

Exploring the influence of gender and tactical learning approaches on students' enjoyment levels in physical education

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ABSTRACT

Issues related to gender and learning approaches in physical education continue to be intriguing research topics. The trend of studying these variables persists year after year. However, research that combines learning approaches and gender as independent variables remains limited, particularly in studies focusing on the development of students' enjoyment in physical education. This study aims to examine the effects of the learning approach and gender on students' enjoyment. This study is an experimental study involving 56 students, comprising 28 boys and 28 girls, aged between 13 and 14 years. The students were divided into four groups. The research instrument utilized the Physical Activity Enjoyment Scale Questionnaire (PACES), designed to assess the level of student enjoyment during physical education classes. Data analysis was conducted using Two-Way ANOVA. The results of the analysis show that (1) The choice of learning approach, whether technical or tactical, significantly impacts students' enjoyment of learning, (2) Gender, whether male or female, also significantly affects student enjoyment, and (3) there is no interaction between gender and the chosen learning approach in influencing student enjoyment. In summary, both the learning approach and gender have an influence on the development of students' enjoyment, but their effects vary. Specifically, the tactical approach appears to have a more substantial impact than the technical approach. Additionally, male students exert a greater influence than female students on the development of enjoyment in physical education learning.

Keywords: gender, enjoyment, technical approach, tactical approach, physical education

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INTRODUCTION

Enjoyment is a positive emotion associated with intrinsic motivation, meaning that behavior is carried out strictly for the pleasure it provides (Dismore & Bailey, 2011). In certain behaviors, enjoyment encompasses affective responses such as fun, liking, and pleasure; individual attitudes, and perceptions of certain behaviors (Raedeke, 2007). Enjoyment in physical activity is intricately tied to factors such as the nature of physical activity, intensity level, environmental conditions, competition, and activities that take place in individual or group formats (Remmers et al., 2015). Consequently, individuals enjoy physical activities that evoke positive affective responses, elicit good attitudes, have personal meaning, and are available in interesting activities. Research underscores the pivotal role of enjoyment in physical activity, as it serves as a significant determinant for adults' active engagement in physical activity programs (Graves et al., 2010).

In the context of physical education, enjoyment stands out as a pivotal factor signifying a positive disposition toward physical activities and sports (Sucipto, Hidayat, et al., 2019). It serves as both a mediator and predictor of the consistency of individual physical activity and sports

participation. Additionally, it exhibits a positive correlation with several psychological variables, including motivation, commitment, and consistency (Sucipto, Hidayat, et al., 2019). Apart from psychological variables, physical activity within the context of physical education holds particular relevance for promoting health and preventing chronic diseases (Murrock et al., 2016). Therefore, the habit of carrying out physical activity must be fostered from an early age to improve individual's awareness of its significance for fitness and overall health (Vanhees et al., 2012). Such early cultivation is crucial for ensuring that health-related objectives are driven by extrinsic motivation (Miquelon & Vallerand, 2006), ultimately embedding the pursuit of pleasure as intrinsic goals among students (Sucipto et al., 2021).

An important prerequisite for optimally promoting enjoyment levels in physical activity is acquiring a comprehensive understanding of the determinants that shape the students' perceptions of enjoyment in physical education. Previous research have furnished compelling evidence that social dynamics and perceived competence represent pivotal factors influencing the enjoyment of physical education (Hashim et al., 2008). The social aspect seems to be the most important aspect due to its capacity to foster close interpersonal relationships and facilitate effective communication within group settings. This social aspect triggers enjoyment regardless of gender, age, or type of sport (Wienke & Jekauc, 2016). The second most influential factor for enjoying sports is the perception of personal competence, which encompasses sentiments of accomplishment, goal attainment, and progress. According to these findings, social aspects and perceived competence can be promoted by creating appropriate interventions in physical education classes to increase enjoyment (Wienke & Jekauc, 2016). Unfortunately, physical education classes often focus on competitive sports (Bernstein et al., 2011) and often manifest stringent pedagogical approaches, limited student autonomy, and a dearth of opportunities for social engagement (Engels & Freund, 2020).

In the context of physical education, sports activities learning is traditionally carried out using a pedagogical model of direct instruction which profoundly influences the ongoing process of physical activity (Harvey at al., 2020). Therefore, it is necessary to have a learning model that can infuses enjoyment into physical education, one of which is through a tactical approach. The main objective of the tactical approach is to increase students' understanding of the concept of play (Gubacs-Collins, 2007). Students are actively encouraged to address tactical challenges within game situations, effectively requiring them to select and apply appropriate technical skills (Gubacs-Collins, 2007). The tactical approach consists of four stages of learning (Griffin et al., 1997), including engagement in simple games, mastery of basic techniques based on needs, involvement in actual games, problem-solving in tactical contexts. Manipulation of game components, such as rules, number of players, playroom dimensions and movement within the playroom, serves as tools for creating games and practice scenarios that facilitate the development of tactical comprehension and the application of movement skills for strategic play, his approach is further augmented by the incorporation of guided questions, which prompt players to engage in problem-solving and foster a deeper understanding of movement skills, ultimately nurturing playing intelligence (Griffin & Sheeny, 2004). Therefore, the learning scenario is directed at active learning that involves decision-making processes, social interactions, and cognitive understanding for both male and female students (Dyson et al., 2004).

Research on gender has emerged as a compelling area of study. The interaction of teachers and students in physical education learning becomes very important, especially given the presence of both male and female students. In learning, students are treated differently based on the gender when doing physical activities (McBride, 2016). Anthropometric balance of the body, femininity and masculinity is a problem in the physical education process (Gorely et al., 2003). Research conducted by Barr-Anderson DJ, Neumark-Sztainer D, Lytle L (Barr-Anderson et al., 2008) reveals that environmental factors within the context of physical education, which foster gender equality, hold the potential to significantly enhance students' enjoyment levels.

Conceptual studies related to gender have been extensively deliberated upon in prior literature. many research results prove that gender significantly influences physical education, resulting in discernible disparities between men and women across several facets that are focal points of teacher attention, with the aim of making physical education learning appealing to all students. The results of the study proved that female students were less interested than male students in implementing physical education learning (With-Nielsen & Pfister, 2011). Additionally, a study by Laxdal & Giske's (2020) involving 554 Norwegian high school students completed a questionnaire by assessing the social, psychological, and pedagogical aspects of the learning environment as measured using peer relations, teacher student relations, teacher learning support, task involved climate, and ego involved climate. In the context of gender, this research underscores notable distinctions between male and female students across four variables: peer relations, teacher learning support, task-oriented climate, and ego-involved climate (Laxdal & Giske, 2020). The study provides support for theoretical studies related to gender issues primarily in two main approaches: 1) the pursuit of equal opportunities and 2) the adoption of an anti-sexist stance (John, 2017). To enhance the depth of the discussion, incorporating insights from renowned scholars who have dedicated their research to the intersection of gender and physical education is required. Notable figures in this field include Laura Azzarito, Kim Oliver, Katy Fitzpatrick, Jennifer Walton-Fissette, etc

Previous research reveals that one of the keys to active involvement of junior high school students in physical education is to increase enjoyment in activities (Pharez, 2016) Furthermore, Engels & Freund, (2020) reinforces that the implementation of systematically designed cooperative games within learning can effectively foster enjoyment in physical education classes. In addition, the research conducted by Sucipto et al., (2021) prove that employing the tactical approach in the learning process significantly impacts both the enjoyment and playing skills of football. (Sucipto et al., 2021). Moreover, the research conducted by Rokhayati, Nur, Elan & Gandana (2016) demonstrates that the tactical approach has a much greater influence than the technical approach in increasing motivation to learn physical education in elementary schools (Rokhayati et al., 2016). Beyond the psychological aspect, previous research confirms that the tactical approach, when packaged as a Tactical Game Model (TGM), has a positive effect on students' physical activity levels and skill development in various sports, such as soccer, football, and handball (Hodges et al., 2018).

The studies and issues related to gender and learning approaches in physical education remain intriguing topics. The trend of research on these variables is still widely carried out from year to year. However, research that simultaneously explores learning approaches and gender as independent variables has not been widely carried out, particularly in the context of how these factors influence the variability of enjoyment in the physical education learning process. Therefore, the authors aim to address this gap by conducting a factorial research study, seeking to examine gender differences in the level of enjoyment during physical education learning, with a specific focus on the application of tactical and technical approaches within the context of physical education instruction.

METHOD

Design

This research is an experimental study employing a 2x2 factorial design (Cheng, 2016 & I. S. Kim et al., 2003) to examine the impacts of gender and learning approaches in influencing students' level of enjoyment. There are two independent variables in this study, namely the learning approach (A) having two factors, namely the tactical approach (A1) and the technical approach (A2). The second independent variable is gender consisting of male (B1) and female (B2). The tactical and technical approaches were chosen due to their prevalence as instructional methods commonly employed by teachers in physical education learning (Chatzipanteli et al., 2016). The tactical approach leads to game-drill-game learning, while the technical approach leads to drill-game-drill learning. These approaches are frequently utilized by teachers, particularly in sports games (Chatzipanteli et al., 2016; Giménez-egido et al., 2020; Kane et al., 2016; Rydzik & Ambroży, 2021; Sgrò et al., 2021).

Participants

The participants involved in the study were 56 students, comprising 28 boys and 28 girls, with an age range of 13-14 years (M=12.2; SD=1.4). These participants were randomly assigned to one of four experimental groups (Lim & Jonathan, 2014; Weiss et al., 2015). The group division is presented in Table 1.

Approach (A)	Gende	Gender (B)			
	Man (B1)	Women (B2)			
Tactical (A1)	A1B1 (N=14)	A1B2 (N=14)			
Technical (A2)	A2B2 (N=14)	A2B2 (N=14)			

Table 1. Group division by factor

Table 1 shows the group divisions based on the predetermined factors within each independent variable. These divisions yielded four distinct combination groups for the purpose of treatment allocation: the male student tactical approach group (A1B1); the female students' tactical approach group (A1B2); the male students' technical approach group (A2B1); and The female students' technical approach group (A2B2). Participants were divided into four groups.

Instruments

The instrument employed in this study is the Physical Activity Enjoyment Scale Questionnaire (PACES), which has been validated for use in assessing pleasure levels in physical education (Latorre Román et al., 2014; Sucipto, Hidayat, et al., 2019). The instrument's validity has been reassessed through the estimation of content validity using the estimated content validity (Lawshe's CVR) with a ratio value between 0.71 to 1.00 (Sucipto, Tarigan, et al., 2019; Y Yudiana et al., 2017). The PACES instrument is a suitable medium for measuring pleasure in physical activity among adolescents and is used as a mediator variable in interventions designed to increase physical activity (Motl et al., 2001).

Procedures

The research design used in this study was a 2x2 factorial design, wherein participants were randomly assigned to four groups. Two approaches were used in this study. The tactical and the technical approach were the active independent variable. Gender, categorized as male and female, served as the passive independent variable. The intervention process was carried out for 16 meetings in the physical education learning process, the measurement process encompassed two assessments: an initial test and a final test, administered as a part of the outcomes evaluation for the learning approach intervention, utilizing the PACES instrument. All participants in this study provided signed informed consent to participate during the intervention program (Baena-morales et al., 2022; Dokchan et al., 2022). Four certified physical education teachers with average teaching experience (M = 5.6 years; SD = 0.2), were involved as teachers assigned to teach in this study. Workshops and training sessions were conducted to ensure that the teachers were aligned with the theoretical underpinnings and concepts associated with the tactical and technical learning approaches. The workshop was held for one day which included strengthening the theory and concepts of tactical and technical approaches, preparing tailored learning programs, and engaging in practical teaching exercises to apply the developed programs (Billore, 2021; Hidayat, 2019; Sopandi, W., & Handayani, 2019; Tsujimoto et al., 2021). The research stages are presented in Figure 1.

Statistical analyses

The analysis was carried out using Two Way Anova, namely by revealing the difference in the mean of the two independent groups that met the same assumptions of normality and variance (T. K. Kim, 2017). The analysis also facilitated the testing of main and interaction effects between the measured variables (Li & Nachtsheim, 2000). The group pertains to the categorization of participants into the tactical and technical approach models, concerning the enhancement of pleasure in relation to the students' gender during their participation in physical education. The

aim of this analysis is to elucidate the influence of tactical and technical approaches on pleasure, considering the participants' gender.



Figure 1. Research Stages

FINDING AND DISCUSSION

Finding

This study aims to investigate differences in the level of enjoyment during physical education lessons by applying technical and tactical learning models considering gender. The following are the results of descriptive statistics on measuring students' pleasure levels, which are presented in Table 2.

Approach	Candan	Ν	Pre-test		Post-test		Gain	
	Gender		Μ	SD	М	SD	М	SD
Testical	Man	14	82.21	4.61	86.64	3.03	4.43	1.58
Tactical	Woman	14	62.43	4.80	68.21	5.86	5.78	1.06
T = 1 = 1	Man	14	76.64	6.97	78.29	7.14	1.65	0.17
Technical	Woman	14	61.36	6.43	63.07	7.64	1.71	1.21
Total		56	70.66	5.70	74.05	5.92	3.39	1.01

Table 2. Descriptive statistics of student pleasure level measurement results

Table 2 explains the results of measuring the student enjoyment level. The measurement was carried out twice: prior to and after the participants received treatment. The results of descriptive statistics show that during the pre-test measurement, the mean scores ranged from 61.36 to 82.21. The women's technical approach group attained the lowest score (M=61.36; SD=6.43), the men's tactical approach group obtained the highest score (M=82.21; SD=4.61). Meanwhile, the results of the post-test measurement ranged from 63.07 to 86.64. Similarly, the pre-test score for the women's technical approach group obtained the lowest score (M=63.07; 7.64), while the men's tactical approach group got the highest score (M=86.64; SD=3.03). The gain scores, representing the difference between pre-test and post-test scores, varied from 1.65 to 5.78. The lowest gain score was obtained in the men's tactical approach group (M=1.65; SD=0.17) and the highest gain score was obtained in the women's tactical approach group (M=5.78; SD=1.06). The increase in scores between the pre-test and post-test is further presented in Figure 2.

Figure 2 illustrates the increase in pre-test and post-test scores concerning the enjoyment variable. Overall, there is an increase between pre-test and post-test scores in all groups. The tactical approach had a higher improvement after the treatment was given to both male and female students (see Table 2).

Based on the analysis of the test of between subject effects in Table 3, both learning approaches demonstrate a significant impact on enjoyment (F=16.64; p= 0.00). This indicates that the tactical and technical approaches have distinct effects on students' enjoyment. The Partial Eta Squared (PES) at 0.24 indicates that the intervention approach to learning (tactical and technical) contributes to a 24% variance in the development of students' enjoyment in physical education learning. In addition, the analysis of the gender variable demonstrates a significant effect on the development of students' enjoyment (F= 103.34; p = 0.00). This proves that male and female

students individually exert differing influences on the development of enjoyment. This is evidenced by the PES magnitude of 0.67, meaning that gender (male and female) accounts for a significant 67% of the variability in the development of enjoyment in physical education.



Figure 2. Bar Chart of the Increase in Pre and Post-test Score

Table 3. The test of between-subject effects

Source	df	Mean Square	F	Sig.	PES
Approach	1	637.88	16.64	0.00	0.24
Gender	1	3961.45	103.34	0.00	0.67
Approach * Gender	1	36.16	0.94	0.34	0.02

Note: PES = Partial Eta Square

Meanwhile, in testing the interaction between approach and gender, this interaction lacks a significant effect (F=0.94; p=0.34). This proves that there is no interaction between the learning approach and gender on enjoyment development. The PES value obtained is 0.02, signifying that the combined influence of learning approach and gender only contributes to a 2% variability in the development of students' enjoyment in physical education.

Table 4. Comparison of approaches and gender towards enjoyment								
	Approach	/ Gender	Mean Difference (I-J)	Std. Error	Sig. ^b			
	Tactical	Technical	6.75	1.65	0.00			
	Male	Female	16.82	1.65	0.00			

Table 4. Comparison of approaches and gender towards enjoyment

Based on the results of the pairwise comparison analysis as outlined in table 4, a significant difference exists between the tactical and technical approaches in terms of their impact on the development of enjoyment (MD=6.75; p=0.00). This shows that the tactical approach (M=77.43) has a higher influence than the technical approach (M=70.68) in the development of enjoyment. In addition, in the gender variable, it was proven that there were differences between male and female students in the development of enjoyment (MD = 16.82; p = 0.00). Male students (M=82.46) exhibit a higher level of enjoyment in physical education learning compared to female students (M=65.64). The results of the analysis prove that both the learning approach and the gender variable, as observed through the main effects analysis, exert a notable influence on the development of enjoyment.

Discussion

This research generally aims to to examine the impact of gender and learning approach on the development of students' enjoyment in the context of physical education. The results of the main effects analysis prove that the learning approach has a significant influence on the development of enjoyment in the physical education learning. One of the supporting factors that can increase enjoyment in the physical education learning process is the teacher's guidance in fostering physical activities, skills, knowledge, and cultivating positive attitudes that promote a healthy lifestyle and active engagement (Dyson. 2014). Therefore, physical education is is recognized as a conduit for promoting physical activity involvement, motor skills development, physical competence, and fostering distinct self-perceptions (Wadsworth et al. 2013).

In a practical level, the learning approach is one of the indicators that can affect the quality of learning outcomes (Davidson. 2002) such as motivation, academic results, and time spent in the learning process (Everaert et al., 2017). Therefore, apart from the learning approach, teachers are expected to encourage active student participation in the teaching and learning process, employ appropriate methods, techniques, and teaching materials, actively involve students, and serve as role models for learners in adopting effective learning approaches (Alkin-Sahin, 2015). This approach empowers students to engage in learning activities they perceive as conducive to success in the learning process of their own volition (Flood & Wilson. 2008). The findings of this study strengthen the results of previous studies which state that the learning approach is one of the factors enhancing the success of the learning process including the achievement of cognitive, affective, and psychomotor aspects (Adamopoulos et al., 2020; Alkin-Sahin, 2015; Davidson, 2002; Everaert et al., 2017; Flood & Wilson, 2008; Yunyun Yudiana et al., 2021, 2022).

The results of the simple effect analysis prove that statistically the tactical approach has a higher and significant effect than the technical approach on enjoyment. This finding aligns with the defining characteristics of the tactical approach, which places a strong emphasis on the playoriented approach, thereby creating a safe and comfortable environment for students (Bailey. 2008; Chatzipanteli et al. 2016; Sucipto et al. 2021; Wright et al. 2009). At the practical level, the tactical approach has four distinct stages of learning (Griffin et al. 1997) (1) involving children in simple games, (2) mastering basic techniques based on needs, (3) actively engaging children in real games, (4) encouraging students to solve tactical problems within the context of games (Griffin et al. 1997). In addition, the tactical approach model is basically based on a game-based approach which encourages students to be active and have fun due to tailored game modifications that cater to individual student characteristics (Cocca et al. 2020; Jarrett & Light. 2019; Miller et al. 2016). On the other hand, the technical approach emphasizes mastery of technical skills, commencing with teacher-led demonstrations and explanations of the skills to be acquired, followed by teacher-led exercises, and concluding with games that afford students opportunities to apply the acquired skills (Hodges et al. 2018). The findings of this study reinforce previous research which states that the tactical approach has a significant impact on physical education learning outcomes such as increasing knowledge, interest, and excitement for both teachers and students (Gubacs-Collins. 2007), motivation boost (Rokhayati et al. 2016), and the development of student enjoyment (Sucipto et al. 2021) carried out in the context of a sport game. This confirms that adolescents demonstrating high or moderate extrinsic motivation, or a strong combination of intrinsic and extrinsic motivation in physical education learning, exhibit the highest levels of enjoyment and are more physically active (Yli-Piipari et al. 2012).

In addition, viewed from the perspective of the physical education learning process, the tactical approach serves two primary purposes. Firstly, the tactical approach can promote greater interest and excitement for all students. Secondly, the tactical approach can improve tactical knowledge and game skills for all students and especially for those who are unable to consistently execute motor skills successfully in game situations (Griffin et al. 1997). Therefore, this approach introduces four components of the cycle in which tactical lessons are built, namelyearly play; a student-centered question and answer session led by a teacher; practice informed by the Q&A; and concluding games that emphasize the application of skills within the game context (Araújo, et al.2016). Based on this study, the implementation of the tactical approach is a commonly employed strategy by teachers within the physical education learning process. This prevalence can be attributed to the diverse nature of the physical education learning process, which incorporates various forms and variations of content packaged within physical activity games (Hodges, et al, 2018). The results of this study align with several prior research findings, including studies by Allard-latour et al. (2022); Aryanti et al. (2022); Gubacs-Collins (2007); Harvey et al. (2020); Hodges et al. (2018); Jarrett & Light (2019); Putra (2022); Rokhayati. L Nur. (2016); Smith et al. (2015).

The results of the next study prove that gender has a significant influence on the development of student enjoyment. Essentially, male and female students exhibit distinct interests in physical education learning. This finding supports one of the previous research results which proves that male and female students have different talents and interests in sports activities (Socialization & Motivation, 2005). Statistically, the results of the measurement of male students have an average value higher than that of female students. Field observations show that male students are more active and derive greater enjoyment from the physical education learning process. Junior high school students typically fall within the age range of 13 to 15 years, marking a crucial period of transition from childhood to adulthood. For this reason, physical education teachers take good opportunities to channel their interests and talents to physical activities that contain educational values in intra-curricular, co-curricular and extra-curricular activities at their schools. Rocco dan Paulini (2002) state that sports play a pivotal role in adolescents' lives, offering them valuable experiences. Through sports, youth are directed to sportsmanship and learn to be a leader. Likewise, Hurlock (1994) say that engaging in sports provides adolescents with opportunities to bolster their self-esteem. Therefore, based on this study, it can be concluded that sports for adolescents can provide positive experiences for their lives in addition to improving self-image, quality of life (Hendrayana et al., 2022), and positive youth development (Hambali et al., 2022; N. L. Holt, 2016; N. Holt & Neely, 2011; Kramer et al., 2020).

Theoretically, experts often present divergent viewpoints in gender studies, with the primary distinction between essentialist and constructionist perspectives (Sabbe & Aelterman, 2007). The biological essentialist approach to gender claims that innate differences between the sexes shape different behaviors and social characteristics (Sabbe & Aelterman, 2007). In this view, males and females are considered as possessing contrasting and innate traits (Stanley, 2002). Conversely, the socialization model, rooted in biological perspectives, has garnered significant attention in recent decades. According to the socialization model, individuals do not inherently possess specific behavioral and personality traits; rather, they acquire societal-imposed role expectations (sex roles) through processes such as such as modeling, imitation, and the application of rewards and punishments (Sabbe & Aelterman, 2007). The socialization model provides the view that a person's attitudes and behavior will be influenced by biological factors that are formed through processes and habits in their everyday environment. As a result, some researchers view this model as a product of culture and the experiential processes undergone by individuals (Cerbara et al., 2022; Haustein et al., 2020; Phillips et al., 2015; Sánchez Guerrero & Schober, 2021). Whereas constructionists claim that masculinity and femininity are not entirely biological, therefore, gender is actively constructed through the process of 'gender performance (poststructuralist terms) or 'doing gender' (ethnomethodological terms). These concepts refer to the multiple active roles undertaken by individuals (Sabbe & Aelterman, 2007). Based on the views of these two theories, the differences between men and women in various aspects appears as a natural consequence. The roles individuals engage in and the environmental factors they encounter serve as indicators of ingrained attitudes and behaviors in both men and women.

This finding supports the results of research conducted by (Cairney et al., 2012) which suggests that although the difference is not significantly pronounced, male and female students exhibit the highest levels of enjoyment in physical education learning (Cairney et al., 2012). In addition, the results of research conducted by Oya & Ishihara in 2022 prove that there are differences in the level of enjoyment in the process of physical activity, highlighting differences in enjoyment levels in physical activity based on the type or characteristics of the activity and gender (Oya & Ishihara. 2022). Thus, these findings are in line with the results of previous studies that focused on gender differences in physical activities (Allard-latour et al.. 2022; Cairney et al. 2012; Koolwijk et al. 2022; Liao et al. 2020; Oya & Ishihara. 2022).

CONCLUSION

Based on the results of the analysis it can be concluded that the learning approach (F=16.64; p= 0.00; η 2=24%) and gender (F= 103.34; p = 0.00; η 2=67%) significantly influence the development of students' enjoyment. The tactical approach is proven to have a higher impact than

the technical approach. Furthermore, regarding gender, male students exhibit a greater influence than female students on the development of enjoyment in physical education learning. It is evident that male and female students have different interests in studying physical education. The implications of this study are twofold. Firstly, they serve as valuable guidance for physical education teachers engaged in the teaching and learning of physical education in schools. These findings offer insights into tailoring teaching approaches to suit the varying interests and preferences of male and female students. Secondly, these results call upon educational institutions and academics specializing in physical education to undertake further investigations into related variables. Additionally, it is suggested that they develop integrated curriculum approaches that prioritize the enhancement of enjoyment in physical education learning.

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