

Assessment of Factors Influencing Students' Participation in Physical and Health Education in Secondary Schools in the Federal Capital Territory

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ABSTRACT

This quantitative research study aims to understand the factors that influence the participation of secondary school students and teachers in Physical and Health Education (PHE) in public schools located in the Federal Capital Territory. The study involved a sample of 150 students and 20 PHE teachers, selected using a stratified random sampling technique to ensure diversity in the participant groups. Data collection was primarily done through a structured four-point Likert scale questionnaire, which evaluated level of participation, factors and barriers to engagement in PHE programmes. Descriptive and inferential statistical analyses were conducted to summarise and analyse the data obtained. ANOVA was used to test for significant impacts of different factors on student participation in PHE, including student-related, teacher-related, and institution-related factors. The findings of the study indicate that teacher-related and institution-related factors have a significant impact on participation in physical and health education among secondary school students, while student-related factors were not found to be determinants. The study also found that the perceived importance of physical and health education, availability of facilities, and support from teachers and peers were the key factors influencing students' participation in the subject. Based on these findings, the study recommends enhancing the importance of PHE in the curriculum, improving facilities and resources for physical and health education, and fostering greater collaboration between teachers and students to promote participation. Implementing these recommendations could potentially enhance student engagement and overall participation in physical and health education in secondary schools.

Keywords: Assessment, physical education, health education, participation, influencing factors, barrier

INTRODUCTION

In secondary schools in Nigeria, one of the main courses taught is physical and health education. Essentially, this course is one of the core studies offered in secondary education, to provide students with the pertinent healthcare knowledge and skills they need to lead healthy lives in the community. The need for this topic to remain in Nigeria's educational curricula is strongly supported by the importance of its contents for children's general healthy development as well as the many healthcare lessons it teaches young learners.

The subject matter is centered on helping the child develop the knowledge and abilities needed to make wise choices regarding their conduct and overall health, according to Chiawa (2009).

It concludes that young people's chances of having strong physical and mental talents for life are increased when they get early and appropriate instruction on the many strategies for adjusting to excellent physical

and health education.

Considering these changes, Ejifugha and Uwazie (2014) continue to hold the belief that schools play a significant role in providing adolescents in Nigeria with this fundamental education. As far as the government and those designing the nation's secondary school curricula are concerned, helping young children develop good, healthy habits from an early age is still a top priority. This is extremely important as Nigerian primary school curricula continue to emphasise the need to instill excellent healthcare skills in young students.

Due to Nigeria's past colonial history with the British government, physical and health education and health education are now required in the secondary school curriculum. From 1861 to 1960, when Nigeria was under British authority for over a century, laws governing several facets of the country's society, including education, were put in place. Nigeria's formal education system was taken over by the British government in 1884–1885, following the Berlin Conference. Due to difficulties in properly teaching hygiene and sanitation, physical and health education was formally included in the curriculum in 1948 as part of the curriculum reform process. This modification attempted to improve the interaction between teachers and students, expand the scope of the topic, and let students apply what they had learned in the real world (Iwunna, 2011).

To evaluate the involvement of secondary schools in PHE in Nigeria, much research has been carried out. For instance, research by Mitchell, E. (2010) looked at the difficulties secondary schools had in putting PHE programmes into practice and offered solutions for raising involvement. Ejifugha and Uwazie (2014) conducted second research to assess how well PHE interventions improved the health of Nigerian secondary school children.

In summary, it is essential to assess the extent to which Nigerian secondary schools participate in physical and health education to encourage students to lead healthy lives. Policymakers may devise ways to improve PHE teaching in secondary schools and pinpoint areas for improvement by assessing the quality and availability of PHE programmes.

Statement of the Problem

Concerns over the global decrease in teenage physical and health activities, particularly those of Nigeria's Federal Capital Territory of Abuja, have grown in recent years (Repository UNILAG, na). Secondary school students' general growth and well-being need to participate in regular physical and health education programmes. Comprehensive and successful programmes for health and physical and health education are absent from secondary schools in Abuja, the Federal Capital Territory. A discernible pattern exists in the declining percentage of pupils who engage in physical activities and health education programmes which is noticeable. This poses a significant concern for the overall well-being and development of students in the region. Additionally, there is a lack of proper assessment mechanisms in place to evaluate the effectiveness of existing physical and health education programs in primary schools. Hence, there is a crucial need to assess and address the current state of primary school participation in physical and health education in the Federal Capital Territory of Abuja, to ensure the holistic development and well-being of the students.

Purpose of the Study

The purpose of the study on the assessment of factors influencing secondary school participation in physical and health education in the Federal Capital Territory of Abuja is to evaluate the current level of participation in physical and health education among primary school students in the region.

By assessing secondary school participation in physical and health education in the Federal Capital Territory

of Abuja this study aims to achieve the following objectives:

1. To investigate the current level of participation in physical and health education among secondary school students in the Federal Capital Territory of Abuja.
2. To identify institution-related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory.
3. To find out teacher-related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory.
4. To examine student-related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory.

Research Questions

1. What is the current level of participation in physical and health education among primary school students in the Federal Capital Territory of Abuja?
2. What are the institution-related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory?
3. What are the teacher-related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory?
4. What are the student-related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory?

Hypotheses:

1. Null Hypothesis (H₀): There is no significant impact of institution-related factors on the level of participation in physical and health education among students.
2. Null Hypothesis (H₀): There is no significant impact of teacher-related factors on the level of participation in physical and health education among students
3. Null Hypothesis (H₀): There is no significant impact of student-related factors on the level of participation in physical and health education among students.

LITERATURE REVIEW

Concept of Physical and Health Education

As part of the broader education system, physical and health education is crucial for fostering personal health, well-being, and physical fitness. Different definitions of physical and health education have been offered by academics, who have highlighted the necessity of these programmes in fostering a healthy lifestyle, reducing illness, and improving people's quality of life in general.

Dr Paul Wylle, a well-known expert in the field of health and physical and health education, described physical and health education as the process of creating and sustaining a condition of health that enables a person to fully engage in and enjoy life via physical activity. (Wylle, 2010)

Similarly, Dr. Angela Davis emphasized the importance of health education in her book *Education for a Meaningful* stating that education encompasses the learning experiences designed to help individuals and communities improve their health by increasing their knowledge or influencing them (Davis, 2015). Based on these studies, Physical and health education can be defined as the acquisition of skills and knowledge necessary to help the development of the body, mind, and spirit in other to promote health and wellness.

One of the main courses offered in all Nigerian secondary schools is physical and health education. In the context of education, the subject's curriculum exposes students to a variety of healthcare courses that deepen and broaden their understanding of the many methods, strategies, and dispositions that support wellness. The nation's curriculum designers believe that exposing students to the many healthcare courses authorised for this subject in the classroom would help instructors, students, and their families at home all be healthier.

Physical and health education includes teaching students how to adopt and maintain healthy lifestyle habits that will lead to overall fitness, as well as educating them about the dangers of self-medication, how to prevent and treat infectious diseases, how to manage injuries, nutrition, and essential food nutrients. It also covers drug information, including misuse and overuse, personal hygiene, and environmental hygiene. Finally, it aims to support and strengthen students' developing motor skills and give them the foundational skills they need to play games, participate in sports, and engage in other physical activities throughout their lives (Bucher, 2005).

Undoubtedly, only well children can enroll in school, attend classes, devote their valuable study time to learning, develop new abilities, and actively engage in both academic and extracurricular activities at school (UNICEF (1990)). It was never by happenstance that this topic ended up in Nigerian school curricula. The goal of this well-thought-out educational programme was to broaden the young Nigerian learners' knowledge bases about various healthcare practices that might improve their own and their families health. The government expects learners to be able to help their family members and larger community relations to have excellent health if they have access to sufficient health education information. (Ejifugha, & Uwazie, 2014).

Curriculum for physical and health education seeks to meet the demands of a wide range of student populations while also promoting healthy development in young people, encouraging interest in sports and physical exercise, and improving the understanding of health and physical and health education principles. Participating in sports, developing one's skills, learning about fitness and health, maintaining one's mental health, and adjusting to social situations are just a few ways that these ideas are put into reality (Dwyer et al 2006). Physical and health education at the secondary school level aims to identify young sports people and train them as well as preserve physical development, encourage pleasure of movement, build an awareness of human movement, and teach useful physical abilities like dancing, climbing, and staying safe (Eisenmann, 2006). Exposing learners to a variety of exercises and healthful activities, teaching them lifetime fitness skills, promoting exercise self-monitoring, adjusting activity levels to meet individual requirements, emphasising effort over results, and offering good role models are all important components in contemporary physical and health education. (Repository UNILAG, na)

Theoretical Framework

For the general growth and well-being of primary school students, they must participate in physical and health education and health education. For interventions to be designed effectively, it is important to comprehend the factors influencing their engagement in these activities. Providing insights into the elements affecting Nigerian primary school students' engagement in physical and health education is the

goal of this theoretical framework.

The Health Belief Model

The Health Belief Model is a theoretical framework that might be used to evaluate the elements impacting secondary school students' engagement in physical and health education and health education (HBM). The Health Belief Model, developed in the 1950s by social psychologists Hochbaum, Rosenstock, and Kegels, posits that people's health-related behaviors are influenced by their perceptions of the threat of a health condition, the benefits of taking action to reduce the threat, the barriers to taking action, and their self-efficacy in being able to perform the recommended behavior (Mullan & Markham, 2009).

One study utilized the Health Belief Model to assess factors influencing participation in physical and health education among adolescents using the Theory of Planned Behavior to predict adolescents' intentions to engage in leisure-time physical activity.

In the context of secondary school students' participation in physical and health education, inferences drawn from the Health Belief Model suggest that students' engagement can be influenced by several factors. These include their perceived susceptibility to health issues, the benefits they associate with participation, the barriers they encounter, and their self-efficacy. Educators and policymakers can leverage this model to comprehensively understand and address these factors, ultimately promoting a healthier lifestyle among secondary school students.

Social Cognitive Theory (SCT)

The Social Cognitive Theory (SCT) proposed by Bandura in 1986 can indeed be applied to understand the factors influencing participation in physical and health education. According to SCT, behavior is influenced by personal factors, environmental factors, and behavior-specific factors.

In the context of physical and health education participation, personal factors refer to the individual characteristics of pupils, such as their beliefs, attitudes, and motivations towards physical activity. Environmental factors would encompass the social and physical environment in which the students are situated, including their family, peers, school, and community. Behavior-specific factors, like self-efficacy and outcome expectations, would play a crucial role in determining whether students engage in physical and health education activities. When assessing the factors influencing the participation of secondary school students in physical and health education from the perspective of Social Cognitive Theory, it is important to consider how these different factors interact to shape students' behaviors. Teachers and education professionals can leverage this theoretical framework to design interventions that promote greater participation and engagement among students in physical and health education classes.

Drawing inference from the SCT theory, the participation of students in physical and health education is influenced by personal factors such as beliefs and motivations, environmental factors like family support and school resources, and behavior-specific factors like self-efficacy and outcome expectations. Educators can use the Social Cognitive Theory (SCT) framework to develop effective strategies to improve students' engagement in physical and health education (Bandura, A. (1986)

Factors influencing participation of secondary students in physical and health education

Notwithstanding the program's significance, observations indicate that several obstacles and variables appear to be working against it being implemented successfully and becoming used in Nigerian primary schools. Physical and health education in schools appears to be deficient in government intervention and administrative assistance. Despite recommendations from health, educational, and social service

organisations that students' health and well-being be improved through physical and health education and the development of their sporting talents, Adebayo and Folawiyo (2000) found that budgetary constraints, particularly in the South Western states of Nigeria, are often cited as the reason for reducing health and physical and health education budget.

In keeping with these viewpoints, the purpose of this research is to ascertain how different elements affect students' involvement in the vital field of physical and health education and health. Research on how classroom amenities and resources affect secondary school students' perceptions of physical and health education was done by Omini (2002). Three hundred (300) students were included in the experiment at a significance level of .05. The study used an ex post facto research approach, sample selection at random, and the correlation coefficient of the Pearson Product Moment as the statistical instrument. According to the results, students' attitudes towards physical and health education are much improved when there is room and access to suggested textbooks. The availability and use of facilities that will raise one's skill level influence a person's interest in physical and health education, according to Kleges (2002). Furthermore, the study conducted by Akintade (2001) showed that instructional facilities help learners feel at ease in a classroom setting, which increases their effectiveness in engaging in-class activities.

The belief that no one can offer what he does not have, according to Adegoke (2000), is another believed reason affecting students' choice of physical and health education as a topic for examination. The administration's decision to enroll people in physical and health education is influenced by the skills, talents, and strategies displayed by a teacher or other staff member. Unfortunately, employees are frequently seen as the most important component of any organisation, particularly in the teaching profession where they have the power to create or break the organization's objectives.

Research on physical and health education in the New Normal was undertaken by Centeio et al. (2021) and Jeong & So (2020). Regarding the study's objectives, subjects, and employed mediating variable, they differ from one another. The results showed that many obstacles existed and that these obstacles stemmed from several variables, such as low student participation and regulatory requirements. Future educators in the physical and health education field can benefit from knowing the obstacles and enablers of successful remote instruction, as well as the initial experiences of instructors adjusting to a remote learning environment.

Morgan and Hansen (2008) and Tolasa (2020) have divided the factors in schools that prevent teachers from offering physical and health education programmes into two categories: institutional (beyond the teachers' control) and teacher-related (resulting from the teachers' actions). It is possible to use this categorization in elementary and secondary educational settings due to its simplicity. Several institutional barriers have been identified by prior research (Hardman, 2008; Le Masurier & Corbin, 2006; Morgan & Hansen, 2008), including budgetary restrictions, a lack of resources, curricula that are too packed, a reduction in the amount of time allotted for the subject, and a lack of facilities and materials.

A study conducted in Canada has revealed that educators who teach multiple subjects at the secondary level face institutional obstacles that impede the creation of a curriculum that adheres to health and physical and health education standards. These barriers encompass insufficient emphasis on physical and health education, the absence of performance metrics for physical and health education, and a lack of infrastructure to support it (Dwyer et al., 2003). This study underscores the significance of identifying and addressing institutional challenges to guarantee a comprehensive and favorable education and well-being for students. Previous research has highlighted many institutional barriers including budget constraints, scarce resources, reductions in time provisions in the curriculum, the absence of professional development, the crowded curriculum itself, and the lack of facilities and equipment (Hardman, 2008; Morgan & Hansen, 2008).

The attitudes of physical and health education instructors, how they educate, and the bonds they create with

their students all have a big influence on students' academic performance in this subject, according to a study published in 2019 by Whittle, Telford, and Benson. To improve student accomplishment, physical and health education instructors should, according to the research findings, concentrate on developing a friendly learning environment that encourages positive interactions with their students and make use of efficient teaching techniques that accommodate a variety of learning preferences.

Moreover, professional development is crucial for physical and health education instructors, as stressed by Kahts-Kramer and Wood (2023). According to the authors, continuous professional development programmes can assist educators in meeting the various learning requirements of their pupils and enhancing their methods in a long-lasting way. In addition to helping teachers keep current with the most recent findings and practices in the area, the authors pointed out that these programmes ought to concentrate on giving them the information and abilities needed to use evidence-based best practices in the classroom.

Factors like students' degree of engagement, propensity for dormant habits, insufficient physical fitness that may affect their abilities, social and economic status, peer support and motivation, psychological obstacles, and don't have of drive or motivation should all be considered when analysing student behaviour. (Bourke and Morgan, 2005).

Naylor et al. (2015) and Ingram et al. (2013) state that the following categories may be used to categorise the variables impacting involvement in physical and health education and health education: Preferences of the in addition to behavior-specific factors like self-efficacy and outcome expectations, environmental factors like educational facilities, support from family members, and neighbourhood assets can influence students' preferences and abilities. Personal factors like age, sex, and economic circumstances can also have an impact.

In addition to demonstrating the dearth of research conducted in secondary education, the broad secondary school-based findings may also be explained by the fact that physical and health education is a required course for both primary and secondary school teachers. Teachers should be better equipped to create and execute programmes by having the abilities necessary to overcome obstacles thanks to this expertise.

METHODOLOGY

Research Design:

A quantitative research design was employed to gather numerical data and analyze the factors influencing student participation in physical and health education. The study aimed to assess these factors among students and Physical and Health Education (PHE) teachers in public secondary schools in the Federal Capital Territory.

Sample and Sampling Technique:

A sample of 150 secondary school students and 20 PHE teachers from public secondary schools in the Federal Capital Territory was selected for the study. Stratified random sampling was utilized to ensure the representation of diverse student and teacher populations. This technique involved dividing the student and teacher populations into distinct strata based on relevant characteristics before randomly selecting participants from each group.

Instrument of Data Collection:

The primary instrument used for data collection was a structured four-point Likert scale questionnaire. The questionnaire contained items designed to assess the factors influencing student participation in PHE,

including motivational factors, perceived benefits, and barriers to engagement. The Likert scale allowed participants to rate their responses on a scale ranging from strongly disagree to strongly agree, providing valuable quantitative data for analysis. The survey used to assess the factors that affect engagement in physical and health education was adopted and modified from the studies of Jenkinson and Benson (2010). To determine agreement or disagreement, the cut-off mean was set at 2.50, which is calculated by adding up the scores for Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1), and then dividing by 4. Scores above 2.50 were considered Accepted, while scores below 2.50 were considered Rejected.

The questionnaire for research objectives 1 (to investigate the current level of participation in physical and health education among secondary school students in the Federal Capital Territory of Abuja) and 4 (to examine student-related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory) were administered to only 150 students. On the other hand, research objectives 2 and 3 were administered to the 20 PHE teachers.

Data Analysis:

The study involved analyzing data using both descriptive and inferential statistical methods. Descriptive statistics, such as mean and standard deviation, were used to summarize and analyze the responses obtained from the questionnaire. Mean scores were used to gain insights into the average perceptions of students and teachers regarding factors that influence participation in Physical and Health Education (PHE) programs. Standard deviation was used to measure the variability of responses within the sample.

Inferential statistics, specifically the analysis of variance (ANOVA), was employed to test for significant impact in the perceived factors influencing student participation among different groups. These groups included student-related factors, teacher-related factors, and student-related factors. ANOVA allowed for the identification of key factors that significantly impacted student engagement in PHE programs in secondary schools.

To ensure the reliability and validity of the questionnaire used in the study, Cronbach's alpha of 0.87 was calculated to ensure the internal consistency of the questionnaire items. Additionally, content validity was assessed by experts in the field of Physical and Health Education to ensure that the questionnaire adequately captured the factors influencing participation.

RESULTS AND DISCUSSION

Research Question 1

What is the current level of participation in physical and health education among secondary school students in the Federal Capital Territory of Abuja?

Table 1: Mean and standard deviation of results of current level of participation in physical and health education among secondary school students in the Federal Capital Territory of Abuja.

| S/N | Levels of Participation | Mean | St.d | Decision |
|-----|--|------|------|----------|
| 1 | I make an effort to stay informed about the latest developments in physical and health education | 2.82 | 1.62 | Accepted |
| 2 | I feel confident in my physical abilities and skills due to my participation in physical and health education classes. | 2.84 | 1.72 | Accepted |
| 3 | I actively engage in physical and health education activities on a regular basis | 2.70 | 1.60 | Accepted |

| | | | | |
|----|--|------|------|----------|
| 4 | I enjoy participating in sports and physical activities outside of school hours. | 1.75 | 1.63 | Rejected |
| 5 | I feel confident in my knowledge of health topics discussed in school | 1.57 | 1.46 | Rejected |
| 6 | My teachers encourage and support my participation in physical and health education activities | 1.88 | 1.71 | Rejected |
| 7. | I believe that physical and health education should be given more emphasis in the school curriculum. | 2.79 | 1.49 | Accepted |
| 8. | I make an effort to engage in physical activities outside of school hours. | 2.91 | 1.86 | Accepted |
| 9 | Average Mean | 2.41 | | |
| 10 | Cut-off Mean | 2.50 | | |

According to the result from Table 1, students reported making efforts to stay informed about the latest developments in physical and health education (M=2.82, St.d=1.62), feeling confident in their abilities due to participation in PHE classes (M=2.84, St.d=1.72), and actively engaging in related activities on a regular basis (M=2.70, St.d=1.60).

However, there are areas for improvement as well, as indicated by the rejection of statements related to enjoying sports and physical activities outside of school (M=1.75, St.d=1.63), feeling confident in knowledge of health topics discussed in school (M=1.57, St.d=1.46), and teachers encouraging participation in such activities (M=1.88, St.d=1.71). Despite these areas for improvement, the overall average mean of 2.41 suggests that there is a slight positive inclination towards physical and health education among students. The cut-off means of 2.50 indicates that there is room for enhancement in certain aspects to raise the overall level of participation. It may be beneficial to focus on promoting extracurricular physical activities, enhancing teacher support, and increasing understanding of health topics to further improve the engagement of students in physical and health education in the region.

Research Question 2

What is the institution-related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory?

Table 2: Mean and standard deviation results of Institution related factors influencing the level of participation of secondary school students in physical and health education programs in secondary schools in the Federal Capital Territory.

| S/N | Factors | Mean | St.d | Decision |
|-----|--|------|------|----------|
| 1 | Institution Related Factors | | | |
| 2 | Lack of access to facilities and equipment | 4.77 | 1.30 | Accepted |
| 3 | Limited time allocated for physical and health education in the curriculum | 4.28 | 1.79 | Accepted |
| 4 | Crowded curriculum with competing subjects | 3.15 | 1.85 | Accepted |
| 5 | Insufficient funding for PHE programs | 4.52 | 1.54 | Accepted |
| 6 | Low prioritization of physical and health education and sports in the school's agenda | 3.41 | 1.66 | Accepted |
| 7 | Poor planning negatively affects the quality of Physical and health education lessons. | 4.56 | 1.51 | Accepted |
| 8 | Average Mean | 3.54 | 1.60 | Accepted |
| 9 | Cut-off Mean | 2.50 | | |

The result from table 2 shows that various institution-related factors influence the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory. These factors include lack of access to facilities and equipment(M=4.77, St.d=1.30),limited time allocated for physical and health education in the curriculum(M=4.28, St.d=1.79), crowded curriculum with competing subjects(M=3.15, St.d=1.85), insufficient funding for PHE programs(M=4.52, St.d=1.54), low prioritization of physical and health education in the school’s agenda(M=3.41,St.d=1.66) and poor planning negatively affecting the quality of Physical and health Education lessons(M=4.56, St.d=1.51). The mean and standard deviation results indicate that all of these factors are accepted as having an influence on student participation. The average mean for all factors is 3.54, and the cut-off mean for significance is 2.50. Based on the mean values from table 2, lack of access to facilities and equipment (m=4.77, St.d=1.30) is perceived as the most influential factor, followed by poor planning negatively affecting the quality of physical and health education lessons (M=4.56, St.d=1.51). These results suggest that improving access to facilities and equipment, as well as better planning for physical and education lessons, could potentially enhance the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory.

Research Question 3

What are the teacher-related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory?

Table 3: Mean and standard deviation results of teacher- related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory.

| S/N | Teacher-Related Factors | Mean | St.d | Decision |
|-----|---|------|------|----------|
| 1 | Shortage of physical and health education staff leading to limited support and supervision | 4.49 | 0.87 | Accepted |
| 2 | Other teaching priorities taking precedence over physical and health education | 3.32 | 1.45 | Accepted |
| 3 | Limited access to professional development for physical and health education teachers | 4.63 | 0.82 | Accepted |
| 4 | Attitudes toward Physical and health education influence student engagement and performance | 3.29 | 1.91 | Accepted |
| 5 | The location and environment of a school impact how Physical and health education teaching and participation are influenced | 4.61 | 0.61 | Accepted |
| 6 | Colleagues not recognizing the importance of Public Health Education (PHE) initiatives | 3.78 | 1.86 | Accepted |
| 7 | Average Mean | 3.85 | 1.52 | |
| 8 | Cut-off Mean | 2.50 | | |

According to the result from Table 1, students reported making efforts to stay informed about the latest developments in physical and health education (M=2.82, St.d=1.62), feeling confident in their abilities due to participation in PHE classes (M=2.84, St.d=1.72), and actively engaging in related activities on a regular basis (M=2.70, St.d=1.60).

However, there are areas for improvement as well, as indicated by the rejection of statements related to enjoying sports and physical activities outside of school (M=1.75, St.d=1.63), feeling confident in knowledge of health topics discussed in school (M=1.57, St.d=1.46), and teachers encouraging participation

in such activities (M=1.88, St.d=1.71). Despite these areas for improvement, the overall average mean of 2.41 suggests that there is a slight positive inclination towards physical and health education among students. The cut-off means of 2.50 indicates that there is room for enhancement in certain aspects to raise the overall level of participation. It may be beneficial to focus on promoting extracurricular physical activities, enhancing teacher support, and increasing understanding of health topics to further improve the engagement of students in physical and health education in the region.

Research Question 4

What are the student-related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory?

Table 4: Mean and standard deviation results of student-related factors influencing the level of participation of secondary school students in physical and health education programs in primary schools in the Federal Capital Territory

| S/N | Students' Related Factors | Mean | St.d | Decisions |
|-----|--|------|------|-----------|
| 1 | Peer pressure influence students' attitudes towards Physical and health education | 2.87 | 1.73 | Accepted |
| 2 | Intrapersonal barriers such as lack of motivation or laziness can impede participation in Physical and health education. | 2.48 | 1.89 | Accepted |
| 3 | The socioeconomic status of students can affect their access to Physical and health education resources | 2.18 | 1.90 | Rejected |
| 4 | The lure of sedentary behavior competes with participation in Physical and health education activities. | 2.01 | 1.98 | Rejected |
| 5 | Peer support is important for fostering a positive environment in Physical and health education | 2.55 | 0.97 | Accepted |
| 6 | Past PHE negative experience | 2.37 | 1.95 | Rejected |
| 7 | Average Mean | 2.41 | 1.73 | |
| 8 | Cut-off mean | 2.50 | | |

The results from Table 4 show that peer pressure influence and peer support were accepted as significant factors affecting the participation levels of secondary school students in physical and health education programs in primary schools located in the Federal Capital Territory. These factors scored means of 2.87 and 2.55 respectively, with standard deviations ranging between 0.97 and 1.90. On the other hand, intrapersonal barriers, socioeconomic status of students, and the lure of sedentary behavior were not considered significant factors, with means of 2.48, 2.18, and 2.01 and standard deviations of 1.90 and 1.98, respectively. The influence of past negative experiences in physical and health education programs also scored below the cut-off mean, with a mean of 2.37. Overall, peer pressure influence and peer support were identified as more influential factors in student participation in physical and health education programs.

The average mean of all these factors combined is 3.85, which is above the cut-off mean of 2.50. This indicates that teacher-related factors generally have a significant impact on the participation levels of secondary school students in physical and health education programs in primary schools situated in the Federal Capital Territory.

Hypotheses:

1. Null Hypothesis (H0): There is no significant impact of institution- related factors on the level of participation in physical and health education among students.

Table 5: One Way ANOVA test result of impact of institution- related factors on the level of participation in physical and health education among students.

| ANOVA | | | | | |
|-----------------|----|---------------|-------------|-------------|-----------|
| Source | DF | Sum of Square | Mean Square | F Statistic | Sig. |
| Between groups) | 1 | 9.9962 | 9.9962 | 26.6559 | 0.0002359 |
| Within groups) | 12 | 4.5001 | 0.375 | | |
| Total | 13 | 14.4963 | 1.1151 | | |

The test statistic, also known as the F-statistic, from Table 5 is 26.6559. The associated p-value is 0.0002359. Since the p-value is less than the common significance level of 0.05, we can reject the null hypothesis. This indicates that there is strong evidence of a significant impact of institution-related factors on students’ participation in physical and health education. In conclusion, the study suggests that institution-related factors have a significant influence on students’ engagement in physical and health education programs.

2. Null Hypothesis (H0): There is no significant impact of teacher- related factors on the level of participation in physical and health education among students.

Table 6: One Way ANOVA test result of impact of teacher- related factors on the level of participation in physical and health education among students.

| ANOVA | | | | | |
|----------------|----|---------------|-------------|--------------|-----------|
| Source | DF | Sum of Square | Mean Square | F Statistics | Sig. |
| Between groups | 1 | 8.9148 | 8.9148 | 25.0232 | 0.0003081 |
| Within groups | 12 | 4.2752 | 0.3563 | | |
| Total | 13 | 13.19 | 1.0146 | | |

The results from Table 6 reveal that the F-statistic (also known as the test statistic) is 25.0232 and the corresponding p-value is 0.0003081. As the p-value is less than the common significance level (for example, 0.05), we can reject the null hypothesis. This means that there is strong evidence to support the idea that teacher-related factors have a significant impact on student’s participation in physical and health education. To sum up, the study suggests that teacher-related factors do indeed influence students’ engagement in physical and health education programs.

3. Null Hypothesis (H0): There is no significant impact of student- related factors on the level of participation in physical and health education among students

Table 7: One Way ANOVA test result of impact of student-related factors on the level of participation in physical and health education among students.

| ANOVA | | | | | |
|----------------|----|---------------|-------------|--------------|--------|
| Source | DF | Sum of Square | Mean Square | F Statistics | Sig. |
| Between groups | 1 | 0.00002143 | 0.00002143 | 0.00009509 | 0.9924 |
| Within groups | 12 | 2.7042 | 0.2253 | | |
| Total | 13 | 2.7042 | 0.208 | | |

According to the results in Table 7, the F-statistic, also known as the test statistic, is 0.00009509 and the corresponding p-value is 0.9924. Since the p-value is much higher than the usual significance level (e.g. 0.05), we cannot reject the null hypothesis. This means that there is not enough evidence to suggest that the factor being tested has a significant impact. In summary, the study does not reveal a significant effect of student-related factors (between groups) on the level of performance in physical and health education (within groups).

DISCUSSION

The results of the current level of participation in physical and health education among primary school students in the Federal Capital Territory of Abuja show a mixed pattern of acceptance and rejection of different statements related to participation in physical and health education.

The findings suggest that students are more likely to make an effort to stay informed about the latest developments in physical and health education, feel confident in their physical abilities, actively engage in physical and health education activities, and believe that physical and health education should be given more emphasis in the school curriculum. These results are consistent with previous studies that have shown the positive impact of physical and health education on students' knowledge, skills, and attitudes toward physical activity and health.

We have identified both institutional and teacher-related barriers that are similar to and complement the many primary school-based studies (DeCorby et al., 2005; Morgan & Hansen, 2008). However, this study provides further insights, demonstrating that there are different barriers and factors that teachers may encounter when providing physical and health education in secondary schools, including those imposed by the students themselves. The three highest-ranked institutional-based barriers and factors identified by teachers that specifically affect the participation level in physical and health are Access to facilities $\bar{x} = 4.77$ (1.30), Poor planning negatively affects the quality of Physical and health education lessons $\bar{x} = 4.56$ (1.51) and Low prioritization of physical and health education and sports in the school's agenda $\bar{x} = 3.41$ (1.66) (Table 1). These barriers and factors are also acknowledged as considerable impediments to the provision of physical and health education in secondary schools by Previous research which highlighted many institutional barriers (Hardman, 2008; Morgan & Hansen, 2008). Although institutional, these are all barriers that can, if carefully considered (and with good lesson planning and creativity, and departmental support and organisation) be overcome by teachers across all curriculum areas. facilities are rotated, students experience learning in a range of environments and lessons can be planned appropriately to use the available space most effectively.

The One-way ANOVA test results presented in Table 5 provide a clear statistical analysis regarding the

impact of institution-related factors on the level of participation in physical and health education among students. The null hypothesis (H_0) posits that there is no significant impact of these factors. However, the ANOVA results tell a different story. With a significant F statistic of 26.6559 and a p-value of 0.0002359, the null hypothesis can be rejected. This indicates that there is indeed a significant impact of institution-related factors on student participation levels in physical and health education.

This finding is consistent with previous studies that have explored similar themes. For instance, a systematic review of research by Tolasa (2020) found that organizational support, including institutional factors, plays a crucial role in influencing students' participation in physical activity.

Tolasa (2020) identified environmental factors and the availability of facilities as key determinants of student participation in physical and health education and sports programs.

These studies underscore the importance of institutional support and resources in facilitating active participation in physical and health education. They suggest that improvements in these areas could lead to enhanced engagement and better outcomes for students in terms of their physical well-being and educational experiences. The significant statistical evidence from the ANOVA test adds weight to the argument for schools and educational policymakers to invest in and prioritize institution-related factors to promote physical and health education.

Of interest in this study is the finding that all the items of teacher-related factors impact the level of participation in PHE activities, Limited access to professional development for physical and health education teachers ($\bar{x}=4.6$), The location and environment of a school ($\bar{x}=4.61$) and Shortage of physical and health education staff ($\bar{x}=4.49$) had the highest mean leading to limited support and supervision of student participation (Table 2). This aligns with the previous studies of Mowling, Brock, Eiler, and Rudisill (2004) and Sherar et al. (2009), who have reported in secondary school studies most teacher-related factors listed in the findings. The study reveals that teachers perceive their own difficulties in engaging students as a significant barrier to PE participation. This is a critical insight, as it suggests that teacher training and professional development should focus more on strategies for student engagement and motivation, an aspect not extensively covered in primary school studies.

The findings of this study also indicated a significant impact of teacher-related factors on the level of participation in physical and health education among students. The F statistic of 25.0232 and a p-value of 0.0003081 strongly suggest rejecting the null hypothesis, affirming that teacher-related factors do indeed influence student participation. This finding is consistent with previous research, such as Whittle, Telford, and Benson (2019), which highlighted the importance of teacher attitudes, teaching strategies, and student-teacher relationships in influencing academic achievement in physical and health education¹. Additionally, Kahts-Kramer and Wood (2023) emphasized the need for professional development for physical and health education teachers to address learning needs and improve practice in a sustainable manner.

These studies, along with the ANOVA results, underscore the critical role teachers play in engaging students in physical and health education. They suggest that enhancing teacher effectiveness through professional development and support can lead to increased student participation and potentially better health and educational outcomes. The significant statistical evidence from the ANOVA test adds weight to the argument for educational policymakers to invest in teacher-related factors to promote physical and health education.

Interestingly, the study notes that students themselves contribute to the barriers, with low interest in PE and peer pressure being significant factors. This reflects the findings of previous studies like those by Salvy et al. (2009), which emphasized the role of peer influence on students' physical activity levels.

The results of this study suggest that student-related factors do not have a significant impact on the level of participation in physical and health education among students. The F statistic is extremely low (0.00009509), and the p-value (0.9924) far exceeds the conventional threshold of 0.05 for statistical significance. This indicates that any variation in participation levels is not likely due to the student-related factors being studied. This outcome is somewhat surprising given that previous research has often found student-related factors to be influential. For example, a study by Tolasa (2020) identified socioeconomic status, family attitudes, and environmental conditions as significant determinants of student participation in physical and health education and sports programs. Similarly, research by Whittle, Telford, and Benson (2019) emphasized the importance of student perceptions of teacher-related factors, which indirectly points to the relevance of student attitudes and beliefs in their participation levels.

The discrepancy between these studies and the current ANOVA results could be due to a variety of reasons. It's possible that the specific student-related factors examined in this ANOVA test differ from those in previous studies, or that the context of this study—such as the location or the educational system—differs in ways that affect student participation. It could also be that the sample size or the methods used to measure participation were not sensitive enough to detect an impact.

In conclusion, while this particular ANOVA test does not find a significant impact of student-related factors on participation in physical and health education, it does not necessarily contradict the broader body of research suggesting that such factors are generally important. It highlights the need for further investigation into the specific conditions and contexts that might influence the role of student-related factors in physical and health education participation.

CONCLUSION

The study offers an in-depth analysis of the numerous and diverse obstacles that physical and health education (PHE) programs face in secondary schools. The study echoes the complexity of the issues highlighted in earlier research, pointing out that addressing these barriers requires a comprehensive and collaborative approach. To overcome these obstacles, the study suggests that policymakers, school administrators, and PHE teachers must work together to create a more conducive environment for physical activity. This approach should involve implementing policy changes that prioritize the promotion of physical activity, providing school administration support to facilitate the development of effective PHE programs, enhancing teacher training to ensure that PE teachers have the necessary skills to engage students, and implementing strategies to increase student engagement while counteracting negative peer pressure. By adopting this holistic approach, schools can overcome the identified barriers and promote lifelong physical activity habits among students.

RECOMMENDATIONS

1. Encourage students to stay informed about the latest developments in physical and health education by organizing workshops, seminars, and guest speaker sessions.
2. Implement programs and initiatives to boost students' confidence in their physical abilities and skills through regular practice and challenges.
3. PHE teachers should promote active engagement in physical and health education activities by introducing fun and interactive sessions and incorporating innovative teaching methods.
4. PHE teachers should provide additional support and resources to enhance students' knowledge of health topics discussed in school through informative campaigns, workshops, and interactive lessons.
5. PHE teachers should advocate for an increased emphasis on physical and health education in the school curriculum, highlighting the importance of developing well-rounded individuals who are informed and active in maintaining their health.
6. School administrators should streamline the curriculum by reducing competing subjects to create

more space for physical and health education.

7. School administrators should secure additional funding for physical and health education programs to improve their effectiveness.
8. School authorities should Implement better planning strategies to ensure the quality of Physical and health education lessons is maintained at a high standard.
9. School authorities should address the staffing shortage by recruiting and retaining qualified physical and health education teachers.
10. Advocate for the importance of physical and health education within the school community.
11. The PHE teachers should collaborate with other subject teachers and administrators to create a balanced schedule that allocates sufficient time for physical and health education.
12. PHE teachers should attend workshops, conferences, and training sessions to enhance teaching skills and keep educators updated on best practices.
13. PHE teachers should promote the value of physical activity for physical health, mental well-being, and academic success.
14. PHE teachers should advocate for improvements, such as well-maintained sports fields, gymnasiums, and safe play areas.
15. PHE teachers should consider community partnerships to expand access to recreational facilities.

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