critical need for cooperation among school personnel and the potential consequences of lacking such cooperation. Collaboration and support among teachers, administrators, and staff are essential for creating a conducive and effective learning environment. Participant 6 stated:

> Help each other; if there's no assistance from the president or Ma'am (the school head), my expenses might increase. (RQ3P6)

This theme emphasizes the importance of collaboration among school personnel in addressing matters within the educational setting. The current landscape presents unprecedented challenges for school administrators in the Philippines and globally. By working together, educators can reduce expenses, enhance professional development, provide comprehensive student support, and improve educational outcomes for all stakeholders.

A recent study investigates explicitly the correlation between the leadership and management styles of school principals and the readiness of public schools for the academic year. Focusing on five schools in Laguna City, the research contributes to developing governance operations and contingency plans tailored to these schools. This study's findings aim to inform and guide these administrators in enhancing their leadership approaches and

operational strategies, intending to bolster the preparedness of schools to navigate the complex challenges they currently face (Villar et al. 2021). Additionally, collaborative efforts between parents, teachers, and school personnel are essential in educational settings, particularly during the pandemic, where online learning or schooling is prevalent (Anakotta 2022).

Conclusion

The study revealed that elementary teachers undertook various preparatory measures to ensure a smooth transition to full face-to-face classes. These included addressing physical infrastructure issues, such as fixing school equipment and facilities, and strengthening communication with parents and guardians to keep them updated on the evolving school protocols. Additionally, teachers demonstrated adaptability by progressively teaching students and developing self-equipped teaching skills, which proved essential in bridging the gap between virtual learning and in-person instruction. These preparations highlighted the teachers' proactive approach to creating a conducive learning environment, even under uncertain conditions.

However, the challenges encountered by elementary teachers were significant, reflecting the multifaceted nature of the return to face-to-face classes. Teachers had to ensure that school environments remained safe and conducive to learning, which often involved making personal financial sacrifices due to insufficient government support. Moreover, they had to address the poor academic skills of children, many of whom faced learning gaps from prolonged remote education, compounded by insufficient parental support. These challenges underscored teachers' complex realities in adapting to post-pandemic education and the overwhelming pressure placed on them to address these issues with limited resources.

Despite these challenges, the study identified several best practices that elementary teachers employed to overcome obstacles during the transition to full in-person classes. Teachers motivated themselves to rise above the difficulties, maintained an optimistic outlook, and actively communicated with parents and guardians to foster more vital collaboration. They also took responsibility for addressing the challenges head-on, emphasizing the importance of cooperation among school personnel to achieve a seamless resumption of face-to-face learning. These best practices demonstrate the resilience and creativity of teachers in navigating unprecedented circumstances.

The novelty of this study lies in its focus on the specific experiences of elementary teachers during the full implementation of face-to-face classes in the post-pandemic era. While previous studies have examined various aspects of distance learning and hybrid models, this research fills a crucial gap by exploring the preparations, challenges, and best practices from the lens of elementary school educators. The findings provide valuable insights for policymakers, educational leaders, and future researchers who seek to develop more effective

strategies in post-pandemic education, emphasizing the urgency of addressing schools' infrastructural and pedagogical needs.

The study's primary limitation is its small sample size, focusing on only seven elementary teachers, which may not fully represent the experiences of all educators in diverse settings. Additionally, the research was conducted in a specific geographical area, limiting the generalizability of the findings to other regions or contexts. Lastly, using self-reported data through interviews may have introduced biases, as participants could have underreported or overemphasized specific experiences.

AI Acknowledgment

The authors acknowledge the use of ChatGPT (https://chatgpt.com/) to enhance the manuscript. The prompts used include enhancing the sentence construction on some parts. The output from these prompts was used to enhance some of the content of the article.

Informed Consent

The authors have obtained informed consent from all participants.

Conflict of Interest

The authors declare that there is no conflict of interest.

REFERENCES

Aguaded, Ignacio, Arantxa Vizcaíno-Verdú, Victoria García-Prieto, and Patricia De-Casas. 2023. "The Impact of Post-Pandemic Learning Loss on Education Development: A Systematic Review." *Review of Communication Research* 11: 172–189. https://doi.org/10.5680/RCR.V11.7.

Alejo, Anna, Robert Jenkins, Nicolas Reuge, and Haogen Yao. 2023. "Understanding and Addressing the Post-Pandemic Learning Disparities." *International Journal of Educational Development* 102: 102842. https://doi.org/10.1016/j.ijedudev.2023.102842.

Amora, Angelo Jericho F., Cathy R. Benabente, Jerwin M. Luisen, Gerlyn D. Otero, Eileen Joan L. Villacampa, and Neil Edward D. Yee. 2023. "Challenges of Administrative Supervision on the Full Implementation of Face-To-Face Classes." *Journal of Namibian Studies: History Politics Culture* 34: 928–957.

Anakotta, Elka. 2022. "Proposing Models of Mutual Cooperation Between Parents and Teacher During Pandemic Era." Presented at the Proceedings of the First Lekantara Annual Conference on Public Administration, Literature, Social Sciences, Humanities, and Education, LePALISSHE 2021, Malang, Indonesia, August 3, 2021. https://doi.org/10.4108/eai.3-8-2021.2315075.

Andarwulan, Trisna, Taufiq Akbar Al Fajri, and Galieh Damayanti. 2021. "Elementary Teachers' Readiness Toward the Online Learning Policy in the New Normal Era during COVID-19." *International Journal of Instruction* 14 (3): 771–786. https://doi.org/10.29333/iji.2021.14345a.

Aquino, April LI. 2024. "Learning Modalities and Teaching Strategies Used by Junior High School Teachers in the 1st District of Sorsogon: An Assessment." *International Journal of Education, Business and Economics Research* 4 (2): 273–280.

Asmarani, Aulia. 2022. "Parenting Communication in a Pandemic (Descriptive Study of Parenting Communication in Educating and Protecting Children During A Pandemic in Giri Mekar Village, Cilengkrang District, Bandung Regency)." *Dinasti International Journal of Education Management and Social Science* 3 (4): 458–467. https://doi.org/10.31933/dijemss.v3i4.1173.

Baiza, Yahia, ed. 2022. "The Covid-19 Pandemic and Education Crisis: A Global Overview." In *Education in Troubled Times: A Global Pluralist Response*. Cambridge Scholars Publishing.

Baser, Jamil Abd, Rasidayanty Saion, Siti Salwa Ab Manap, Azman Hasan, and Abdul Rasid Abdul Razzaq. 2016. "Barriers of Inculcating Critical Thinking Skills in Teaching and Learning Process." *Advanced Science Letters* 22 (12): 4004–4006. https://doi.org/10.1166/asl.2016.8151.

Berris, Rebecca, and Evonne Miller. 2011. "How Design of the Physical Environment Impacts on Early Learning: Educators' and Parents' Perspectives." *Australasian Journal of Early Childhood* 36 (4): 102–110. https://doi.org/10.1177/183693911103600414.

Bozkurt, Aras, Insung Jung, Junhong Xiao, et al. 2020. "A Global Outlook to the Interruption of Education Due to COVID-19 Pandemic: Navigating in a Time of Uncertainty and Crisis." *Asian Journal of Distance Education* 15 (1): 1–126. https://doi.org/10.5281/zenodo.3878572.

Brown, Martha A. 2021. "We Cannot Return to 'Normal': A Post-COVID Call for a Systems Approach to Implementing Restorative Justice in Education (RJE)." *Laws* 10 (3): 68. https://doi.org/10.3390/laws10030068.

Bumblauskas, Daniel, and Nick Vyas. 2021. "The Convergence of Online Teaching and Problem Based Learning Modules Amid the Covid-19 Pandemic." *Electronic Journal of e-Learning* 19 (3): 147–158. https://doi.org/10.34190/ejel.19.3.2295.

Buza, Violeta, and Mirlinda Hysa. 2020. "School-Family Cooperation Through Different Forms of Communication in Schools During the Covid-19 Pandemic." *Thesis* 9 (2): 55–80.

Chang-Richards, Alice, John Vargo, and Erica Seville. 2013. "Organisational Resilience to Natural Disasters: New Zealand's Experience." *China Policy Review* 10: 117–119.

Creswell, J. D., L. E. Pacilio, E. K. Lindsay, and K. W. Brown. 2014. "Brief Mindfulness Meditation Training Alters Psychological and Neuroendocrine Responses to Social Evaluative Stress." *Psychoneuroendocrinology* 44: 1-12.

De Vera, Jayson L., Joanna A. Marie De Borja, and Antriman Orleans. 2020. "Addressing Instructional Gaps in K to 12 Science Teaching Through Learning Action Cell (LAC)." *International Journal of Research Publications* 46 (1).

Dotterer, Aryn M., and Elizabeth Wehrspann. 2015. "Parent Involvement and Academic Outcomes Among Urban Adolescents: Examining the Role of School Engagement." *Educational Psychology* 36 (4): 812–830. https://doi.org/10.1080/01443410.2015.1099617.

Edward, K. L., and T. Welch. 2011. "The Extension of Colaizzi's Method of Phenomenological Enquiry." *Contemporary Nurse* 39 (2): 163–171. https://doi.org/10.5172/conu.2011.39.2.163.

Eika, Evelyn. 2021. "Learning in Higher Education Under the Covid-19 Pandemic: Were Students More Engaged or Less?" *International Journal of English Linguistics* 11 (1). https://doi.org/10.5539/ijel.v11n3p96.

El Cid, Pascal. 2018. "Teacher-Initiated Communication with Parents: Preferred Types and Channels to Facilitate School-Home Relations and Enhance Student Performance and Motivation." Master's thesis, University of Victoria.

Elas, Noor, Faizah Majid, and Suthagar Narasuman. 2019. "Development of Technological Pedagogical Content Knowledge (TPACK) for English Teachers: The Validity and Reliability." *International Journal of Emerging Technologies in Learning (IJET)* 14 (20): 18–33. https://doi.org/10.3991/ijet.v14i20.11456.

Estrellado, Carie Justine. 2021. "Transition to Post-Pandemic Education in the Philippines: Unfolding Insights." *International Journal of Scientific and Research Publications* 11 (12). https://doi.org/10.29322/IJSRP.11.12.2021.p12074.

Fernando, Generose C., and Gilbert S. Arrieta. 2023. "Income, Expenses and Expenditure Patterns of Elementary Public-School Teachers: Inputs to a Proposed Financial Literacy Program." *International Journal of Social Learning (IJSL)* 4 (1): 129–141. https://doi.org/10.47134/ijsl.v4i1.226.

Finnegan, W. 2022. "Educating for Hope and Action Competence: A Study of Secondary School Students and Teachers in England." *Environmental Education Research* 29 (11): 1617–1636. https://doi.org/10.1080/13504622.2022.2120963.

Gildo, Desiree L., Richard R. Bermundo, Margie M. Rociento, et al. 2023. "School Improvement and Safety Plan for Limited Face-to-Face Classes." *International Education Trend Issues* 1 (2): 88–97. https://doi.org/10.56442/ieti.v1i2.152.

Glickman, Rachel A. 2024. "Reflecting on, Resetting, and Reimagining Schools in the Post-Pandemic Context: A Case Study in Rural Vermont."

Josefsson, A., and S. Menham. 2022. "English Teachers' Well-Being During the Covid-19 Pandemic: Understanding Their Perseverance." Digitala Vetenskapliga Arkivet.

Magcanta, Stephanie Rose. 2023. "Let's Carve: Bridging the Gaps to Overcome Academic Difficulties in the New Normal Between Teachers and Learners." *ZamPen Research Journal* 12 (2): 35-44. https://doi.org/10.2139/ssrn.4831666.

Nguyen, Hong-Thu Thi. 2021. "Boosting Motivation to Help Students to Overcome Online Learning Barriers in Covid-19 Pandemic: A Case Study." *International Journal of Interactive Mobile Technologies* 15 (10): 4–20. https://doi.org/10.3991/ijim.v15i10.20319.

Nioda, April Joy B., and Ruben L. Tagare Jr. 2024. "The Experiences of Non-Physical Education Generalist Teachers in Implementing PE in the Primary Grades: Implications for Capability Development Initiatives." *International Electronic Journal of Elementary Education* 16 (3): 325–335. https://doi.org/10.26822/iejee.2024.334.

Novianti, Ria, and Meyke Garzia. 2020. "Parental Engagement in Children's Online Learning During Covid-19 Pandemic." *Journal of Teaching and Learning in Elementary Education* 3 (2): 117–131. https://doi.org/10.33578/jtlee.v3i2.7845.

Ozmen, Fatma, Cemal Akuzum, Muhammed Zıncırlı, and Gulenaz Selcuk. 2016. "The Communication Barriers Between Teachers and Parents in Primary Schools." *Eurasian Journal of Educational Research* 16 (66): 27–46.

Pascua, Kathleen, and Ruben Lagunero Tagare Jr. 2024. "Experiences, Motivation, Commitment, and Suggestions of Physical Education Teachers Amidst COVID-19 Crisis." *Egitim ve Bilim* 49 (219): 187–200. https://doi.org/10.15390/EB.2024.12095.

Paudel, Pitambar. 2021. "Online Education: Benefits, Challenges and Strategies During and After COVID-19 in Higher Education." *International Journal on Studies in Education (IJonSE)* 3 (2). https://doi.org/10.46328/ijonse.32.

Rahmawati, Nur. 2022. "Teacher Problems During the Implementation of Learning in the New Normal Era in Elementary Schools." *Jurnal Ilmiah Sekolah Dasar* 6 (1): 176–185. https://doi.org/10.23887/jisd.v6i1.44485.

Rasmitadila, Rasmitadila, Rusi Rusmiati Aliyyah, Reza Rachmadtullah, et al. 2020. "The Perceptions of Primary School Teachers of Online Learning During the COVID-19 Pandemic Period." *Journal of Ethnic and Cultural Studies* 7 (2): 90–109. https://doi.org/10.29333/ejecs/388.

Sá, Maria José, and Sandro Serpa. 2020. "The COVID-19 Pandemic as an Opportunity to Foster the Sustainable Development of Teaching in Higher Education." *Sustainability* 12 (20): 8525. https://doi.org/10.3390/su12208525.

Samoy Jr, Hermenegildo F., Flordeliza C. Gecobe, Dakila Carlo E. Cua, et al. 2021. "From Ladle to Chalk and Pencil: Parents in the New Normal of Philippine Education System." *Universal Journal of Educational Research* 9 (3): 504–511. https://doi.org/10.13189/ujer.2021.090310.

Singh, Jitendra, Keely Steele, and Lovely Singh. 2021. "Combining the Best of Online and Face-to-Face Learning: Hybrid and Blended Learning Approach for COVID-19, Post

Vaccine, and Post-Pandemic World." *Journal of Educational Technology Systems* 50 (2): 140–171. https://doi.org/10.1177/00472395211047865.

Tabroni, Imam, Ayit Irpani, Didih Ahmadiah, Akhmad Riandy Agusta, and Sulaiman Girivirya. 2022. "Implementation and Strengthening of the Literacy Movement in Elementary Schools Pasca the Covid-19 Pandemic." *Multicultural Education* 8 (1): 15–31.

Tagare Jr, Ruben. 2023. "Back to In-Person Classes in the Philippine Basic Education: Threading the Opportunities and Limitations in the Teaching of Physical Education." *Challenges: New Trends in Physical Education, Sport and Recreation* 47: 986–993.

Tantowi, H. Ahmad, Ali Subchan, Sahri Romadon, and Rosidin. 2022. "Mutual Relationship Management Between Teachers and Parents: Strategies for Improving Student Learning Outcomes." *Al-Tanzim: Jurnal Manajemen Pendidikan Islam* 6 (3): 803–813. https://doi.org/10.33650/al-tanzim.v6i3.3643.

UNESCO. 2018. *Preparing Teachers for Global Citizenship Education. A Template*. UNESCO Bangkok Office.

Villar, Rycel Bungay, Alberto D. Yazon, Consorcia S. Tan, Lerma P. Buenvinida, and Marcial M. Bandoy. 2021. "School Heads' Leadership Practices in The New Normal, Administrative Disposition, and Readiness of the Public Schools in Laguna." *International Journal of Theory and Application in Elementary and Secondary School Education* 3 (2): 156–170. https://doi.org/10.31098/ijtaese.v3i2.683.

Wahyuni, Wahyuni, M. Zaiyar, Mazlan, Sahat Saragih, and Elvis Napitupulu. 2023. "Students Talk About Difficulties They Have in Solving Math Problems." *Al-Jabar: Jurnal Pendidikan Matematika* 14 (1): 181–190. https://doi.org/10.24042/ajpm.v14i1.16910.

Widodo, Arif, Nursaptini, Setiani Novitasari, Deni Sutisna, and Umar. 2020. "From Face-to-Face Learning to Web Base Learning: How Are Student Readiness." *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran* 10 (2): 149–160. https://doi.org/10.25273/pe.v10i2.6801.

ABOUT THE AUTHORS

Marc Angielou L. Alagao: Student Researcher, Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines
Corresponding Author's Email: malagao@usm.edu.ph

Ruben L. Tagare, Jr.: Associate Professor IV, Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines; Graduate Student, Adamson University, Manila, Philippines
Email: tagareruben@usm.edu.ph

Marlene E. Orfrecio: Associate Professor III, Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines
Email: meorfrecio@usm.edu.ph

Helen Grace D. Lopez: Associate Professor IV, Institute of Sports, Physical Education and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines
Email: hgdlopez@usm.edu.ph

Priscilla P. Dagoc: Associate Professor III, Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines
Email: ppdagoc@usm.edu.ph

Norge D. Martinez: Associate Professor IV, Institute of Sports, Physical Education and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines
Email: ndmartinez@usm.edu.ph

Moreno B. Java, Jr.: Associate Professor III, Institute of Sports, Physical Education and Recreation, University of Southern Mindanao, Kabacan, Cotabato, Philippines
Email: morns2176@gmail.com

Jomar B. Esto: Assistant Professor III, PALMA Cluster Campuses, University of Southern Mindanao, Kabacan, Cotabato, Philippines
Email: jbesto@usm.edu.ph

sciendo

Physical Culture and Sport. Studies and Research, 2025, 107, xx-xx
https://doi.org/10.2478/pcssr-2025-0005

OPEN ACCESS

Investigating the Local Culture and Characteristics of Gen Zs in Rural Communities: Insights in Improving Students' Physical Education Experience

Authors' contribution:

A) conception and design of the study
B) acquisition of data
C) analysis and interpretation of data
D) manuscript preparation
E) obtaining funding

Ruben L. Tagare, Jr.[1,2 A-D], Daniel B. Saroca, Jr.[1,3 ACD], Jerrwin C. Aguinaldo[4 ACD]

[1]*College of Education and Liberal Arts, Adamson University, Manila, Philippines*
[2]*Institute of Sports, Physical Education and Recreation, University of Southern Mindanao, Philippines*
[3]*Undergraduate Studies, Institute of Education, Far Eastern University, Manila, Philippines*
[4]*Department of Physical Education, Brother Andrew Gonzalez FSC College of Education, De La Salle University, Manila, Philippines*

Received: 26.08.2024
Accepted: 07.10.2024

***Correspondence:** Ruben L. Tagare, Jr.; 1College of Education and Liberal Arts Graduate School Adamson University, Manila, Philippines, 1000; Email: tagareruben@usm.edu.ph

Abstract

This study explored the local characteristics of Generation Z students in rural communities as insights to enhance the implementation of the Philippine PATH-Fit program and improve students' educational experiences. Employing a qualitative-ethnographic approach, insights were collected from 20 carefully selected participants through open-ended questions validated by experts. The findings identified seven key characteristics: competitiveness; pressure from external expectations; a tendency to overthink and experience emotional and depressive states; adaptability and cooperation; organizational skills and perfectionism; body consciousness; and a strong sense of social awareness, openness, and risk-taking. The study concludes that these students exhibit unique strengths and challenges. Their competitive nature and high standards are often accompanied by significant stress and self-imposed pressure. While their adaptability and teamwork skills help them navigate changing environments, their emotional sensitivity and focus on body image can affect their mental health. Their proactive approach to societal issues and openness to new experiences make them dynamic and complex individuals. These findings underscore the importance of addressing Generation Z students' strengths and vulnerabilities to better support their overall well-being and success within the PATH-Fit program.

Keywords: Educational enrichment; Generation Z; instructional adjustment; students' characteristics; rural communities

Introduction

There is a crisis of inactivity worldwide, as 81% of young people and 27% of adults fail to achieve the physical activity objectives established by the World Health Organization (WHO, 2022). Following Piercy et al. (2018), individuals are advised to engage in 150–300 minutes of moderate-intensity aerobic physical activity, 75–150 minutes of vigorous-intensity aerobic physical activity, or a combination of both, each week. The Philippines is the second most physically inactive country globally, with a staggering 92% of its young population being physically inactive. This poses a substantial public health hazard, as reported by the World Health Organization (WHO, 2019).

Physical education adopts a proactive strategy to confront this global crisis by providing students with the fundamental knowledge and abilities to embrace and encourage a physically active lifestyle (de Jesus et al., 2022).

By offering a well-organized curriculum and hands-on experiences, physical education cultivates enduring physical activity habits in young individuals. This contributes to improved public health outcomes and mitigates the adverse effects of a sedentary lifestyle (Siedentop & Van der Mars, 2022).

Generation Z, born between 1995 and the early 2010s, has substantially impacted the societal norms, cultural landscapes, and educational frameworks of generational dynamics (Dolot, 2018). Generation Z, or Gen Z, is the initial cohort of individuals born in the twenty-first century. They are acclimated to residing in a world significantly impacted by the widespread availability of information, globalization, and technological advancements (Seemiller & Grace, 2018). Cilliers (2017) underscored the significance of understanding the values and characteristics of this demographic for educators, policymakers, and researchers committed to tailoring educational programs to this generation's unique requirements and characteristics.

Generation Z is distinguished from other generations by a distinctive set of values, according to researchers from the United States. This is because they were raised when digital technology was the dominant force, including the pervasive use of smartphones, social media, and instant connectivity (Francis & Hoefel, 2018). Their inherent technological proficiency has influenced their communication methods and desire for immediate access to information, interactive educational experiences, and a global perspective (Iorgulescu, 2016). Gen Z is characterized by their practicality and resilience, influenced by their experiences with economic uncertainties, geopolitical shifts, and a swiftly evolving job market. A profound yearning for the inclusion of all individuals, equity, and authenticity characterizes this generation. Their values are rooted in a strong belief in social activism, equity, diversity, and environmental sustainability (Mohr & Mohr, 2017).

Additionally, the current generation's reliance on digital technology may decrease physical activity and increase sedentary behaviors among young individuals. This poses challenges for conventional physical education programs, primarily composed of instructor-led activities conducted in person (Kenney & Gortmaker, 2017). Traditional physical education methods emphasizing outdoor activities, sports, and group exercises are more prevalent in rural areas with limited technology and internet connectivity. However, to effectively address the discrepancy between Generation Z's preference for digital platforms and the traditional physical education methods in rural areas, it is necessary to implement innovative strategies incorporating technology-driven educational experiences, such as gamification, mobile applications, and online resources. These strategies are designed to promote physical activity and well-being among young people while also considering rural areas' unique cultural and environmental characteristics. The PATH-Fit program can create a learning experience that is both inclusive and dynamic while also considering the unique characteristics of Generation Z. The objective of this program is to encourage students to adopt active and healthy lifestyles and cultivate an enduring commitment to physical fitness and wellness.

Nevertheless, implementing physical education in numerous tertiary educational institutions in the Philippines has encountered significant challenges (Junio and Liwag, 2016). These obstacles include deficiencies in curriculum implementation and teacher training, and a lack of emphasis on the subject matter, frequently perceived as having a more significant political significance than cultural significance. The historical context suggests that tertiary physical education has been influenced by factors that extend beyond pedagogical considerations, as per Cariaga (2014). The scholarly discourse on these matters underscores the importance of a comprehensive enhancement approach. Abbasov and Mavlyanov (2019) emphasize the critical importance of enhancing the quality and efficacy of physical education by augmenting resources, such as investing in the development of human personnel and improving school facilities. Physical education subjects are frequently undervalued and given low priority in Malaysia, where similar challenges have been observed (Kilue & Muhamad, 2017). These concerns are not unique to the Philippines. Physical education instructors in Brazilian public schools encounter obstacles, such as deficient facilities, inadequate compensation, and a scarcity of resources (Osborne et al., 2016).

To address these critical issues, the Philippine Commission on Higher Education (CHED) has mandated that all Higher Education Institutions (HEIs) transition to and provide the new tertiary physical education program, Physical Activity Towards Health and Fitness (PATH Fit), as outlined in CMO 39, series of 2021. A proactive solution to imperative matters such as the demand for consistent teaching methods, PATH-Fit is specifically designed to provide a comprehensive and uniform curriculum. The framework emphasizes comprehensive development, fundamental life skills, and physical fitness. Additionally, the program is consistent with the requirements of the current educational system by implementing innovative strategies that can improve the overall quality and effectiveness of physical education in higher education (Peromingan et al., 2023).

The primary objective of PATH-Fit is to surpass conventional frameworks and revolutionize and improve the status of physical education in Philippine higher education. This will be accomplished by implementing a comprehensive program that integrates the development of essential life skills and physical fitness to address enduring challenges. (Velez, 2023). The curriculum's objective of providing students with a comprehensive educational

experience that emphasizes physical well-being, collaboration, effective communication, and overall development is further elaborated upon in the CHED CMO 39 (s. 2021). PATH-Fit endeavors to improve the quality and efficacy of higher education in Physical Education by incorporating innovative methods and adapting to current educational demands. This guarantees that graduates have the knowledge and skills to engage in active social activities and maintain their well-being.

Many studies have investigated the complex terrain of Generation Z, analyzing their behaviors in various educational and industrial environments. Bhore and Pandita (2022) conducted a comparison between Gen Z and Gen Y, discovering that social media has a substantial impact on the career decisions of Gen Z. Ajmain (2020) underscored the significance of implementing effective communication strategies and the influence of technology on the social communication abilities of Gen Z. A review was conducted by Shorey et al. (2021) to ascertain the learning styles, preferences, and requirements of healthcare students from Generation Z. They underscored the significance of incorporating technology and self-care strategies into the education of these students. According to Arkhipova et al. (2018), Generation Z students demonstrate a favorable attitude toward technology in education, which implies that their academic performance can be improved through proper technology utilization. The increased expectations of trust and dependence on social media among college Generation Z students were emphasized by Giunta (2017). This underlines the need for educators to understand and adapt to their students' unique characteristics and preferences.

Furthermore, recent research in the Philippines' tertiary physical education sector has focused on the assessment of the efficacy of existing curricula (Coronel & Ferrater-Gimena, 2017), teaching methodologies (Tanucan et al., 2021), and the overall educational experience (Aguinaldo et al., 2022). The research investigated the impact of technology on physical education, teacher practices, curriculum design, and student engagement (Escomes et al., 2021). The importance of program curriculum adaptability and rigorous quality evaluation has been emphasized by Panganiban (2019). In the interim, Graciano (2022) has pinpointed the preferences and attitudes of students toward physical education to ensure that it is following their requirements. In addition, Lobo et al. (2022) emphasized the significance of student characteristics, indicating the need for innovative approaches to improve the educational process.

Despite a plethora of studies and literature on Generation Z and tertiary physical education, there is still a significant absence of understanding regarding the unique characteristics of Generation Z students, particularly in rural communities in the Philippines. Consequently, the objective of this investigation was to address this deficiency by investigating the variables that affect the characteristics of students in rural settings. This research contributes to the broader academic discourse by offering valuable insights into educational practices and student engagement. This research aimed to pinpoint areas in the curriculum and pedagogical approaches that could be enhanced by investigating the characteristics of Generation Z. The objective was to establish an educational experience that is more pertinent, engaging, and satisfying. The findings of this investigation can be applied to the development of student-centered initiatives, culturally conscious practices, and customized learning approaches tailored to the unique needs of rural Generation Z students.

By providing valuable insights into the complexities of Generation Z students in rural areas, this study contributed to the ongoing discussion on inclusive and fair education. It served as a foundation for discussions regarding adapting teaching methods to accommodate a variety of student demographics, promoting a sense of inclusion, and encouraging continuous physical activity. Scholars will be encouraged to investigate further effective techniques, inventive methods, and culturally sensitive strategies to improve physical education research by identifying deficiencies in the current literature and proposing a methodology to study the preferences of Generation Z in the context of Tertiary Physical Education.

Methodology

Research Design

This research utilized a qualitative design, specifically an ethnographic approach. Creswell and Poth (2016) defined qualitative research as a method that aims to understand human phenomena by conducting a comprehensive analysis of non-numerical data. Ethnographic research is a qualitative research method that involves the researcher's complete immersion in the natural environment of a particular social group or culture to understand and analyze its complexities (Brewer, 2000). Ethnographic research aims to comprehend the customs, beliefs, behaviors, and routines of the community under investigation through immersion, interviews, and participant observation.

According to Gobo (2011), this method entails comprehensive and in-depth on-site research, which allows the researcher to establish a strong rapport with participants, gain an internal perspective, and disclose insights that would not be apparent through alternative research methods. To gain a comprehensive understanding of culture, ethnographic research investigates the social interactions and symbolic significance intrinsic to the experiences of the individuals being studied (Hammersley, 2006).

This design for research is suitable for understanding the unique characteristics of the local population and its ability to provide an exhaustive representation of the types of students in rural communities. The objective of this investigation was to enhance the implementation of the PATH-Fit program. To guarantee that the program follows the unique educational objectives, cultural values, and interests of Generation Z in rural areas, ethnography was implemented to gain a thorough understanding of the local environment.

Sampling Method (locale, population, technique)

The purposive sampling technique was employed to select 20 Generation Z participants as the primary data source for this study. According to Campbell et al. (2020), purposive sampling is a technique that involves the selection of participants in a study based on specific characteristics, experiences, or perspectives that are highly pertinent to the research. This sampling technique is frequently implemented in research projects that seek to acquire a comprehensive understanding of individuals who possess unique or specialized expertise, guaranteeing that the chosen participants can significantly contribute to the research subject (Tongco, 2007). To be eligible for the study, participants must meet specific criteria, such as being a member of Generation Z (born between 1995 and 2010) presently enrolled on PATH-Fit courses and residing in a rural community.

The sample size selected for the study of Generation Z students in the Cotabato Province of the Philippines was deemed sufficient to represent the diverse characteristics of this demographic. The primary goal of qualitative research is to acquire comprehensive and in-depth data from each participant rather than to achieve a broad representation. The selection criteria were sufficiently specific to target individuals with shared characteristics while allowing for a certain degree of variability within these parameters. While the sample size of 20 participants may appear small, it is sufficient to represent the diverse perspectives, experiences, and backgrounds of Cotabato's rural Generation Z population.

Research Instrument

The primary research instrument employed in this study was a set of open-ended guide questions specifically designed to investigate the diverse perspectives of Generation Z students. Participants could conduct a more genuine and in-depth examination of their thoughts due to the open-ended queries, which allowed them to openly and comprehensively analyze their characteristics. Experts evaluated the content and suitability of this set of open-ended guide questions through a validation process.

Verbal signals, facial expressions, and contextual factors that could facilitate interpreting the participants' responses were captured using a camera and voice recorder. These multimedia tools improved the qualitative data by providing a representation of the participants' environment and experiences.

Data Analysis

The Colaizzi Method (1978) was employed to conduct the data analysis and interpretation of this study. This method involves meticulous data reduction, categorization, and abstraction to extract significant insights from participants' experiences. Steps in the Colaizzi Method include the transcription of interviews or data and the identification of essential statements and phrases that are relevant to the research questions. The subsequent procedures involve the extraction of significances and motifs from these statements, classifying these motifs into clusters, and, ultimately, compiling a comprehensive representation of the phenomenon under investigation.

The Colaizzi Method was particularly suitable for this study because it followed the exploratory nature of the research, which intends to understand the characteristics of Generation Z students in rural communities. The participants' experiences and perspectives were comprehensively understood through systematically and rigorously analyzing the collected data. The method's adaptability facilitated the emergence of themes from participants' attitudes, a critical component in documenting diverse and abundant insights into Generation Z students in rural environments.

Results

Table 1. Themes, Descriptions, and Sample Transcripts on the Local Characteristics of Generation Z Students in Rural Communities

Sub-themes	Description	Sample Transcript
1. Competitive	Generation Z students in rural communities are highly competitive, driven by personal goals, and a desire to excel beyond their standards.	• *"I'm not really challenged by others, but if I see someone doing better, I tell myself that I can reach that level too."* • *"I'm competitive towards myself because I always have goals to achieve, and if I don't attain them, I get disappointed."* • *"I want our efforts to be fully compensated, and I really want us to place well due to the efforts we've exerted."*
2. Pressured	They experience significant pressure from family expectations, peer comparisons, and self-imposed standards, impacting their stress levels and academic performance.	• *"I realized that even though I was doing my best, I needed to maintain high performance through grade 12."* • *"My parents are causing the pressure, and I don't meet our family's expectations."* • *"I feel pressured because I realize that people my age are accomplishing so much while I am at home."*
3. Overthinker, Emotional, and Depressive	Many are prone to overthinking and emotional struggles, leading to self-doubt and depressive phases that affect their daily lives.	• *"My overthinking still doesn't change anything; it feels like my anxiety is ultimately for nothing."* • *"I overthink all situations because I fear disappointments, especially in contests I participate in."* • *"When I'm criticized, I end up feeling self-pity and questioning myself."*
4. Adaptive and Cooperative	They are adaptable to new technologies and environments and value teamwork, often taking on leadership roles within group settings.	• *"We tend to be adaptive because the things surrounding us are new, and we adjust easily to new ideas or groups."* • *"I prefer to work with friends or classmates, as I have introverted tendencies but also like to lead and ensure cooperation."* • *"I want to come out of my shell while leading and ensuring that what I want happens in group activities."*
5. Organized and Perfectionist	This group tends to be organized and perfectionist, maintaining high standards and order in their work and environments.	• *"I am really organized when it comes to my things, and clutter distracts me when studying."* • *"I want everything to be organized and my schedule to be well-arranged; it's not about being obsessive."* • *"I want everything to be perfect, like in activities, and I won't settle for a single mistake."*
6. Body Conscious	They are very aware of their body image, influenced by societal standards and peer opinions, which affects their self-esteem and behaviors.	• *"I gained weight after quitting swimming and feel that if people don't like my face, at least my body should be okay."* • *"People or my classmates would say that I gained weight, which was really stressful and made me starve myself."* • *"Even a single word can really hurt, and when I'm criticized, I end up questioning myself and seeking escape."*
7. Socially Aware, Risk Taker, and Open-minded	They are socially aware and open-minded, actively engaging with societal issues and willing to take risks to explore new experiences.	• *"I want to be aware of all the issues happening and participate actively in community activities."* • *"Gen Z has the urge to get involved in societal issues because we want change and are open-minded about expressing our opinions."* • *"We scrutinize everything for its flaws and are very opinionated, even participating in 'cancel culture' for minor provocations."*

Discussions

Competitive. This theme illustrates that Generation Z students in rural communities see themselves as competitive. They often set high standards for themselves, motivated by personal goals and the desire to meet or exceed their achievements. They feel pressure, both self-imposed and from their families, to succeed and avoid disappointment. This competitiveness is evident in their academic and extracurricular activities, where they strive to perform well and improve continuously. While they are driven to achieve high results and maintain high standards, they also emphasize that their competitiveness is aimed at self-improvement rather than undermining others. Based on the research participants:

"...I am also competitive. I'm not really challenged by others, but if I see someone doing better, I tell myself I can reach that level, too. So, in a way, I'm competitive with myself because ever since I was a kid, there's a six-year gap between me and my sister, and I grew up in a household where my older sister was also an overachiever." – Yan

"...I can say that I am competitive in things like during competitions. I want our efforts to be fully compensated. I am competitive towards others in certain events, like in a band, because I want us to place well due to our efforts. If you've invested a lot of effort into something, the results should be good..." – Nica

"...I am competitive but in a good way; it doesn't drag others down. My competitiveness helps me because, of course, it pushes me to improve. For example, if someone else scores high, I strive to improve my performance. I am competitive, but in a way that doesn't harm others..." – Andrew

This implies that this drive for competitiveness among students can lead to significant academic and personal achievements, fostering a culture of excellence and high performance. However, it can also result in heightened stress levels and pressure to meet self-imposed and external expectations. This intense focus on competition may influence their interpersonal relationships, social dynamics, and overall well-being.

Further, being competitive can positively affect a student's well-being by fostering motivation, improving performance and instilling a sense of accomplishment when goals are achieved (Gabrielova & Buchko, 2021). It can drive students to strive for excellence, develop resilience, and enhance their problem-solving skills. However, it can also negatively impact well-being by leading to stress, anxiety, and burnout, mainly if the competition is intense or perceived as a high-stakes pressure (Barhate & Dirani, 2022). An excessive focus on winning can erode self-esteem, create unhealthy comparisons, and potentially lead to negative social interactions or isolation. Balancing competition with collaboration and self-care is crucial for maintaining a healthy level of well-being (Franke, 2021).

Pressured. Another characteristic that defines Generation Z students in rural communities is the significant pressure they experience. This pressure often stems from their families, especially when family members are high achievers. Thus, they feel a heightened responsibility to meet these high expectations. Observing their peers' achievements at similar ages exacerbates this pressure, leading them to compare themselves and feel the need to constantly keep up. This means their pressure is complex, from familial expectations and social comparisons, which profoundly influence their motivation and stress levels. Based on the research participants:

"...I feel pressured too, but in most cases, my parents are the ones causing the pressure. They are achievers, and I don't meet our family's expectations since I have a different mindset. It's tough for me because I was a very smart kid when I was younger, but I lost my grades and honors in high school. During that time, my friends also pressured me to do well and improve. Sometimes, I cry or get angry, but I don't show or tell them I am hurt..." – Benjamin

"...I can assess that I am pressured, especially by peer pressure, because I realize that people my age are accomplishing so much while I am at home, always on my phone. So, I feel pressured, even though my family isn't pressuring me; it's just me pressuring myself..." – Kitchie

"...As a Gen Z, I feel pressured because, among my siblings, I'm not as focused on academic work. That's why I'm always reminded to take my studies seriously. It's hard to face people because they will still have something to say even if we're not doing anything. That's why it's difficult to face them, which is why I immediately cut off toxic people..." – Christmas

The implication of the pressure experienced by Generation Z students in rural communities is that it can significantly impact their mental health and emotional well-being. The constant need to meet familial and social expectations can lead to heightened anxiety, stress, and a fear of failure. This pressure might drive them to overexert themselves, potentially leading to burnout and decreased overall life satisfaction. Additionally, the comparison with peers can foster a competitive

environment that may strain friendships and hinder collaborative efforts.

Furthermore, Cai et al. (2019) explained that pressure significantly influences students' mental, emotional, and physical well-being. Under pressure to perform academically, socially, or in extracurricular activities, students may experience heightened stress and anxiety, which can impair their ability to concentrate, learn, and retain information (Mao et al., 2019). This pressure can lead to burnout, decreased motivation, and a sense of overwhelm, impacting their overall mental health. Additionally, it can strain relationships with peers and family and reduce participation in enjoyable or relaxing activities. Prolonged pressure without adequate support and coping mechanisms can negatively affect students' well-being and academic performance (Evans et al., 2020).

Overthinker, Emotional, and Depressive. This theme highlights that Generation Z students in rural communities often see themselves as overthinkers, emotional, and prone to depressive states. According to the research participants, they tend to overthink to avoid repeating past mistakes and mitigate the fear of disappointment. This overthinking is accompanied by heightened emotional sensitivity, especially when faced with disappointments from themselves or others. This means that their tendency to overthink is closely tied to their emotional and mental health, leading them to experience significant stress and emotional turmoil when expectations are not met. According to them:

> *"... we are overthinkers because we don't want the same mistakes to happen as before due to our carelessness. Although some people are overthinkers because it leads them to take preventive measures, my overthinking still doesn't change anything for me. It feels like my anxiety is ultimately for nothing ..." – Tamz*

> *"... I am also an overthinker, and I overthink all situations because I fear disappointments. For example, I overthink what would happen if I didn't answer correctly in the contests I participated in. This might also be due to my upbringing, as my mom is very strict and always expects me to excel ..." – Bryan*

> *"... As Gen-Z, we tend to be emotional, like experiencing depressive phases. When we face disappointments, we often find ways to prove ourselves to ourselves ..." – Bogart*

This denotes that the combination of traits can lead to chronic stress, anxiety, and a heightened vulnerability to mental health issues such as depression. Their tendency to overthink can worsen emotional distress and create a cycle of negative thinking, which can hinder their academic performance and personal growth. Additionally, their emotional sensitivity might affect their relationships and social interactions, potentially leading to feelings of isolation and loneliness.

Moreover, overthinking can significantly impact a student's well-being and contribute to depression by creating a cycle of persistent worry and self-doubt. When students constantly reflect on their mistakes, future uncertainties, or potential outcomes, it can lead to heightened anxiety, stress, and feelings of inadequacy (Lane et al., 2020). This constant mental strain can worsen symptoms of depression, such as persistent sadness, fatigue, and loss of interest in activities. Overthinking can also interfere with sleep and concentration, further heightening emotional and cognitive difficulties (Mage & Langlois, 2022).

Adaptive and Cooperative. This theme shows Generation Z students in rural communities are adaptive and cooperative. They can adjust quickly to changing environments, reflecting their ability to pilot modern challenges and technologies. Their adaptability is evident in their quick adjustment to new ideas and situations. They value cooperation, preferring to work with others in group settings. They often take on leadership roles within these groups, balancing their introverted tendencies with a desire to guide and ensure successful collaboration. This combination of adaptability and cooperation helps them manage various social and academic tasks effectively. Based on them:

> *"... adaptive because we are born in times that are not traditional, so we tend to be adaptive because the things surrounding us are new. If you look at the younger ones now, a 2-year-old already knows how to use a cellphone, so our generation is very adaptable. They can easily adjust to their ideas or group ..." – Tamz*

> *"... we are cooperative because I prefer to work with friends or classmates since I have some introverted tendencies, so I want to come out of my shell while having characteristics where I like to lead and ensure that what I want happens. So, I want to know if there are activities we can cooperate on, and I can lead ..." – Snow*

This indicates that their adaptability allows them to quickly learn and utilize new technologies, which can enhance their academic and professional skills. Their cooperative nature fosters teamwork and collaboration, which is valuable in educational and work environments. However, their reliance on digital tools and tendency to work in groups might also influence their ability to solve

problems independently or engage in more traditional, less collaborative tasks.

Additionally, being adaptive and cooperative can significantly benefit students in their future jobs by enhancing their ability to navigate and thrive in diverse and changing work environments (Schreiner et al., 2020). Adaptability allows them to embrace new challenges, learn new skills, and adjust to different roles and expectations, making them valuable assets to employers (Burns, 2020). Mobolade et al. (2021) state that cooperation fosters strong teamwork, communication, and interpersonal skills, which are essential for collaborative projects and building positive workplace relationships. These traits help students become versatile, reliable, and effective employees who can contribute to a harmonious and productive work culture.

Organized and Perfectionist. This theme shows that Generation Z students in rural communities view themselves as highly organized and perfectionist. They feel strongly about keeping their surroundings tidy and well-arranged. Clutter and disorganization can distract them and hinder their focus, especially in shared living spaces like boarding houses. They prefer to manage their time effectively and maintain a structured environment. They hold high standards for their work and activities, striving for perfection and not settling for any mistakes, no matter how small. This desire for order and flawlessness drives them to handle everything precisely and efficiently. As they said:

"... I am organized regarding my things, etc. Especially in the boarding house, if I see a mess, my mind gets confused when I see it. When I see clutter, I get distracted when studying and sometimes can't regain my focus. In the boarding house, I have co-tenants, and sometimes, when I can't take it anymore, I just don't look at it or go outside. I put the table outside and study there so I don't get distracted inside ..." – Yan

"... as a Gen Z, I am organized because I hate it when other people are messy and careless. I want everything to be organized and to manage my time wisely. It's not about being obsessive, but I want things to be orderly and my schedule well-arranged ..." – Ela

"... I am also a perfectionist. Very much so. I want everything to be perfect, like in activities, 100/100, and I won't settle for a single mistake because it's a waste if there are even minor errors ..." – Snow

This entails their strong organizational skills and attention to detail, which can lead to high-quality work and efficient management of tasks. However, their pursuit of perfection and dislike of mistakes may also create stress and a fear of failure, potentially affecting their mental health and ability to handle unexpected challenges. This high level of self-expectation can impact their overall well-being and may influence their interactions with others, particularly in collaborative settings where flexibility and adaptability are required.

Fathurrahman (2020) also explained that being organized and a perfectionist can positively impact students in their future jobs by helping them manage tasks efficiently, meet deadlines, and produce high-quality work. Organizational skills enable them to prioritize effectively, maintain order, and increase productivity, which are highly valued in any professional setting (Vreeker-Williamson et al., 2024). However, perfectionism can also have adverse effects, such as causing undue stress, delaying task completion due to excessive attention to detail, and fostering a fear of failure (Zucker, 2022). This can lead to burnout and hinder adaptability in dynamic work environments. Balancing organizational skills with realistic expectations and flexibility is crucial for long-term career success and well-being (Helmers, 2020).

Body Conscious. This theme highlights that Generation Z students in rural communities are very aware of their bodies and how others perceive them. They feel pressure to maintain a particular body image, often influenced by other people's opinions. Negative comments about their weight or appearance cause stress and lead them to take actions like dieting or avoiding social interactions. Being body conscious is essential because they believe it affects how others define and perceive them. This awareness and sensitivity to body image significantly impact their self-esteem and behaviors. Based on their responses:

"... I'm body conscious. For example, since grade 6, people or my classmates would say I gained weight. Then it was stressful because their opinions were very stressful so that I would starve myself every night..." – Kitchee

"... and before, I was conscious, which affected me. Like before, they thought I was an attention-seeker, but I wasn't; I was just being natural. I stopped paying attention to my classmates because they gossiped about me..." – Namikazee

This conveys that their self-esteem and mental health are closely tied to their physical appearance. This heightened awareness and sensitivity to body image can lead to stress and anxiety, influencing their daily behaviors and social interactions. Their efforts to conform to perceived body standards may result in unhealthy practices, such as restrictive dieting or social withdrawal. This focus on body image can also affect their academic performance

and participation in activities, as their concern about appearance might overshadow other aspects of their lives.

Consequently, youths today are highly conscious about their bodies as a form of self-validation due to the pervasive influence of social media, societal standards, and peer pressure (Akbaş, 2020). Platforms like Instagram, TikTok, and Snapchat often emphasize physical appearance and perpetuate idealized body images, leading young people to equate their self-worth with how closely they match these standards (Nazworth, 2022). This constant exposure can create a strong desire for external validation through likes, comments, and followers, driving them to focus on their appearance (Pruett, 2024). Additionally, societal norms and peer comparisons can amplify these feelings, making body consciousness a significant aspect of their self-identity and self-esteem (Merino et al., 2024).

Socially Aware, Risk Taker, and Open-minded. This theme describes Generation Z students in rural communities as highly aware of societal issues. They actively seek to stay informed and involved, not wanting to ignore essential matters. Their awareness drives them to participate in community activities and speak out on issues they care about. They are also willing to take risks by stepping out of their comfort zones to explore new experiences and challenges. This generation values open-mindedness, expressing their opinions and standing by their beliefs while respecting different perspectives. Their social awareness and willingness to take risks reflect a desire for change and a proactive approach to life. To wit:

> *"...Gen Z stands up for issues and is open-minded. We have words to say based on what we see. If there's an issue, I speak or take a stand—not to the extent of joining rallies outright, but I have my standpoint. I know where I stand and what I believe. I can make comments and stand by them. I think Gen Z has the urge, a strong desire to get involved in societal issues because we are aware of what's happening around us, and we want change..." – Bebe*

> *"...Perhaps, as Gen Z, we are involved in societal issues. We notice that some of us are socially aware, but not to the extent of joining rallies, though we respect others who do. But Gen Z today is very opinionated and open-minded. Even for small things, we scrutinize everything for its flaws. There's this " cancel culture" trend at the slightest provocation..." – AJ*

This indicates that being socially aware, risk-takers, and open-minded means they will likely be proactive agents of change in their communities. Their awareness of societal issues drives them to engage in community activities and advocate for causes they believe in, potentially leading to positive social impact and progress. Their willingness to take risks and embrace new challenges suggests a readiness to innovate and adapt, which can contribute to personal growth and community development. Their open-mindedness fosters a culture of respect and inclusivity, encouraging diverse perspectives and collaborative problem-solving.

Students today are socially aware and risk-takers due to their exposure to diverse perspectives and information through digital media and global connectivity. This awareness of social issues such as climate change, inequality, and social justice drives them to be more conscious of their actions and their impact on the world (Wilks et al., 2020). Additionally, McHaney (2023) said that the rapid pace of technological and cultural change encourages them to take risks, experiment, and innovate, seeing these actions as necessary for progress and personal growth. Their willingness to challenge the status quo and engage with complex issues reflects a dynamic and proactive approach to shaping their future (Wucker, 2021).

Conclusions

This study concludes that Generation Z students in rural communities are marked by a strong competitive drive, often fueled by personal ambitions and external pressures, leading to significant self-imposed stress and high expectations. Their adaptability and cooperative nature enable them to thrive in changing environments and work effectively in team settings, while their organizational skills and perfectionism push them toward achieving high standards. Despite their strengths, they also face challenges such as overthinking, emotional sensitivity, and body consciousness, which can impact their mental health and self-perception. Their social awareness, openness to new experiences, and willingness to take risks reflect a proactive approach to personal growth and societal involvement, highlighting their dynamic and complex characteristics.

References

Abbasov, B. A., & Mavlyanov, F. A. (2019). Issues of Improvement of the form of Physical Education in Health Promotion. *Theoretical & Applied Science*, (10), 659–661. https://doi.org/10.15863/TAS.2019.10.78.123

Aguinaldo, J. C., Cobar, A. G. C., & Dimarucot, H. C. (2022). Learning Effectiveness and Satisfaction Self-report of College Online Physical Education (OLPE) Students in the Philippines in Time of COVID-19 Pandemic. *Sport Mont*, *20*(3). https://doi.org/10.26773/smj.221011

Ajmain, T. (2020). Impacts and effective communication on generation Z in industrial revolution 4.0 era. *JETAL: Journal of English Teaching & Applied Linguistic*, *1*(2), 82–87. https://doi.org/10.36655/jetal.v1i2.204

Akbaş, M. N. (2020). Exploring the influence of youtubers on adolescents' identity construction:| an interpretative phenomenological analysis.

Arkhipova, M. V., Belova, E. E., Gavrikova, Y. A., Pleskanyuk, T. N., & Arkhipov, A. N. (2019). Reaching generation Z. Attitude toward technology among the newest generation of school students. In *Perspectives on the use of New Information and Communication Technology (ICT) in the Modern Economy* (pp. 1026–1032). Springer International Publishing. https://doi.org/10.1007/978-3-319-90835-9_114

Barhate, B., & Dirani, K. M. (2022). Career aspirations of generation Z: a systematic literature review. *European Journal of Training and Development*, *46*(1/2), 139–157.

Bhore, M., & Pandita, D. (2022, May). An Exploratory Study of The Gen Z and E Generation in the Digital Era for the Modern Business Environment. In *2022 7th International Conference on Business and Industrial Research (ICBIR)* (pp. 406–410). IEEE. https://doi.org/10.1109/ICBIR54589.2022.9786526

Brewer, J. (2000). *Ethnography*. McGraw-Hill Education (UK).

Burns, R. (2020). *Adult Learner at Work: The challenges of lifelong education in the new millenium*. Routledge.

Cai, X., Lu, Y., Pan, J., & Zhong, S. (2019). Gender gap under pressure: evidence from China's National College entrance examination. *Review of Economics and Statistics*, *101*(2), 249–263.

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., ... & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, *25*(8), 652–661. https://doi.org/10.1177/1744987120927206

Candela, A. G. (2019). Exploring the function of member checking. *The qualitative report*, *24*(3), 619–628. https://doi.org/10.46743/2160-3715/2019.3726

Cariaga, J. N. (2014). The physical education program of state universities in Isabela: An assessment. *Research Journal of Physical Education Sciences. 2320*, 9011.

Cilliers, E. J. (2017). The challenge of teaching generation Z. *PEOPLE International Journal of Social Sciences*. https://doi.org/10.20319/pijss.2017.31.188198

Coronel, H. S., & Ferrater-Gimena, J. A. (2017). Instructional Management Skills and Effectiveness of Physical Education Instructors in Higher Education Institutions in Cebu City, Philippines. *JPAIR Institutional Research*, *9*(9), 69–84. https://doi.org/10.7719/irj.v9i9.493

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, *39*(3), 124–130. https://doi.org/10.1207/s15430421tip3903_2

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.

de Jesus, G. M., de Oliveira Araujo, R. H., Dias, L. A., Barros, A. K. C., dos Santos Araujo, L. D. M., & de Assis, M. A. A. (2022). Attendance in physical education classes, sedentary behavior, and different forms of physical activity among schoolchildren: a cross-sectional study. *BMC Public Health*, *22*(1), 1461.

Dolot, A. (2018). The characteristics of Generation Z. *E-mentor*, *74*(2), 44–50. https://doi.org/10.15219/em74.1351

Escomes, E. L., Gutierrez, C. J. P., Sarabia, I. P. C., Morbo, E. A., & Calixtro Jr, V. L. (2021). Factors affecting distance learning of the physical education students of Sultan Kudarat State University, Mindanao, Philippines. *Indonesian Journal of Educational Research and Technology*, *1*(3), 87–94. https://doi.org/10.17509/ijert.v1i3.41413

Evans, S., Mikocka-Walus, A., Klas, A., Olive, L., Sciberras, E., Karantzas, G., & Westrupp, E. M. (2020). From "it has stopped our lives" to "spending more time together has strengthened bonds": The varied experiences of Australian families during COVID-19. *Frontiers in psychology*, *11*, 588667.

Fathurrahman, D. (2020). Time and designer: Unveiling design practitioners' characteristics on time management, perfectionism, procrastination, and burnout.

Francis, T., & Hoefel, F. (2018). True Gen': Generation Z and its implications for companies. *McKinsey & Company*, *12*, 1–10.

Franke, N. (2021). *Built to belong: Discovering the power of community over competition*. Hachette UK.

Gabrielova, K., & Buchko, A. A. (2021). Here comes Generation Z: Millennials as managers. *Business Horizons*, *64*(4), 489–499.

Giunta, C. (2017). An emerging awareness of generation Z students for higher education professors. *Archives of Business Research*, *5*(4). https://doi.org/10.14738/abr.54.2962

Gobo, G. (2011). Ethnography. In *Qualitative research* (pp. 15–36). Sage.

Graciano, M. (2022). Activity Preference, Demographic Characteristics, and Attitudes of the Students toward Physical Education at the University of Eastern Philippines. *Asian Journal of Education and Social Studies*, *32*(1), 12–27. https://doi.org/10.9734/ajess/2022/v32i130759

Graziano, L., Spurrier, A., & Squire, J. (2022). A History of Public Education and the Assembly of Services.

Hammersley, M. (2006). Ethnography: problems and prospects. *Ethnography and education*, *1*(1), 3–14. https://doi.org/10.1080/17457820500512697

Härkönen, U. (2001). The Bronfenbrenner ecological systems theory of human development.

Helmers, Y. S. (2020). *Systematic Review of Maladaptive Perfectionism: Etiology, Treatment and School-Based Interventions* (Doctoral dissertation, Alliant International University).

Iorgulescu, M. C. (2016). Generation Z and its perception of work. *Cross-Cultural Management Journal*, *18*(01), 47–54.

Junio, J. J. B., & Liwag, J. A. (2016). Factors Affecting Students' Performance in Physical Education Class in Lyceum of The Philippines University-Laguna. *LPU-Laguna Journal of Multidisciplinary Research*, *4*.

Kenney, E. L., & Gortmaker, S. L. (2017). United States adolescents' television, computer, videogame, smartphone, and tablet use: associations with sugary drinks, sleep, physical activity, and obesity. *The Journal of pediatrics*, *182*, 144–149.

Kilue, D., & Muhamad, T. A. (2017). Cabaran pengajaran subjek pendidikan jasmani di sekolah menengah di Malaysia [Challenges in the teaching of physical education subject in Malaysian secondary schools]. *Journal of Nusantara Studies (JONUS)*, *2*(2), 53–65. https://doi.org/10.24200/jonus.vol2iss2pp53-65

Lane, A., McGrath, J., Cleary, E., Guerandel, A., & Malone, K. M. (2020). Worried, weary and worn out: mixed-method study of stress and well-being in final-year medical students. *BMJ open*, *10*(12), e040245.

Lobo, J., Dimalanta, G., & Bautista, C. (2022). An Investigation on the Factors Affecting Students' Interest in Physical Education Using Principal Component Analysis (PCA) at a Local City College in Angeles City, Pampanga, Philippines. *American Journal of Multidisciplinary Research and Innovation*, *1*(2), 63–69. https://doi.org/10.54536/ajmri.v1i2.291

Mage, L., & Langlois, G. (2022). *Act Before You Overthink: Make Decisions Easier and Liberate Your Mind*. Lison Mage.

Mao, Y., Zhang, N., Liu, J., Zhu, B., He, R., & Wang, X. (2019). A systematic review of depression and anxiety in medical students in China. *BMC medical education*, *19*, 1–13.

McHaney, R. (2023). *The new digital shoreline: How Web 2.0 and millennials are revolutionizing higher education*. Taylor & Francis.

Merino, M., Tornero-Aguilera, J. F., Rubio-Zarapuz, A., Villanueva-Tobaldo, C. V., Martín-Rodríguez, A., & Clemente-Suárez, V. J. (2024). Body Perceptions and Psychological Well-Being: A Review of the Impact of Social Media and Physical Measurements on Self-Esteem and Mental Health with a Focus on Body Image Satisfaction and Its Relationship with Cultural and Gender Factors. *Healthcare*, *12*(14), 1396. https://doi.org/10.3390/healthcare12141396

Mobolade, G. O., & Akinade, M. E. (2021). Team building and teamwork in organizations: Implications to managers and employees in work places. *International Journal of Management, Social Sciences, Peace and Conflict Studies*, *11*(4), 1.

Mohr, K. A., & Mohr, E. S. (2017). Understanding Generation Z students to promote a contemporary learning environment. *Journal on empowering teaching excellence*, *1*(1), 9.

Moon, M. D. (2019). Triangulation: A method to increase validity, reliability, and legitimation in clinical research. *Journal of emergency nursing*, *45*(1), 103–105.

Nazworth, J. (2022). *A Generic Qualitative Exploration of Middle-Aged Women's Body Image Experiences from Social Media Use* (Doctoral dissertation, Capella University).

Osborne, R., Belmont, R. S., Peixoto, R. P., Azevedo, I. O. S. D., & Carvalho Junior, A. F. P. D. (2016). Obstacles for physical education teachers in public schools: an unsustainable situation. *Motriz: Revista de Educação Física*, *22*, 0310–0318. https://doi.org/10.1590/s1980-6574201600040015

Panganiban, T. D. C. (2019). Quality assessment of physical education program of state universities in the Philippines. *Jurnal SPORTIF: Jurnal Penelitian Pembelajaran*, *5*(2), 166–174. https://doi.org/10.29407/js_unpgri.v5i2.12983

Peromingan, R. S. J., Misil, E. S., Andajao, M. F. J. M., & Labad, E. M. (2023). Adapted New Tertiary Physical Actvitites for Students with Disabilities. *Available at SSRN 4408513*. https://doi.org/10.2139/ssrn.4408513

Piercy, K. L., Troiano, R. P., Ballard, R. M., Carlson, S. A., Fulton, J. E., Galuska, D. A., ... & Olson, R. D. (2018). The physical activity guidelines for Americans. *Jama*, *320*(19), 2020–2028.

Postholm, M. B. (2015). Methodologies in Cultural–Historical Activity Theory: The example of school-based development. *Educational research*, *57*(1), 43–58. https://doi.org/10.1080/00131881.2014.983723

Pruett, M. (2024). *From Likes to Looks: The Relationship Between TikTok Use and Body Satisfaction in a Young Adult Population* (Master›s thesis, The University of Mississippi).

Schreiner, L. A., Louis, M. C., & Nelson, D. D. (Eds.). (2020). *Thriving in transitions: A research-based approach to college student success*. The National Resource Center for The First-Year Experience.

Seemiller, C., & Grace, M. (2018). *Generation Z: A century in the making*. Routledge. https://doi.org/10.4324/9780429442476

Shorey, S., Chan, V., Rajendran, P., & Ang, E. (2021). Learning styles, preferences and needs of generation Z healthcare students: Scoping review. *Nurse education in practice*, *57*, 103247. https://doi.org/10.1016/j.nepr.2021.103247

Siedentop, D., & Van der Mars, H. (2022). *Introduction to physical education, fitness, and sport*. Human kinetics.

Tagare, R. L., & Villaluz, G. D. (2021). Probing the delivery of tertiary physical education among the generation Z students in the transition years of Philippine K to 12. *International Journal of Physical Education, Sports and Health*, *8*(4), 355–359. https://doi.org/10.22271/kheljournal.2021.v8.i4f.2204

Tanucan, J. C. M., Hernani, M. R., & Diano, F. (2021). Filipino physical education teachers' technological pedagogical content knowledge on remote digital teaching. *International Journal of Information and Education Technology*, *11*(9), 416–423. https://doi.org/10.18178/ijiet.2021.11.9.1544

Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection. https://doi.org/10.17348/era.5.0.147–158

Velez, L. (2023). Explicit instruction in fitness exercise for PATH-Fit II (physical activities towards health and fitness). *Indonesian Journal of Research in Physical Education, Sport, and Health (IJRPESH)*, *1*(1), 30–43.

Vreeker-Williamson, E., Gill, H., Barclay, L. J., & Powell, D. M. (2024). The good, the bad, and the ambiguous: A qualitative approach to understanding workplace perfectionism and job performance. *Canadian Psychology/Psychologie canadienne*.

Wilks, J., Turner, A., & Shipway, B. (2020). The risky socioecological learner. *Touchstones for deterritorializing socioecological learning: The anthropocene, posthumanism and common worlds as creative Milieux*, 75–97.

World Health Organization. (2019). *Global action plan on physical activity 2018–2030: more active people for a healthier world*. World Health Organization.

World Health Organization. (2022). *Global status report on physical activity 2022: country profiles*. World Health Organization.

Wucker, M. (2021). *You are what you risk: The new art and science of navigating an uncertain world*. Simon and Schuster.

Zucker, B. (2022). *A Perfectionist's Guide to Not Being Perfect*. American Psychological Association.

Education and Science

Original Article

Early Release 1-14

Experiences, Motivation, Commitment, and Suggestions of Physical Education Teachers Amidst COVID-19 Crisis

Kathleen Pascua [1], Ruben Jr. Lagunero Tagare [2]

Abstract

At the peak of the COVID-19 pandemic, teachers and administrators were caught off guard by the suddenness of this situation and were obliged to construct emergency remote learning systems immediately. With the problems identified in various literature, this research was conducted to elicit teachers' experiences, motivation, commitment, and suggestions as they implement physical education amidst the pandemic. Using a qualitative descriptive research design, this study delved deeper into the experiences of twenty senior high school teachers from selected schools in Cotabato Province in the Philippines using in-depth interviews. During the triangulation of results, this study identified that limited resources for students and technological gaps among teachers posed obstacles to quality learning. However, teachers demonstrated optimism in acquiring new skills and adapting innovative technological strategies to facilitate distance education. Collaborative efforts with colleagues proved instrumental in problem-solving, and teachers viewed their negative experiences as opportunities for personal and professional growth. The findings were then used to develop conclusions and recommendations for better implementing physical education in the Philippine senior high school curriculum.

Keywords

Dedication
Inspiration
New normal education
Teachers' challenges
Teachers' experiences

Article Info

Received: 08.08.2022
Accepted: 01.24.2024
Published Online: 07.16.2024

DOI: 10.15390/EB.2024.12095

Introduction

Education is the most potent weapon to change the world (Mandela 2003). Ending gender inequity, reducing poverty, constructing a sustainable planet, preventing unnecessary deaths and illnesses, and promoting peace depend on it (Tilak, 2002). Education has become the new currency in a knowledge economy, allowing countries to maintain economic competitiveness and worldwide success. Education is one of the essential long-term investments that is true for every country globally, not just first-world countries (Khan, 2015).

The efficiency of education was tested when COVID-19 infected the world. During the surge of the pandemic, the worldwide education system abruptly shifted from studying in the four corners of the classroom to learning via devices and modules. Teachers are urged to utilize interactive materials and technologies to teach their subjects and implement curriculum using varied methods to learners

[1] University of Southern Mindanao, Institute of Sports, Physical Education and Recreation, Philippines, kmpascua@usm.edu.ph
[2] University of Southern Mindanao, Institute of Sports, Physical Education and Recreation, Philippines, tagareruben@usm.edu.ph

(Eickelmann & Gerick, 2020). According to Hebebci, Bertiz, and Alan (2020), some teachers believe that distance education will never be successful as face-to-face instruction and that face-to-face lessons are more convenient and efficient than distance classes. While students cannot dispute that distance classes save time, teachers may find it less effective (Nambiar, 2020).

Among other academic disciplines, physical education is believed to be the most affected, including skill acquisition and movement education. Students fail to perform the necessary competencies due to varying social restrictions. Kraft, Simon, and Lyon (2020) revealed that in the United States, teachers are having difficulties due to a rapid decline in students' enthusiasm for physical education and schooling. Some teachers' "feeling of achievement" had dropped due to the current problems in the educational landscape.

Marshall, Shannon, and Love (2020) further explained that it is more difficult for physical education teachers to obtain feedback and connect directly with students during the pandemic due to personal problems that they are experiencing along with the alarming virus infection. In the Philippines, it has been noticed that the educational system in the COVID-19 era brings a significant threat to schools because some are located in remote regions are experiencing issues with connectivity and technology.

Despite these uncertainties, the Philippine government devised a strategy for dealing with the problems that schools are facing. The Philippine Department of Education implemented a learning continuity plan that teaches private and public schools in the Philippines how to use it. The government committed to this strategy to ensure the safety and health of teachers, school employees, and students despite the pandemic as stipulated in Department Orders Nos. 12 and 13, 2020.

Agaton and Cueto (2021) investigated the impact of COVID-19 on access and equity in education for disadvantaged students in the Philippines. They highlighted that students are experiencing huge disparities in accessing remote learning resources, such as internet connectivity, devices, and learning materials, and the socio-economic factors. De los Santos and Labrague (2021) assessed the mental health impact of COVID-19 on Filipino students and highlighted the prevalence of anxiety, depression, and stress among students that directly hinder students' learning process.

On the side of teachers, Bravo, Dangerfield, Taylor, and Johnson (2021) examined the well-being and job satisfaction of teachers in the Philippines during the COVID-19 pandemic, specifically the emotional, physical, and psychological impact of this crisis on teachers. They revealed that the increased workload and mode of learning add stress and burnout to them. Rotas and Cahapay (2021) revealed that teachers have technological, pedagogical, and emotional difficulties due to the need to modify teaching methods and instructional strategies to suit the online or blended learning environment. Teachers during the pandemic must find innovative ways to engage students, deliver content effectively, and provide meaningful learning experiences despite the limitations imposed by the pandemic.

Though several scholars have been examining the initial impact of COVID-19 on educational institutions; a thorough literature review reveals a considerable gap in studies investigating the experiences, motivation, commitment, and suggestions of physical education teachers in teaching physical education amidst the pandemic. Hence, to bridge this gap, this study was conducted to elicit the:

a. Experiences of teachers in teaching physical education amidst the pandemic;
b. Reasons how teachers' experiences shape their motivation and commitment; and
c. Suggestions of teachers to better implement physical education amidst the pandemic.

This study is also anchored to the Self-Determination Theory proposed by Deci and Ryan (2012). This widely recognized psychological theory focuses on human motivation and the factors that drive intrinsic motivation and well-being. This theory suggests individuals have innate psychological needs for autonomy, competence, and relatedness. When these needs are fulfilled, individuals are more likely to be intrinsically motivated and experience greater satisfaction and well-being.

In the context of physical education teachers amidst the COVID-19 crisis, Self-Determination Theory can provide insights into their experiences, motivation, and commitment. The theory can help examine how teachers' sense of autonomy, competence, and relatedness may have been affected during the pandemic. It can shed light on the factors contributing to their resilience, adaptability, and engagement in their teaching practices.

Further, by exploring physical education teachers' experiences, motivations, commitment, and suggestions amidst the COVID-19 crisis, this research provides practical and feasible recommendations to enhance their teaching styles. Also, by capturing their perspectives and narratives, this research will help scholar readers, including educators, administrators, policymakers, and researchers, understand the unique challenges faced by physical education teachers and their strategies to address them. This understanding fosters empathy, collaboration, and informed decision-making in designing effective support systems for physical education instruction.

Furthermore, the findings of this study provide physical education teachers with a comprehensive understanding of how their peers cope with the challenging circumstances they currently encounter. By sharing experiences, motivation, and commitment, this research will equip teachers with various coping strategies and best practices. As the COVID-19 crisis has significantly impacted education systems worldwide, this research is a valuable resource for future researchers. It offers a rich dataset of secondary data that can be utilized for comparative analysis, longitudinal studies, or further exploration of specific themes related to physical education instruction amidst crises.

Method

Research Design and Procedures

This study utilized a qualitative–descriptive research design to delve further into senior high school teachers' experiences, motivation, commitment, and suggestions in teaching physical education during the COVID–19 pandemic. Qualitative research is the collection of non-numerical data. This design is a naturalistic inquiry that seeks an in-depth knowledge in society. In light of this, the researchers chose a qualitative study because it is a research technique with a strong philosophical pattern.

After doing all primary activities, the researchers obtained ethical approval from institutional review board to ensure that this study adhered to ethical guidelines. Ethical considerations included protecting participant’s privacy and confidentiality. Informed consent procedures were followed, where participants were provided with detailed information about the study's purpose, procedures, potential risks, and benefits. Participants voluntarily signed consent forms to indicate their willingness to participate.

The researchers conducted initial visits to establish rapport with the participants and create a comfortable environment for data collection. Afther this, focus group discussions (FGDs) and in-depth interviews (IDIs) were employed as data collection methods to gather participants' diverse perspectives and in-depth insights. FGDs lasted around 1 hour, while IDIs lasted around 45mins per participant. Unstructured FGDs involved group discussions among participants facilitated by the researchers, enabling participants to exchange ideas, reflect on their experiences, and generate collective insights. IDIs, on the other hand, involved one-on-one interviews with individual participants, providing a deeper exploration of their personal experiences, motivations, and suggestions.

To enhance the validity and reliability of the research findings, the researchers employed data validation and triangulation techniques. This involved cross-checking and comparing data from multiple sources, such as different participants, data collection methods, or external sources. By triangulating the data, the researchers ensured the robustness of their findings, minimized bias, and provided a more comprehensive and accurate portrayal of the experiences, motivations, commitment, and suggestions of physical education teachers amidst the COVID-19 crisis.

Sample

A purposive, non-probability sampling approach was utilized to ensure that participants had in-depth knowledge and understanding of the phenomenon under investigation. Twenty Senior High School Physical Education Teachers from Cotabato Province in the Philippines were purposefully invited and actively engaged in the research process. The selection criteria aimed to include diverse participants, considering factors such as their years of teaching experience, educational backgrounds, and geographical representation. By deliberately selecting participants with relevant experience and insights, the study gained valuable perspectives that significantly contributed to the goals of this research.

Tools of Data Collection

In this study, the researchers used guide questions as the primary materials for data collection. These guide questions were carefully developed and validated by experts in the field to ensure their quality and effectiveness in eliciting relevant information from the participants. The questions underwent an in-depth examination, which involved a thorough review and analysis to ensure their relevance, appropriateness, and alignment with the research objectives.

The researchers used audio recordings to capture and gather the data during the research process. The participant's responses, discussions, and interactions were recorded using audio recording devices. This method allows for a detailed and comprehensive data analysis, enabling researchers to extract meaningful findings and draw conclusions based on the recorded information.

Data Analysis

This study employed the framework developed by Miles and Huberman (1994) to analyze and interpret the qualitative data. The process involved data reduction, display, and conclusion drawing and verification. Data reduction encompassed the coding and condensing the collected data, extracting essential and relevant information from the participants' responses. The transformed data were then presented through figures, tables, or discussion.

Thematic analysis was employed to facilitate the categorization of qualitative data. Data display involved organizing and presenting the data in an organized manner, enabling a seamless flow of information and facilitating the drawing conclusions. Once the responses to the research questions were thoroughly analyzed, conclusion drawing and verification were carried out to describe the study's main findings. Validation involved a rigorous reexamination of the data, ensuring a high level of confirmation was achieved.

Ethical Consideration

In all types of research, particularly qualitative research, ethical considerations are critical; the primary focus protects participants and the guiding basis of "no harm." The following are some ethical considerations to consider when doing qualitative research.

Informed Consent explains that the person participating in the study is aware enough and fully informed. The participants need to be made aware of the purpose of the study. The primary purpose of informed consent is that the participant can decide whether they had participated in the evaluation. Additional information should also be provided if the participant becomes distressed during their participation.

Confidentiality means that any identifying information is not made available to or accessed by anyone but the researchers only. It also ensures such identifying information is excluded from reports or published documents. Only assess relevant components only assess those applicable to the study

being conducted. High-risk populations are sometimes used as captive audiences to ask questions. It is vital to keep evaluations as simple as possible and to remain focused on the intention of the evaluation and what the data gathered will be used for.

Findings and Discussion

Table 1. The Experiences of Teachers in Teaching Physical Education Amidst COVID-19 Pandemic

Major Themes	Frequency of Responses	Core Ideas
Engaged Students VS Unengaded Students due to Resource Problems	General	The students with lack of resources experience difficulties.
	Typical	Students are active despite the pandemic.
	Typical	The students are enthusiastic and receptive despite the problems.
	General	The students are unmotivated to learn due to resource problems.
Collaboration Helps Teachers Bridge Pedagogical Gaps	General	Teachers are exchanging tactics and ideas.
	Typical	Teachers attend seminars to expand their knowledge and develop new skills.
	Typical	Teachers are collaborating to address their problems.
Despite the Adversity, it Opens New Learning Development for Teachers	Variant	Most teachers have attended learning opportunities such as training sessions on the new learning platform.
	General	The majority of teachers are equipped with new information to deliver courses efficiently.
Tech-gaps Hinder Quality Learning	General	Teachers and student are unable to purchase the necessary equipment for academic pursuits.
	General	The students find it challenging to reach out due to their places.
	General	Students are not financially stable.

(Pascua & Tagare, 2023)

Legend:

General – response mentioned by 50% or more of the participants

Typical – response mentioned by at least 25% but less than 50%

Variant – response mentioned by less than 25% of the participants

As seen in Table 1, the following themes are the analysis and discussion of teachers' experiences in teaching physical education amidst the COVID-19 pandemic:

Theme 1. Engaged Students VS Unengaded Students due to Resource Problems

The first major theme that emerged from the teachers' observations is the students' engagement with the new learning platform despite the challenges of distance learning. According to Usher and Kober (2013), students demonstrate motivation and active participation when teachers establish clear goals and standards that promote higher-order thinking skills. Providing adequate learning materials and employing modern teaching methods can also contribute to students' self-motivation to learn. Creating an inclusive and participative environment also fosters interactivity in the new normal learning setting (Livitchi & Cibuc, 2020).

When asked about their experiences with students during the pandemic, participants acknowledged that while some students actively participate, others face difficulties keeping up with the lessons due to various factors. One teacher, referred to as Teacher #1, shared their perspective:

> *"…Some students are trying their best just for them to participate in the activities, especially in the video presentations; the good thing is you can see that despite everything the child does, their responsibility just to participate with the parents, of course" (T1- Q1)*

Further, the participants noticed that because of the new platform of learning, few students are not that participative due to poor internet connection and lack of gadgets, Teacher #8 elaborated it:

> *"…Though it seemed so difficult to do so because of poor connection if the internet, I am so amazed to cope with the new normal way of teaching and appreciated student's efforts and creativity in creating video."(T8- Q1)*

This implies that despite the challenges and adversities brought about by the COVID-19 crisis, there is an optimistic tendency among students to actively participate in learning activities, particularly in video presentations. This implies that students are motivated to fulfill their responsibilities and engage with the educational process, even with the support and involvement of their parents. This finding suggests that the students' motivation to participate stems from their sense of responsibility and the support they receive from their parents.

Theme 2. Collaboration Helps Teachers Bridge Pedagogical Gaps

The second theme highlights the positive experiences of Physical Education teachers as they navigate and adapt to the new learning platform. To effectively deliver courses during the pandemic, educators must provide ample learning resources and possess technological proficiency (Sahoo, 2020). With the absence of face-to-face interaction, students require increased attention, prompting teachers to invest extra effort, attend seminars, and engage in knowledge sharing to maintain an effective learning system. To wit:

> *"…we are open like everybody is sharing the strategies to make the learning process effective." (T1-Q1)*

> *"…We do sharing like he/she will be in charge in printing so there is sharing and the work will be easier for you will just get the module that is ready for delivery." (T5-Q1)*

This demonstrates that teachers recognize the importance of equipping themselves with the necessary technical skills and resources to engage students in the new learning environment effectively. The additional effort made by teachers to attend seminars and collaborate with their peers highlights their commitment to enhancing their teaching practices despite the challenges posed by the pandemic. This dedication ensures that students receive the attention and support required to succeed in their Physical Education studies.

Theme 3. Despite the Adversity, it Opens New Learning Development for Teachers

This theme highlights the efforts of teachers to acquire new learning concepts and improve their teaching methods for effective knowledge transfer to students. Given the challenges of absorbing further information during the pandemic, teachers have recognized the need for innovative learning techniques to facilitate student learning. Attending seminars and training sessions to enhance their ICT skills is crucial, as technology can positively impact student behavior and learning and teaching outcomes (Huang, Wang, Wu, & Wang, 2013).

Through their unique teaching strategies, teachers have devised approaches to foster increased student participation amidst the epidemic (Muhamadjonovna, 2020). The following responses from the participants further illustrate these experiences:

> *"…I learned a lot… different strategies, and how to make things easier concerning preparing instructional materials." (T2-Q1)*

> *"…we can develop video lessons and even learning activity sheets and contributor to developing self-learning modules…" (T8-Q1)*

This finding suggests that teachers' professional development and utilization of technology contribute to creating an engaging and participatory learning environment for students. By continuously improving their teaching strategies and incorporating innovative methods, teachers enhance the overall learning experience and student outcomes. Further, these findings highlight the importance of ongoing teacher development, particularly in ICT skills, to adapt to the challenges posed by the pandemic.

Theme 4. Tech-gaps Hinder Quality Learning

The fourth theme focuses on the observations made by Physical Education teachers regarding students' negative experiences in the new learning platform. These observations indicate that teachers face challenges in delivering lessons due to various factors affecting students, such as poor internet connection, financial instability, and limited technological literacy. Mojica (2021) highlights that during the pandemic, poor internet connection emerges as a major problem, hindering knowledge acquisition and lessons. When participants were asked about their negative experiences in delivering materials to students, it became evident that various factors arose, particularly among students, during the pandemic. Testimonies from Teacher #7 and Teacher #8 support these implications:

> *"…there are some students who still cannot manipulate or are afraid to explore their computer and internet. Students are sometimes absent due to poor internet connection and brown out" (T7-Q1)*

> *"…the students cannot submit on time and complete outputs and cannot able to perform very well… Though it seemed so difficult to do so because of poor connection if the internet." (T8Q1)*

The challenges related to internet connectivity, financial constraints, and technological literacy contribute to difficulties in delivering effective instruction and hinder students' access to quality education. These highlight the urgent need for solutions to address the issues students and teachers face. Efforts should be made to improve internet accessibility, support students from financially unstable backgrounds, and enhance technological literacy among students and teachers.

On the other hand, participants expressed their perspectives on the negative experiences encountered with the new learning platform, highlighting that some students face challenges in attending classes due to financial constraints. To wit:

> *"…especially in sports, there is equipment that other students can't afford, so how can they practice so sometimes they do it in a way like imaginary."(T3-Q1)*

> *"…we should accept the fact that not all of the students will have the courage to pay attention, especially since we are now in the new normal of learning." (T4-Q1)*

The inability to afford essential materials and resources further exacerbates the challenges the transition to online learning poses. This highlights the importance of addressing financial constraints and providing adequate support to ensure equitable access to education for all students.

Table 2. Themes and Core Ideas on How Teachers' Experiences Shape Their Motivation and Commitment to Teaching Physical Education Amidst COVID-19 Pandemic

Major Themes	Frequency of Responses	Core Ideas
Optimism Fuels Passion for Teaching	General	Teachers use their experiences, both positive and negative, to better administer Physical Education.
	General	The teachers are optimistic despite the abrupt changes in the new learning platform.
Turning Negativities into Motivations	General	Teachers are turning negative situations into positive ones.
	General	Teachers are creative enough, and they used to adapt to the negative experiences they have.

(Pascua & Tagare, 2023)

Legend:

General – response mentioned by 50% or more of the participants

Typical – response mentioned by at least 25% but less than 50%

Variant – response mentioned by less than 25% of the participants

As presented in Table 2, the major themes of how the pandemic shapes the motivation and commitment of teachers in teaching physical education are discussed as follows:

Theme 1. Optimism Fuels Passion for Teaching

The first theme explores how optimism plays a crucial role in fueling the passion and dedication of physical education teachers, particularly in the face of the COVID-19 pandemic. Teaching physical education is a challenging task that requires significant effort and preparation to deliver sessions successfully. To navigate the obstacles posed by the new learning platform, teachers must maintain high levels of motivation and commitment to their subject (Ahmed, Allaf, & Elghazaly, 2020). Despite facing hurdles and obstacles while imparting lessons, the participants in the study shared their experiences of turning these challenges into valuable learning opportunities. They demonstrated their resilience and determination to complete tasks and effectively support their students in acquiring the necessary knowledge and skills. When asked about their strategies for maintaining dedication and commitment, the participants provided the following responses:

> *"…maybe if there are failures, I will just think of it as a part of me to be strong at the end of the day. We need to be adapted to every change whether we are prepared for it or not." (T1-Q2)*

> *"…those negative experiences I've got, I will just make this as a challenge for me to make it into a positive one…" (T5-Q2)*

> *"…I am still motivated in teaching PE despite the challenges during the pandemic through embracing the new normal and accepting that we must teach the students and provide quality education to the young ones amidst the pandemic..." (T8-Q2)*

These findings highlight the importance of fostering a positive mindset and maintaining an optimistic outlook as essential factors in sustaining passion and dedication among physical education teachers. By embracing challenges as learning opportunities and continuously enhancing their teaching approaches, teachers can navigate the complexities of the pandemic and contribute to the effective delivery of physical education in the new learning environment.

Theme 2. Turning Negativities into Motivations

The second theme of the study delves into how physical education teachers navigate the challenges of the new learning technology during the pandemic and transform their negative experiences into opportunities for improvement. Both students and teachers encounter difficulties in adapting to the virtual learning environment. However, teachers can reframe these challenges as catalysts for enhancing the quality of their lessons.

Physical education teachers engage in critical and imaginative thinking to ensure an efficient and effective teaching approach. They recognize the importance of developing pedagogies that encourage meaningful participation in physical education (Beni, Fletcher, & Ní Chróinín, 2017). Despite experiencing negative consequences in the learning environment, the participants' responses align with the insights of socialization theory, which emphasizes the role of commitment to colleagues and exposure to the work environment in fostering dedication and commitment (Richards, Gaudreault, Starck, & Mays Woods, 2018).

> *"..Those negative experiences I've got, I will just make this as a challenge for me to make it into a positive one." (T5-Q2)*

> *"…I am still motivated in teaching PE despite the challenges during the pandemic through embracing the new normal and accepting the fact that we must teach the students and provide quality education to the young ones amidst the pandemic, for I am one of them before having dreams and hopes.."(T8-Q2)*

Teachers found innovative ways to engage students and enhance their learning experiences by leveraging their creativity and resourcefulness. Their dedication to their profession, their colleagues' support, and the learning environment played a significant role in motivating them to overcome these difficulties. This finding underscores the importance of resilience, adaptability, and a positive mindset in facing the challenges of the pandemic. By embracing the opportunities for growth and innovation, physical education teachers can transform negative experiences into motivation for continuously improving their teaching practices. Their commitment to their students and the collaborative support from their professional network contribute to their ability to navigate the complexities of the new learning environment.

Table 3. Themes and Ideas on the Suggestions and Recommendations of Teachers to Better Implement Physical Education amidst the Pandemic

Major Theme	**Frequency of the responses**	**Core Ideas**
Hire and Expand the Skilled Teaching Workforce	General	Teachers must be skilled in teaching.
	Typical	Physical Education teachers should have sufficient background and knowledge.
Ensure Compliance with Government Health Regulations	General	Teachers and students should follow the norms set forth by the government.
Increase Instructional Time for Physical Education	General	Teachers must exercise patience to convey knowledge to students properly.
	General	The government should devote sufficient time to the subject of Physical Education.
Foster Teachers' Commitment to Student Learning	General	Teachers should incorporate inputs into the lessons they are teaching.
	General	There should be supplementary learning materials.

(Pascua & Tagare, 2023)

Legend:

General – response mentioned by 50% or more of the participants

Typical – response mentioned by at least 25% but less than 50%

Variant – response mentioned by less than 25% of the participants

As presented in Table 3, the following themes are the analysis and discussion of teachers' suggestions and recommendations for better implementing physical education amidst the pandemic:

Theme 1. Hire and Expand the Skilled Teaching Workforce

Excellent teachers foster positive, caring relationships encouraging students to believe in themselves. Excellent teachers engage students in meaningful learning and aim to motivate them on an inherent level, and they think that they are responsible for their student's learning and development. Skilled teachers are highly beneficial, significantly, as the educational system changes due to the recent pandemic. Students require complete help to effectively learn the teachings, so teachers must be skilled simultaneously. According to the findings, for students to properly acquire knowledge and ideas, teachers must have sufficient knowledge and ideas about the classes better to execute those (Tessier, Sarrazin, & Ntoumanis, 2010). Following are the responses of the participants that narrated these experiences:

> *"…The other suggestion I have here is that we lack skilled PE teachers, that is why maybe the government will take enough action to add some skilled PE teachers." (T1-Q3)*

When students feel supported, valued, and believed in by their teachers, they are more likely to develop a positive self-image and a belief in their abilities. This, in turn, creates a conducive learning environment where students feel safe to take risks, ask questions, and actively participate in their learning journey. Positive teacher-student relationships also contribute to student's emotional well-being, creating a sense of belonging and connectedness within the classroom. Excellent teachers go beyond simply delivering content; they strive to make learning meaningful by connecting it to real-life situations and fostering students' intrinsic motivation to learn. By designing lessons that tap into students' interests, experiences, and aspirations, teachers can ignite genuine curiosity and passion for learning.

Theme 2. Ensure Compliance with Government Health Regulations

The COVID-19 pandemic has significantly impacted the education system, necessitating the need to adhere to government policies for a successful implementation of remote learning. In response to the virus's rapid spread, the government has established rules and regulations to ensure the safety of students, teachers, and staff. The sudden disruption caused by the pandemic led to the development of online learning platforms, requiring teachers and students to adapt to this new mode of education (Tee et al., 2020). The study's findings suggest that by following the government's protocols, students and teachers can effectively engage in teaching and learning, gaining a comprehensive understanding of the subject matter.

> *"…The best way is to follow the government, especially now in this time of pandemic we need to be vaccinated. Maybe we should adhere to the plan of our government and just follow the health protocols." (T1-Q3)*

The participants in the study provided valuable insights into their experiences within this new educational landscape. Their responses shed light on the challenges and adjustments made to comply with the government's guidelines. Teachers and students can maintain a structured and secure learning environment by adhering to these regulations. The study emphasizes the importance of acquiring a deep and broad understanding of the subject matter, highlighting the role of government protocols in facilitating this.

Theme 3. Increase Instructional Time for Physical Education

Effective implementation of physical education necessitates allocating sufficient time for teachers to impart knowledge and skills to the learners effectively. Educators have observed that some students have leisure time during the subject's scheduled sessions, leading to various factors that may affect their engagement. The study's findings highlight the importance of dedicating adequate time to enhance students' motor skills and facilitate knowledge transfer and ideas. Previous research by Loprinzi, Cardinal, Loprinzi, and Lee (2012) supports that allocating enough time to physical education is crucial for enhancing motor skills development. Following are the responses of the participants that narrated these experiences:

"…I suggest giving PE more time… giving PE enough time like Math, English, and other subjects. I think this is why the students are not that close to PE teachers because they only got the chance to meet once a week." (T2-Q3)

"…Maybe my suggestion in teaching PE is number 1; it should be patient, especially since we are Physical Education teachers because it is given that our subject is the most difficult and challenging in this pandemic." (T3-Q3)

The participants in the study provided valuable insights into their experiences related to time allocation in physical education. Their responses shed light on the challenges and implications of having limited time for effective teaching and learning. The study emphasizes the need to set aside sufficient time to deliver quality physical education instruction, considering the importance of motor skills development. By devoting additional time to physical education, the educational system can better support students in acquiring the necessary skills and knowledge.

Theme 4. Foster Teachers' Commitment to Student Learning

The experiences shared by the participants in the study further underscore the significance of educators' commitment and proactive efforts in addressing the difficulties students face in the new learning platform. Teachers can improve their instructional approaches and facilitate effective knowledge transfer by offering a range of learning resources and engaging in professional development opportunities. Their dedication and willingness to adapt to the online learning environment are crucial for ensuring students can successfully navigate the challenges and acquire the necessary knowledge and skills. The participants' responses provide valuable insights into teachers' strategies and approaches to support students in this changing educational landscape. Following are the responses of the participants that narrated these experiences:

"…Though we are now in a pandemic, as a teacher, we need to put additional inputs to the lesson. The teacher should add video clips or any video instructions link for the students to view and have references." (T5-Q3)

"…Develop more videos in each lesson as supplementary learning materials for students." (T8-Q3)

This finding implies educators need to prioritize providing comprehensive learning materials, including digital resources and tools, to support effective instruction in the online environment. Additionally, the results emphasize the importance of ongoing professional development opportunities for teachers to enhance their pedagogical skills and proficiency in online education. The experiences shared by the participants demonstrate that teachers' commitment and proactive efforts are essential for overcoming the challenges posed by the transition to online learning. Teachers can help mitigate the difficulties associated with acquiring knowledge and ideas in the new learning platform by investing their time, effort, and patience in preparing and supporting students.

Conclusions

The findings of this study highlight the resilience and motivation of students and teachers, despite the challenges they face in adapting to the rapid changes in the educational system. Their eagerness to learn and commitment to schoolwork demonstrate their determination to acquire new concepts and knowledge. It also emphasizes the importance of providing opportunities for teachers' personal and professional development to navigate the new learning platform effectively.

However, it also reveals challenges teachers face, including limited resources such as internet speed, materials, equipment, and technological competence, as well as budget constraints imposed by the government. Nevertheless, teachers have demonstrated their ability to transform negative experiences into positive ones, inspiring and motivating their students even during a difficult educational system.

Further, the study concludes the resilience and courage exhibited by physical education teachers in the face of challenges. Teachers utilize their own experiences to challenge and motivate their students, despite the ongoing difficulties in the educational landscape. It highlights the importance of teachers' dedicated efforts, patience, and time investment to ensure the effective implementation of physical education during the global pandemic.

Finally, this research concludes the significant role of infrastructure and equipment in facilitating high-quality physical education. It emphasizes the need for schools to adhere to safety norms and regulations when utilizing fitness facilities to safeguard the well-being of both teachers and students. By recognizing the importance of these factors, schools can create more meaningful teaching-learning experiences and enhance the overall quality of physical education amidst the ongoing pandemic.

References

Ahmed, H., Allaf, M., & Elghazaly, H. (2020). COVID-19 and medical education. *The Lancet Infectious Diseases*, *20*(7), 777-778. doi:10.1016/S1473-3099(20)30226-7

Agaton, C. B., & Cueto, L. J. (2021). Learning at home: Parents' lived experiences on distance learning during COVID-19 pandemic in the Philippines. *International Journal of Evaluation and Research in Education, 10*(3), 901-911. doi:10.11591/ijere.v10i3.21136

Beni, S., Fletcher, T., & Ní Chróinín, D. (2017). Meaningful experiences in physical education and youth sport: A review of the literature. *Quest*, *69*(3), 291-312. doi:10.1080/00336297.2016.1224192

Bravo, J. P., Dangerfield, T. L., Taylor, D. W., & Johnson, K. A. (2021). Remdesivir is a delayed translocation inhibitor of SARS-CoV-2 replication. *Molecular Cell, 81*(7), 1548-1552. doi:10.1016/j.molcel.2021.01.035

De los Santos, J. A. A., & Labrague, L. J. (2021). The impact of fear of COVID-19 on job stress, and turnover intentions of frontline nurses in the community: A cross-sectional study in the Philippines. *Traumatology, 27*(1), 52-59. doi:10.1037/trm0000294

Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. *Handbook of Theories of Social Psychology, 1*(20), 416-436. doi:10.4135/9781446249215.n21

Eickelmann, B., & Gerick, J. (2020). Lernen mit digitalen Medien: Zielsetzungen in Zeiten von Corona und unter besonderer Berücksichtigung von sozialen Ungleichheiten. In D. Fickermann & B. Edelstein (Eds.), *Langsam vermisse ich die Schule* (pp. 153-162). Almanya: Waxmann Verlag GmbH.

Hebebci, M. T., Bertiz, Y., & Alan, S. (2020). Investigation of views of students and teachers on distance education practices during the coronavirus (COVID-19) pandemic. *International Journal of Technology in Education and Science (IJTES), 4*(4), 267-282. doi:10.46328/ijtes.v4i4.113

Huang, C. C., Wang, Y. M., Wu, T. W., & Wang, P. A. (2013). An empirical analysis of the antecedents and performance consequences of using the moodle platform. *International Journal of Information and Education Technology*, *3*(2), 217-221. doi:10.7763/IJIET.2013.V3.267

Khan, M. T. (2015). Role of education in poverty reduction (a literature review). *International Journal of Information, Business and Management*, *7*(3), 124-134.

Kraft, M. A., Simon, N. S., & Lyon, M. A. (2020). *Sustaining a sense of success: The importance of teacher working conditions during the COVID-19 pandemic*. Educating in an Epidemic: The K-12 Response to COVID-19, Annenberg Institute for School Reform at Brown University, USA.

Livitchi, O., & Cibuc, L. (2020). *Integrating active and participative methods in teaching and learning process in modern higher education*. Paper presented at the Contemporary Issues in Economy and Technology. Retrieved from https://ibn.idsi.md/sites/default/files/imag_file/164-175_1.pdf

Loprinzi, P. D., Cardinal, B. J., Loprinzi, K. L., & Lee, H. (2012). Benefits and environmental determinants of physical activity in children and adolescents. *Obesity Facts*, *5*(4), 597-610. doi:10.1159/000342684

Mandela, N. (2003). *Lighting your way to a better future: Speech delivered by Mr N R Mandela at launch of Mindset Network* [Speech]. Houghton: Nelson Mandela Foundation. Retrieved from http://www.mandela.gov.za/mandela_speeches/2003/030716_mindset.htm

Marshall, D. T., Shannon, D. M., & Love, S. M. (2020). How teachers experienced the COVID-19 transition to remote instruction. *Phi Delta Kappan, 102*(3), 46-50. doi:10.1177/0031721720970702

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.

Mojica, M. I. O. (2021). The lived experiences of teacher and students in physical education amidst the pandemic. *EPRA International Journal of Research & Development*, *6*(6), 365-372. doi:10.36713/epra7342

Muhamadjonovna, S. D. (2020). The development of sociolinguistic competence of future English language teachers through computer technologies. *European Journal of Research and Reflection in Educational Sciences*, *8*(3), 147-150.

Nambiar, D. (2020). The impact of online learning during COVID-19: Students' and teachers' perspective. *The International Journal of Indian Psychology, 8*(2), 783-793.

Richards, K. A. R., Gaudreault, K. L., Starck, J. R., & Mays Woods, A. (2018). Physical education teachers' perceptions of perceived mattering and marginalization. *Physical Education and Sport Pedagogy*, *23*(4), 445-459. doi:10.1080/17408989.2018.1455820

Rotas, E., & Cahapay, M. (2021). From stress to success: Exploring how Filipino students cope with remote learning amid COVID-19 pandemic. *Journal of Pedagogical Sociology and Psychology, 3*(1), 27-35. doi:10.33902/JPSP.2021366608

Sahoo, S. (2020). E-readiness and perception of student teachers' towards online learning in the midst of COVID-19 pandemic. *Search Life-Sciences Literature, 12*(120), 1-14.

Tee, M., Wang, C., Tee, C., Pan, R., Reyes, P. W., Wan, X., ... Ho, R. (2020). Physical and mental health impact of the COVID-19 pandemic in lower middle and upper middle-income Asian countries: A comparison between the Philippines and China. *Frontiers in Psychiatry, 4*(11), 16-31. doi:10.3389/fpsyt.2020.568929

Tessier, D., Sarrazin, P., & Ntoumanis, N. (2010). The effect of an intervention to improve newly qualified teachers' interpersonal style, students' motivation and psychological need satisfaction in sport-based physical education. *Contemporary Educational Psychology*, *35*(4), 242-253. doi:10.1016/j.cedpsych.2010.05.005

Tilak, J. B. (2002). Education and poverty. *Journal of Human Development*, *3*(2), 191-207. doi:10.1080/14649880220147301

Usher, A., & Kober, N. (2013). Student motivation: An overlooked piece of school reform. *The Education Digest, 78*(5), 9-16.

EXAMINING THE INFLUENCE OF ACHIEVEMENT GOALS IN SPORTS ON THE QUALITY OF LIFE AMONG STUDENTS IN PHILIPPINE HIGHER EDUCATION

Prof. Ruben Jr Lagunero Tagare*, Prof. Marlon Mancera, Eduard Sumera

Physical Education, University of Southern Mindanao, Philippines

Abstract

This study aimed to examine the influence of achievement goals in sports on the quality of life among students in Philippine higher education. The research utilized a quantitative-correlation design involving 1,494 respondents selected through simple random sampling. Data were collected using the Achievement Goal Scale for Youth Sports questionnaire and the Youth Quality of Life Instrument. Results revealed that students exhibited a moderate achievement goal orientation in sports and perceived their quality of life as moderate. Notably, a significant positive relationship was found between achievement goals in sports and perceived quality of life, indicating that as students' achievement goals in sports increased, their quality of life also improved. These findings highlight the importance of fostering a balanced approach to sports participation, promoting intrinsic motivation and personal growth, and addressing specific needs to enhance overall well-being among students. Future research endeavors may explore additional factors influencing the relationship between sports participation and quality of life, considering cultural, contextual, and individual differences. Interventions and programs to support students' achievement goals in sports should be prioritized to promote holistic development and well-being in educational settings.

Keywords: Achievement Goal in Sports, Holistic Sports, Quality of Life, and Youth Sports

Manuscrito recibido: 25/03/2024
Manuscrito aceptado: 18/04/2024

*Corresponding Author: Ruben Jr Lagunero Tagare, Physical Education, University of Southern Mindanao, Philippines

Correo-e: tagareruben@usm.edu.ph

Introduction

Achievement goals in sports encompass individuals' aspirations, orientations, and motivations when engaging in sporting activities. These goals typically revolve around the desire to demonstrate competence, achieve success, and attain mastery within the sporting context (Chu & Zhang, 2018). Two primary achievement goals are often identified: task-oriented goals, which focus on personal improvement, skill development, and mastering challenges, and ego-oriented goals, which emphasize outperforming others, winning, and receiving external recognition (Wilt & Johnson, 2024). Task-oriented goals are associated with intrinsic motivation, enjoyment of the sport, and long-term engagement, while ego-oriented goals may lead to heightened anxiety, reduced enjoyment, and burnout (Pluhar et al., 2019). Individuals may exhibit a combination of both types of goals, and pursuing specific achievement goals can influence their behavior, effort, persistence, and overall performance in sports (Alhadabi & Karpinski, 2020).

On the other hand, students' quality of life encompasses various dimensions of well-being and satisfaction across physical, emotional, social, and academic domains. It reflects students' lives and subjective perceptions of happiness, fulfillment, and contentment (Ribeiro et al., 2018). Physical well-being includes access to healthcare, nutrition, exercise, and sleep quality, all of which contribute to overall health and vitality (Alsubaie et al., 2019). Emotional well-being involves managing stress, coping with challenges, experiencing positive emotions, and maintaining mental health. Social well-being encompasses the quality of relationships, social support networks, a sense of belonging, and engagement in social activities, essential for building connections and fostering a sense of community (Alkatheri et al., 2020). Academic well-being relates to students' experiences in educational settings, including satisfaction with learning environments, academic achievement, perceived competence, and future aspirations (Kasar & Karaman, 2021).

In the present educational setting, one prominent issue with students is the prevalence of performance-oriented goals over task-oriented ones, where students prioritize external validation, competition, and achievement over personal growth and mastery (Niemivirta et al., 2019). This emphasis on performance can increase stress, anxiety, and burnout, negatively impacting students' overall well-being (Etherton et al., 2022). Luthar and Kumar (2018) further explained that factors such as academic pressure, peer comparison, and societal expectations can further worsen these challenges, fostering a culture of perfectionism and undermining students' sense of satisfaction and fulfillment. The limited access to resources, opportunities, and support systems may hinder students' ability to pursue their goals effectively, contributing to frustration and disengagement.

Further, research on achievement goals in sports has consistently shown that specific, challenging goals lead to better performance (Roberts & Nerstad, 2020). Team achievement goals, including performance approach, performance-avoidance, mastery approach, and mastery-avoidance, significantly impact team performance (Van Mierlo & Van Hooft, 2020). Mastery-approach goals positively predict intrinsic motivation and sports performance, while performance-avoidance goals have a negative impact on performance. These highlight the importance of setting appropriate and motivating goals in sports, as they can significantly influence individuals' motivation, performance, and overall success in athletic endeavors (Kim et al., 2019).

Furthermore, an array of studies has investigated the quality of life among students, examining various influencing factors. Muhammed and Abubakar (2019) identified significant influences on quality of life among indigenous students, family income levels, and field of study. Lonska et al. (2021) underscored the subjective nature of quality of life, noting students' valuation of educational services, disposable income, and access to healthcare.

Though studies have been conducted on students' goal orientation and quality of life, research correlating these variables remains insufficient. Recognizing this gap, this study investigated the relationship between students' goal orientation, particularly in sports, and their overall quality of life. By exploring this connection, the study aims to shed light on how students' aspirations and motivations in sports activities may impact various dimensions of their quality of life. Through rigorous examination and analysis, this research seeks to provide valuable insights that can inform educational policies, programs, and interventions to enhance student well-being in Philippine higher education.

Moreover, conducting this study holds significant implications for students, teachers, administrators, and educational leaders as it can offer valuable insights into how students' participation in sporting activities influences their well-being. It can empower them to make informed choices regarding their involvement in sports and guide them toward setting meaningful goals that contribute positively to their overall quality of life. Teachers and coaches can benefit from this research by understanding how to support students' holistic development through sports, fostering a positive and enriching environment that promotes both athletic achievement and personal well-being. For administrators and educational leaders, insights from this study can inform the design and implementation of policies, programs, and resources to promote student engagement in sports and enhance the overall quality of education in Philippine higher education institutions. By recognizing the importance of sports participation in shaping students' lives and well-being, educational stakeholders can work collaboratively to create an inclusive and supportive environment that maximizes the potential benefits of sports involvement for all students.

Methods

Research Design

This research employed a quantitative-correlation design to investigate the relationship between students' achievement goals in sports and their quality of life. Creswell (2021) explained that quantitative research design involves systematically collecting and analyzing numerical data to examine patterns, relationships, and trends within a population or sample. In this context,

quantitative correlation design specifically focuses on measuring the strength and direction of associations between variables, allowing researchers to assess how changes in one variable relate to changes in another (Bloomfield and Fisher, 2019).

The correlation aspect of the design enables researchers to determine the extent to which students' achievement goals in sports are related to various dimensions of their quality of life. This design is particularly appropriate for this study as it provides a structured framework for quantitatively examining the relationship between these variables, offering statistical evidence to support conclusions and recommendations. By employing this design, researchers have efficiently explored the potential influence of achievement goals in sports on students' overall quality of life, yielding valuable insights that can inform educational practices and interventions.

Research Respondents and Sampling Procedure

This study involved a total of 1,494 respondents who were gathered using a simple random sampling technique. This method is done where each member of the population has an equal chance of being selected for the study (Bhardwaj, 2019). This approach was chosen to ensure that every student had an equal opportunity to participate in the research, thereby reducing bias and ensuring the generalizability of the findings to the broader student population. Simple random sampling is preferred in studies aiming for representativeness and minimizing sampling error, making it particularly suitable for this research endeavor. By employing this method, the study aimed to obtain a diverse and representative sample of students, allowing for strong analysis and generalization of results to the broader student population.

Research Instruments

This research utilized the Achievement Goal Scale for Youth Sports questionnaire, a validated instrument developed by Cumming et al. (2007) for assessing achievement goals in youth sports contexts. Both exploratory and confirmatory factor analyses were conducted, demonstrating the questionnaire's factorial validity, with a Cronbach's alpha value of .88, indicating high internal consistency reliability. This signifies that the questionnaire reliably measures the intended constructs of achievement goals in sports among youth.

For the Students' Quality of Life Questionnaire, this research adapted the instrument developed and validated by Patrick et al. (2002) titled the "Youth Quality of Life Instrument – Short Form (YQOL-SF)," which encompasses 15 perceptual items assessing domains such as sense of self, social relationships, environment, and general quality of life. The instrument was crafted using Rasch methodology, ensuring rigorous development and validation procedures. The instrument demonstrated strong internal consistency reliability, as evidenced by a Cronbach's alpha value of .80. This suggests that the questionnaire items consistently measure the intended aspects of students' quality of life.

Statistical Analysis

The data analysis and interpretation were done with the assistance of SPSS (Statistical Package for the Social Sciences), a widely used software program for statistical analysis in social science research. SPSS provided researchers with a comprehensive suite of tools for data management, descriptive statistics, inferential statistics, and data visualization, facilitating the exploration, manipulation, and interpretation of data from various research designs.

For statistical analysis, this research utilized mean and composite mean calculations to describe students' achievement goal orientation and perceived quality of life. Mean values were employed to summarize the central tendencies within each variable, providing a clear understanding of the average scores. Spearman's rho correlation coefficient was then employed to examine the significant relationship between these variables, allowing for exploring associations without requiring linear relationships between variables. This method enabled the study to assess the strength and direction of the relationship between achievement goal orientation and perceived quality of life, providing valuable insights into their potential interactions.

Result

Table 1-3

Discussion

Student Respondents' Achievement Goals in Sports

Table 1 presents the results of students' achievement goals in sports. Analysis reveals that the statement "I feel successful when I do my best" obtained the highest mean value of 3.49, indicating a verbal description of "true." This signifies that a significant proportion of students strongly identify with feeling successful when they exert their best effort in sports activities.

This implies that these students prioritize personal improvement, effort, and mastery over external validation or comparison with others. Their inclination towards valuing individual progress and self-fulfillment underscores a task-oriented approach to sports participation, where intrinsic motivation and personal growth are prioritized. This finding suggests that fostering a supportive environment that encourages students to focus on personal development and effort may lead to greater satisfaction and fulfillment in their sporting activities.

Newman (2014) explained that younger people often feel successful when they do their best because there is a natural inclination towards personal growth and achievement during youth, driven by developmental milestones and societal expectations. Younger individuals tend to possess high energy, enthusiasm, and optimism, fueling their drive to excel and make a positive impact (Newman & Smith, 2014). The absence of significant life responsibilities and obligations allows them to devote more time and effort to pursuing their passions and interests, leading to a sense of accomplishment when they give their best effort (Uddin, 2021). Olszewski-Kubilius (2018) also highlighted that the validation and recognition received from peers, family, and society play a crucial role in reinforcing their perception of success, motivating them to strive for excellence in various undertakings continuously.

On the other hand, the statement "to me, success means being better than others" garnered the least mean value of 2.04, accompanied by a verbal description of "not true." This suggests that many respondents do not prioritize success over outperforming others. Instead, they place less emphasis on comparative achievement and are more focused on personal growth, self-improvement, and intrinsic satisfaction.

This implies that these individuals adopt a task-oriented approach to success, valuing their progress and effort over external benchmarks or comparisons with peers. Their mindset prioritizes individual development and mastery, fostering intrinsic motivation and a sense of fulfillment derived from

Table 1. Student Respondents' Achievement Goals in Sports.

Statements	Mean	Verbal Description
9. I feel successful when I do my best	3.49	TRUE
7. I feel successful when I learn new skills	3.43	TRUE
3. The most important thing is to improve my skills	3.4	TRUE
5. I work hard to become the best I can be	3.37	TRUE
1. My goal is to learn new skills and get as good as possible	3.28	TRUE
6. My goal is to master the skills in the sport I am interested in.	3.18	TRUE
2. The most important thing is to be the best version of myself through sports	3.01	TRUE
4. My goal is to improve so I will be better than others	2.42	Not True
10. I want to show that I am better than others	2.08	Not True
8. To me, success means being better than others	2.04	Not True
Overall Mean	2.97	True = Moderate Achievement Goals in Sports
Legend		
4.00 – 3.50	Very True	High Achievement Goals in Sports
3.49 – 2.50	TRUE	Moderate Achievement Goals in Sports
2.59 – 1.50	Not True	Low Achievement Goals in Sports
1.49 – 1.00	Not at all True	No Achievement Goals in Sports

Table 2. Student Respondents' Perceived Quality of Life.

Statements	Mean	Verbal Description
7. I am not alone in my life	3.05	Moderate
14. I feel I am getting a good education	3.05	Moderate
6. I feel I am getting along with my parents or guardians	3.01	Moderate
13. I feel safe when I am at home	3.01	Moderate
15. I am satisfied with the way my life is now	3.01	Moderate
5. I feel understood by my parents or guardians	2.98	Moderate
12. I look forward to the future	2.98	Moderate
2. I feel good about myself	2.89	Moderate
9. I feel I can take part in the same activities as others my age	2.89	Moderate
1. I am able to do most things as well as I want	2.82	Moderate
8. I am happy with the friends I have	2.82	Moderate
4. I am pleased with how I look	2.54	Moderate
11. I feel my life is full of interesting things to do	2.54	Moderate
3. I feel I am important to others	2.45	Rarely
10. People my age treat me with respect	2.45	Rarely
Overall Mean	2.83	Moderate = Moderate Quality of Life
Legend		
4.00 – 3.50	Very Much	High Quality of Life
3.49 – 2.50	Moderate	Moderate Quality of Life
2.59 – 1.50	Rarely	Low Quality of Life
1.49 – 1.00	Not at All	Very Low Quality of Life

Table 3. Test of Significant Relationship between the Student Respondents' Achievement Goals in Sports and Perceived Quality of Life.

Variables	Correlation Coefficient	Significant Value	Interpretation
Achievement Goals in Sports and	0.398	0.001	Significant
Perceived Quality of Life			

personal achievements rather than external recognition or validation. This finding underscores the importance of promoting a positive and supportive environment that encourages students to pursue personal growth and self-improvement rather than solely focusing on competition and comparison with others.

A task-oriented approach to success is often preferable to competing with others because focusing on personal growth and mastery allows individuals to set realistic and achievable goals based on their abilities and progress, leading to a greater sense of control and satisfaction (Henkel et al., 2019). This approach fosters intrinsic motivation, as individuals derive fulfillment from learning and improvement rather than solely seeking external validation or comparison with others (Elgh, 2014). A task-oriented mindset promotes collaboration and cooperation rather than rivalry, fostering a supportive and inclusive environment where individuals can learn from each other and celebrate collective achievements (Hosseini-Asl et al., 2020).

Overall, the students' achievement goal orientation in sports yielded a composite mean value of 2.97, interpreted as "moderate achievement goals in sports." This suggests that, on average, students exhibit a balanced orientation toward achieving success in sports activities. While they may possess a degree of motivation and aspiration to excel, it falls within a moderate range, indicating a healthy balance between striving for personal improvement and avoiding excessive competitiveness.

This implies that the student population surveyed demonstrates a reasonable level of goal orientation in sports, with a tendency to prioritize individual progress and effort while maintaining a realistic perspective on success. This balanced approach is conducive to fostering intrinsic motivation, enjoyment, and long-term engagement in sports activities while mitigating the adverse effects of excessive pressure and competition. This suggests that efforts to support and enhance students' achievement goals in sports should reinforce positive attitudes towards personal growth and self-improvement, promoting a sustainable and fulfilling sports experience for all students.

Giles-Mathis (2023) explained that by prioritizing personal improvement, individuals can cultivate intrinsic motivation and derive satisfaction from the journey of self-improvement. However, maintaining a realistic perspective on success ensures that individuals avoid excessive pressure and comparison with others, reducing the risk of burnout and promoting long-term well-being. This balance allows individuals to set achievable goals, celebrate their accomplishments, and persevere through challenges with resilience and optimism (Schaffner, 2021).

Student Respondents' Perceived Quality of Life

Table 2 presents the Student Respondents' Perceived Quality of Life. Analysis of the data reveals that the statements "I am not alone in my life" and "I feel I am getting a good education" both obtained the highest mean value of 3.05, classified as "moderate" based on verbal descriptions. This indicates that a significant proportion of students perceive a moderate level of support in their social relationships and feel satisfied with the quality of education they are receiving

This implies that students place considerable importance on social connections and educational opportunities in shaping their overall quality of life. The fact that these aspects garnered the highest mean values suggests that they are critical determinants of students' well-being and satisfaction. The moderate ratings indicate a balanced perception, where students acknowledge the presence of supportive relationships and quality education without necessarily attributing extreme significance to them. These findings highlight the importance of fostering a supportive social environment and providing high-quality educational experiences to enhance students' overall quality of life and well-being.

Shankar et al. (2015) outlined that positive social connections contribute to resilience, self-esteem, and mental health, buffering against stress and adversity. Meaningful relationships with peers, family, and mentors facilitate personal growth, empathy, and social skills, preparing youth for future challenges and opportunities (Clark, 2018). Laurie et al. (2016) explained that receiving quality education equips youth with essential knowledge, skills, and opportunities for personal and professional growth. It fosters critical thinking, creativity, and problem-solving abilities, empowering youth to navigate complexities in today's society and pursue their aspirations. Quality education also promotes social mobility, empowering individuals to access better opportunities and contribute meaningfully to their communities and society (Spaull, 2015).

On the other hand, the statements "I feel I am important to others" and "People my age treat me with respect" received the least mean value of 2.83, classified as "rarely" based on verbal descriptions. This indicates that a notable proportion of respondents perceive infrequent instances where they feel valued by others and treated with respect by peers of the same age group.

These imply that these students may experience challenges or deficiencies in social support and interpersonal dynamics. The low mean values suggest a lack of consistent affirmation and recognition from others, impacting their self-esteem, sense of belonging, and overall well-being. The fewness of feeling

respected by peers highlights potential issues related to bullying, social exclusion, or negative peer interactions within the student community.

Bullying and social exclusion within the student community persist in today's society due to societal norms that perpetuate aggression and power imbalances, insufficient education and awareness about the consequences of bullying, and a lack of effective interventions and support systems in schools (Søndergaard, 2014). Factors such as social media usage and cyberbullying have expanded the scope and anonymity of bullying behaviors, making them more challenging to address. Individual characteristics such as low self-esteem, social skills deficits, or past experiences of victimization can also contribute to both perpetration and victimization (Søndergaard & Rabøl Hansen, 2018).

Overall, the student respondents' perceived quality of life obtained a composite mean value of 2.83, corresponding to an interpretation of "moderate quality of life." This indicates that, on average, students perceive their quality of life to be moderate, falling between low and high levels. While aspects of their quality of life may be satisfactory, there is room for improvement in various domains to enhance overall well-being.

This implies that students may experience positive and negative experiences across different aspects of their lives. While they may feel satisfied with certain aspects, there are likely areas where they face challenges or dissatisfaction. Addressing these inconsistencies and enhancing students' quality of life may require targeted interventions and support systems that address specific needs and promote overall well-being. It underscores the importance of adopting a holistic approach to student well-being, considering various factors such as social relationships, academic experiences, physical health, and personal fulfillment.

Tonon (2021) emphasizes the social construction of youth and the impact of the social context on their daily lives, suggesting that societal changes and pressures may contribute to their quality of life. Tatai (2022) further explores this, highlighting the influence of social modernization on teenagers' quality of life, including their mental and physical health, cultural experiences, and academic performance. Clayton and Steffensen (2005) explained that a loving and supportive family, friendships, and recreational time are critical factors in their quality of life.

Significant Relationship Between Student Respondents' Achievement Goals in Sports and Perceived Quality of Life

Table 3 tests the significant relationship between the student respondents' achievement goals in sports and perceived quality of life. The data reveals a significant value of .001 and a correlation coefficient of .398, indicating a statistically significant relationship between the variables. This positive correlation suggests that as respondents' achievement goals in sports increase, their perceived quality of life also tends to increase.

This implies a meaningful connection between students' sports engagement and overall quality of life. The findings suggest that involvement in sports activities, mainly driven by specific achievement goals, positively influences students' well-being and satisfaction. This underscores the potential benefits of promoting a goal-oriented approach to sports participation in educational settings, as it enhances athletic performance and contributes to students' holistic development and overall quality of life. These results highlight the importance of incorporating sports and physical activity programs into educational curricula to foster student well-being and academic success.

Participation in sports and other physical activities has been linked to numerous student benefits, contributing to overall well-being (Baciu & Baciu 2015). Specifically, engagement in sports can positively impact subjective dimensions of quality of life, including enjoyment, satisfaction, and global satisfaction with life (Peráčková & Peráček, 2019). Involvement in organized sports can lead to various psychological and social advantages, such as improved academic achievement, enhanced self-esteem, reduced behavioral problems, and the acquisition of critical life skills (Forest & Wood, 2012).

Conclusion

In conclusion, the findings of this study disclose the achievement goals of students in sports, revealing a moderate orientation towards success in athletic endeavors. This suggests a balanced approach, emphasizing personal improvement and effort while avoiding excessive competitiveness. Such a mindset is conducive to fostering intrinsic motivation and long-term engagement in sports activities, promoting holistic development and well-being among students.

Similarly, the study unveiled a perceived moderate quality of life among students, indicating satisfactory and challenging aspects across various domains. While students may experience positive social relationships and educational satisfaction, there are opportunities for improvement in other areas to enhance overall well-being. Addressing these gaps requires targeted interventions and support systems that address specific needs and promote holistic well-being among students.

Lastly, the significant relationship between achievement goals in sports and perceived quality of life highlights the interconnectedness of these domains in shaping students' well-being. The positive correlation suggests that fostering a goal-oriented approach to sports participation can positively influence students' quality of life. This underscores the importance of integrating sports and physical activity programs into educational curricula to promote student well-being and academic success. These findings highlight the importance of adopting a holistic approach to student development, considering various factors such as achievement goals, social relationships, and overall quality of life to foster a supportive and enriching educational environment.

References

1. Alhadabi, A., & Karpinski, A. C. (2020). Grit, self-efficacy, achievement orientation goals, and academic performance in University students. International Journal of Adolescence and Youth, 25(1), 519-535.
2. Alkatheri, A. M., Bustami, R. T., Albekairy, A. M., Alanizi, A. H., Alnafesah, R., Almodaimegh, H., ... & Qandil, A. M. (2020). Quality of life and stress level among health professions students. Health Professions Education, 6(2), 201-210.
3. Alsubaie, M. M., Stain, H. J., Webster, L. A. D., & Wadman, R. (2019). The role of sources of social support on depression and quality of life for university students. International journal of adolescence and youth, 24(4), 484-496.
4. Baciu, C., & Baciu, A. (2015). Quality of life and students' socialization through sport. Procedia-Social and Behavioral Sciences, 209, 78-83.
5. Bhardwaj, P. (2019). Types of sampling in research. Journal of Primary Care Specialties, 5(3), 157-163.
6. Bloomfield, J., & Fisher, M. J. (2019). Quantitative research design. Journal of the Australasian Rehabilitation Nurses Association, 22(2), 27-30.
7. Chu, T. L., & Zhang, T. (2018). Motivational processes in Sport Education programs among high school students: A systematic review. European Physical Education Review, 24(3), 372-394.
8. Clark, J. L., Algoe, S. B., & Green, M. C. (2018). Social network sites and well-being: The role of social connection. Current Directions in Psychological Science, 27(1), 32-37.
9. Clayton, A. K., & Steffensen, S. (2005). Meningen med livet: hur 15-åringar i en stor och en liten stad i Sverige ser på livskvalitet.
10. Creswell, J. W. (2021). A concise introduction to mixed methods research. SAGE publications.
11. Cumming, S. P., Smith, R. E., Smoll, F. L., Standage, M., & Grossbard, J. R. (2008). Development and validation of the achievement goal scale for youth sports. Psychology of Sport and Exercise, 9(5), 686-703.
12. Elgh, F. (2014). Automated engineer-to-order systems–a task-oriented approach to enable traceability of design rationale. International Journal of Agile Systems and Management 21, 7(3-4), 324-347.
13. Etherton, K., Steele-Johnson, D., Salvano, K., & Kovacs, N. (2022). Resilience effects on student performance and well-being: the role of self-efficacy, self-set goals, and anxiety. The Journal of general psychology, 149(3), 279-298.
14. Forest, A. L., & Wood, J. V. (2012). When social networking is not working: Individuals with low self-esteem recognize but do not reap the benefits of self-disclosure on Facebook. Psychological science, 23(3), 295-302.
15. Giles-Mathis, I. (2023). The Experience of Resilience and Striving for Self-Improvement Among Adults (Doctoral dissertation, Capella University).
16. Henkel, T. G., Marion Jr, J. W., & Bourdeau, D. T. (2019). Project manager leadership behavior: Task-oriented versus relationship-oriented. Journal of leadership education, 18(2), 1.
17. Hosseini-Asl, E., McCann, B., Wu, C. S., Yavuz, S., & Socher, R. (2020). A simple language model for task-oriented dialogue. Advances in Neural Information Processing Systems, 33, 20179-20191.
18. Kasar, K. S., & Karaman, E. (2021). Life in lockdown: Social isolation, loneliness and quality of life in the elderly during the COVID-19 pandemic: A scoping review. Geriatric Nursing, 42(5), 1222-1229.
19. Kim, M., Kim, A. C. H., Newman, J. I., Ferris, G. R., & Perrewé, P. L. (2019). The antecedents and consequences of positive organizational behavior: The role of psychological capital for promoting employee well-being in sport organizations. Sport Management Review, 22(1), 108-125.

20. Laurie, R., Nonoyama-Tarumi, Y., Mckeown, R., & Hopkins, C. (2016). Contributions of education for sustainable development (ESD) to quality education: A synthesis of research. Journal of Education for Sustainable development, 10(2), 226-242.

21. Lonska, J., Mietule, I., Litavniece, L., Arbidane, I., Vanadzins, I., Matisane, L., & Paegle, L. (2021). Work–life balance of the employed population during the emergency situation of COVID-19 in Latvia. Frontiers in Psychology, 12, 682459.

22. Luthar, S. S., & Kumar, N. L. (2018). Youth in high-achieving schools: Challenges to mental health and directions for evidence-based interventions. Handbook of school-based mental health promotion: An evidence-informed framework for implementation, 441-458.

23. Muhammed, Z., & Abubakar, I. R. (2019). Improving the quality of life of urban communities in developing countries. Responsible Consumption and Production, Encyclopedia of the UN Sustainable Development Goals, 1-14.

24. Newman, S. (2014). Intergenerational programs: Past, present and future. Taylor & Francis.

25. Newman, S., & Smith, T. B. (2014). Developmental theories as the basis for intergenerational programs. In Intergenerational Programs (pp. 3-19). Taylor & Francis.

26. Niemivirta, M., Pulkka, A. T., Tapola, A., & Tuominen, H. (2019). Achievement goal orientations: A person-oriented approach. The Cambridge handbook of motivation and learning, 566-616.

27. Olszewski-Kubilius, P. (2018). The role of the family in talent development. Handbook of giftedness in children: Psychoeducational theory, research, and best practices, 129-147.

28. Patrick, D. L., Edwards, T. C., & Topolski, T. D. (2002). Adolescent quality of life, part II: initial validation of a new instrument. Journal of adolescence, 25(3), 287-300.

29. Peráčková, J., & Peráček, P. (2019). Sport for the subjective dimensions of quality of life. In Quality of Life-Biopsychosocial Perspectives. IntechOpen.

30. Pluhar, E., McCracken, C., Griffith, K. L., Christino, M. A., Sugimoto, D., & Meehan III, W. P. (2019). Team sport athletes may be less likely to suffer anxiety or depression than individual sport athletes. Journal of sports science & medicine, 18(3), 490.

31. Ribeiro, Í. J., Pereira, R., Freire, I. V., de Oliveira, B. G., Casotti, C. A., & Boery, E. N. (2018). Stress and quality of life among university students: A systematic literature review. Health Professions Education, 4(2), 70-77.

32. Roberts, G. C., & Nerstad, C. G. (2020). Motivation: achievement goal theory in sport and physical activity. In The Routledge international encyclopedia of sport and exercise psychology (pp. 322-341). Routledge.

33. Schaffner, A. K. (2021). The art of self-improvement: Ten timeless truths. Yale University Press.

34. Shankar, A., Rafnsson, S. B., & Steptoe, A. (2015). Longitudinal associations between social connections and subjective well-being in the English Longitudinal Study of Ageing. Psychology & health, 30(6), 686-698.

35. Søndergaard, D. M. (2014). Social exclusion anxiety: Bullying and the forces that contribute to bullying amongst children at school. School bullying: New theories in context, 47-80.

36. Søndergaard, D. M., & Rabøl Hansen, H. (2018). Bullying, social exclusion anxiety and longing for belonging. Nordic Studies in Education, 38(4), 319-336.

37. Spaull, N. (2015). Schooling in South Africa: How low-quality education becomes a poverty trap. South African child gauge, 12(1), 34-41.

38. Sugara, G. S., Rakhmat, C., & Nurihsan, J. (2020). Factorial structure and psychometric properties of the quality of life inventory in an Indonesian college sample. Mediterranean Journal of Clinical Psychology, 8(3).

39. Tatai, R. (2022). The" Clean Your Plate Campaign": A Study of "Traditional Values" and Their Impact on Younger Generations (Master's thesis).

40. Tonon, G. H. (2021). Student's quality of life at the university: A qualitative study. Applied Research in Quality of Life, 16(4), 1517-1535.

41. Uddin, M. (2021). Addressing work-life balance challenges of working women during COVID-19 in Bangladesh. International Social Science Journal, 71(239-240), 7-20.

42. Van Mierlo, H., & Van Hooft, E. A. (2020). Team achievement goals and sports team performance. Small Group Research, 51(5), 581-615.

43. Wilt, J. A., & Johnson, S. E. (2024). Emotional states, achievement goals, and performance in NCAA Division I swimmers. Scientific Journal of Sport and Performance, 3(1), 10-19.

iejee

International Electronic Journal of Elementary Education
March 2024, Volume 16, Issue 3

The Experiences of Non-Physical Education Generalist Teachers in Implementing PE in the Primary Grades: Implications for Capability Development Initiatives

April Joy B. Nioda[a], Ruben L. Tagare Jr.[b,*]

Received : 6 September 2023
Revised : 1 December 2023
Accepted : 28 March 2024
DOI : 10.26822/iejee.2024.334

[a]April Joy B. Nioda, Department of Physical Education, Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Philippines.
E-mail: ajbulawannioda@gmail.com
ORCID: https://orcid.org/0009-0008-2970-2803

[b,*] **Corresponding Author:** Ruben L. Tagare, Jr., Department of Physical Education, Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, Philippines.
E-mail: tagareruben@usm.edu.ph
ORCID: https://orcid.org/0000-0003-1628-6229

Abstract

This research aims to explore the experiences of non-physical education teachers in implementing physical education in the primary grades as a basis for creating feasible capability-building initiatives. Employing a qualitative-descriptive research design, in-depth interviews were conducted with twenty non-physical education generalist teachers using a guided interview questionnaire validated by experts. Through the triangulation of results, this study uncovers the creativity and resourcefulness exhibited by generalist teachers in lesson preparation. However, several challenges impede their successful implementation of physical education, including the risk of injuries, inadequate equipment, a lack of training or seminars, insufficient teaching strategies, and personal health issues. The findings inform the development of conclusions and recommendations to enhance the effectiveness of generalist teachers in teaching physical education in primary grades.

Keywords:

Non-PE Teachers' Problems; PE in the Primary Grades; Teachers' Experiences

Introduction

Physical education is an essential subject that fosters improvements in the social, spiritual, mental, and physical aspects of learners' lives across all educational levels (Pangrazi & Beighle, 2019). Recognizing the numerous advantages, such as improved physical fitness and activity, it is clear that well-trained physical education teachers play a critical role in maximizing these advantages (McKenzie & Lounsbery, 2013).

In the Philippines' elementary education context, educators, commonly called "generalist teachers," instruct learners in the primary grades. They are often called generalist teachers because they teach their primary school learners various subjects. Unlike specialized teachers who focus on a single subject or discipline, such as mathematics or science, elementary school generalist teachers cover many subjects, including language arts, mathematics, social studies,

science, physical education, and health. They provide a foundational education across multiple disciplines in the early stages of a learner's learning journey, fostering well-rounded academic development (Sumalinog, 2018).

Despite their knowledge of core academic subjects, generalist teachers face challenges, such as a lack of specialized training, understanding of required skills, and a noticeable lack of confidence in teaching subjects they are not experts (Truelove et al., 2021). This lack of training and unfamiliarity with some curricula are significant barriers to effective teaching, making it especially difficult to achieve intended learning outcomes in elementary curriculum, such as acquiring common life skills (Lu & Lorusso, 2016). The lack of targeted training limits teachers' ability to navigate the complexities of core subjects and their ability to instill essential life skills in learners.

Further, elementary teachers face difficulties due to insufficient funding and resource allocation to deliver their subjects efficiently. This deficiency frequently manifests as a scarcity of essential equipment and materials to be used in the classroom. Teachers struggle with limited access to equipment, tools, and appropriate spaces, significantly limiting their ability to incorporate diverse activities, especially in physical education (Pangrazi & Beighle, 2019).

Neutzling et al. (2019) also highlighted that the congested curriculum and limited time allotted to each subject add to teachers' challenges. The demanding curriculum limits the time for learning activities, making it difficult for teachers to provide adequate and well-rounded primary instruction. This limitation not only determines the variety of activities available but also jeopardizes the overall quality of learning experiences, affecting the holistic development of learners.

Furthermore, the consequences extend to the learners, compromising focus and performance. Spittle (2015) revealed that generalist teachers' difficulties teaching core subjects directly impact students' engagement and academic achievement. Despite these challenges, generalist teachers in primary grades demonstrate commendable dedication and motivation to impart knowledge in their assigned subjects (Metzler, 2017).

While previous research has delved into generalist teachers' experiences in teaching core subjects, a significant research gap remains in exploring the experiences encountered by generalist teachers responsible for teaching physical education in the primary grades. The current literature has primarily focused on the challenges and strategies associated with core academic subjects, leaving a significant gap in understanding the unique dynamics, obstacles, and potential solutions for physical education instruction. This study aims to address and bridge this gap by thoroughly investigating generalist teachers' challenges when teaching physical education at the primary level. This research aims to provide valuable insights that contribute to enhancing their capabilities and competencies in this critical aspect of primary education by delving into their experiences and soliciting their recommendations.

Moreover, this study not only contributes to the academic literature by filling a gap, but it also has the potential to inform policy, shape professional development initiatives, and improve the overall quality of physical education instruction in primary grades. This research's findings can serve as a fundamental building block for school action planning and contribute to academic discourse. The study provides a roadmap for schools to improve the effectiveness of their physical education programs by offering practical strategies for overcoming challenges encountered in teaching physical education to primary grades. This valuable advice is critical for schools looking to foster a positive and thriving environment for teachers and students in physical education.

In addition, the study adds significant value to the physical education community as it opens avenues for further exploration and research in this critical area by serving as a reference point for future scholars. The insights gained from generalist teachers' experiences and challenges become a valuable resource for researchers looking to delve deeper into the complexities of physical education instruction in primary grades. This research lays the groundwork for developing feasible recommendations that address the specific challenges faced by generalist teachers. This research adds to the field's current understanding and actively informs practical strategies and future scholarly endeavors, emphasizing its broad and enduring significance.

Methodology

Research Design

This study employs a qualitative-descriptive research design to comprehensively describe the experiences of generalist teachers teaching physical education in primary grades. This approach is well-suited to illuminating the interrelated nature of teaching physical education by emphasizing subjective meanings, social interactions, and contextual factors that shape teaching and learning experiences in this domain (Grossoehme, 2014). Hennink et al. (2020) outlined that qualitative research design is a powerful tool for exploring subjective meanings and social interactions inherent in physical education's teaching and learning process. It is especially well-suited for capturing the contextual factors that influence

generalist teachers' experiences, shedding light on the complexities of their pedagogical approaches. Using qualitative methods such as interviews, observations, and focus groups reflects a deliberate effort to employ various strategies that can reveal the breadth and depth of the experiences under investigation.

The researchers use qualitative methods to delve into the intricate details of generalist teachers' experiences as this design enables them to capture the richness of their perspectives and practices, contributing to a comprehensive depiction of the teaching and learning dynamics in primary-grade physical education.

Research Participants and Materials

Purposeful sampling was used in this study to carefully select participants who could provide in-depth insights into the experiences of generalist teachers teaching physical education in primary grades. This method was chosen carefully to ensure the participants' diverse backgrounds and perspectives would enrich the study's exploration. Twenty (20) generalist teachers were chosen from selected elementary schools in Cotabato, Philippines. According to the inclusion criteria, participants had to be generalist teachers actively involved in physical education in the primary grades and have a non-physical education educational background—this deliberate selection aimed to capture a diverse range of experiences and perspectives within the targeted context.

A guided interview questionnaire was used to collect data. The open-ended questions in this questionnaire were thoughtfully designed to encourage participants to delve into the complexities of their experiences, providing detailed responses and additional insights. "Can you describe a specific challenge you faced while teaching physical education to primary grade learners and how you addressed it?" is an example of such a question.

During the interview sessions, the researchers used an electronic voice recorder to ensure the fidelity and comprehensiveness of data collection. This method allowed for accurate documentation and thorough capturing of the participants' diverse insights and perspectives. The audio recordings were invaluable for accurately representing and analyzing the richness of the participants' responses.

Data Collection

Approval letters were obtained from the heads of selected elementary schools in the Cotabato Province in the Philippines to facilitate this study. Following the acquisition of permissions, informed consent forms were secured, followed by the scheduling of interviews at mutually convenient times and locations. The researchers made a preliminary visit to familiarize participants with the interview process, fostering a comfortable environment for future engagements. According to Guest (2013), in-depth interviews are a classic qualitative data collection method that involves a skilled interviewer engaging in profound conversations with knowledgeable interviewees. A carefully crafted set of questions was shared in advance with research participants, serving as the primary tool for data collection.

During the interviews, participants were given ample time to provide detailed responses to the questions. These sessions were audio-recorded and transcribed verbatim to preserve the richness and authenticity of the participants' narratives. A member check validation and triangulation strategies were implemented to ensure the validity of the research findings. This entailed comparing data collected from multiple individuals, improving the study's credibility and reliability.

Data Analysis

Thematic analysis, as defined by Braun and Clarke (2006), serves as the analytical foundation of this qualitative research study. This methodical three-step coding system, used in qualitative research (Maguire & Delahunt, 2017), includes (1) data reduction, which involves transforming participant responses into figures, tables, and discussions; (2) data display, which involves presenting organized data; and (3) conclusion, drawing, and verification, which involves summarizing primary inputs and examining data to reinforce the conclusion. Braun and Clarke's thematic analysis ensures a systematic and thorough exploration of the qualitative data, allowing for the identification and interpretation of recurring patterns and themes. This method perfectly aligns with the study's objectives, allowing for a more nuanced understanding of generalist teachers' experiences teaching physical education in primary grades.

Ethical Consideration

Throughout this research endeavor, ethical considerations were important, with a commitment to upholding the highest standards. The teachers participating in the study were treated with the utmost respect, and their participation was entirely voluntary. To protect their privacy and confidentiality, strict measures were put in place, including obtaining informed consent outlining the nature and purpose of the study. The interview questions were carefully crafted to ensure a respectful and empathetic dialogue.

Further, to promote transparency and equal opportunity, thorough orientation were conducted to provide teachers with clear insights into the study's objectives, procedures, and potential outcomes,

allowing them to make informed decisions about their participation. This dedication to ethical practices demonstrates the researchers' commitment to conducting a study that prioritizes the participants' well-being and rights while also contributing valuable insights to the field of education.

Results and Discussion

High Risk for Injuries. Physical education provides a valuable opportunity for learners to cultivate and refine their skills and talents through various activities such as sports, dance, and exercise. This theme, however, highlights a concerning aspect of the increased risk of injury associated with learner engagement, particularly during outdoor activities. According to the research participants, accidents occurred when learners actively participated in outdoor activities. This noteworthy observation highlights a pervasive challenge in ensuring learners' safety during physical education classes. In response to this concern, the participants took a precautionary approach, limiting the inclusion of outdoor activities in their lesson plans. This intentional avoidance of outdoor activities was viewed as a strategic measure aimed at reducing the frequency of accidents and ensuring the learners' well-being; however, it sacrifices maximum physical education experience of learners. According to research participant 6:

> *"...once, I felt fearful due to frequent accidents during PE classes, as I could be held responsible. Consequently, I began avoiding PE lessons to mitigate the risk, such as when a student broke their arm." - RQ2P6*

Teaching physical education is sometimes dangerous because learners are at risk, primarily when the physical education teacher conducts an outdoor activity. Before doing so, the area and materials that will be used must be checked first to see if they are safe for the learners. Sometimes, accidents during physical education classes are unexpected events due to various reasons, such as the mistake of the physical education teacher not checking first all the materials and areas that will be used by the learners or even the behavior of the learners where the learners are stubborn, did not listen to the teacher's instruction, and were naughty during activities.

To lessen this kind of case, a physical education teacher must check the area, weather, or even all the equipment that will be used before doing the activity to see if it is safe to use or not (McCoy et al., 2017). According to Kovač et al. (2013), injuries in physical education classes often occur in the lower limbs due to oversight by the teacher in checking equipment. Teachers should take preventive measures, plan effectively, and prioritize student safety to ensure productive and safe outdoor activities.

Inadequate School Physical Education Equipment Hinders Quality Experience for Learners. This theme emphasizes the significant challenge posed by resource constraints in physical education teaching. The lack of necessary equipment or materials affects effective lesson delivery, potentially leading to learners' dissatisfaction. Essential topics in physical education frequently necessitate hands-on experience with equipment or materials, making it difficult to pass on knowledge when these resources are unavailable. Teachers strategize this by using alternatives as substitutes for specialized equipment.

For example, in the absence of standard sports equipment, schools have creatively used household

Table 1.

Challenges that Generalist Teachers Encounter in Implementing Physical Education in the Primary Grades.

Essential Themes	Categories	Core Ideas
High Risk for Injuries	Physical Education Brings the Learners in a Harmful Situation and Leads to Accidents.	Frequent accidents happen during physical education classes, especially when conducting physical activities. Teachers minimize physical activities to prevent learners from being in a harmful situation.
Inadequate Physical Education Equipment Hinders Quality Experiences for Learners	Lack of Equipment that is Needed for Physical Education Class.	No proper area that is spacious and safe for physical activities. Teachers do not have complete equipment and materials for physical education classes.
Lack of Pedagogical Strategies in Handling Learners' Diverse Behaviors in Physical Education	Learners' Different Behaviors is One of The Hindrances of Their Learning	Teachers have learners who are slow learners. Teachers have learners that have different attitudes or behaviors. Teachers are encouraging their learners to learn despite the personalities that they have shown.
Teachers' Health Problems Limit them to Teach Other Areas in Physical Education	Teachers' Personal Health Problem Cannot Make them Teach the Lessons Properly	Teachers cannot teach and perform the exercises correctly. Teachers limit their actions when teaching physical education since they have personal health problems.

items such as plastic bottles, rolled-up socks, or chalk markings on the ground to facilitate learning experiences. Participants in the study emphasized the dynamic nature of their teaching approach, adjusting lessons based on the availability of equipment or materials. This adaptability is consistent with the resilience demonstrated by schools in resource-constrained environments. Educators can ensure that learners receive meaningful instruction even when resources are limited by incorporating these practical, low-cost alternatives. To wit:

> *"... most of the time, lessons require a spacious area, which should be a safe area for the children. Sometimes, we don't have enough equipment, so we just make do with what is available." – RQ2P10*

Lack of equipment when teaching physical education classes is a big problem because physical education teachers cannot deliver the lessons properly to the learners, considering that there are lessons that need to be taught that require an actual demonstration, especially in sports, dance, or even exercise. Learners only engage in a limited amount of physical education activity because sometimes there is no available equipment for a specific lesson that is being discussed (Hasan et al., 2020). Furthermore, a lack of knowledge of particular equipment creates concerns that learners may be at high risk for injuries if they use the equipment during a new activity. If they don't know how to use it, there is a possibility that they will get injured or hurt.

Walter (2014) suggests that inadequate resources hinder learners' skill development in physical education. To address this, teachers can innovate, like introducing low-cost activities such as "larong pinoy" to promote sportsmanship, humility, obedience, trust, and unity. These innovations enhance communication, thinking, and social skills, ensuring the effectiveness of physical education.

Lack of Pedagogical Strategies in Handling Learners' Diverse Behaviors in Physical Education. This theme discusses that research participants are experiencing diverse attitudes from their learners, which creates distraction and affects their teaching practices. The strategies the research participants applied during their discussion were insufficient, considering that their learners did not even listen to them as they delivered their lessons. In this way, it also affects the performance of the research participants, as they cannot attain the lesson objectives that they will provide, knowing that it distracts from their plan and strategies because of the diverse attitudes of their learners. Further, as the research participants teach their learners with various attitudes, it creates a hostile environment where the lessons will not be appropriately delivered. It makes the performance of the research participants worse. As stated by research participants 5 and 11:

> *"Games are readily available for outdoor activities, including those aimed at improving children's behavior and attitude. However, maintaining their interest requires effective engagement." - RQ2P5*

> *"Discipline with children often entails monitoring their outdoor activities, akin to watching over horses released from their pens, ensuring safety as some play while others focus." - RQ2P11*

This theme denotes a lack of strategies used by the research participants in terms of delivering their lessons to their learners. This challenge that research participants are experiencing is ineffective in the sense that their learners are not able to listen to them or pay attention to them, considering that the strategies used by research participants are not enough. This leads to poor outcomes for the research participants, as they cannot perform well in such a way that they cannot properly teach the lesson to their learners. Further, the research participants continue to teach their lessons to their learners despite the challenge they experience, which is the diverse behaviors of the learners, because they want to make sure that their learners will gain some knowledge. According to research participants 4 and 8:

> *"Some children may be less participative due to their unique preferences. As a teacher, I still encourage their involvement, even if they are less enthusiastic." - RQ2P8*

According to Bennie et al. (2017), using different teaching strategies develops the teachers' knowledge and skills in teaching physical education lessons. Also, when physical education teachers teach lessons by not sticking to only one strategy, they can make their learners have good behavior and be able to handle them. The help of different teaching strategies used by the teachers will enhance their enjoyment, motivation, and teaching process. With this, teachers are effective as they teach their learners lessons in physical education classes.

Teachers' diverse teaching strategies, as per Hand (2014), reflect their confidence and teaching efficacy. This benefits learners and teachers, leading to successful physical education classes and a positive environment.

Teachers' Health Problems Limit them to Teach Other Areas in Physical Education. This theme delves into the significant impact of personal health challenges faced by research participants, which is an important consideration. Despite dealing with health issues such as hypertension, obesity, and immobility, the research participants continue to teach physical education to learners. However, the limitations imposed by their medical conditions limit their actions and movements while teaching. To address these issues, a conducive teaching environment that accommodates educators' health needs becomes critical. This could

include arranging ergonomic teaching aids, ensuring comfortable seating during theory sessions, and facilitating a teaching schedule with adequate rest intervals.

Furthermore, a collaborative approach within the school community can be highly beneficial. Creating a support network where colleagues can assist in tasks that may aggravate affected teachers' health problems can significantly reduce their burdens. This collaborative effort could include splitting up teaching duties or incorporating peer assistance during physically demanding lessons. According to participant 6 in the study:

> *"I face challenges in teaching activities like dancing or exercise due to my high blood pressure, which limits my movements. Health issues like mine can hinder the proper execution of lessons." - RQ2P6*

According to Tahir and Ahmad (2020), teachers experiencing health problems could experience lapses. In contrast, these teachers cannot teach effectively or support the learners, especially in physical education. Further, these teachers will have limited movement as they cannot fully execute their duties properly because of their conditions. To solve this kind of problem, supporting teachers experiencing health problems can improve their teaching performance and the learners' learning outcomes.

Teachers with health issues are in a dangerous situation that could result in learners not understanding them clearly or being unable to teach the lesson on a particular day. When teachers miss class due to health issues, learners may not participate in the day's most crucial lessons and activities, which has a negative impact on their growth (Genc & Dogan, 2019). Teachers should get regular check-ups to be healthy and able to teach the lesson to the learners and help the learners continue to learn and improve their skills.

Technology Integration in Primary Physical Education. This theme discusses the suggestion of research participants that putting technology in physical education classes is needed because it makes the learners more attentive to the discussion. If the learners are focused, integrating technology is effective, whereas learners can participate in every activity during physical education class. Since research participants observed that learners would feel some excitement when technology is involved during the lesson delivery, technology seems to bring light or benefits to learning, such as good performance. Further, research participants prefer to use or integrate technology when they teach physical education subjects rather than do it traditionally. As stated by research participant 2:

> *"... we should also keep up with our technology since before, everything was traditional. Now, we need to keep up with the trend. My learners even requested a projector during class. It can be boring if we just keep on talking without any visuals." – RQ3P2*

Table 2.

Practical Suggestions of Generalist Teachers to Improve their Capability and Competence in Teaching Physical Education in the Primary Grades

Essential Themes	Categories	Core Ideas
Technology Integration in Primary Physical Education	Technology Can Get the Attention of the Children	Teachers go with the trend, which is the use of technology in physical education classes. Learners feel less bored if teachers use a projector or DLP to present their lessons.
Greater Empathy for Learners and Burning Passion For the Teaching Profession	Accepting the differences between the children	Teachers should show their love and care for their learners. Teachers should not hurt their learners. Teachers should not be short-tempered when teaching physical education classes.
Participation in Relevant Physical Education Pedagogy Training	Teachers should attend training or seminars about physical education subjects.	Teachers should participate in any training or seminars on physical education so they do not feel any difficulty when teaching the subject. Attending training or seminars helps improve the teachers and gives them additional knowledge about physical education.
Prioritize Purchasing the Needed Equipment for Physical Education Classes	Complete Materials Related to Physical Education Able to Present All the Topics	Schools should provide equipment and materials that is for physical education classes. Teachers were able to teach and demonstrate all the lessons in physical education with authenticity.
Exchange of Ideas and References with Colleagues	Ask for Advice From Colleagues to Have a Guide in Delivering the Lessons in Physical Education.	Teachers should not be afraid of asking for help from colleagues, especially related to the lessons in physical education. Asking for ideas from colleagues can help teachers improve their teaching strategies.

Learners prefer technology in physical education classes because it grabs their attention and enhances focus. Marttinen et al. (2019) found that integrating technology, like instructional videos, increases student engagement and motivation. This dynamic approach improves motor skills and allows access to information, fostering communication among learners and teachers (Das, 2019).

Greater Empathy for Learners and Burning Passion For the Teaching Profession. This theme discusses how the research participants suggest having greater empathy for their learners, which includes showing love and care for them. Showing this behavior makes the learners feel that the research participants give them some importance and value. Research participants loved their works and also the learners because they wanted to make their learners feel comfortable interacting with them. Further, showing pure intentions to the learners is believed to create a good relationship and produce positive outcomes. According to research participants 13 and 17:

> *"... the most important thing is to love your job and not to take teaching for granted. Also, love your learners." – RQ3P13*

> *"... I think showing your learners that you love them is important. It doesn't have to be every day, but it's important to show that you care about them consistently."– RQ3P17*

This theme implies that showing love to work and to the learners makes them achieve their goals and succeed in learning a particular lesson delivered by the teachers. Also, teachers will have a comfortable environment where they can simply present their lessons to their learners without showing awkwardness. Aside from these values, increasing patience can have good learning effects for teachers and learners. Further, it decreases the suffering of the learners in learning the lessons in physical education if the teacher also shows a lot of patience towards teaching the learners. As stated by research participants 7 and 16:

> *"... teachers should be patient and find ways to encourage learners because if they are not taught properly, they will suffer in higher levels of education." – RQ3P7*

Showing love and positive behavior towards learners in physical education classes encourages their enthusiasm for learning. As noted by Jung and Choi (2016) and Behzadnia (2021), this approach fosters a strong bond between teachers and learners, leading to a successful and enjoyable learning experience. It empowers learners to apply their knowledge in real life, and when teachers show genuine interest in learners, they feel valued. They can actively engage in class activities, ultimately changing their perception of teachers in a positive light.

Participation in Relevant Physical Education Pedagogy Training. This theme discusses that the research participants suggest that if a teacher is trained when teaching physical education, it will be more effective because the lessons introduced to the learners are appropriate and have relevant information. Training or seminars positively impact the research participants, considering that they gain knowledge and improve their skills and talents, which can be applied when teaching the learners. The learners can get additional accurate knowledge from them. Further, research participants recommend that teachers who teach a physical education subject but are not physical education graduates attend training or seminars related to physical education because it helps them teach the lessons appropriately and be able to teach the learners without hesitation. As stated by research participants 4 and 6:

> *"... perhaps we should conduct more seminars and training, particularly in physical education, so that when there are difficulties in teaching, we know the proper training methods. It would be helpful to have intended seminars focused on physical education." – RQ3P4*

When teaching physical education, teachers must have training to help them teach the lessons without any confusion. Physical education teachers must be trained appropriately or must attend trainings or seminars related to physical education because it has benefits where they can improve their confidence and equip themselves with better values (Koh et al., 2016). Training or seminars also help physical education teachers acquire pedagogical strategies and develop motivation in teaching, and with this, it is much easier for them to present their lessons to the learners during physical education classes. Hence, training or seminars improve the skills of physical education teachers, which will also make them effective because the learners will understand them easily, achieve the goal, and enhance their learning.

As stated by Gil-Espinosa (2021), training or seminars related to physical education make teachers more aware of what they will do to teach the lessons on physical education to the learners, especially when learning sports, dance, or exercise. They're going to be more knowledgeable, have improved teaching practices, have enhanced skills, and be able to properly execute all the movements related to the topic that will be taught to the learners, including in sports, dance, and exercise. Further, training or seminars can lead to them creating innovative teaching practices during physical education classes, which helps the physical education teachers meet the needs of their learners and have positive outcomes such as good performance and high scores in every assessment.

Prioritize Purchasing the Needed Equipment for Physical Education Classes. This theme discusses the resources or materials that should be available when teaching physical education lessons because every topic in a lesson is different and needs equipment to be appropriately presented, especially in sports, dance, and exercise. Having complete materials necessary for physical education lessons makes the learners, teachers, and the physical education subject effective, considering that it is delivered appropriately with relevant information, presented properly, and makes proper use of equipment or materials. Further, research participants observed that physical education classes and their lessons would be more accessible to the learners if complete resources or materials were needed. As stated by research participant 10:

> *"... first and foremost, what I would like to request from DepEd is to provide us complete materials, activity sheets, and especially the necessary equipment because it is one of the hindrances that make teaching difficult for us. So, especially now that social media and television are important, it would be great if the materials and activities shown there are practical and applicable to the daily lives of the learners." – RQ3P10*

Resources when teaching the physical education subject to the learners must be complete so that the teaching process of the physical education teachers is adequate. Incomplete resources affect the performance of the learners. In contrast, the learners cannot perform the activity because insufficient materials or equipment are needed for physical education classes. Providing efficient resources can lead to a better outcome during physical education classes, considering that physical education teachers can teach lessons with the proper use of equipment and learners can perform with the help of the appropriate equipment. With complete resources, it will meet the needs of the learners when performing physical education classes (Rosete et al., 2022).

Having a greater availability of resources gives learners more opportunities to engage in different physical activities, making them more active and participative. According to Carlson et al. (2015), encouraging learners to engage in various physical activities with complete resources promotes a high-quality physical education subject. The presence of equipment or materials increases the excitement of the learners, and they are more eager to learn how to use the equipment or materials, especially when they are learning sports, dance, and exercise. Further, having complete resources when teaching physical education brings positivity and benefits for both teachers and learners, which can improve learning and teaching experiences.

Exchange of Ideas and References with Colleagues. This theme talks about how asking for help from colleagues or co-workers regarding physical education classes is not a problem because it is one of the stepping stones to surpassing the challenges that every teacher faces, which helped them overcome by having advice or ideas from colleagues. In addition, the advice from colleagues serves as a guide in teaching lessons in physical education in the primary grades, especially if a teacher is a novice and the ideas they will get applied to them in teaching the lesson correctly. The opinions and references of colleagues are sometimes not applicable, but it is up to the teacher if they will follow them; they will just analyze them to see if they are good and can help them. Further, research participants expressed that this suggestion makes teaching lessons in physical education easier and is one of the ways to help overcome the challenges that teachers experience. As stated by research participants 12 and 15:

> *"... so, we can approach any teacher, regardless of the grade level, if they have a specialty in a certain subject, especially in PE. We can approach them and not be afraid to ask for their help." – RQ3P12*

> *"... the first thing to do as a beginner is to ask questions. It's better to ask more experienced teachers for advice. Second, you need to plan and develop strategies. Do research and engage in self-study so that when you enter the field or the classroom, you can teach effectively and execute your plans properly." – RQ3P15*

The physical education teacher can gain more knowledge by getting assistance from other physical education teachers. More resources and peer help will enhance a physical education teacher's career as a teacher, and ideas from peers are intended to help a physical education teacher teach a subject (Mäkelä et al., 2014). It is acceptable to ask coworkers for help, making your classes more exciting and productive. Therefore, since it lessens their workload and enhances student achievements, asking for assistance from colleagues is an intelligent idea for physical education teachers.

According to the study of Eirín-Nemiña et al. (2022), the satisfaction of physical education teachers improves when they ask for help and get full support and favorable treatment from colleagues. If physical education teachers ask for help from colleagues, it leads to better lesson planning, sharing resources and expertise, and improved classroom management. Therefore, it is not a problem to ask for help from colleagues. Still, it can help physical education teachers better understand what to do during physical education classes.

Conclusion

This study concludes that generalist teachers face various challenges when teaching physical education, including the risk of student injury, inadequate

equipment, limited pedagogical strategies, and personal health issues. Proactive measures are required to effectively address these challenges, such as instituting safety and first-aid training to ensure teachers' competence in dealing with potential risks and injuries during physical activities, prioritizing investments in the availability and maintenance of necessary equipment to facilitate effective and comprehensive physical education instruction, continuous professional development that includes pedagogical strategies and ICT integration for improving teaching practices and providing engaging learning experiences, and prioritizing teachers' well-being, such as health screenings and regular physical activities to foster a positive and supportive environment.

As a result, drawing on the recommendations of generalist teachers, this study suggests a varied approach to improving physical education teaching in primary grades, such as integrating technology into lesson preparation and delivery, along with compassionate support for learners, to serve as the foundation for developing dynamic and inclusive learning environments. This research also emphasizes the significance of seeking advice from colleagues, encouraging collaboration, and facilitating the exchange of instructional materials to improve the overall professional community and share expertise.

References:

Arthur, J., & Golder, G. (2020). Short-Term (Lesson) Planning in Physical Education: How Planning and Evaluation Support Effective Learning and Teaching. In Learning to Teach Physical Education in the Secondary School (pp. 87-105). Routledge.

Bandeira, A. D. S., Ravagnani, F. C. D. P., Barbosa Filho, V. C., de Oliveira, V. J. M., de Camargo, E. M., Tenório, M. C. M., ... & Silva, K. S. (2022). Mapping recommended strategies to promote active and healthy lifestyles through physical education classes: a scoping review. *International Journal of Behavioral Nutrition and Physical Activity, 19*(1), 1-20.

Behzadnia, B. (2021). The relations between learners' causality orientations and teachers' interpersonal behaviors with learners' basic need satisfaction and frustration, intention to physical activity, and well-being. Physical Education and Sport Pedagogy, *26*(6), 613-632.

Bennie, A., Peralta, L., Gibbons, S., Lubans, D., & Rosenkranz, R. (2017). Physical education teachers' perceptions about the effectiveness and acceptability of strategies used to increase relevance and choice for learners in physical education classes. *Asia-Pacific Journal of Teacher Education, 45*(3), 302-319.

Berecke, A. (2021). Searching Relevant Information on the Internet. *Journal of Information Retrieval, 42*(3), 315-332.

Carlson, J. A., Engelberg, J. K., Cain, K. L., Conway, T. L., Mignano, A. M., Bonilla, E. A., ... & Sallis, J. F. (2015). Contextual factors related to implementation of classroom physical activity breaks. *Journal of School Health, 85*(8), 532-540.

Das, N. (2019). The Impact of Digital Communication Technology as Educational Tools into Physical Education Programs: A Literature Review.

Dyson, B., & Casey, A. (2016). Cooperative Learning in Physical Education and Physical Activity: A practical Introduction. *Routledge*.

Eirín-Nemiña, R., Sanmiguel-Rodríguez, A., & Rodríguez-Rodríguez, J. (2022). Professional satisfaction of physical education teachers. *Sport, Education and Society, 27*(1), 85-98.

Genc, A., & Dogan, U. (2019). Investigation of health problems of physical education teachers and their relationship with absenteeism. *Universal Journal of Educational Research, 7*(2), 387-393.

Gil-Espinosa, F. J. (2021). Training of physical education teachers and the use of rules to improve school coexistence. *Journal of Physical Education and Sport, 21*(3), 1331-1336.

Grossoehme, D. H. (2014). Overview of qualitative research. *Journal of health care chaplaincy, 20*(3), 109-122.

Guest, G., Namey, E., & Mitchell, M. (2013). In-depth interviews. *Collecting Qualitative Data: A Field Manual for Applied Research [online]*, *113*, 171.

Hand, K. E. (2014). Building Confident Teachers: Preservice Physical Education Teachers' Efficacy Beliefs. *Journal of Case Studies in Education, 6*.

Hasan, A. R., Rashid, M. H., Smith, G., Selim, M. A., & Rasheed, S. (2020). Challenges of promoting physical activity among school children in urban Bangladesh: a qualitative inquiry. *PloS one, 15*(3), e0230321.

Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods*. Sage.

Jung, H., & Choi, E. (2016). The importance of indirect teaching behaviour and its educational effects in physical education. *Physical Education and Sport Pedagogy, 21*(2), 121-136.

Kahan, D. (2017). Physical Education in Primary Schools: The Impact of In-Service Teacher Training on Teacher's Perceived Confidence, Attitudes and Teaching Skills. *Physical Education and Sport Pedagogy, 22*(2), 161-174.

Koh, K. T., Ong, S. W., & Camiré, M. (2016). Implementation of a values training program in physical education and sport: Perspectives from teachers, coaches, learners, and athletes. *Physical Education and Sport Pedagogy, 21*(3), 295-312.

Kovač, M., Leskošek, B., Hadžić, V., & Jurak, G. (2013). Injuries among Slovenian physical education teachers: A cross-sectional study. International *Journal of Occupational Safety and Ergonomics, 19*(1), 87-95.

Linqi, M., Chusui, L., Lipin, Y., Hongbo, L., & Libin, Y. (2020). Influence of the Internet based Multimedia Technology on Teaching Reforms and Management of Physical Education. *Revista de psicología del deporte*, *29*(4).

Lu, C., & Lorusso, J. (2016). No PE Degree? Foundational Knowledge to Support Generalist Teachers of Physical Education.

Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, Step-By-Step Guide for Learning and Teaching Scholars. *All Ireland Journal of Higher Education*, *9*(3).

Mäkelä, K., Hirvensalo, M., & Whipp, P. R. (2014). Should I stay or should I go? Physical education teachers' career intentions. *Research Quarterly for Exercise and Sport, 85*(2), 234-244.

Marttinen, R., Landi, D., Fredrick, R. N., & Silverman, S. (2019). Wearable digital technology in PE: Advantages, barriers, and teachers' ideologies. *Journal of Teaching in Physical Education, 39*(2), 227-235.

McCoy, L., Esslinger, K., & Baghurst, T. (2017). Injury and inclusion: understanding common legal concerns in physical education. *Strategies, 30*(5), 3-11.

McKenzie, T. L., & Lounsbery, M. A. (2013). Physical Education Teacher Effectiveness in a Public Health Context. *Research Quarterly for Exercise and Sport*, 84(4), 419-430.

Metzler, M. (2017). Instructional models in physical education. *Routledge*.

Mitchell, S. A., & Walton-Fisette, J. L. (2022). The essentials of teaching physical education: Curriculum, instruction, and assessment. Human Kinetics.

Neutzling, M., Pratt, E., & Parker, M. (2019). Perceptions of Learning to Teach in a Constructivist Environment. *Physical Educator*, *76*(3), 756-776.

Pangrazi, R. P., & Beighle, A. (2019). Dynamic Physical Education for Elementary School Children. *Human Kinetics Publishers*.

Phelps, A., Colburn, J., Hodges, M., Knipe, R., Doherty, B., & Keating, X. D. (2021). A qualitative exploration of technology use among preservice physical education teachers in a secondary methods course. *Teaching and Teacher Education*, *105*, 103400.

Ratminingsih, N. M., Mahadewi, L. P. P., & Divayana, D. G. H. (2018). ICT-Based Interactive Game in TEYL: Teachers' Perception, Learners' Motivation, and Achievement. *International Journal of Emerging Technologies in Learning, 13*(9).

Rosete, E. N., Candelon, Z. G., Gandal, A., Falle, J. A., & Vivencio Jr, L. C. (2022). Sports facilities and equipment: availability and learners' satisfaction in the physical education classes. *Indonesian Journal of Multidiciplinary Research, 2*(2), 377-380.

Sato, T., Tsuda, E., Ellison, D., & Hodge, S. R. (2020). Japanese Elementary Teachers' Professional Development Experiences in Physical Education Lesson Studies. *Physical Education and Sport Pedagogy*, *25*(2), 137-153.

Smith, L., Harvey, S., & Savory, L. (2018). Primary School Teachers' Experiences of Physical Education Professional Development: A Case Study. Physical Education and Sport *Pedagogy, 23*(2), 136-149.

Spittle, S. (2015). An Examination of Teacher Confidence and Motivation to Teach Primary School Physical Education (Doctoral dissertation, Victoria University).

Sumalinog, G. G. (2018). Mother Tongue Implementation in the Philippines: What Do Parents Say. *International Journal of Science and Research (IJSR)*, *8*(6), 911-915.

Tahir, S., & Ahmad, S. (2020). Impact of health issues on teaching performance of physical education teachers. International *Journal of Physical Education, Sports and Health, 7*(1), 178-181.

Truelove, S., Bruijns, B. A., Johnson, A. M., Burke, S. M., & Tucker, P. (2021). Factors that Influence Canadian Generalist and Physical Education Specialist Elementary School Teachers' Practices in Physical Education: A Qualitative Study. *Canadian Journal of Education/Revue canadienne de l'éducation, 44*(1), 202-231.

Walter, C. M. (2014). Promoting physical activity: A low cost intervention programme for disadvantaged schools in Port Elizabeth, South Africa: Physical activity. *African Journal for Physical Health Education, Recreation and Dance, 20*(21), 357-371.

Yu, H., Kulinna, P. H., & Lorenz, K. A. (2018). An integration of mobile applications into physical education programs. *Strategies, 31*(3), 13-19.

The Physical Educator Vol. 81 • pp. 185–204 • 2024
https://doi.org/10.18666/TPE-2024-V81-I2-11509

SPORT EDUCATION

Filipino Teachers' Favorable Experiences in Teaching Sports Track during the Transition Years of Philippine K-12

Steffany Anne C. Poblador and Ruben L. Tagare, Jr.

Abstract

The Philippine education system is undergoing a period of transition with the adoption of Republic Act 10533, generally known as the Enhanced Basic Education Act. Since the law's enactment in 2013, scholars in physical education have been researching the early impact of this change. Nonetheless, investigations on teachers' favorable stories and experiences in teaching the Senior High School's Sports Track program were woefully inadequate. As a result, this research used a qualitative phenomenology research design to elicit the favorable stories and experiences from these teachers. Participants from chosen schools in the Cotabato Province in the Philippines participated in focus groups, in-depth interviews, and extensive field observation. During the triangulation of the results, five noteworthy issues from the research participants emerged. These include having participative and kinesthetically intelligent learners, sports track competencies that correspond to the teachers' gained knowledge in college, teaching–learning that is more interactive, a curriculum that incorporates practical and hands-on activities, and an easier implementation of the curriculum. The data were used in the development of conclusions that served as

Steffany Anne C. Poblador, Department of Physical Education, Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Philippines. Ruben L. Tagare, Jr., Department of Physical Education, Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Philippines. Please send author correspondence to tagareruben@usm.edu.ph

implications for improvement of the Sports Track program's implementation in the Philippine Senior High School curriculum.

Ensuring the continued strength of the educational system in the Philippines is a key factor in promoting the country's overall development. Filipinos are encouraged to respect education as a reliable tool for speeding social progress, inspiring patriotism, and encouraging community development under the 1987 constitution of the Republic of the Philippines. These excerpts highlight the importance of education for Filipino citizens and demonstrate why education must be made available to everyone:

- "The State shall give priority to education, science and technology, arts, culture, and sports to foster patriotism and nationalism, accelerate social progress, and promote total human liberation and development" (Section 17, Article 2).
- "The State shall protect and promote the right of all citizens to quality education at all levels, and shall take appropriate steps to make such education accessible to all" (Section 1, Article 14).
- "The State recognizes the complementary roles of public and private institutions in the educational system and shall exercise reasonable supervision and regulation of all educational institutions" (Section 4, Article 14).
- "The State shall assign the highest budgetary priority to education and ensure that teaching will attract and retain its rightful share of the best available talents through adequate remuneration and other means of job satisfaction and fulfillment" (Section 5, Article 14).

Despite the country's strong commitment to high-quality education, multiple indicators suggest Philippine education is in serious danger of declining. These indicators include students' performances on international comparative exams and an insufficient match between Filipino graduates' skills and competences and global industry needs. These signs stem from a lack of political support for fundamental changes; a weaker institutional atmosphere favorable to change; and rapid enrollment increase, resulting in overcrowded classrooms. Additionally, the emphasis of researchers is improve-

ment of the overall Philippine educational system, according to researchers (Sergio, 2012).

To address this issue fully, the legislative branch enacted Republic Act 10533, commonly known as the Enhanced Basic Education Act of 2013, which intends to strengthen the country's basic education offering by improving the curriculum and adding the necessary years for basic education. As a consequence, the school curricula have been completely updated and revised to better align its aims and goals with the needs of today's students. Additionally, physical education and health have also been upgraded to better suit the interests and needs of the learners as one of the courses offered in the basic education curriculum.

Physical education teachers, in comparison to other subject teachers, face a unique set of duties for ensuring students' academic performance. They were unusual because they were responsible for facilitating a learning process in an area of knowledge that promotes physical literacy among students and focuses on their performance in a variety of physical activities. Additionally, their extensive knowledge, talents, and experiences are essential to students' performance development because they act as the major source of information students acquire and use in their jobs (Baykara & Orhan, 2020).

Physical education teachers develop professionally when they work in a supportive atmosphere that enables them to offer a stimulating environment for the learning community while maintaining an awareness of their efficiency. This conduciveness requires the provision of adequate facilities and equipment, the assignment of acceptable workloads, the maintenance of institutional support, and the maintenance of a manageable class size filled with cooperative students (Richards et al., 2017). Although these characteristics are significant, physical education teachers, particularly in the Philippine setting, continue to encounter a variety of issues and tales related to them, particularly in light of the recently implemented K–12 curriculum (Rutkowska & Zalech, 2015).

As various scholars' research works highlight, the K–12 curriculum faces many challenges and issues. According to a 2019 Development Asia poll, the Philippine educational system struggled to meet the new curriculum's requirements, citing a variety of school-based deficiencies. Due to insufficient facilities and a teacher

shortage at the Senior High School, track and strand offerings were limited. Sports Track, a senior high school program that prepares students for careers in physical education or sports-related fields (Nucum, 2018) is one of the least-provided strands in the country. Due to institutional constraints on the availability of resources for track offerings, Sports Track is only available to schools with the financial means to invest in facilities, equipment, and infrastructure, leaving students with the option of competing for slots or choosing another track (Brilliantes et al., 2019). This incompatibility between the students' abilities and the sports program jeopardizes both the instructional effectiveness and the retention rate of physical education teachers (Agboola et al., 2014).

Physical education teachers now have new stories to tell as online classes have become the new norm in schools. Due to the closure of educational institutions to strengthen the implementation of social distancing measures due to the alarming cases of the COVID-19 pandemic, discussion and communication between teachers and students occurred in virtual classrooms and social media platforms. As a result, physical education teachers began utilizing technological tools for remote instruction, despite personal concerns about the effect of digital delivery of physical education on students (Varea et al., 2022).

In light of research identifying problems and challenges related to this research topic, this study documents the favorable stories and experiences of physical education teachers teaching in Sports Track during the Philippine K–12 transition years. This research conceptualizes to fill the void left by the absence of relevant studies examining positive experiences. This research establishes a connection between the stories and the experiences that shape the overall experiences of physical education teachers when they teach their subjects. Because physical education teachers are the primary facilitators of students' learning progress, their input is valuable in decision making for the holistic enhancement of the learning environment and experience.

Method

Design and Procedures

This study used a phenomenological qualitative design to accomplish its objective. Phenomenology derives the essence of a phe-

nomenon from the firsthand experience of an individual. Because it views human experience as an authentic mode of world interpretation, it is interested in describing and evaluating participants' basic information and perceptions about their involvement in a particular scenario or occurrence. Because this design aspires to comprehend their worldview, their perspective becomes a credible source of knowledge (Eddles-Hirsch, 2015).

Additionally, qualitative research using phenomenology aims to capture participants' social realities in their natural environment. This objective is attained through the use of in-depth interviews and focused group discussions, in which data are gathered and interpreted in terms of implicit meanings.

We obtained permission letters from multiple study locations and a signed informed consent contract from research participants. Following that, interviews were scheduled at participants' convenience. We were inspired by Virgilio Enriquez's *Makapilipinong Pananaliksik* (indigenous Filipino method in research introduced in 1975). The nonaggressive Filipino approach known as *pakikipagkwentuhan* (casual conversation) inspired this style. For analysis and interpretation, all interviews were audiotaped and verbatim transcribed.

Participants and Materials

The primary participants in this study were physical education teachers who taught in Senior High School Sports Track at selected schools in the Philippines' Cotabato Province. The difficulties they encountered provided the essential information this study intended to extract using interview guide questions. As a result, this research made use of purposive sampling. According to Creswell (2009), this sampling technique assists the researcher in collecting data by choosing suitable participants who can contribute to a complete understanding of the study and its main point.

Analysis and Interpretation

Three steps were followed in analysis of the transcribed information: data reduction, data presentation, and conclusion formulation and verification.

Data reduction obtains the required information by filtering participants' replies and isolating the important and relevant concepts. The acquired data are subsequently converted into figures, tables, or conversations. Thematic analysis is a technique for classifying data and is used in the categorization of qualitative data. On the other hand, data display refers to the method in which ordered data are presented. This stage allows the flow of information from which the conclusion will be drawn. Finally, conclusions were drawn and confirmed. The conclusion picture described the major inputs identified in the study following their examination of their replies to the questions. Verification, on the other hand, strengthened the conclusion, allowing for reexamination of the evidence as many times as required until the needed confirmation was reached.

To ensure rigor and artistry in this qualitative study, we employed the Piantanida and Garman (2009) experiential-theoretic transition model was employed. The recounting of the participants' real experiences was undertaken at the start of the interpretation. Following a comprehensive discussion of the participants' experiences, iterative interpretations were offered on the basis of their remarks. Finally, ideas and studies were utilized for support of the data's interpretation. We avoided personal bias to retain the participants' real opinions and sentiments.

Results and Discussions

This section presents the participants' experiences, perspectives, and ideas as elicited during in-depth interviews and focus group discussions. Table 1 lists major themes, frequency of responses, and core ideas.

Table 1
Physical Education Teachers' Favorable Stories and Experiences in Teaching in Philippine Senior High School Sports Track

Major theme	Frequency of responses	Core ideas
Sports Track learners are participative, hyperactive, and kinesthetically intelligent	Variant	Students are quick learners and active participants.
	Typical	Students are eager to acquire new abilities.
	Typical	Students are receptive to new activities.
	General	Students are hyperactive.
	Variant	Students are receptive and enthused.
	Variant	Students demonstrate kinesthetic intelligence.
	Variant	Students are relatively simple to train.
Teachers gained knowledge in college corresponds with Sports Track competencies	General	Teachers applied all of the knowledge they gained during their college years.
	Typical	Teachers are assigned to a special sports program.
	General	Teachers who have completed their specialization are oriented toward a sports-specific program.
	General	Teachers put what they've learned in their degrees into practice.

Table 1 (cont.)

Major theme	Frequency of responses	Core ideas
More interactive teaching–learning	Typical	Teachers are not perfect in their field so they also learn from their students.
	Typical	Teachers are experts in their field, but they also learn from their students through interactions during school activities.
	Typical	There is interaction between students and teachers during school activities.
	Typical	Teachers take pleasure in gaining knowledge from their students.
	General	Students also impart learnings to teachers.
	General	Teachers and students collaborate on learning
Sports Track curriculum incorporates practical and hands-on activities	General	Teachers and students practically collaborate on tasks or lessons.
	Variant	It focuses more on the realistic and practical aspects of teaching.
	General	It is more situational and hands-on instruction.
	General	It is more about experiential learning.
	General	They develop skills collaboratively through hands-on instruction student activities.

Table 1 (cont.)

Major theme	Frequency of responses	Core ideas
Easier implementation of Sports Track curriculum	General	The curriculum is excellent and quite simple to execute.
	General	The curriculum assists teachers in making their jobs easier.
	Typical	It is balanced, advocating for both the teacher and the student.
	Variant	The curriculum is beneficial in that it is segmented by specialization.
	Variant	The curriculum is geared toward students pursuing careers in sports.
	Typical	The curriculum assists students in preparing for careers as educators.
	Variant	The curriculum is excellent since it teaches students how to be successful in sports.
	General	In some ways, this is beneficial because they will not delve deeper into the things that will be taught because they are already included in the curriculum.
	Variant	The specialized program in sports focuses on a particular area of expertise.

Note. For frequency of response, "general" means the response was mentioned by 50% or more of the participants, "typical" means the response was mentioned by at least 25% but less than 50%, and "variant" means the response was mentioned by less than 25% of the participants.

Theme 1: Sports Track Learners Are Participative, Hyperactive, and Kinesthetically Intelligent

The first main theme consolidated the developing replies in which teachers reported their observations of students' performance in physical education. The participants identified a variety of elements that led to the students' enthusiasm.

Students' physical competence and social skills increased when the classroom environment encouraged them to participate actively and become productive (Bailey, 2006). Students' motivation to engage rose when the learning experiences were geared toward their areas of interest. As well, having the confidence to perform well in a task greatly correlated to an individual's functionality (Bray, 2013).

When participants were asked about their students' performance in class, the comments frequently referenced the students' diversity and lively personalities. Their propensity for active participation in theoretical conversations over passive participation was the cause behind this tendency. Teacher 13 and Teacher 6 shared similar sentiments:

> I find them quite enthusiastic about learning not only inside the classroom, but also outside its walls. They are extremely kinesthetically active, preferring to undertake the task quickly, but we must first discuss the regulation before enforcing it. (Q1, T13)

> They have varying preferences . . . It is important that your strategies include physical exercises that will actually move them. They cannot afford to be idle. They are enthused. (Q1, T6)

Additionally, the participants saw that the students' varied personalities did not interfere with their ability to have a positive learning experience. Rather than that, they cooperated with one another. Teacher 5 corroborated this, whereas Teacher 6 expanded on the concept:

> And then for the learners, they're good because they are different from each other. Our students are diverse. (Q1, T5)

> They are all diverse that's why they have different attitudes. However, they are still able to cooperate with each other, so most probably when it comes to learning their experiences are still wonderfu. (Q1, T6)

This harmonic interaction between the students and the material provided for a seamless teaching experience for the participants. Teachers 2 and 12 conveyed this conclusion:

> Most of them are quick learners. They can immediately grasp the lessons and apply them smoothly. (Q1, T2)

> The majority of individuals enrolling in the sports track are athletes who have competed in both local and national meets. That is why training them is not tough, as they have already gained expertise during their elementary and junior high school years. (Q12, T12)

On the other hand, as confirmed by Teachers 5 and 6, the students' prior educational experience and kinesthetic intelligence significantly aided in the assimilation of the knowledge teachers disseminated:

> I admire them simply because they are born with kinesthetic intelligence. Learning by doing—the majority of them are capable of performing the task at hand. (Q1, T5)

> They cannot simply sit about, and I can tell they are more enthusiastic than the other strand courses. Indeed, their intelligence is kinesthetic. (Q1, T6)

It was obvious the students had an interest in physical education and sports, which contributed to their eagerness to learn. The teachers appreciated this willingness to learn:

> Learners demonstrate a desire to acquire new abilities. They, too, are competitive, but some of them behave poorly. (Q1, T4)

> In terms of learners, I am most impressed by their responsiveness and enthusiasm as I train them for their future careers. (Q1, T6)

Theme 2: Teachers' Knowledge Gained in College Corresponds With Sports Track Competencies

The second theme detailed the participants' experiences imparting personal knowledge about the subject to the students. They reported happiness with their working environment, owing to their good fortune in being assigned to disciplines in which they had specialized throughout their tertiary study. This environment helped them to further develop their knowledge, enhancing the effectiveness of the information they dispensed to students. Teachers 3's and 11's testimonies corroborated this implication:

> I am extremely satisfied since I implemented all of the knowledge I gained during my college years. I put it into practice and shared it with my students. That is it. (Q2, T3)

> In terms of application and teaching, as a graduate of physical education, it enables me to impart knowledge in my unique area of specialization, particularly in sports . . . Teaching Senior High School Sports Track allowed me to put what I studied in my degree into practice. (Q2, T11)

Additionally, they concentrated on examining the many tactics they employed to accommodate students' learning styles. To ensure the effectiveness of the selection, teachers needed to consider the relationship between the practical application and the core knowledge and abilities of physical education (Whittle et al., 2018). Fortunately, they accommodated to them well, as Teacher 2 confirmed:

> In my seven years of teaching, I've learnt a great deal. One advantage is that I am capable of catering to a variety of different sorts of learners through the varied tactics I employ in class. It's wonderful that we can cater to them all. (Q2, T2)

Gilakjani (2012) stressed the important nature of these behaviors in achieving excellent learning outcomes. Apart from academic

proficiency, he believed that a teacher should be cognizant of what students already know, to choose the most effective teaching style.

Theme 3: More Interactive Teaching–Learning

The third theme was mutual learning between students and teachers. As noted, the students' enthusiasm and passion were intrinsically linked to the subject. This means they possess a level of literacy greater than that of a teacher whose credentials do not correspond to the allocated topic. This is a common occurrence in public schools, where hired teachers lack the necessary educational background for the subjects taught in Senior High School (Orbeta et al., 2019). To address this knowledge gap, respondents established an interactive environment in which students could exchange their perspectives and learn from one another. This method was demonstrated in the responses of Teachers 8, 6, and 10:

> The positive experiences I've had while teaching are as follows: first, I've gained a better understanding of physical education because I didn't pursue it as a subject of specialization; second, I've gained exposure to new knowledge and skills when teaching this type of curriculum. In terms of the learners, I also gained a great deal of knowledge from them as a result of the very dynamic classroom environment. Because some of the learners are more knowledgeable than I am, I benefited from their expertise as well. (Q2, T8)

> Therefore, if you teach sports, your instruction does not revolve solely around the four corners of the classroom. Additionally, there is excellent contact outside of the classroom in an actual physical activity. (Q#2, T6)

> It is not just that we teach students, but students occasionally provide us with expertise in a particular discipline. When it comes to learners, there are some who are more knowledgeable than we are. (Q2, T10)

While participants experienced inconvenience as a result of the new curriculum, this issue resulted in increased student engagement as students were encouraged to communicate more with their teachers.

This inclusiveness facilitated feedback that benefited both the teachers' teaching performance and the learners' holistic competency (Bertills et al., 2019).

Theme 4: Sports Track Curriculum Incorporates Practical and Hands-on Activities

This theme highlighted hands-on teaching–learning practices that occurred during the implementation of teachings. While it was the teacher's obligation to guarantee that physical education contributed to the overall development of the students, the expected outcomes of the performances remained the learners' responsibility (Cloes, 2017). In accordance with this, Teacher 16 described their experience researching several genres within a given field, such as dance:

> We provide material to students and then let them to study independently, as we encourage them to express themselves through hands-on activities. This is one of the curriculum's strengths. Apart from that, we provide an interactive environment in which we can all learn from one another. As the level of difficulty increases, we, as their teachers, become more adaptable. (Q2, T16)

According to the participants' comments, the practice resulted in the students becoming more adaptable and incredibly competitive. Teacher 16 explained that the Sports Track curriculum pushed students to explore many genres of dance and sports and to hone their talents to compete at the highest level. Students were instilled with the ability to be adaptable and productive.

> Our students are exceptionally adaptable. They can pick up any kind of dance through hands-on exercises . . . Our students become extremely productive and globally competitive as a result of the sports track curriculum. (Q2, T16)

Additionally, participants mentioned the subject's practicability, owing to their involvement in situational-based learning, where they acquired skills to apply in real life. Teachers 9 and 12 listed the physical activities in which they collaborated with their students:

> The positive experiences I've gained or experienced on the Sports Track are that it's more realistic, situational, practical, and hands-on. (Q2, T9)

> The positive experiences I've had while teaching are all hands-on. [Students] acquire knowledge from their experiences. We practice drills, conduct joint research, and then apply what we've learned. We work one-on-one with my players and, of course, they learn via experience, which is the best part of teaching. (Q2, T12)

According to the participants' statements, incorporating cooperative learning into the teaching technique resulted in an increase in students' productivity in terms of academic and physical performance. This strategy encouraged students to use their cognitive abilities to communicate and do tasks, allowing them to actively absorb information (Lee, 2014).

Theme 5: Easier Implementation of Sports Track Curriculum

This theme assessed the Sports Track program's curriculum. One of the components of high-quality physical education is an effective curriculum that molds students holistically and successfully assesses their performance through the establishment of criteria that define their rate of growth (Centers for Disease Control and Prevention, 2010). Given that the subject's objective is to execute interventions that accomplish its stated objective, it is important to ascertain whether the intervention is helpful for both teachers and students (Starc & Strel, 2012).

Participants believed the program was well balanced. It contained material that was appropriate for the students' level and a streamlined content that relieved the teachers of the burden of determining the order of lessons. The responses of Teachers 5, 4, and 10 reflected this:

> Because the curriculum is changeable, it benefits us teachers. As a result, we no longer struggle as much with determining the order of the classes we want to offer to the students. (Q2, T5)

> According to the curriculum, it is somewhat appropriate for the students' current level. I believe it is in some way pro-students. (Q2, T4)

> In terms of curriculum, because we deal with a variety of sports, it serves as our bible, our foundation, and our guide. It is well-balanced and straightforward to implement. (Q2, T10)

Additionally, the curriculum was developed to fulfill the needs of both students and teachers. To begin, it focused on the academic and physical growth of students and prepared them to become better professionals in their chosen sport or field. Teachers 7 and 9 reviewed the curriculum's suitability for the students' information consumption, whereas Teacher 11 discussed the subjects presented in the program:

> The curriculum is good; it is tailored to student-athletes who demonstrate true athletic ability. That is the most enjoyable aspect of the curriculum. (Q3, T7)

> In terms of curriculum, it emphasizes specialized areas and gives opportunities for lifelong learning. (Q2, T9)

> There are classes that prepare students to become future educators, such as basic sports psychology, how to interact with players, and how to identify the athletes' requirements, among others. It teaches them what they need to do to improve as coaches and players. (Q2, T11)

Additionally, the curriculum was capable of enhancing the students' current status. It enabled them to receive specialized training in the various physical activities they studied. Teachers 15 and 6 confirmed this:

> The curriculum is excellent because it teaches them how to be good athletes and citizens. It's tough in a way because the majority of students on the Sports Track are really hyperactive. (Q3, T15)

> The curriculum is excellent. What's great about athletics track is that it allows students to grow. Additionally, it served as a platform for students to choose from if they were not attracted toward other scales such as linguistics or logic. It enables students who are kinesthetically intelligent to succeed."(Q3, T6)

Finally, the curriculum provided teachers with opportunities to expand their expertise to provide a higher level of physical education to their students. Teacher 13 expanded on this situation:

> The positive experience that I have had as a result of the curriculum is that teachers were given time to attend seminars; for example, in athletics, they were sent to seminars and we learned the fundamental laws and regulations as well as the many sporting honors. (Q2, T13)

Conclusion

This study shows teachers' expressions of gratitude for their positive experiences of teaching Sports Track in Senior High School in the Philippines. This includes their observations of the curriculum, the school administration's management and support, and the students. The study increases understanding of the relationship between these factors and teachers' ability to maintain the effectiveness of their pedagogical content knowledge. This is important for preserving the quality of education as teachers in the Philippines continue to adjust and adapt to the system's recent paradigm.

Thus, this study implies that teachers should work in an environment conducive to professional growth, in which they can interact with competitive learners and receive adequate institutional support for training and physical activity.

Additionally, this study concludes that students on the Sports Track have multiple intelligences with a remarkable predominance in kinesthetic intelligence. Evidence for this comes from their hyperactive personalities, participative behaviors, and ability to develop a sense of versatility throughout the learning process. Additionally, their capacity to grow collectively as they develop the skills necessary to excel in a variety of competitions demonstrates the efficacy of a hands-on teaching–learning process. As a result of these observa-

tions, it may be concluded that instructional tactics should promote active participation and interaction in the learning environment.

Another conclusion from this study is the advantage conferred on physical education teachers by their postsecondary degree–based competencies in teaching specialized and applied courses. It is simpler to implement the Senior Sports Track Curriculum when teachers have broad knowledge and experience in many settings of physical education as a foundation. This allows teachers to focus on further developing their skills and proficiency to fulfill the learning demands of the students.

References

Agboola, B. M., Adeyemi, J., & Ogbodo, C. M. (2014). Academic achievement and admission policy as correlate of student retention in Nigerian federal universities. *International Journal of Business and Social Sciences*, *5*(2), 101–108. https://ijbssnet.com/journals/Vol_5_No_2_February_2014/12.pdf

Bailey, R. (2006, October). Physical education and sports in school: A review of benefits and outcomes. *Journal of School Health*, *76*(8), 397–399. https://doi.org/10.1111/j.1746-1561.2006.00132.x

Baykara, Z., & Orhan, R. (2020). An analysis of job satisfaction levels of physical education teachers in Ankara, Turkey. *Educational Research and Reviews*, *15*(2), 65–71.

Bertills, K., Granlund, M., & Augustine, L. (2019). Inclusive teaching skills and student engagement in physical education. *Frontiers in Education*, 4, Article 74. https://doi.org/10.3389/feduc.2019.00074

Bray, M. (2013). *The impact of student choice on learning engagement in physical education* [Synthesis project]. SUNY Open Access Repository. https://soar.suny.edu/handle/20.500.12648/4008

Brilliantes, K. B., Orbeta, A. J., Francisco-Abrigo, K. A., Capones, E. M., & Jovellanos, J. B. (2019). *Status of senior high school implementation: A process evaluation*. Philippine Institute for Developmental Studies.

Centers for Disease Control and Prevention. (2010, July). *Strategies to improve the quality of physical education.* https://www.cdc.gov/healthyschools/pecat/quality_pe.pdf

Cloes, M. (2017). Preparing physically educated citizens in physical education: Expectations and practices. *Retos*, *31*, 245–251.

Creswell, J. W. (2009). Mapping the field of mixed methods research. *Journal of Mixed Methods Research, 3*(2), 95–108.

Development Asia. (2019, August 7). *Factors affecting senior high school track offerings in the Philippines*. https://development.asia/insight/factors-affecting-senior-high-school-track-offerings-philippines

Eddles-Hirsch, K. (2015). Phenomenology and educational research. *International Journal of Advanced Research, 3*(8), 251–260.

Gilakjani, A. (2012). A match or mismatch between learning styles of the learners and teaching styles of the teachers. *I.J.Modern Education and Computer Science*, *11*, 51–60. https://doi.org/10.5815/ijmecs.2012.11.05

Lee, T.-E. (2014). Effects of a cooperative learning strategy on the effectiveness of physical fitness teaching and constraining factors. *Mathematical Problems in Engineering*, *2014*, Article 519291. https://doi.org/10.1155/2014/519291

Nucum, K. (2018, October 8). *SHS Sports Track: What is it all about?* Edukasyon.ph. https://www.edukasyon.ph/blog/shs-sports-track-what-is-it-all-about

Piantanida, M., & Garman, N. B. (Eds.). (2009). *The qualitative dissertation: A guide for students and faculty.* Corwin Press.

Richards, K. R., Washburn, N., Carson, R. L., & Hemphill, M. A. (2017). A 30-year scoping review of the physical education teacher satisfaction literature. *Quest*, *69*(4), 495–514. https://doi.org/10.1080/00336297.2017.1296365

Rutkowska, K., & Zalech, M. (2015). Job satisfaction of a physical education teacher as seen by school community. *Physical Culture and Sport*, *Studies and Research*, *68*, 34–40. https://doi.org/10.1515/pcssr-2015-0026

Sergio, M. (2012). K–12 education reform: Problems and prospects. *Gibón*, *9*, 70–80. https://www.adnu.edu.ph/urc/download/p070p080.pdf

Starc, G., & Strel, J. (2012). Influence of the quality implementations of a physical education curriculum on the physical development and physical fitness of students. *BMC Public Health*, *12*, Article 61. https://doi.org/10.1186/1471-2458-12-61

Varea, V., Gonzales-Calvo, G., & Garcia-Monge, A. (2022). Exploring the changes of physical education in the age of COVID-19. *Physical Education and Sport Pedagogy*, 27(1), 32–42. https://doi.org/10.1080/17408989.2020.1861233

Whittle, R. J., Telford, A., & Benson, A. C. (2018). Teacher's perceptions of how they influence student academic performance in VCE physical education. *Australian Journal of Teacher Education*, *43*(2). https://doi.org/10.14221/ajte.2018v43n2.1

The Physical Educator Vol. 81 • pp. 231–251 • 2024
https://doi.org/10.18666/TPE-2024-V81-I2-11508

TEACHER EDUCATION

Probing the Early Teaching Experiences of Newly Hired Physical Education Teachers: Implications for Curriculum Enhancement

Danie John C. Asio and Ruben L. Tagare, Jr.

Abstract

With the demand for the new basic education system in the Philippines, school divisions employ many physical education teachers each year to teach relevant courses in the K–12 curriculum. Since the implementation of this new curriculum in 2013, scholars have been examining the initial impact; however, investigation on the experiences of newly hired physical education teachers during their first year of service has barely been sufficient. As a result, this research used a qualitative phenomenology research design to elicit information on the early experiences of these teachers and use these as implications for enhancing the curriculum content of undergraduate teacher education programs. Participants from selected schools in Cotabato Province in the Philippines took part in an in-depth interview while closely adhering to the safety procedures brought by the COVID-19 pandemic. A few of the issues the research participants raised included integrating topics on adjusting to behavioral differences in the workplace, training

Danie John C. Asio, Department of Physical Education, Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Philippines. Ruben L. Tagare, Jr., Department of Physical Education, Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Philippines. Please send author correspondence to tagareruben@usm.edu.ph

preservice teachers to deliver lessons in a way that students can easily understand them, exposing preservice teachers to teaching strategies that boost student involvement and designing efficient instructional materials; and fostering teaching commitment to the teaching profession in preservice teachers. The data were then used in the development of conclusions and recommendations that can be used to improve the curriculum of Philippine undergraduate teacher education programs.

Education is a tool for socioeconomic progress and transformation. It is a pillar in the growth of a society. It allows an individual to acquire information with a particular skill in teaching, which was a great career in which time was impacting, tranforming, and modifying a career for the better. The new instructor understands that the first few years are fraught with significant obstacles, humiliating blunders, and brutally hard days (Estrera, 2019).

Because learning about becoming a teacher is different than teaching after completion of teacher training, undergraduate students who take on the role of teacheer may feel overwhelmed. Such emotions are normal but should not deter students from following their ambition of becoming a teacher. Newly hired teachers confront a lack of supervision and the design of regular lessons to educate their students daily. Furthermore, newly hired teachers have to hone their abilities and strengthen their relationships with their students and coworkers (Fry, 2007).

As the result of recent educational developments in the Philippines, newly hired teachers face numerous challenges, including a lack of administrative support, an inability to manage personal and professional expectations, limited teaching resources, a lack of professional development, and difficulty dealing with behavioral problems in the classroom. However, because of these difficulties in their work and specific circumstances, they tend to withdraw their ideals during points in their lives. For some essential purposes, performing this phenomenological research of newly hired physical education teachers is informative and beneficial. This study allows teachers to understand more about the newly hired senior high school teachers' lived experiences and challenges for teaching their subjects. It also helps them to understand the lived experience of physical education teachers and the implications of enhancing the curriculum.

This study addresses the question of "What were the lived experiences of newly hired Physical Education Teachers in Senior High School?" Specifically, this research aims to answer these subquestions:

1. What experiences do they like the most as newly hired physical education teachers?
2. What were the problems and challenges that the newly hired physical education teachers are experiencing?
3. As newly hired physical education teachers, what sensible suggestions can better prepare teacher education students in the actual teaching world?

Method

Research Design and Procedures

This study employed a qualitative design, especially the phenomenology approach, to investigate the lived experiences of newly hired physical education teachers. Qualitative research is the collection of nonnumerical data. The design is a naturalistic inquiry that seeks an in-depth knowledge of the occurrences seen in society.

The first step in collecting data for a phenomenology study was to secure a letter of authorization from the heads of the various research environments. The approval letters indicated that both parties engaged in the study agreed and received permission. Following an approved letter, we secured an informed consent contract from the participants. Informed consent emphasized that the participants engaged in the study were aware of and completely informed about the objectives.

An initial visit for the preliminary interview allowed us to collect preliminary data to make the study more credible and authentic. We additionally performed in-depth interviews with the participants to collect more accurate data, predict how honest and impartial the participants were, and confirm the study findings. We conducted validation and triangulation by generating and comparing the data from different participants.

Research Participants

Participants in this phenomenological research were drawn from chosen schools in the Cotabato Province in the Philippines

who were just hired in the Department of Education Senior High School for the 2019–2020 academic year.

Data Analysis and Interpretation

This study utilized the framework from Miles and Huberman (1994) to analyze and interpret the qualitative data: data reduction, data display, and conclusion drawing and verification. Data reduction is a method of coding and reducing the codes and converting the derived data into figures, tables, or discussions. We gathered the required information, categorized the participants' replies, and extracted the essential and relevant information. The resulting data were next transformed into figures, tables, or discussions. Thematic analysis was used for data sorting and in the categorization of qualitative data.

On the other hand, data display, or the presentation of organized data, facilitated the flow of information to the point at which conclusions were drawn. After analysis of the replies to the questions, a conclusion was drawn and verification was done. This helped us to describe the primary inputs in the study. Verification was done through reexamination of the data as many times as necessary until the desired confirmation level was achieved.

The use of the experiential-theoretic transition model from Piantanida and Garman (2009) ensured rigor and artistry in this qualitative study. At the start of the interpretation, the participants' real-life experiences were narrated on the basis of their context. Iterative performance based on the participants' responses was given after a thorough discussion of their experiences. Finally, we used theories and studies to bolster the interpretation of the data. To preserve the genuineness of the participants' thoughts and feelings, we tried to limit personal bias.

Ethical Considerations

We ensured that the necessary ethical standards and considerations were strictly followed throughout the study. We acknowledged that conformity and ethical standards were established. Thus, the strict adherence to the three principles relevant to research ethics involving human subjects mentioned in the 1979 Belmont report was observed thoroughly. These were the principles of respect to

person, beneficence, and justice. The teachers involved in this study were treated with the highest regard. Their involvement in this study was voluntary. They were likewise mindful that they could withdraw their participation at any time without any demands of explanation.

Likewise, the privacy and confidentiality of the research participants were ensured. The responses of the participants were treated with utmost anonymity. They just needed to sign the informed consent form as a sign of their voluntary participation. Beneficence was also an ethical standard that we observed in protecting the research participants from harm. We ensured that the guide questions used in data gathering had no degrading, discriminating, or unacceptable language offensive to the research participants. The participants did not undergo activities that would expose them to any physical or psychological dangers.

Finally, in promoting justice, we conducted an orientation to explain the objectives and all undertakings of this research before gathering data.

Results and Discussion

This section presents the experiences, standpoints, and insights from the participants who participated in the in-depth interview. Table 1 lists the experiences newly hired teacher mentioned the most. Table 2 lists the problems and challenges they face most commonly, and Table 3 lists their sensible suggestions to prepare students to teach in the real world.

Experiences Newly Hired Physical Education Teachers Like the Most

Theme 1: Newly Hired Teachers Face a Favorable Challenge Due to the New Normal Learning

The new normal learning appears to be a favorable challenge for newly hired teachers. With the suspension of face-to-face engagement within schools due to the COVID-19 pandemic, schools in the Philippines are adapting to the new normal form of education at present. Continuous innovations of educators and the active involvement of other stakeholders are the driving force for its success. For the continuity of education and for every school to still attain its

mission and vision, which is to provide quality education to every Filipino learner, the Department of Education implemented modular distance learning. Distance learning refers to a learning delivery modality where learning occurs between the teacher and the geographically remote learners during instruction. This modality has three types: modular distance learning, online distance learning, and TV/radio-based instruction (Quinones, 2020).

According to Bernardo (2020), modular learning is the most popular type of distance learning. In the Philippines, all public schools currently use this learning modality. According to a Department of Education survey (Baticulon et al., 2021), learning through printed and digital modules is the most preferred distance learning method for parents with children who are enrolled this academic year. This is also in consideration of the learners in rural areas where the internet is not accessible for online learning.

When participants were asked what experiences they liked the most as newly hired physical education teachers, the most mentioned was newly hired teachers face a favorable challenge due to the new normal learning. In this regard, Teachers 1 and 2 said,

> As an educator, we need to teach our students well, especially now that we are experiencing a pandemic, we must find a way to teach our students well. (G11-T1)

> The first time I entered as a newly hired physical education teacher was that I was teaching my students in a [virtual] way which is a challenge for me to teach my students well, and makes lessons that they just easier to understand even if we are in the new mode of teaching during this pandemic. (G11-T2)

Newly hired teachers face multiple challenges. They are beset with a multitude of concerns and anxieties. Such feelings are expected but should not deter their desire to "learn to teach" (Salandanan, 2005). In regard to challenges, Teachers 4 and 6 stated,

> More haggard now, you will experience more tests, especially in the new teaching method, the modular and online. So, we

Table 1
Themes and Core Ideas of the Experiences They Like the Most as Newly Hired Physical Education Teachers

Major theme	Frequency of responses	Core idea
Newly hired teachers face a favorable challenge due to the new normal learning	Variant	The teacher must find a way to teach their students even when they are experiencing a pandemic.
	Variant	The teacher was excited about the new way of learning, which is the new teaching mode.
	Typical	Using online platforms for teaching the students in the new learning mode.
	Typical	New learning methods are applied to teach the students well during the pandemic.
	Variant	The teacher must find a way to deliver their lessons well.
More interactive teaching–learning process	Variant	Teaching and sharing some knowledge to their students.
	Typical	Gaining some new learnings and life lessons as an effective teacher.
	Variant	Experience in their first year of being a newly hired physical education teacher.
Holistic physical education activities for the development of well-rounded learners	Variant	Teaching how to develop and enhance their full potential as a student.
	Variant	Enhancing the abilities of the students.

Note. "General" means response mentioned by 50% or more of the participants. "Typical" means response mentioned by at least 25% but less than 50%. "Variant means response mentioned by less than 25% of the participants.

> physical education teachers know that physical education is not only inside the classroom but also outside of it. (G11-T4)

Theme 2: More Interactive Teaching–Learning Process

This theme explores the experiences of newly hired physical education teachers, focusing on the aspects they find most rewarding. Through the insights of participants, it becomes evident that contemporary teaching-learning processes are increasingly interactive. This shift is attributed to advancements in technology, which provide educators with tools to engage students in dynamic ways, as well as a growing emphasis on student-centered learning, inclusivity, and socio-emotional development. By integrating multimedia resources, collaborative activities, differentiated instruction, and socio-emotional learning principles, educators create inclusive and engaging learning environments that cater to the diverse needs of students, fostering both academic achievement and holistic development.

The strategies aim to promote critical and reflective thinking, research, and evaluation skills that will help students take positive action to protect, enhance, and advocate for their own and others' health, well-being, and safety (Senthamarai, 2018). Students use personal and social capability to work collaboratively with others in learning activities; to appreciate their own strengths and abilities and those of their peers; and to develop a range of interpersonal skills such as communication, negotiation, teamwork, leadership, and an appreciation of diverse cultures perspectives.

When asked what experiences they liked the most as a newly hired physical education teacher, the participants said they required a more interactive teaching–learning process. The participants most mentioned new learning when teaching physical education. In this regard, Teachers 1 and 2 said,

> The experience that I liked as a newly hired physical education teacher was teaching my students. I enjoyed it because I could teach them, and I could share my knowledge with the students I was teaching. (G12-T1)

> New experiences, new things we learn every day, and I am also excited to learn new life lessons not only from me but

also from my students as a person and as an effective physical education teacher. (G12-T2)

Theme 3: Holistic Physical Education Activities for the Development of Well-Rounded Learners

Holistic education focuses on the entire possible development of the person, encouraging individuals to become the very best or finest that they can be and enabling them to experience all they can from life and reach their goals. Physical activity decreases in and out of the school environment, and children are becoming increasingly sedentary, unfit, and overweight. As a result, children in today's society have a greater likelihood of poor health.

Further, holistic development of children involves the development of their physical abilities and skills—both gross motor skills (larger movements made with arms, legs, or whole body) and fine motor skills (smaller, more graceful movements that use the small muscles of the fingers, toes, wrists, lips, and tongue; Barnett et al., 2013). Children need to be taught their ABCs to read and write; they also need fundamental movement skills (gross motor skills) to obtain a foundation for a physically active lifestyle. An active lifestyle can contribute to children's physical, emotional, and intellectual development, including self-efficacy, general self-esteem, socialization, and mental discipline.

When asked what experiences they liked the most as a newly hired physical education teacher, participants most mentioned holistic physical education activities for the development of well-rounded learners. In this regard, Teacher 1 said,

> The experience I like most as a newly hired physical education teacher is that I can teach and help students develop and enhance their holistic health (mental, physical, social, emotional, and spiritual). (G11-T1)

Problems and Challenges for Newly Hired Physical Education Teachers

Theme 1: Difficulties in Dealing With the Attitudes of Students and Senior Colleagues

New teachers experience challenges with students' and senior colleagues' attitudes (Llego, 2017), as well as other challenges and stumbling blocks (Table 2). The pressure to get along can affect curricula in schools, with experienced teachers receiving a level of respect from their young, recently hired colleagues. Physical education teachers are often marginalized, and the need to feel accepted among colleagues is essential (Christiansen et al., 2013).

When asked about the problems and challenges they experienced, participants immediately shared about dealing with the attitudes of their students and their senior colleagues. In this regard, Teacher 1 shared,

> Honestly, the number one thing that I experienced was the way I dealt with my teaching colleagues, how to get along with my colleagues, and next on how I can get along with my students. (G11-T1)

Theme 2: Inadequate Facilities and Equipment for Students' Learning in the New Normal

Sports facilities and equipment play an essential role in engaging students in physical education classes' learning processes and activities. The lack of facilities and equipment seems to impact implementation of high-quality physical education significantly. Resource adequacy influences job satisfaction directly and positively. The term "resource adequacy" refers to the extent to which facilities, finance, equipment, and resources are suitable and adequate to support personnel, and lacking sports facilities and equipment in schools may lead to low student motivation, thus more burned-out, less satisfied teachers implementing physical education (Kroupis et al., 2019).

When asked about the problems and challenges that newly hired physical education teachers are experiencing, the participants mentioned inadequate facilities and equipment for students learning in the new normal. In this regard, Teachers 2 and 4 said,

Table 2
Themes and Core Ideas on the Problems and Challenges of Newly Hired Physical Education Teachers

Major theme	Frequency of responses	Core idea
Difficulties in dealing with the attitudes of students and senior colleagues	General	Newly hired teacher's problem is getting along with another coteacher.
	Variant	Teachers must build trust with their colleagues and the students.
	Variant	Trust issue.
	Variant	Newly hired teacher's problem in trusting others and building the trust to the students.
Inadequate facilities and equipment for students learning in the new normal	General	Lack of facilities for the newly hired teacher.
	Typical	Lack of equipment's ability to demonstrate and teach the students adequately.
	Typical	Equipment that is important to the newly hired teacher in their first teaching.
	Variant	Lack of facilities and equipment.
	Variant	Lack of budget to buy equipment.
Delivering lectures in such a way that students can quickly grasp them	General	Finding a solution will help the teacher explain the lesson while they are in the pandemic.
	Typical	Delivering lessons to the students so that they can more easily understand.
	Typical	How teachers deliver their lessons properly to their students so that they can easily understand.
Ensuring that proper teaching tactics increase student involvement in class	General	Students' participation in class and each student's interest in participating.
	Typical	Interest of the student in their class.

Note. "General" means response was mentioned by 50% or more of the participants. "Typical" means response was mentioned by at least 25% but less than 50%. "Variant" means response was mentioned by less than 25% of the participants.

> The problems and challenges that I experienced when I was a newly accepted physical education teacher were, first and foremost, the equipment of the games and their facilities. How students can learn and quickly understand the teaching. (G11-T2)

> The problems and challenges I experienced in the first class as a new physical education teacher, first and foremost, are the school equipment. (G11-T4)

As the centerpiece of learning in a school, the classroom needs to be adaptable to the changing needs of the academic environment. Information technology devices such as cameras, microphones, monitors, and computer systems need to be integrated into the faculty office, classroom, laboratory, and other teaching areas.

Theme 3: Delivering Lectures in Such a Way That Students Can Quickly Grasp Them

Newly hired teachers like to deliver lessons to students in a way students can easily understand the lesson during this time of the pandemic. It takes a long time and a lot of effort for teachers to create practical classes. New teachers must commit to bringing the necessary action and remember that even the best-planned lecture is useless unless delivered in an engaging manner via effective classroom management tactics.

The lecture technique must address students' expectations of student and teacher roles. Students may first resist "active" learning, indicating more comfort with the traditional lecture format. Such opposition is frequently tied to students' preference for authoritative rather than discursive instruction and may be more prevalent among men and students with less experience (Owens et al., 2017).

When asked about the problems and challenges that newly hired physical education teachers are experiencing, the participants shared about challenges with delivering their lessons or lectures appropriately so their students could catch up quickly. Teachers 1 and 2 said,

> The challenges I faced throughout my first year of teaching were how to teach my students in the new normal. I had to find a way to teach the student easily even when we were

not in the classroom, and also in students who are not well connected. (G12-T1)

The challenges I faced as a newly accepted physical education teacher were how I could properly deliver my lessons to my students that they could easily understand and follow. (G12-T2)

Teachers can use blended learning to deliver the lessons or lectures so students can catch up quickly. This also refers to a learning delivery that combines face-to-face with any, or a mix of, modular distance learning, online distance learning, and television/radio-based instruction. Blended learning can enable the schools to limit face-to-face learning, ensure social distancing, and decrease the volume of people outside the home at any given time (Pimentel-Tibon, 2020).

Theme 4: Assuring That Proper Teaching Tactics Are Used to Increase Student Involvement in Class

It is important that teachers have techniques to use to increase students' involvement in their class. Classroom discussion is one of the most frequently used and often embraced pedagogical strategies. In attempting to enhance participation quality and discussion effectiveness, teachers have concerns about what to do about students who are less inclined to participate voluntarily.

The strategies for instructors of graduate business classes may apply for newly hired teachers: place significant weight on the participation grade and cold-calling (i.e., call on students whose hands are not raised).]

Students may experience enhanced quality of participation and discussion in class if the teacher requires or grades participation, incorporates ideas and experiences into class, actively facilitates, asks practical questions, provides a supportive classroom environment, and affirms contributions/constructive feedback. Teachers can use these methods to formulate future teaching strategies.

When teachers were asked about the problems and challenges that newly hired physical education teachers experienced, the topic most mentioned was ensuring the use of proper teaching tactics for increased student involvement in class**.** In this regard, Teacher 4 said,

> I think the problems and challenges I experienced in the first class as a new physical education teacher, was how to teach them where students participating in any activities would not be of interest, some students would boredom is probably caused by the strategy I use in my teaching. (G12-T4)

When teachers think of student participation in learning activities, they usually think of excellent behavior (behavioral engagement); positive feelings (emotional engagement); and, significantly, student thinking (cognitive attention; Fredricks, 2014).

Sensible Suggestions to Better Prepare Teacher Education Students in the Real World

Theme 1: Instill a Genuine Commitment to the Teaching Profession

It is important for newly hired physical education teachers to receive sensible suggestions in training that better prepare them for the actual teaching world. Historically speaking, prospective teachers tend to view the field of education as a career choice that pays a respectable salary and comes with a built-in 3-month summer vacation. Additionally, some individuals view teaching as an "easy" profession because they attended school and watched their teachers in action. In reality, educating children and young adults requires extensive training, practice, skills, and several personal commitments that teachers must embrace to succeed in the field and ultimately leave a positive and lasting impression on their students (Hilken et al., 2017).

When teachers were askled about why there is a need to instill commitment in the teaching profession, they could have sensible suggestions to prepare better teacher education students for the actual teaching world. Teachers 1 and 2 shared,

> My only advice is maybe you just need to accept, love, and be strong in what you do, because if you don't love what you do, you will get bored, and you will get annoyed, you will think of giving up, but if you love what you do you can handle all the challenges that will come to you. (G11-T1)

> My advice for the incoming physical education teacher, it is crucial that you just follow what you want, as well as what your heart wants, love what you are doing, don't be shy to ask because that's where we can also learn, read books and love your preferred profession." (G11-T2)

Theme 2: Train Preservice Teachers to Create Effective Instructional Materials That Support Students' Learning

It is important for teachers to have proper training to increase the learning of their students and create effective instructional materials that will support their students' learning. Proper training gives new teachers the greatest chance of success as well as brings into the forefront new challenges in education. When this training does not happen, newly hired teachers may leave the profession early. Further, when training is insufficient, students suffer. Newly hired teacher must have proper training to enhance their capabilities and skills so they can create effective instructional materials that will help and support the learnings of their students (Kelly, 2019).

When asked what sensible suggestions can better prepare teacher education students for the actual teaching world, the participants most mentioned training preservice teachers to create effective instructional materials that support students' learning. In this regard, Teacher 1 shared,

> Perhaps the education department needs to provide the necessary materials so that teachers can improve and teach new teachers, because not everyone will learn in college, so it is very important that when you enter there is training about what can be done to elevate and increase the learning of the new teachers. (G12-T1)

Theme 3: Expose Preservice Teachers to Activities That Will Help Them Develop More Effective Teaching Practices

There is a need to expose preservice teachers to activities that will help them to develop more effective teaching practices. Newly hired teachers must be exposed to some activities that will help them develop more effective teaching practices as well as help them teach their students effectively. They must study teaching strategies so

Table 3
Themes and Core Ideas of Newly Hired Physical Education Teachers and Sensible Suggestions to Prepare Better Teacher Education Students in the Real World of Teaching

Major theme	Frequency of response	Core idea
Instill a sincere commitment to the teaching profession	General	You just really need to accept, love, and be strong to do your job.
	Typical	Follow what you want, as well as what your heart desires.
	Typical	Study well the course taken to be prepared for the challenges that will come, and love what you choose.
	Typical	Take the advice of the elders, be open to new knowledge that can be shared by others, and most of all, your love of your chosen profession. And you must love teaching students.
Train preservice teachers to create effective instructional materials that support students' learning.	General	Providing the needs and materials so that teachers can improve and teach well.
	Typical	Critical of proper training for teachers to increase the new teachers' learning ahead of time.
Expose preservice teachers to activities that will help them develop more effective teaching practices.	General	Study the teaching strategies to handle different types of students and better learn different techniques so that your students can learn more efficiently.

Note. "General" means response was mentioned by 50% or more of the participants. "Typical" means response was mentioned by at least 25% but less than 50%. "Variant" means response was mentioned by less than 25% of the participants.

they are equipped and learn different techniques that will help their students learn more easily if they handle different types of students (Lipscomb, 2017).

When asked what sensible suggestions can better prepare teacher education students in the actual teaching world, they mentioned exposing preservice teachers to activities that will help them to develop more effective teaching practices. In this regard, Teacher 3 shared,

> My only advice is to study teaching strategies because in the real world you will experience different types of students and better learn different techniques so that your students can learn more easily. (G11-T3)

Conclusion

This study provides a good foundation for future studies that can impact the curriculum enhancement of the newly hired teacher. There are some problems and challenges that newly hired teachers face in their first years as teachers such as dealing with the attitude of their students and their co-teachers, lack of equipment and facilities, and problems in delivering the lesson to their students during the COVID-19 pandemic.

To overcome these challenges, teachers can attend training and seminars that provide them with the required skills and ideas for implementing improved physical education. They can take the opportunity to participate in activities and workshops to equip them with the necessary skills and ideas for better physical education implementation. Physical education is crucial to overall student well-being, which is why teachers are putting in extra effort to prepare learning materials and deliver them to students in this time of the pandemic.

On the basis of the experiences of the newly hired physical education teachers, it seems that regardless of whether the incidents are positive or negative, the teachers accept them and are conscious enough to see them as positive. Newly hired physical education teachers need to accept that, at this time of the pandemic, they are the ones who must encourage their students to improve their spirits and continue their studies, despite the challenges of the pandemic.

This study concludes that despite the experiences that newly hired teachers experience, these teachers face a challenge due to the new normal learning. Newly hired teachers must find a way to teach their students even when experiencing a pandemic, and using online platforms for teaching the students in the new mode of learning is the best method of delivering their lessons well. Newly hired teachers must adjust to the new method of learning to teach their students well in times of a pandemic. A more interactive teaching–learning process can allow for more learning for both teachers and students and for teachers to gain insights to becoming more effective in their teaching. Additionally, newly hired teachers can use holistic physical education activities to develop well-rounded learners and teach students to develop and enhance their full potential.

This study concludes that the problems and challenges of newly hired physical education teachers experiencing include

- difficulties in adjusting to the behaviors and attitudes of students and senior colleagues. Newly hired physical education teachers struggle to handle their students' perspectives and their co-teachers' attitudes, in their first year of teaching.
- lack of facilities and equipment for student learning in the new normal. Newly hired teachers must need some proper facilities and equipment to teach and demonstrate well the lessons they need to prepare for their students.
- and to meet the needs of their students. Newly hired teachers must deliver lectures in a way that students can quickly grasp them. Thus, newly hired physical education teachers must find a solution to help them further explain the lesson while teaching in the pandemic. Teachers need to ensure that teaching tactics increase student involvement in class. They must employ techniques that will help students to participate during their classes and help students understand. The lessons must also meet the interest of each student to inspire participation in class.

This study concludes that newly hired physical education teachers must be better prepared to teach students in the real world. Newly hired teachers must provide opinions and insights about what they experience and what problems and challenges they encountered for

those who chose the teaching profession. Teacher education must "instill a genuine commitment to the teaching profession." Newly hired teachers must "follow what [they] want, as well as what [their heart desires," "study well the course taken to be prepared for the challenges that will come and love what [they] choose. Preservice training also needs to prepare teachers to create effective instructional materials that support students' learning, and schools need to provide the materials newly hired teachers need to improve and teach their lessons to their students. Finally, teacher training needs to expose preservice teachers to activities that will help them develop more effective teaching practices.

Hence, on the basis of the findings of this study, we make these remommendations:

1. Undergraduate teacher education must include topics related to adjusting to behavioral differences in the workplace. This can help newly hired physical education teacher to deal with their students' and senior colleagues' attitudes. Undergraduate teacher education must also expose preservice teachers to activities that will hone their teaching strategies.
2. Upon being hired, the newly hired teachers must receive proper training and seminars that further improve their pedagogical content. Workshops to capacitate these teachers with the new normal is also suggested.

References

Barnett Lmhlll, D. R., Cliff, D. P., Okely, A. D., Hills, A. P., & Morgan P. J. (2013). Australian children lack the fundamental movement skills to be active and healthy. H*ealth Promotion Journal of Australia*, 24(2), 82–84. https://doi.org/10.1071/HE12920

Baticulon, R. E., Sy, J. J., Alberto, N. R. I., Baron, M. B. C., Mabulay, R. E. C., Rizada, L. G. T., & Reyes, J. C. B. (2021). Barriers to online learning in the time of COVID-19: A national survey of medical students in the Philippines. *Medical Science Educator, 31*, 615-626.

Bernardo, J. (2020, July 30). *Modular learning most preferred by parents*: *DepEd*. ABS-CBN News. https://news.abs-cbn.com/news/07/30/20/modular-learning-most-preferred-by-parents-deped

Christiansen, M., Fagerholt, K., Nygreen, B., & Ronen, D. (2013). Ship routing and scheduling in the new millennium. *European Journal of Operational Research, 228*(3), 467–483.

Estrera, R. (2019). *The challenges encountered by the newly-hired teachers in the public secondary schools: Basis for coaching.* Academia. https://www.academia.edu/39994598/THE_CHALLENGES_ENCOUNTERED_BY_THE_NEWLY_HIRED_TEACHERS_IN_THE_PUBLIC_SECONDARY_SCHOOLS_BASIS_FOR_COACHING

Fredricks, J. A. (2014). *Eight myths of student disengagement: Creating classrooms of deep learning.* Corwin Press.

Fry, D. P. (2007). *Beyond war: The human potential for peace.* Oxford University Press.

Hilken, T., de Ruyter, K., Chylinski, M., Mahr, D., & Keeling, D. I. (2017). Augmenting the eye of the beholder: exploring the strategic potential of augmented reality to enhance online service experiences. *Journal of the Academy of Marketing Science, 45*, 884–905.

Kelly, J. R. (2019). *Leisure identities and interactions.* Routledge.

Kroupis, I., Kouli, O., & Kourtessis, T. (2019). Physical education teacher's job satisfaction and burnout levels in relation to school's sport facilities. *International Journal of Instruction, 12*(4), 579–592.

Lipscomb, S., Hamison, J., Burghardt, J., Johnson, D. R., & Thurlow, M. (2017). *Preparing for life after high school: The characteristics and experiences of youth in special Education.* Findings from the National Longitudinal Transition Study 2012. Volume 2: Comparisons across Disability Groups. Full Report. NCEE 2017-4018. National Center for Education Evaluation and Regional Assistance.

Llego, J. (2017). Demographic influence on emotional intelligence of science technology and engineering teachers in region 1 Philippines. *Imperial Journal of Interdisciplinary Research (IJIR), 3*(3), 1075–1083.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.* Sage.

Owens, E. L., Wu, J. S., & Zimmerman, J. (2017). Idiosyncratic shocks to firm underlying economics and abnormal accruals. *The Accounting Review, 92*(2), 183–219.

Piantanida, M., & Garman, N. B. (Eds.). (2009). *The qualitative dissertation: A guide for students and faculty.* Corwin Press.

Pimentel-Tibon, J. (2020). *The new normal in basic education*. Lexology. https://www. lexology. com/library/detail. aspx.
Quinones, M. T. (2020, July 3). *DepEd clarifies blended, distance learning modalities for SY 2020–2021*. Philippine Information Agency. https://pia.gov.ph/news/articles/1046619
Senthamarai, S. (2018). Interactive teaching strategies. *Journal of Applied and Advanced Research, 3*(1), S36–S38.

Multidisciplinary Journal for Education
Social and Technological Sciences

http://polipapers.upv.es/index.php/MUSE/
e-ISSN: 2341-2593

Activity Preferences of Generation Z Students for Tertiary Physical Education: Implications for Curriculum Enhancement

Ruben L. Tagare, Jr.[a], **Geraldine D. Villaluz**[b]

[a] Instructor, Department of Physical Education, Institute of Sports, Physical Education, and Recreation, University of Southern Mindanao, Kabacan, 9407, Philippines
[b] Parttime Faculty, School of Education, University of San Carlos, Cebu City 6000, Philippines
* Correspondence: tagareruben@usm.edu.ph
Received: 16 January 2020; Accepted: 26 February 2021; Published: 1 March 2021

Abstract

This research aimed to look into Generation Z Students' preferred activities to enhance the curriculum content of Tertiary Physical Education in one of the leading Universities in the Philippines using the phenomenological research design due to the fact that a great number of students in Physical Education have dropped out. A total of 110 research participants were involved in focus group discussions, in-depth interviews, and extensive field observation. Results from focus group discussions, interviews, and extensive observations resulted to five concerns: less lectures, practical activities needed, minimal competition programs, and group activities. Findings from this study served as basis for a contextualized Physical Education program for Generation Z students in Southern Philippines.

Keywords: Activity Preference in Physical Education; Generation Z Students; Enhancing Tertiary Physical Education; Phenomenology Research

To cite this article: Tagare, R., & Villaluz, G. (2021). Enhancing Tertiary Physical Education by Determining the Activity Preferences of Generation Z Students. Multidisciplinary Journal for Education, Social and Technological Sciences, 8(2), 92-106. https://doi.org/10.4995/muse.2021.15492

1. Introduction

Generation Z students have gained a lot of interest because of their distinct characteristics and behaviors. One of their generation's significant distinctions is that they were born in a world where technology is pervasive. The biographies of these students consistently suggest that mentors in the academe must consider these new students' characteristics to cultivate them efficiently. Generation Z was born between 1995 and 2010 (Rothman, 2014), accounting for one-third of the Philippine population. Their age is thought to be remarkable in many respects since they did not see computers, the internet, and technology as merely weapons but as an essential part of their lives (Philippine Statistics Authority, 2019).

Generation Z students were seen as Digital Natives in the global culture, educated in a technologically advanced society, nurtured in various environments and terrorism issues, and linked globally in the virtual home. Despite being more innovative, more adaptable, and inclusive of different cultures, Generation Z Students face challenges and issues that will be significant concerns for many industries in the coming years. They are egocentric mammals who imagine themselves as CEOs and owners with their own companies rather than workers after college graduation. Generation Z Students are ready to get what they want right away, prematurely old, pampered, and risk-averse (Singh, 2014).

Researchers discovered that in the United States, most educators in the academe made appropriate changes to their instructional strategy to make it more immersive and experiential-based, considering the characteristics of Generation Z Students. They also discovered that Generation Z students' distinct and unusual characteristics pose a problem in conventional classroom structures. Educators now recognize that the traditional teaching–learning approach is no longer reliable and applicable for these students (Skiba and Barton, 2006).

Since 2018, Philippine Higher Education Institutions have been welcoming pioneer Senior High School graduates, and research has shown that there is a need for new approaches in the teaching-learning phase, which would be a step toward permanently changing the landscape of Philippine education in irreversible ways. Generation Z students were extremely busy, creative, multi-taskers, digitally literate, and ethnically diverse. Scholars have identified this generation as

self-assured, unique, under strain, team-oriented, and effective. Since they depend on good results to gain high scores and marks, academic competitions are intense and occur regularly to this generation (Debard, 2004).

Apart from non-participative students during class activities, the growing number of dropouts in Physical Education classes in one of the leading Universities in the Philippines is a significant concern.

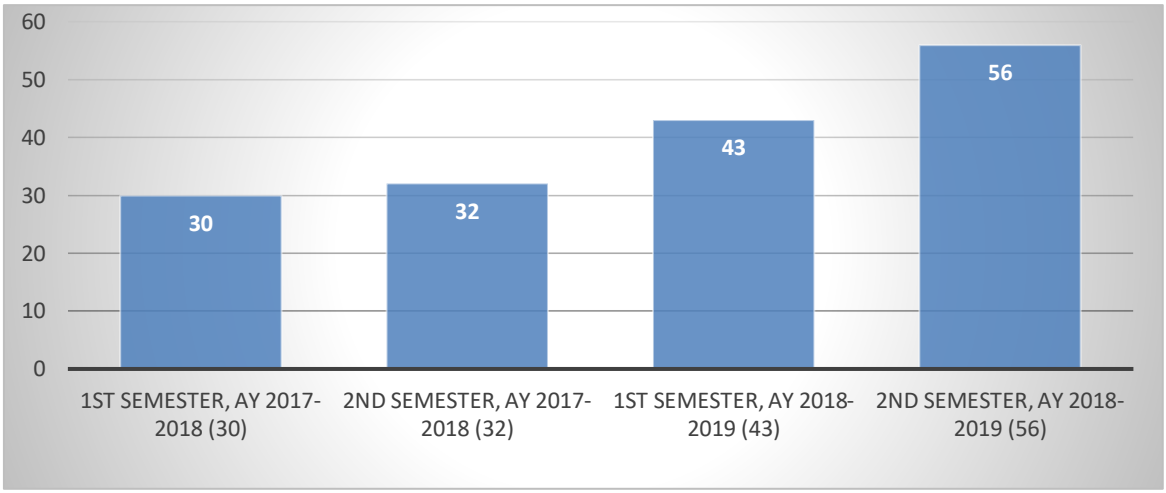


Table 1 Graph of the Total Number of Dropouts in Physical Education Classes in one of the leading State Universities in the Philippines (Information and Communication Technology Office, 2019).

In the year 2020, an inquiry was undertaken to find a clear solution to this issue by describing the flaws in the implementation of Tertiary Physical Education in the abovementioned school from the perspective of Generation Z students. The investigation revealed five (5) significant concerns that transpired during the triangulation of the results. These were: duplication of activities from senior high school Physical Education, stress due to very high Physical Fitness Test standards, very time-consuming take-home tasks in Physical Education that affect their time for other matters, very high teachers' expectations, and teachers' absenteeism. Apart from the students' problems, the program quality of the new Tertiary Physical Education of the University was one of the leading factors in the growing number of dropout Students. As a result of this analysis, it is proposed that the existing

curriculum be revisited and updated and suggest contextualizing the course material by adding the local notions and preferred activities of Generation Z Students (Tagare and Villaluz, 2019).

With the current problem found, this study aimed to look into the activity preferences of Generation Z students in their Tertiary Physical Education classes as a way to strengthen the course offering. This research shows how educational content can be enriched by integrating local knowledge and how learning environments can be strengthened by grasping native principles as a platform for enhancing a curriculum that is tailored to Students' generation patterns, preferences, and expectations.

This phenomenology investigation has created a venue for Generation Z students to express themselves by airing out their opinions and suggestions, which acted as the base principles for understanding their behavior interests in Tertiary Physical Education. Critical themes were generated and considered to improve the Physical Education curriculum content and offerings. This analysis should be used as a guide for program authors, instructors, and scholars to show that instructional improvement can be achieved by looking into Students' behavior to tailor learning environments to their preferences and interests. Considering the design of this study, a research question was formulated:

1. What are the preferred activities of Generation Z Learners for Tertiary Physical Education?

2. Methods and Materials

2.1 Research Design

This research employed a qualitative research design, specifically applying the steps of the Phenomenology approach. The experiences of generation Z Students in their Physical Education classes were analyzed through multiple data collection procedures to create a realistic portrait of how they behave, think, and talk to realize the outcomes of this study. Phenomenology is an analytical description of a scenario, traditionally written in the third person and empirically based on data gathered from researchers at a field site (Creswell, 2012). In this analysis, the researchers

invested enough time in the actual locations of the research participants for focus group discussions, in-depth interviews, non-obtrusive participant observations, journal writing, and field notes to accurately gather the correct evidence needed to closely address Generation Z's preferred meaningful activities for Physical Education.

2.2 Research Procedures

To perform a qualitative phenomenology study, it was necessary first to seek approval from the head of the schools and acquire an informed consent contract from the research participants. Following the approval of the required information, the researcher performed a series of orientations to clarify the study's goals and the costs and advantages of the participants' participation.

The qualitative analysis relied heavily on fieldwork. Following the preliminaries, immersion in the actual study setting started to provide a more detailed and accurate image of generation Z students' experiences in Physical Education. In this phenomenological approach, in-depth interviews were conducted in sites where Generation Z students gather and spend their leisure hours. Primary sources were obtained through unobtrusive observations, journal writing, memoing, and focus group discussions. To complement the primary evidence, nonobtrusive participant observation and journal writing were used. Speech recorders, video camera recorders, and journal writing were used to collect the participants' responses. The best method for authentically capturing the attitudes and emotions of the study participants was to observe them in their natural environment, where they could easily share their feelings.

2.3 Research Participants

Since there are so many Generation Zs in the research setting, the sample participants were selected using a purposive sampling process. The key participants for this research were 110 Generation Z students who are born between 1995 - 2010. Students from the University Laboratory School, Kabacan National High School, and Tertiary Students from the University of Southern Mindanao served as primary participants for this research.

2.4 Research Instrument

In this study, casual and semi-structured dialogues were used to perform the interviews. Open-ended guide questions were used to help capture the participants' responses. The guide questions were subjected to an ethics review to ensure that no derogatory contents could affect the research participants' emotional well-being. These approaches seem to be informal discussions, but they have a clear and implicit goal: to understand how generation Z students conceptualize and arrange their interactions into concrete categories.

2.5 Data Analysis and Interpretation

Word analysis, coding, and thematization of concepts were used to analyze and interpret the data. Open codes were generated to classify the most important and recurring words and ideas mentioned by the research participants. After the open coding, axial coding was performed to build the relationship between concepts and exclude outlier ideas and phrases. After the coding, essential themes have been established. Validation and triangulation were also used to ensure the trustworthiness and reliability of gathered data.

3. Results and Discussions

Research Question 1. What are the preferred activities of Generation Z Learners for Tertiary Physical Education? As can be gleaned from the result, Generation Z Students unveiled *"Inclusion of Larong Pinoy (Filipino Recreational Activities)," "Holistic Activities for Physical Education," "Lessen the Lectures, Focus on Practical Activities," "Minimize the Competition in Physical Education Classes,"* and *"Inclusion of Group Activities"* as their preferred activities that they wish to be integrated into their Tertiary Physical Education Classes. These ideas are noticeable in the following excerpts of their responses below:

1. ***Inclusion of Larong Pinoy (Filipino Recreational Activities).***

   The *"larong Pinoy,"* or Filipino Recreational Games, was one of the top responses from Generation Z Students as an activity that they would like to be included in their Physical

Education classes. Apart from its nostalgic importance as a representation of Filipino culture, research participants clarified that *larong Pinoy* provides Filipino youths with entertainment, relaxation, and the growth of motor skills, strategic logic, social maturity, and problem-solving skills. They shared concern about preserving Filipino traditional games, as these traditions are increasingly losing their importance due to the threat of digital era. They agree that having *larong Pinoy* in Physical Education classes encourages nationalism and love for traditional Filipino games and pastimes. They still like conventional games because they experience less strain and tension while playing them, as reflected in the following responses:

> *"I would prefer including the larong Pinoy (Filipino Recreational Games) to retain it, and so that we could have more physical activities rather than just using gadgets…" (Participant 70)*
>
> *"…It would be better if the larong Pinoy (Filipino Recreational Games) including luksong baka and other games will be rekindled and played by the youth today as these games are entertaining and are boredom-busters." (Participant 71)*

Existing studies have established a connection between participation in recreational activities and academic achievement. The researchers discovered that time spent outdoors and participating in recreational activities was a good predictor of academic grades, even when achievement test scores were taken into account in a sample of middle school and college students. They discovered that participation in recreational activities helped predict academic achievement even after gender, grade level, ethnic origin, free lunch eligibility, and level of adult supervision after school were statistically controlled (Barnett & Weber, 2008).

Further, Biddle & Asare (2011) and Eime et al. (2013), as cited by Alanazi (2020), demonstrated that those who participate actively in recreational activities experience less symptoms of anxiety than those who do not. Previous research findings indicate that active

involvement in recreation is a critical predictor of mental health (Biddle & Asare, 2011; Eime etal., 2013; Rafferty et al., 2016; Johnson, Connolly, & Tully, 2017).

Additionally, the literature demonstrates that involvement in leisure activities increases self-esteem, self-efficacy, self-concept, chance for social interaction, and decreases alienation and loneliness. Recreation has been shown to be beneficial in the treatment of different types of stress and anxiety (Goldstein, 2012; Paggi et al., 2016; Whitebread et al., 2017).

2. Holistic Activities for Physical Education.

Additionally, the Research Participants favored holistic exercises and emphasized that their Physical Education classes do not solely concentrate on physical development. For them, learning is more enjoyable and meaningful if they can participate in various activities that help them grow their whole selves. Additionally, it will boost their confidence and involvement, ultimately resulting in increased participation in Physical Education classes.

Physical Education is an essential part of the educational process since it helps develop and balance a growing individual's physical, academic, social, and emotional dimensions by professionally chosen physical activities. Physical Education subjects must take a comprehensive approach to cater to the development of each learner's well-being by providing diverse but appropriate learning experiences. The following excerpts from the Research Participants' answers indicate that they still tend to involve holistic activities:

> *"...I hope for the inclusion of mental, emotional, and social activities to enjoy and to learn for greater participation. It should not only focus in physical trainings." (Participant 35)*

> *"...it should not only focus on physical activities, I want to have an activity that is beyond physical development because there are also students who are not kinesthetically inclined, so even if they try harder, but they will also take ample time to learn a specific skill. With that, I want to suggest for us to experience holistic*

activities that could bring development in physical, mental, and social…" (Participant P31)

Numerous sources suggest that in the twenty-first century of teaching and learning, holistic education should be applied to new waves of Students to foster a more realistic worldview, encourage more holistic development and nurture the relationship between the different facets of the personality (intellectual, physical, moral, mental, social, and aesthetic) (Mahmoudi et al., 2012).

Bhardwaj (2016) reinforced this notion further in his inquiry into the value of holistic education in human life, revealing that education is not limited to acquiring knowledge. Fundamentally, it should be about instilling holistic ideals in all students to develop into responsible people. Additionally, his research indicates that in the educational program, it should be observed that values and holistic activities are integrated in an engaging manner such that students master them at any stage of their education. On the other side, the value must be emphasized equally since it is critical to students' holistic growth.

3. Lessen the lectures – Focus on Practical Activities

Generation Z Students desire to reduce lecture time in Physical Education classes, stating that they spend most of their day exposed to other topics taught through the lecture process. The Research Participants stated that they were dissatisfied with Physical Education due to the excessive lectures. Additionally, the Generation Z Students recommend that teachers incorporate stress-relieving activities into their lessons rather than relying solely on lectures.

Additionally, Generation Z Students chose practical exercises in Physical Education over sitting and listening to their teachers' lecture to alleviate academic tension associated with applied and advanced courses. To help them appreciate Physical Education classes more, they should find enjoyment and enthusiasm in their learning activities to provide a brief respite from their stresses. As a result, their willingness to reduce the lectures is expressed in the following responses:

> *"...for it not to be boring, lectures should be lessened because other subjects are already doing lots of lectures. Physical Education should focus more on giving practical activities rather than lecturing the whole period" (Participant 81)*
>
> *"...the teacher shouldn't focus merely on lectures; Physical Education should focus on stress-relieving activities..." (Participant 49)*

Previous research findings reveal that schools can develop 21st-century knowledge by incorporating practical activities into the curriculum (Morris, 2019). Several scholars demonstrated that one effective strategy for fostering behavioral improvement is to provide Students with dynamic and realistic experiences that train them for real-world jobs. As a result, multicomponent school-based interventions that typically provide enhanced practical activities are effective in students' physical activity (Voogt, 2013).

Additionally, Generation Z Students demonstrate an eagerness to participate effectively in the teaching–learning phase since they have a low attention period of about 20 minutes (Proctor & Prevatt 2009). Recent research findings indicate that Generation Z Students cannot sustain an excessive amount of lecture approaches because they get bored with the teacher-centered strategy, frustrated with the lack of opportunities for student activity, and disinterested in their passive involvement in the learning process (Marshall, 2016).

4. Minimize the Competition in Physical Education Classes

Prompted by the pressures of their applied and advanced courses, Generation Z Students chose to minimize the intensely competitive learning activities in their Physical Education classes to alleviate the strain. Additionally, they emphasized that making competitive group assignments is unjust because they do not share the same competencies;

thus, some will receive a high grade due to their talent while others will not because it is not their field.

Further, providing highly competitive activities in Physical Education make them more grade-oriented, which contradicts the central aim of Physical Education in the school curriculum which is to provide students with enjoyable and meaningful interactions that will help them realize the conviction to engage in lifelong physical activity to promote fitness. The following are excerpts from respondents' answers about why they choose to avoid competitions in their Physical Education classes:

> *"…competition should be minimized. Like groupings in dancing where you will be given grade as one group. I think it is not fair enough to depend the grade on it since the skills of each one differs from one another…" (Participant 57)*

> *"For our Physical Education class, we prefer to lessen the highly competitive course works for us to have fun and enjoyment while learning. Because if thorough competitions are still integrated into this subject, we tend to focus on beating other groups to earn better grades, which adds too much pressure. Allocating so much time to prepare for competitions beyond class hours can ruin our schedules and add more stress to us…" (Participant 69)*

Scholars have shown that classroom competitions result in stress and anxiety, especially when they encourage academic competitiveness among individual students. This tension can cause students to prioritize academics over other interests and extracurricular activities, resulting in an unbalanced school experience. A less-than-perfect outcome will affect the child's feelings since they may be upset if they do not succeed, which will erode their trust and self-confidence (Bao, 2009).

Additionally, if a classroom competition does not have an attainable target for all students, the game becomes unbalanced, with certain students leaping forward and others falling behind. This is the kind of rivalry that can result in distress and a decreased motivation

to engage in similar activities. An unhealthy rivalry could be solely based on competing rather than honing a new talent or functioning cooperatively (Wilkins, 2012).

5. ***Inclusion of Group Activities.***

The last activity that Generation Z Students desire to incorporate into their Tertiary Physical Education courses is group activities. They prefer group collaborations over individual tasks because they believe that it foster a more harmonious relationship with their peers and boost their morale while completing an academic mission. It is much more beneficial to include community activities in Tertiary Physical Education to alleviate their shyness and produce high-quality outputs through their collective efforts.

Additionally, they prefer group practices in Tertiary Physical Education because they can share thoughts and inputs with their classmates. Their ability to incorporate community activities into their Physical Education class is shown in the following responses:

> *"…if you have groupmates then you tend to blend with the group where you don't get shy compared to that of being alone where you get shy most of the time" (Participant 52)*

> *"…it's better if it is with groups because you have each other in doing the activities…" (Participant 12)*

This viewpoint is consistent with LaFave's (2019) observations that group activities are recommended in the twenty-first-century teaching-learning phase because it fosters collaboration, strategic thought, enhances partnerships, broadens logical viewpoints, shakes things up, and increases self-confidence, both of which Generation Z Students need more in preparation for the world of work.

Choi & Yong (2015) elaborated on the benefits of group activities for Students, stating that they enable them to tackle more complex problems than they may on an individual assignment, practice delegating roles and responsibilities, share diverse

perspectives, provide a pool of knowledge and skills, receive social support and encouragement to take risks, and develop new aptitudes.

4. CONCLUSIONS

Based on the findings, this research concludes that Generation Z Students are under stress and pressure due to their academic pursuits, as shown by their responses during interviews. This involves academic course works and demands from their teachers and society, which urges their desire to eliminate intensely competitive academic activities in Physical Education to de-stress. They prefer to incorporate recreational activities that allow students to have fun and enjoy themselves while they learn. Generation Z Students also value friendship, as shown by their preference for social activities and the reduction of highly competitive academic tasks in Physical Education.

Additionally, this study concludes that Generation Z Students retain a sense of patriotism, as shown by their preference to include *Larong Pinoy* (Filipino Recreational Activities), which they fear would soon become extinct due to technological advancement. Additionally, this study concludes that students preferred to engage in various activities that focused on their holistic development.

Finally, this study concludes that the Research Participants are committed students, as shown by their enthusiasm for increased participation in their Physical Education classes. Generation Z students prefer fewer lecture lessons and more time for practical and valuable tasks over sitting and listening to their teachers.

Acknowledgements: The researchers would like to thank all individuals who have contributed to the success of this Study. To the Examining Panel, Dr. Maria Rosita A. Hernani, Dr. Antonio Batomalaque, and Dr. Rita May P. Tagalog for the substantial information and constructive criticisms that they have provided for the betterment of this study. To the Commission on Higher Education, University of San Carlos, and University of Southern Mindanao for supporting the researchers and providing necessary favors throughout the study. To the research participants, for their time allotted to participate in the data gathering and validation. Above all, to Almighty God for the strength, guidance, and protection.

Funding: This research was funded by The Philippine Commission on Higher Education.

Conflicts of Interest: The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

References

Alanazi, H. (2020). The Effects of Active Recreational Maths Games on Maths Anxiety and Performance in Primary School Children: An Experimental Study. *Multidisciplinary Journal for Education, Social and Technological Sciences (pp.89-112).* https://doi.org/10.4995/muse.2020.12622

Bao, C. (2009). *Within the classroom walls: Critical classroom processes, students' and teachers' sense of agency, and the making of racial advantages and disadvantages*. [Published Dissertation, Boston College, ProQuest Dissertations Publishing].

Barnett, L. A., & Weber, J. J. (2008). Perceived Benefits to Children from Participating in Different Types of Recreational Activities. *Journal of Park & Recreation Administration*, *26*(3).

Biddle, S. J. H., & Asare, M. (2011). Physical activity and mental health in children and adolescents: A review of reviews. *British Journal of Sports Medicine, 45, 886-895.* http://dx.doi.org/10.1136/bjsports-2011-090185.

Bhardwaj, A. (2016). Importance of Education in Human Life: A Holistic Approach. *International Journal of Science and Consciousness. Vol. 2 | No. 2, Pages 23-28.* http://www.ijsc.net/docs/issue4/importance-of-education-in-human-life.pdf

Choi, J., & Yong, H. (2015). Conceptual group activity recognition model for classroom environments. Piscataway: *The Institute of Electrical and Electronics Engineers, Inc. (IEEE).*

Creswell, J. W. (2002). *Educational Research: Planning, Conducting, And Evaluating Quantitative* (pp. 146-166). Upper Saddle River, NJ: Prentice Hall.

Debard, R. (2004). Serving the Millennial Generation, *Millennials Coming to College (pp. 33-45).* New Directions for Student Services http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.472.8236&rep=rep1&type=pdf

Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition & Physical Activity, 10, 98-118.* https://doi.org/10.1186/1479-5868-10-98.

Goldstein, J. (2012). Play in children's development, health and well-being. Toy Industries of Europe.

Johnson, A., Connolly, P., & Tully, M. A. (2017). School-based physical activity interventions and wellbeing in children: a systematic review and intervention complexity assessment. https://campbellcollaboration.org/media/k2/attachments/ECG_Johnson _Title.pdf.

LaFave, S. E., Granbom, M., Cudjoe, T. K. M., Gottsch, A., Shorb, G., & Szanton, S. L. (2019). Attention control group activities and perceived benefit in a trial of a behavioral intervention for older adults. *Research in Nursing & Health, 42(6), 476-482.*

Mahmoudi, S., Jafari, E., Nasrabadi, H., & Liaghatdar, M. (2012). Holistic Education: An Approach for 21 Century. *International Education Studies, v5 n2 p178-186.* https://eric.ed.gov/?id=EJ1066819

Marshall, D. (2016). *Diagnostic validity of attention-deficit/hyperactivity disorder in college students: A comparison of DSM-IV-TR and DSM-5* [Published Dissertation, The Florida State University, ProQuest Dissertations Publishing].

Morris, N. (2019). To the 21st Century, and Beyond! Investigating the Practical Ways That Secondary School Teachers Can Develop the "21st Century Competencies" in Their Students [Published dissertation, University of Toronto (Canada), ProQuest Dissertations Publishing].

Paggi, M., Jopp, D., & Hertzog, C. (2016). The importance of leisure activities in the relationship between physical health and well-being in a life span sample. *Gerontology, 62, 450-458.* https:/doi.org/10.1159/000444415.

Philippine Statistics Authority. (2019, June 14). Youth: PSA. *Philippine Statistics Authority.* https://psa.gov.ph/content/youth

Proctor, B. E., & Prevatt, F. (2009). Confirming the factor structure of attention-Deficit/Hyperactivity disorder symptoms in college students using student and parent data. *Journal of Learning Disabilities, 42*(3), 250-9.

Rafferty, R., Breslin, G., Brennan, D., & Hassan, D. (2016). A systematic review of school-based physical activity interventions on children's wellbeing. *International Review of Sport and Exercise Psychology, 9(1),1-16.* https://doi.org/10.1080/1750984X.2016.1164228

Rothman, D. (2016). A Tsunami of Students Called Generation Z. *International Journal of Social Sciences.* http://www. mdle. net/JoumaFA_Tsunami_of_Students_Called_Generation_Z. pdf.

Singh, A. (2014). Challenges and Issues of Generation Z. *IOSR Journal of Business and Management*, *16, 59-63.*

Skiba, D. J., & Barton, A. J. (2006). Adapting your teaching to accommodate the new generation of Students. *Online Journal of Issues in Nursing, 11(2), 5.* https://www.ncbi.nlm.nih.gov/pubmed/17201579

Tagare, R. & Villaluz, G. (2019). *Drawbacks in the Delivery of Tertiary Physical Education among the Generation Z Students* [Unpublished Masters' Thesis]. The University of San Carlos.

Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the 21st century. *Journal of Computer Assisted Learning, 29(5), 403-413.*

Wilkins, A. (2012). Push and pull in the classroom: Competition, gender and the neoliberal subject. *Gender and Education, 24(7), 765.* http://ezproxy.usc.edu.ph:2219/10.1080/09540253.2011.606207

Whitebread, D., Neale, D., Jensen, H., Liu, C., Solis, S. L., Hopkins, E., Hirsh-Pasek, K. Zosh, J. M. (2017). The role of play in children's development: A review of the evidence. The LEGO Foundation, DK.