Edu Sportivo
Indonesian Journal of Physical Education
e-ISSN 2745-942X
Journal Homepage: https://journal.uir.ac.id/index.php/SPORTIVO

Effectiveness of Experiential Learning Approaches (ELA) in enhancing students' active participation in physical education

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Received 14 July 2024; Accepted 09 September 2024; Published 31 October 2024

OPEN ACCESS

ABSTRACT

Background: Active participation in physical education (PE) is essential for students' development yet remains challenging in many schools. **Research Objectives**: This study aimed to assess the effectiveness of experiential learning approaches, including role-playing and interactive simulations, in enhancing students' willingness and ability to actively participate in PE at Gabas Integrated School (GIS). **Methods:** This study utilised a one-group pretest-posttest design in which 34 Grade 9 GIS students participated. A researcher-made survey questionnaire patterned from the Students' Participation Survey and the Motivation in Physical Education Survey and a checklist tool were used to gather data. Education experts reviewed the survey questionnaire to ensure content validity and conducted a pilot test. The collected data were analysed using Jeffrey's Amazing Statistics Program (JASP). **Findings/Results:** The study revealed that the students's willingness to participate was initially moderately willing, which increased to extremely willing after the intervention. The student's ability to participate improved from a participative rating to a highly participative rating after the intervention. The Wilcoxon signed-rank test further revealed significant differences between the students' willingness and ability to participate before and after the intervention. **Conclusion**: These findings concluded that an experiential learning approach effectively enhances students' active participation in terms of their willingness and ability to participate in PE classes. Thus, the Department of Education must encourage teachers to use ELA to transform students from passive spectators to active participants. Physical education teachers must also consider incorporating performance-based learning and real-life scenarios that allow students to apply their skills in meaningful contexts to their physical education teaching.

Keywords: Experiential learning; active students' participation; physical education

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10.25299/es:ijope.2024.vol5(3).18082

How to Cite: Buen, R. J., Carcahente, C., Chu, P. D., & Limbo-Rivera, C. (2024). Effectiveness of Experiential Learning Approaches (ELA) in enhancing students' active participation in physical education. *Edu Sportivo: Indonesian Journal of Physical Education, 5*(3), 228-242. https://doi.org/10.25299/es:ijope.2024.vol5(3).18082

Authors' Contribution: a – Study Design; b – Data Collection; c – Statistical Analysis; d – Manuscript Preparation; e – Funds Collection

INTRODUCTION

Physical education (PE) is an educational process that uses planned physical activity to enhance and increase a person's physical, cognitive, emotional, and health development to control their lifestyle (Arfanda et al., 2021). It is designed to help students develop their competencies to engage in various physical activities with alertness and vigour and continue to do so throughout their lives (Benny et al., 2020). Physical education initiatives at the school level are currently directed at improving students' physical activity levels since PA has become the fourth leading mortality risk factor

worldwide, including in Southeast Asia (Bebeley et al., 2017). Schools provide the ideal setting to promote PA among students (Watson et al., 2017). Hence, quality physical education is essential to ensure students reach the recommended physical activity.

On the other hand, student class participation has long been a research subject. Class participation can impact students' overall academic achievement (Aquino, 2023), and the attainment of the curriculum objectives to improve the student's level of physical activity (Gray & Diloreto, 2016). In the classroom, participation can either be passive or active. Passive participation occurs when students are less involved in the learning process and mostly rely on the activities of the teacher (Katz & Sugden, 2013). For example, in a PE class where the teacher lectures about the rules of a basketball game without student involvement, students listen and take notes rather than participate in the activity. Passive participation can, therefore, lead to a lack of material retention. Students may struggle to apply the concepts in practical situations, resulting in lower skill development and enthusiasm for physical activity.

In contrast, active participation occurs when students participate actively in their learning, assume an autonomous role in their education, actively engage with assignments, and collaborate with peers (Iovanne, 2003, as cited in Katz & Sugden, 2013). Active participation happens when, for instance, in a basketball game, students actively engage by dribbling, passing, and shooting. They communicate with teammates, strategise, and make decisions on their game. Active participation in team sports fosters teamwork, communication skills, and strategic thinking. Students also develop physical skills, such as coordination and endurance, which enhance their overall fitness and health.

In the field of physical education (PE), active participation occurs when students are motivated to stay active throughout the PE lesson (Uddin et al., 2020). This can be measured through students' willingness and ability to participate in PE classes. Willingness to participate refers to the student's interest in engaging actively in PE activities and lessons (Viva & Limbo, 2021). It is assessed based on the students' motivation, attitude, and perception, which drive them to engage in exercise, sports, or other physical endeavours during PE. Willingness can be influenced by personal interests, social norms, confidence levels, and perceived barriers (Ryan & Deci, 2000).

Conversely, the ability to participate refers to the student's actual knowledge, skills, and competencies in performing the class activities. This is evaluated based on the student's physical and skill-based competencies that an individual possesses, allowing them to perform specific physical activities. It includes strength, flexibility, coordination, endurance, and technical skills. Ability can be influenced by prior experience, training, and physical fitness levels (Hastie & Trost, 2002).

Moreover, in PE, students are the target stakeholders of the relevant curriculum, and PE goals cannot be achieved without the active participation of students (Junio & Liwag, 2017). Increased participation in PE is positively associated with higher levels of PA (Martin & Bolliger, 2022). Some earlier studies have also shown an association between increased PA and reduced all-cause mortality among younger populations (Äijö et al., 2016). Thus, encouraging active participation in PE classes is crucial for physical education teachers. In addition, students' willingness and ability to participate should be prioritised in educational institutions. These are essential elements of the learning environment, yet they are sometimes disregarded in classroom settings (Afzali et al., 2021).

Connectively, students' lack of interest and reluctance to participate in PE is becoming more prevalent, even in primary school (Garcia, 2021). According to Xiang et al. (2013),

willingness and ability to participate in PE classes decline as students age. Escomes etal. (2021) also noted that in the Philippines, there is a relatively low participation level among students during PE classes. According to Beckers et al. (1995), as cited by Bali (2016), the problems faced by physical educators are related to the conception of activities, the participation of students, and the relations between the teaching staff and the pedagogical action. A study by Cayaban Pagaduan et al. (2022) also revealed that socio-economic conditions, lack of facilities, and inadequate support from schools are significant barriers to students' participation in physical activities in schools. Specifically, many public schools in the Philippines lack sufficient sports and recreational facilities, directly impacting students' participation levels during PE classes.

Similarly, at Gabas Integrated School, students lacked interest and participation during PE classes. Students get distracted and are not paying attention. This could be attributed to the lack of sports facilities, teachers' pedagogical approaches, and the students' perception of PE.

Thus, researchers, trainers, and physical educators have been exploring ways to improve students' active participation (Limbo-Rivera, 2023). Teachers opted to adapt different teaching strategies to cater to the diverse needs of the learners. One approach that teachers use to improve students' participation is the experiential learning approach (ELA). ELA is an active approach that allows learners to learn while "doing, reflecting, thinking, and applying" (Butler et al., 2019, as cited by Kong, 2021). Rather than just listening to a lecture, students do role plays or make decisions (as in a simulation game). It emphasises letting students investigate ideas, engage in planned activities, and interact with their peers or within their communities through active participation (Bartle, 2015). It is a vital instrument for positive modifications in academic education, allowing learners to apply what they have learnt in school to real-world problems (Kong, 2021). It is a successful teaching method that facilitates active learning by providing real-world experiences in which learners interact, critically evaluate course material, and become involved with a topic (Kong, 2021), and experiential learning theory emerged from considering students' differences (Alkan, 2016).

Two well-known approaches have gained popularity within experiential learning: the Performance-Based Experiential Learning Approach (P-B ELA) and the Simulation-Based Experiential Learning Approach (S-B ELA). P-B ELA encourages students to improve their artistic potential by creating and acting out role-plays that reflect their academic lessons. This approach allows students to apply the knowledge, skills, and competencies gained from lessons (Nguyen & Do, 2017). P-B ELA emphasises real-time performance and the practical application of physical skills. In PE, this approach enhances participation by involving students in activities where their skills are assessed in real-world contexts, such as sporting events or fitness assessments. The feedback loop created by performing, receiving feedback, and improving motivates students to engage more fully in PE as they experience tangible progress in their abilities (Thomas, 2000).

On the other hand, S-B ELA involves students participating and analysing real-life experiences related to their coursework, carried out in secure environments, either with or without technology, to help them apply theoretical knowledge practically (Bartle, 2015). S-B ELA can be seen in traditional forms, like physical and human interactive simulations, and contemporary reliance on virtual reality (VR). S-B ELA places students in simulated, real-world scenarios where they must apply physical skills and decision-making in a dynamic environment. In PE, this approach creates realistic situations, such as a simulated game or athletic challenge, where students can practice and refine their abilities under pressure. The immersive nature of simulations makes learning more engaging and relevant, driving increased participation (Stolz & Pill, 2014).

This study encourages habits beyond the classroom by fostering active participation through experiential learning approaches. When students are engaged in PE through approaches that connect learning with real-world applications and personal challenges, they are more likely to develop a positive attitude toward physical activity and continue engaging in it throughout their lives. While experiential learning methods are well studied in subjects like science and math, there is less research on their application in PE. This study extends these educational theories to the physical activity domain, providing a more nuanced understanding of how students learn best in movement-based contexts. It demonstrates that hands-on, reflective learning can significantly improve student engagement in physical education. Traditional PE methods often rely on repetitive drills and teacher-directed instruction, which can lead to disengagement. This study challenges the status quo by integrating more dynamic, student-centred learning approaches. It provides a fresh perspective on how PE can be restructured to meet the needs of today's students. It offers a blueprint for schools seeking to modernise their PE programs and create more effective learning environments.

Thus, the researchers found interest in conducting this study to determine the effectiveness of the experiential learning approach (ELA), specifically role-play activities (P-B ELA) and interactive simulations (S-B ELA), in enhancing the students' active participation in PE classes at Gabas Integrated School.

Specifically, this study sought to answer the following:

1. What is the level of active participation in physical education (PE) before and after the intervention, in terms of: a. willingness to participate in PE classes? b. Ability to participate in PE classes?
2. Is there a significant difference in students' active participation in PE classes concerning their willingness and ability before and after the intervention?

METHOD

Research Design

This research utilised a quasi-experimental design known as a one-group pretest-posttest research design. In this design, the same dependent variable is measured in one group of participants before and after treatment is administered (Artiga et al., 2020; Stratton, 2019). In this study, only one group received the intervention. Participants assess their willingness to participate, while teachers evaluate their participation ability.

Research Participants

The participants of this study were 34 Grade 9 students from Section A of Gabas Integrated School, Baybay City, Leyte, Philippines. Fifteen (15) participants were male, and nineteen (19) were female. Their age ranges from fourteen (14) to seventeen (17) years old, employing the total population. The respondents were specifically chosen because they were identified as having less interest in Physical Education (PE) based on feedback from their PE subject teachers, who noted that these students often seemed disengaged during classes and less enthusiastic about participating in physical activities.

Research Instrument

This research carried out a pretest-posttest survey questionnaire to determine the students' willingness to participate in their PE classes, patterned from Maglalang (2020) Students' Participation Survey Questionnaire and the Viva & Limbo (2021) motivation in

Physical Education Survey Questionnaire. To ensure validity, the questionnaire was reviewed by two Ed.D. experts from the Institute of Human Kinetics. A pilot test was also conducted with a small group of students, allowing for feedback and refinement of the items. The instrument's reliability was assessed using Cronbach's alpha, resulting in a high value of 0.923, indicating excellent internal consistency. Previous studies support the reliability of the adapted instrument, finding a value of 0.91 for their respective questionnaires.

Correspondingly, a checklist tool with a 4-point scaling system was used by the teachers to check the ability of the participants to participate in PE classes before and after the intervention. The instrument was validated by experts in ELA and two Ed.D. experts in physical education from the Institute of Human Kinetics. The table below shows the scores, description, and interpretation of the participants' willingness and ability to participate in PE classes.

Table 1. Score Ranges, Description, and Interpretation of Participants' Willingness to Participate in PE Classes

Score	Description	Interpretation
4.21 – 5.00	Extremely willing	Participants believed they have 91-100% willingness to participate in PE classes.
3.41 – 4.20	Very willing	Participants believed they have 71-90% willingness to participate in PE classes.
2.61 – 3.40	Moderately willing	Participants believed they have 41-70% willingness to participate in PE classes.
1.81 – 2.60	Slightly willing	Participants believed they have 21-40% willingness to participate in PE classes.
1.00 – 1.80	Not willing at all	Participants believed they have 0-20% willingness to participate in PE classes.

Table 2. Score Ranges, Description, and Interpretation of Participants' Ability to Participate in PE Classes

Score	Description	Interpretation
3.26 – 4.00	Highly Participative	Teachers believed the participants to have 76-100% ability to participate in PE classes.
2.51 - 3.25	Participative	Teachers believed the participants to have 51-75% ability to participate in PE classes.
1.76 - 2.50	Not Participative	Teachers believed the participants to have 26-50% ability to participate in PE classes.
1.00 - 1.75	Highly Not Participative	Teachers believed the participants to have 0-25% ability to participate in PE classes.

Data Gathering Procedure

Alignment with the Curriculum Objectives

Using the Department of Education's (DepEd) Grade 9 Physical Education Curriculum Guide (CG), teachers matched the experiential learning approach (ELA) with the curriculum's learning objectives. Afterward, they assessed the lessons and determined the students' needs to achieve the expected competencies specified in the DEP's Most Essential Learning Competencies (MELCs).

Selection of ELA

The teachers chose the simulation-based and performance-based ELA to match the curriculum. Performance-based ELA was chosen for lessons with artistic potential (e.g., Recreational Activities module, Grade 9 PE Quarter 4), where students created and acted out role-plays. Simulation-based ELA for physically engaging lessons (e.g., Festival Dances in the Philippines, Grade 9 PE Quarter 3), where students performed interactive

simulations. ELA activities were selected based on the learning competencies specified in the PE curriculum guide and the needs of the learners. The curriculum guide is the mandated guide from the Department of Education.

Preparation and Facilitation

The teachers prepared the needed materials for the chosen ELA method. They also developed rubrics and assessment tools and informed the students of the evaluation criteria. After the preparation, they facilitated the lessons using the selected ELA method.

Data Collection

This study utilised surveys and observations in data collection. The researchers first distributed a questionnaire to participants before the intervention as pre-ELA data to reflect the participants' initial perspectives. After a series of PE classes using ELA, the same questionnaire was distributed again to gather post-ELA data, reflecting the participants' perspectives after the intervention. In the observations, the teachers rated the students' ability to participate using the 4-point checklist tool before implementing ELA as pre-ELA data. Afterward, the teachers rated students' participation ability after the intervention as post-ELA data.

Statistical Tool

The researchers used mean and standard deviation to determine the students' level of willingness and ability to participate in PE classes before and after the intervention. The Wilcoxon-signed rank test was utilised to determine the significant differences in students' willingness and ability to participate in PE classes before and after the intervention. This nonparametric test was used since the data gathered was not normally distributed and did not meet the assumptions of normality. The Shapiro-Wilk test was used to test normality because of the small sample sizes. The results indicated that the data were not normally distributed, prompting the use of nonparametric statistical methods for further analysis. More so, the data gathered were analysed using Jeffrey's Amazing Statistics Program (JASP). JASP was selected for its user-friendly interface and statistical capabilities, allowing researchers to conduct various statistical tests efficiently while providing clear visualisations of the results.

RESULTS AND DISCUSSION

Before conducting the intervention, the researchers first gathered the students' level of active participation in terms of their willingness and ability to participate through a survey questionnaire and a checklist tool.

Table 3 compares the students' willingness to participate in PE classes before and after an intervention. Results of the study revealed that the students had a "moderately willing" rating (M = 3.18, SD = 0.27) before the intervention and improved to an "extremely willing" rating (M = 4.49, SD = 0.15) after the intervention. The highest mean before the intervention was for students' interest in role-playing and interactive simulations (M = 3.65), while the lowest mean was for their willingness to express their talents and skills in PE classes (M = 2.62). On the other hand, the highest mean after the intervention was for students' satisfaction with every activity they accomplished, whether individual or group (M = 4.71), while the lowest mean was for students' willingness to express their talents and skills in PE classes and not feeling tired during PE activities (M = 4.29). Overall, table 3 marked improvements across all statements.

Table 3. Student's Willingness to Participate in PE Classes before and after the Implementation of ELA as Perceived by the Participants

Statements	Before			After		
	Mean	SD	Description	Mean	SD	Description
1. I am excited to attend Physical Education class.	3.27	0.96	Moderately willing	4.62	0.49	Extremely willing
2. I am prepared to learn.	3.24	0.78	Moderately willing	4.41	0.61	Extremely willing
3. I can freely express my talent and skills in Physical Education class.	2.62	1.10	Moderately willing	4.29	0.52	Extremely willing
4. I feel happy joining Physical Education class.	3.21	1.01	Moderately willing	4.59	0.50	Extremely willing
5. I am willing to gain more knowledge in Physical Education activities.	3.44	0.82	Very willing	4.44	0.75	Extremely willing
6. I like to participate in role-playing and simulation.	3.65	0.81	Very willing	4.53	0.66	Extremely willing
7. I prefer learning through a series of movements.	3.62	0.74	Very willing	4.35	0.69	Extremely willing
8. I exert more effort to participate in discussions and activities.	3.29	0.87	Moderately willing	4.35	0.73	Extremely willing
9. I listen attentively to the lecture of my PE teacher.	3.15	0.82	Moderately willing	4.47	0.62	Extremely willing
10. I actively participate because the activities are engaging.	3.00	1.02	Moderately willing	4.65	0.65	Extremely willing
11. I am truly satisfied in every activity I accomplish, whether individual or group.	3.06	0.89	Moderately willing	4.71	0.46	Extremely willing
12. I became more active in participating in class discussions and collaborative activities that the teacher assigned us to do.	3.03	0.87	Moderately willing	4.65	0.54	Extremely willing
13. I achieve meaningful learning, and at the same time, I enjoy all the activities related to our lesson/topic.	3.18	0.90	Moderately willing	4.68	0.48	Extremely willing
14. I do not feel tired during Physical Education class.	2.82	0.83	Moderately willing	4.29	0.63	Extremely willing
15. I make inquiries about my performance.	3.18	0.90	Moderately willing	4.35	0.65	Extremely willing
Overall	**3.18**	**0.27**	**Moderately willing**	4.49	0.15	**Extremely willing**

Note: 4.21 – 5.00(Extremely willing), 3.41 – 4.20(Very willing), 2.61 – 3.40(Moderately willing), 1.81–2.60(Slightly willing), 1.00 – 1.80(Not willing at all)

The results revealed that implementing the experiential learning approach (ELA), specifically P-B ELA and S-B ELA, significantly increased students' willingness to participate in PE classes. Students showed extremely high interest in PE lessons after the intervention. An "extremely willing" rating implies a higher likelihood that students will actively engage in class activities, collaborate with peers, and take on challenges. This is particularly important in PE, where participation directly correlates with skill development, fitness, and enjoyment of physical activity. The results also highlighted that traditional teaching methods, such as lectures and written tests, initially lowered students' interest in PE. It is important to note that higher willingness to participate can lead to better learning outcomes, as engaged students are more likely to practice skills, participate in discussions, and benefit from experiential learning opportunities. This aligns with research that shows a positive relationship between student engagement and academic success in PE (Wang & Eccles, 2013).

More so, students found role-playing and interactive exercises more enjoyable. Students expressed greater satisfaction with their PE achievements, individually or in groups. However, there was less interest in demonstrating their talents and skills during PE sessions, indicating an area that requires further attention. Expressing talents and skills in PE may require high confidence and comfort, which not all students possess, even after an intervention. Some students may feel shy, anxious, or hesitant to showcase their abilities to peers due to fear of judgement or low self-esteem. Some students may naturally be more reserved or introverted, making it harder to feel comfortable expressing themselves physically or in public. It is important to note that active physical education, capped with enjoyment and fun, would increase student engagement in physical education (Limbo-Rivera, 2023). Thus, educators should leverage these findings to refine teaching practices, ensuring students enjoy and feel fulfilled in PE classes.

These findings align with prior research by Abdullah et al. (2012), highlighting the pivotal role of instructional methodologies in shaping student engagement. Traditional passive learning methods and assessment-heavy practices dampen students' intrinsic motivation and participation in PE. Similarly, Smith et al. (2020) also found that ELA fosters higher levels of student participation, particularly in practical subjects like PE. Therefore, educators employing experiential learning strategies can significantly enhance student interests and learning outcomes (Rukhsana et al., 2021). The more the learners are willing to participate/or interested, the more likely they can be successful in their school activities (Derakhshan et al., 2020). Indeed, the role of experiential learning and self-motivation was found to be significant (Mansor et al., 2022).

Table 4 shows the student's ability to participate in PE classes as rated by the teachers. The results disclosed that the student's ability to participate got a "Participative" rating (M = 2.75, SD = 0.46) before the implementation and increased to a "Highly Participative" rating (M = 3.63, SD = 0.51 after implementing the ELA).

Table 4. Student's Ability to Participate in PE Classes before and after the Implementation of ELA as Perceived by the Teachers

	N	Mean	SD	Description
Ability to Participate Before the Implementation of ELA	34	2.75	0.46	Participative
Ability to Participate After the Implementation of ELA	34	3.63	0.51	Highly Participative

Note: 3.26 – 4.00(Highly Participative), 2.51 - 3.25(Participative), 1.76 - 2.50(Not Participative, 1.00 - 1.75(Highly Not Participative)

The observed increase in students' ability to participate after attending physical education classes with the experiential learning approach (ELA), as shown in Table 4, suggests that ELA effectively supports students in performing and understanding coursework and activities in PE.

Observations during PE classes before the ELA intervention further confirmed the findings of both the present and previous studies. For instance, during the pre-ELA application period, researchers observed that PE classes focused on sports or athletics typically relied on the curriculum and textbooks without incorporating any form of sports-play simulation and lacked tangible experience in performance. Researchers also observed that while students could execute assigned tasks, their participation lacked the depth needed to achieve proficiency in PA participation, like sports, exercises, and academic lessons.

The increase in students' participation ability after the implementation of ELA further suggests that ELA encourages the development of practical skills and learning abilities, helping students achieve proficiency in group activities and daily lessons. The post-ELA observations showed improved student participation, confidence, and ability to engage actively in the learning process, validating the effectiveness of ELA in enhancing educational outcomes. Thus, innovative teaching methods increase students' interest in learning and participation abilities.

These findings are supported by a study by Varman et al. (2023) claiming that ELA effectively improves students' physical activity and participation in PE within or outside the school setting. It helps students to devote more time to educationally sound activities like studying and applying learnt concepts, leading to observable proficiency in task performance. Smith et al. (2020) also found that ELA outperformed traditional instructional methods in promoting student engagement in practical subjects, including PE. This is particularly relevant as it demonstrates that ELA can be a more effective alternative to conventional approaches, which often result in moderate participation levels.

Additionally, Kolb and Kolb (2017) assert that the direct involvement and interaction students experience during ELA classes encourages them to become proactive members of the learning process. Higher levels of participation in PE classes have been consistently associated with adopting more favourable physical activity patterns (Martin & Bolliger, 2022). Thus, Calubayan and Ofrin (2023) recommended that teachers motivate their students to participate in experiential learning activities to improve their interest in physical activities within or outside the classroom.

Table 5 presents the Wilcoxon signed-rank test on the significant differences in students' willingness and ability to participate before and after the intervention. It is indicated that the students' willingness to participate after the intervention was statistically significantly higher than their willingness to participate before the intervention, $z = 4.88$, $p < 0.001$. Similarly, the student's ability to participate after the intervention was statistically significantly higher than the student's ability to participate before the intervention, $z = 3.42$, $p < 0.001$. The low p-values (< 0.001) for both measures indicate that the observed changes are highly statistically significant.

Table 5. Wilcoxon Signed Rank Test on the Significant differences of the Students' Willingness and Ability to Participate in PE Classes before and after the Implementation of ELA

	W	Z	p
Willingness to Participate	525.00	4.88	< 0.001
Ability to Participate	120.00	3.42	< 0.001

Note: highly significant, $p < 0.001$

The data suggests a significant difference, indicating that students' willingness and ability to participate in PE classes before and after implementing the Experiential Learning Approach (ELA) have shown positive development. For willingness to participate, the z-value is 4.88, meaning there was a substantial positive change in students' willingness after ELA was introduced, while for ability to participate, the z-value is 3.42, indicating a significant improvement in students' participation abilities after ELA. The z-value measures how much change was observed between the two conditions (before and after ELA). A higher z-value indicates a larger shift in scores. On the other hand, the p-value uses a threshold of $p < 0.001$ to determine whether the results are highly statistically significant. For both willingness and ability to participate, the p-value is less than 0.001, which means that the observed improvements are highly significant and not due to random chance. The Wilcoxon test results show that the ELA had a strong and

meaningful impact on students' willingness and ability to participate in PE classes. Furthermore, the extremely low p-values ($p < 0.001$) confirm that these improvements are highly unlikely to result from chance, indicating that ELA was effective in boosting engagement and active participation.

Thus, the results indicate that the experiential learning approach, using both P-B ELA with role-play activities and S-B ELA with interactive simulations, statistically enhanced the students' active participation over four weeks. Furthermore, the positive changes reported by participants in their willingness to participate in physical education (PE) classes, along with teachers' observations of improved student participation abilities, suggest that ELA is a compelling educational approach. By participating in an ELA class paired with relevant academic activities, learners improve their inherent interest in learning (Helle et al., 2007, as cited by Kong, 2021) and physical activity. From a psychological point of view, learners willingness and ability to participate in the classroom are closely related (Han & Wang, 2021); nevertheless, students can be architects of their own motivation, and their willingness to participate consists of factors that are psychological and difficult to observe, while the ability to participate involves behaviours that others can observe, so it is not simple to notice and estimate learners' motivation (Reeve, 2018).

The findings of this study align with and lend support to Magnuson and Good (2017) findings that for students to participate and effectively gain knowledge actively, teaching methods must engage the whole person-intellect, feelings, and senses. Additionally, McCarthy (2010) emphasises that effective teaching methods should utilise relevant life and learning experiences and foster an interactive learning environment. Indeed, ELA is a successful teaching method that facilitates active learning by providing real-world experiences in which learners interact and become involved with a topic (Boggu & Joseph, 2019).

The findings support the existing literature that advocates using ELA to enhance student participation in PE classes (Magnuson & Good, 2017; McCarthy, 2010). The significant improvements in willingness and ability to participate align with previous research and challenge traditional views on instructional methods. This study highlights the potential of ELA as a more effective approach for fostering engagement and active participation in physical education, encouraging educators to consider its integration into their teaching practices.

The limitations of this study include a small sample size and location, which may impact the generalisability of the findings. However, the significance of the present results sustains because the study still confers valuable insights into the existing levels of active participation in students and how teaching methods and the learning environment play a crucial role in forging development and outgrowth in students' active participation.

More so, the relationship of the experiential learning approach (ELA) to active student participation in this research is broadly limited to the influence of ELA types in terms of performance-based ELA through role-play activities and simulation-based ELA through interactive simulations. This study also has not expounded on and identified what factors of the experiential learning theory (ELT) contribute to the positive influence of the experiential learning approach (ELA) on active student participation.

CONCLUSION

The study revealed that the student's willingness to participate was initially moderately willing, which increased to extremely willing after the intervention. The

student's ability to participate improved from a participative rating to a highly participative rating after the intervention. The Wilcoxon signed-rank test further revealed significant differences between the students' willingness and ability to participate before and after the intervention. Based on these findings, this research concludes that the experiential learning approach through role-playing and interactive simulations effectively enhances students' active participation in PE in terms of their willingness and ability to participate. Therefore, as educators aim to foster students' skills, integrating methods like ELA can be a pivotal strategy in advancing student willingness and ability to participate.

The researchers recommend that further study on different education levels and settings with a broader locale and number of respondents may yield other results. Exploring other ELA types and methods and how such factors influence active student participation can also be considered for future researchers. While these findings provide valuable insights, further research is needed to understand the effectiveness of different types of ELA and how they can be effectively applied across different educational contexts.

To increase student participation in PE classes, educators are advised to integrate ELA methods, such as role-playing activities and interactive simulations, into their curriculum. This can help increase students' overall motivation and engagement.

ACKNOWLEDGEMENTS

We are grateful to our families for all their support.

CONFLICT OF INTEREST

There are no conflicts of interest regarding the reported research.

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