

Lifeworld of Physical Education Teachers: Integration of Research-Based Practices in In-Person Classes

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Abstract

This study investigated the lifeworld of physical education (PE) teachers, focusing on the integration of research-based practices in in-person instruction. Specifically, it explored how PE teachers engaged with research-related pedagogy and the factors that influenced their implementation of evidence-based strategies. With the use of phenomenological research design, and employing ten (10) PE teachers with embedded research-based practices into their physical education curriculum, the study identified seven key themes: fostering curiosity, enhancing engagement, navigating pedagogical challenges, building resilience, utilizing research-informed practices, practical solutions for research success and effective research teaching into PE teaching. Findings revealed that fostering curiosity through interactive, hands-on learning experiences and connecting research to real-world applications significantly enhanced engagement and intrinsic motivation in PE classes. While adopting research-based practices led to notable improvements in critical thinking and problem-solving skills, teachers faced challenges related to limited resources, time constraints and balancing traditional methods with innovative approaches where effective planning, time management and collaborative support were essential in overcoming these challenges. The study emphasized the importance of a multifaceted approach to PE teaching that combined stimulating learning environments, research-based strategies and practical support systems to optimize both teacher effectiveness and student success.

Keywords: engagement, research-based practices, PE teachers, in-person instruction, pedagogical strategies, resilience, student success



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INTRODUCTION

The integration of research-based practices in physical education (PE) presents significant challenges for teachers, particularly in terms of balancing theoretical knowledge with hands-on application. As part of the growing emphasis on research-driven practices across the curriculum, PE teachers are increasingly tasked with not only enhancing students' physical skills but also fostering critical thinking and research abilities (Bergmark, 2020). This shift in responsibility challenges PE teachers to combine their expertise in physical education with the requirements of research methodologies, creating a unique set of demands within the lifeworld of PE instruction.

However, research-based practices in PE are not limited to the traditional role of teaching physical skills but also require teachers to help students make connections between physical activities and research findings as this modification often demands a high level of expertise, both in physical education and research methodologies, areas where many teachers encounter difficulties (Sangco, 2022). On the same note, limited resources, time constraints, and a lack of professional development in research pedagogy exacerbate these challenges. Additionally, the limited time available in PE classes complicates the integration of research, as teachers must continue to meet the physical fitness and skill development requirements while also embedding research opportunities within the curriculum.

Hence, PE teachers' lifeworld involves navigating this complex dual responsibility in delivering effective physical education instruction while integrating research methodologies into their teaching. The pressure to adapt teaching strategies to accommodate research-based practices often leads to stress and burnout, particularly when teachers lack sufficient resources and support.

Moreover, integrating research into PE classes also requires teachers to rethink assessment practices. Traditional assessments focused on physical performance must now be integrated with research evaluations, requiring a different approach and more time for meaningful assessments (López-Pastor et al., 2013). This change often demands new pedagogical strategies and techniques that many teachers may not feel adequately prepared for, adding to their professional challenges. Given these complexities, the main objective of this study is to explore the lifeworld of PE teachers as they integrate research-based practices into their in-person classes. Specifically, this study aims to answer the following research questions:

1. How do PE teachers implement research-based practices in their teaching, and what factors affect their success?
2. What challenges do PE teachers face in adopting evidence-based strategies, and how do they overcome them?

This study aimed to shed light on how PE teachers navigate the integration of research-based practices in their teaching environment, focusing on the obstacles they face, the strategies they employ, and the overall impact on their instructional practices. Hence, by addressing these challenges, it is hoped that recommendations can be made to better support PE teachers in integrating research effectively, balancing their traditional role with the demands of research-driven teaching.

LITERATURES

Integrating research-based practices into physical education (PE) enhances teaching but

presents challenges like limited resources and time. Despite these hurdles, research-driven methods offer opportunities to improve teaching and student outcomes in PE.

Integration of Research-Based Practices in Education. The integration of research-based practices into education is essential to bridging the gap between theory and practice. Teachers, especially in Physical Education (PE), are increasingly expected to not only deliver practical skills but also integrate evidence-based teaching practices that promote deeper understanding and improved student outcomes. This approach allows students to engage with not just physical skills but also the theoretical frameworks that inform these activities (Gravett & Ramsaroop, 2015). Hence, teachers can improve their instructional strategies, making them more effective and aligned with current educational goals. However, the integration of research into PE can be challenging. PE is inherently a hands-on discipline where physical activity is central to learning.

Integrating research-based practices into this setting often requires balancing the theoretical and practical aspects of the curriculum. Teachers must find ways to incorporate academic research on physical health, motor skills development and learning theories while ensuring that students remain engaged in physical activities (Mak et al., 2021). This can be difficult, particularly when teachers have limited resources or time to devote to research-based approaches in their already crowded curriculum.

Barriers to Research Integration in Physical Education. Incorporating research into PE teaching faces several barriers, particularly regarding limited resources and lack of time where PE teachers often work in environments where budget constraints limit access to research tools, technology, or professional development opportunities as this can make it difficult to stay updated with the latest research and implement evidence-based practices in the classroom (Belleza et al., 2021). Moreover, the fast-paced nature of PE classes leaves little

room for teachers to delve deeply into research findings or adapt their practices based on academic studies.

Thus, another major barrier is the gap between research findings and their practical application in the classroom. Much of the research in physical education tends to focus on theoretical aspects, which may not always be easily adaptable to the physical, hands-on nature of PE. (Joyce & Cartwright, 2020). This disconnect can create challenges for teachers who may not have the time or expertise to translate research into practical lessons. Teachers are often caught in a dilemma where they must meet curriculum requirements while striving to integrate research-based strategies, which can lead to teacher burnout and a sense of inadequacy in fulfilling both roles effectively.

Teacher Professional Development and Research Integration. Ongoing professional development is crucial for teachers to integrate research effectively into their teaching as teachers need access to regular training that not only helps them stay current with physical education trends but also equips them with the skills to incorporate research findings into their lessons (Rajendran et al., 2023). This training should focus on both theoretical knowledge and practical applications, enabling teachers to understand and use research methodologies in their everyday teaching practices. It is sad to note that without such professional development, teachers may struggle to integrate research into their classes in a meaningful way.

However, the integration of research-based practices into PE teaching requires more than just one-time training as it calls for continuous support and resources that teachers can draw upon as they adapt their teaching methods. Teachers often face challenges in trying to apply new research without the support of mentors or colleagues who have experience in integrating research into practice (Bullo et al., 2021). Without a structured professional development system, the pressure of integrating research into PE can be overwhelming, especially when teachers must

also manage physical skills development and student engagement simultaneously.

The Role of Research in Enhancing Physical Education Teaching. Enhancing PE teaching has the potential to greatly enhance the teaching of physical education by providing evidence-based strategies to improve physical fitness, motor skill and overall well-being as it can inform best practices for physical education instruction, guide teachers on how to engage students effectively and help them develop new teaching techniques that are rooted in evidence (Sangco, 2022). Thus, motor skill development can help PE teachers design age-appropriate and effective lesson plans that target specific physical competencies. However, the challenge remains in implementing research-driven practices in a field that traditionally relies on hands-on learning.

More importantly, PE teachers must find ways to make research relevant to the classroom and integrate it into the physical activities where students are engaged in understanding of both the research itself and how it can be practically applied to diverse student needs as many PE teachers may lack the training or resources to make these connections, leading to a gap between what the research suggests and what is practiced in the classroom (Sangco, 2022).

Challenges of Research Implementation in K-12 Education. In K-12 education, implementing research-based practices can be particularly difficult due to the varying levels of teacher expertise and resource availability while research is central to developing better teaching methods, integrating research into K-12 classrooms, especially in subjects like physical education, can be a complex process). Teachers must not only have access to current and relevant research but also possess the skills to critically assess its applicability to their specific teaching environment.

On the same note, without these skills, teachers may struggle to incorporate research in ways that benefit their students as the introduction of research into PE teaching can also cause stress among teachers, especially when they are

expected to balance it with other responsibilities (Kim et al., 2019). PE teachers may feel overwhelmed as they try to stay up to date with the latest research while also focusing on their core responsibility of teaching physical skills. This pressure can lead to stress and teacher burnout, reducing their overall effectiveness in both teaching physical skills and research-based practices where the challenge lies in finding a balance between adhering to research while still delivering high-quality physical education that meets the needs of diverse students.

METHODOLOGY

Research Design. This qualitative phenomenological study explored the challenges PE teachers faced when trying to use research-based practices in their in-person classes. The study followed Creswell's (2013) framework specifically focusing on phenomenology to understand the experiences of PE teachers. The goal was to identify and describe the real challenges these teachers faced when using research methods while still teaching physical education effectively. Hence, by conducting semi-structured interviews, the study aimed to understand how PE teachers worked with research-based practices and the strategies they used to include these practices in their teaching.

Participants of the Study. Participants in this study were ten (10) PE teachers who were responsible for integrating research-based practices into their physical education curriculum. These teachers were selected using purposive sampling, as the study focused specifically on PE teachers who were tasked with combining traditional physical education instruction with research-driven practices. This sampling method ensured that the participants were not only teaching physical education but were also involved in efforts to implement research methodologies within their teaching framework. Purposive sampling allowed for a focused exploration of the specific phenomenon of integrating research in PE, rather than selecting participants based on broader criteria (Campbell et al., 2020).

Research Instrument. The primary data collection method used in this study was in-depth interviews, which allowed the researchers to gain a deep understanding of the challenges and strategies employed by PE teachers in integrating research-based practices. Using a semi-structured interview questionnaire, in-depth interviews were conducted to collect the necessary information from participants to address the study's research problems.

Data Collection Procedure. As interview was the main data gathering procedure, the interviews were guided by a semi-structured interview format, providing a balance between consistency across interviews and flexibility to allow for new insights to emerge. Participants were encouraged to share their experiences in their native language, ensuring an authentic expression of their challenges and strategies (Diehl et al., 2011). This approach fostered a deeper understanding of the phenomenon being studied and ensured that teachers' perspectives were accurately represented.

To ensure that the data was accurate and comprehensive, the researchers explained the purpose of the interview to the participants before beginning, ensuring that all questions were addressed. More, consent was obtained from each teacher prior to the interview and recording process. This step was crucial for maintaining ethical standards and ensuring that the data gathered was used responsibly.

Data Analysis. The data collected from the in-depth interviews were analyzed using the Collaizzi Method for thematic analysis. This method was well-suited for capturing and representing the lived experiences of PE teachers as they integrated research-based practices into their teaching. Through this inductive approach, significant statements from each interview were identified and examined. These statements were organized into sub-themes, which were then analyzed to uncover overarching themes related to the challenges and strategies of integrating research into PE classes. More so, the findings were synthesized into a comprehensive description of the

phenomenon, supported by relevant literature as the research also involved participant validation, where the PE teachers reviewed the findings to ensure that the researcher's interpretations accurately reflected their lived experiences.

RESULTS AND DISCUSSION

The results of the interviews were carefully analyzed and categorized to identify key themes and subthemes related to the experiences of the participants in engaging with research-based subjects. In this study, the participants' research engagement with research-related activities revealed critical aspects such as igniting curiosity, diving into research, and active engagement in research activities. These responses underscore the importance of fostering interest in research and their involvement in research activities, particularly in teachings subjects like physical education, where practical skills and theoretical knowledge must be integrated.

The study also identified several coping mechanisms employed by the participants to overcome the challenges faced in their research journey. These included strategies such as navigating the "research labyrinth," which reflects the complexity of research tasks and resilient learning strategies that allowed PE teacher to persist despite obstacles. Practical solutions to achieving research success were another significant theme, highlighting how students find ways to make research more applicable to their everyday experiences. Finally, effective study strategies emerged as a key element in managing the demands of research tasks. These insights from the participants align with the themes of teacher coping strategies in integrating research-based practices, particularly in the context of physical education, where both practical instruction and theoretical research must be balanced.

The participants' reflections, labeled as SHS PE T1 to SHS PE T10, were analyzed, with their responses serving as evidence of how PE teachers actively engage with research and

apply coping strategies. These responses resonate with the challenges PE teachers faced when integrating research into their teaching methods. The study also highlights the importance of professional development and the need for effective strategies to support both students and teachers in bridging the gap between research and practical application in physical education.

Research-Based Practices in Physical Education Teaching. In the context of this study, engagement refers to the level of active participation, interest and investment that PE teachers exhibit in research-related strategies used during in-person classes. Hence, participants faced problems such as igniting curiosity on research classes, diving into research classes and active engagement into research settings.

Theme 1. Fostering Curiosity. Encompasses the strategic creation of an educational environment that actively stimulates and nurtures students' innate curiosity and desire to explore complex research topics. This theme is grounded in the understanding that fostering curiosity is integral to deep learning and academic engagement (Merbert et al., 2020). The integration of interactive and hands-on activities facilitates active learning, allowing students to engage directly with the content and apply their knowledge in practical contexts.

The following are some of the participants' quoted experiences (in local dialect):

Damo la tak nahibaru-an ha research bisan danay makulba tam pagtutdo, pero kay interesting hiya nga subject asya curious ak permi ngan iistudy nala. [Trans: I've learned a lot from research, even though it can sometimes be challenging. But because it's such an interesting, I'm always curious about our lessons] **SHS PE T1**

"Actually, an research nga subject baga't diri harumamay labi na kun ginpapahimo na as requirement. Pero usa hiya nga interesting nga challenge nga angay ans PE teacher sugad haamon nga seryosohon kay dako an

iya gamit labi na ha promotion". [Trans: Actually, research can be quite challenging, especially when you're asked to come up with a title and for promotion. However, it is an interesting that PE teachers like us should take it seriously because it is very useful, especially when it comes to promotion] **SHS PE T4**

"Mas marisyo an research na kanan PE kun by group talaga kay nagbuburublig kami ngan diri kami gindadak-an tam pag gasto, sanglit mas madagmit namon hiya matima labi na an an by Department nga research output". [Trans: Our research works are better when done in groups because we collaborate and don't feel overwhelmed or stressed out. This way, we can complete it more quickly, especially if it is a Departmentalized research studies] **SHS PE T9**

Truly, inquiry-based learning plays a pivotal role in this process by encouraging teachers to ask probing questions, investigate answers and engage in a self-directed learning journey. Such an approach not only deepens teachers' understanding but also empowers them to take ownership of their learning. Hence, by linking research topics to real-world applications, educators make the subject matter more meaningful and relevant, thereby sustaining students' interest and motivation.

Hence, by allowing teachers the autonomy to choose their own research projects further enhances intrinsic motivation, as it aligns learning with their personal interests and aspirations. Moreover, cultivating a growth mindset is essential, as it helps students view challenges as opportunities for learning rather than obstacles. Regular, constructive feedback supports this mindset by providing educators with guidance on their progress and encouraging continuous improvement.

Theme 2. Enhancing Engagement. To dive into research classes, mean to fully embrace the challenges and opportunities these courses present. It involves actively engaging with the material through hands-on projects,

experiments and inquiry-based learning that foster critical thinking and problem-solving skills (Wang et al., 2024). The process encourages teachers to explore topics they are passionate about, develop their analytical abilities and work collaboratively with peers.

This theme also acknowledges the dual nature of the research experience. On one hand, it provides students with valuable skills and insights that broaden their academic and professional horizons. On the other hand, it can be demanding, with rigorous expectations and deadlines that may cause stress. Despite these challenges, the theme underscores the significant rewards of the research journey, including the growth in knowledge, skills and personal development.

The following are some of the participants' quoted experiences (in local dialect):

"An mga trainings ha research usahay makuri pero makalilipay. An mga hands-on nga pagpahimo ngan pagproposee nakakapabuhì han mga konsepto, nga nakakatabang gud ha pag-intindi han materyal. Naapreciate ko kon paonan-o an mga topik nakakonekta ha mga problema ha tunay nga kalibutan, nga nagdadara ha akon hin motibasyon ngan pag engage ha research. Pero, usahay nagkakaproblema ako ha kakomplikado han mga pamaagi ha research ngan kinahanglan ko hin dugang nga suporta para haakon mga kausa ha trabaho". [Trans: Training on research have been both challenging and rewarding. The hands-on projects and proposal made the concepts come alive, which really helps me understand the research better. I appreciate how the topics are connected to real-world problems, which keeps me motivated and engaged. However, I sometimes struggle with the complexity of the research methods and need extra support to fully grasp them] **SHS PE T4**

"Nakita ko nga an mga researches nakakastimulate kay nag-momotivate ha akon nga mag-isip hin kritikal ngan mag search hin mga bag-o nga ideya. An mga

interactive nga diskusyon ngan an kagawasan nga pumili hin mga topik ha research nga interesado ako nakapukaw gud han akon kuryosidad. Pero, usahay nakakabug-at an pagbalanse han trabaho ha research ngan iba nga akademiko nga responsibilidad. Pero, sa kabug-usan, nababatian ko nga an pagdive ha research nakapadako han akon abilidad ha pag-resolbar hin mga problema ngan nga nakabulig ha akon pagtutdo hin PE." [Trans: I find researches to be quite stimulating because they push me to think critically and explore new ideas. The interactive discussions and the freedom to choose research topics that interest me have definitely sparked my curiosity. On the downside, balancing research work with other academic responsibilities can be overwhelming at times. But overall, I feel that diving into research has enhanced my problem-solving skills and broadened my perspective especially in teaching PE] **SHS PE T3**

"An pag-apil ha mga research nagin usa nga makabulig nga eksperyensya. An pagtutok ha inquiry-based learning nagtutugot ha akon nga magdive hin halarum mga strategies nga interesado ako ngan mapauswag an akon analytical skills. Na-enjoy ko an mga collaborative nga proyekto ngan an oportunidad nga ipresentar an akon mga nadiskubre. Pero, an pinaka-mabug-at nga mga panginahanglan ha pag-conduct han research ngan an presyur ha pag-abot han deadlines mahimo nga makastres. Bisan pa man, an akon nahibaru-an ngan mga skills nga akon nakukuha nakaka waray hin stress" [Trans: Engaging in researche has been a transformative experience. The focus on inquiry-based learning allows me to dive deeply into subjects I'm passionate about and develop my analytical skills. I enjoyed the collaborative projects and the opportunity to present my findings. However, the rigorous demands of conducting research and the pressure of meeting deadlines can be stressful. Despite this, the knowledge and skills I gain are worth the effort] **SHS PE T6**

This theme emphasizes that research-oriented coursework is not just about receiving information passively but actively participating in discovering and understanding complex concepts. Hence, by diving deeply into these classes, students embrace the challenges and opportunities presented, engaging with material through hands-on projects, experiments and inquiry-based learning (Wessels, 2020). Truly, active involvement fosters critical thinking, enhances problem-solving skills, and encourages collaboration, all while allowing students to explore topics they are passionate about.

However, this theme also acknowledges the demanding nature of the research experience with its rigorous expectations and deadlines associated with research which can create stress, balancing the rewarding aspects of the journey. Despite these challenges, the benefits are substantial while teacher can gain valuable skills, insights and personal development that broaden their academic and professional horizons especially in teaching.

Theme 3. Navigating Pedagogical Challenges.

Active participation in research-intensive courses requires teachers to immerse themselves in a variety of research activities which includes formulating research questions, designing experiments, collecting and analyzing data, and presenting findings. Teachers are expected to engage deeply with their topics, which often involves extensive reading, problem-solving and collaboration with peers (Beanland et al., 2019). Palpably speaking, hands-on approach not only helps students grasp complicated concepts but also builds essential skills such as analytical reasoning, data interpretation and effective communication, which are crucial for their academic and professional growth.

The following are some of the participants' quoted experiences (in local dialect):

"Marisyo inin na research kay pog nakapachek kana ngan iba nga parts бага ka hin baltok na kitaon. Usa pa, damo nga challenges anay an gin-aagian para maging

mas maupay an resulta han amon research". [Trans: Research is highly enjoyable because having the opportunity to refine and scrutinize your title and other components gives a sense of accomplishment and intellectual growth. Moreover, the numerous challenges encountered throughout the process are valuable for enhancing the quality of our research outcomes] SHS PE T5

"Usa han amon the best experiences han research kay danay kami naghihikalisang labi nah an harani na maka publish kay makapoy ngan damo pa an arandamon". [Trans: One of our best experiences with the research subject was that we were always on the edge, especially on publication. It was exhausting and required a lot of preparation] SHS PE T6

Tinuod gud man basta namamati han discussion kanan research diri ka kukurian paghimo han imo paper kay mayda man nimo igsusurat. An amon kasi grupo maupay an tasking asya madagmit kami makatima han amon tasks". [Trans: It's really true that when you listen to the discussions about research, you don't find it difficult to write your paper because you have something to write about. In our group, since the tasking is well-organized, we are able to complete our tasks quickly] SHS PE T8

Moreover, teachers' engagement in research-intensive courses often involves overcoming significant challenges. Thus, the demanding nature of these courses requires students to manage their time effectively, balance multiple responsibilities and navigate the complexities of research methodologies (Trolan, 2023). Hence, the process of addressing and overcoming obstacles fosters a sense of accomplishment and confidence in their research abilities.

Finally, fostering a supportive and stimulating environment is crucial for maximizing student engagement in research-intensive courses. As such, educators play a key role in this by providing guidance, feedback, and

encouragement by creating opportunities for students to collaborate, discuss their research with peers, and receive constructive criticism can enhance their learning experience and motivate them to excel (Davenport et al., 2020). Additionally, integrating real-world applications and practical experiences into the curriculum helps students see the relevance of their research that increases their engagement and enthusiasm for the subject matter.

Theme 4. Building Resilience. Effective time management and organization are also critical components of resilient learning strategies, likewise developing a structured approach to studying and completing assignments helps teachers manage their workload and reduce stress (Calonia, 2023). Hence, time management allows educators to allocate sufficient time for studying, problem-solving and revision, which can mitigate feelings of overwhelm and enhance their ability to tackle academic challenges efficiently.

The following are some of the participants' quoted experiences (in local dialect):

"Usa han amon nadevelope han Research subject an maging resilient nga bisan ano pa ka-ready an amon powerpoint labi nah an defense ngan manuscript, damo la gihapon an corrections pero na overcome man namon". [Trans: One of the things we developed from the Research subject is resilience. No matter how prepared our PowerPoint, defense, and manuscript were, there were still many corrections. However, we were able to overcome them] SHS PE T6

"Dapat gud an teachers or researchers diri mabidu-on kaypara hakadto hin kaupayan labi na kunmag comment na an mga panelsists. Usa nga na developed haamon an pagiging resilient kay diri man hiya pwedi diri ig apply an mga suggestions, dapat ma-follow gud han mga suggestions". [Trans: A teacher or researcher should not be discouraged in order to achieve success, especially when the panelists give comments. One thing we developed is resilience because it's necessary to apply their suggestions; you really have to follow their suggestions] SHS PE T7

“Na developed haakon an pagiging resilient, kay mayda mga butang an research subject igin pasantop haamon na maging ready hiton mga challenges labi na an defense, an pag andam han manuscript up to ma hard bound hiya”. [Trans: I developed resilience because the research subject taught us to be prepared for challenges, especially during the defense and the preparation of the manuscript up to the point of having it hardbound] SHS PE T11

Furthermore, building a strong support network is vital for fostering resilience in learning. Engaging with peers, mentors and co-educators provides students with valuable resources, feedback, and encouragement. Collaborative learning environments and access to academic support services can help students address difficulties, gain new perspectives, and stay motivated (Roxas, 2020). More so, seeking help when needed and participating in research groups or academic discussions can offer additional support and foster a sense of community which contributes to a resilient approach to learning by utilizing the available resources that will pave a way to students' educational goals.

Theme 5. Practical Solutions for Research Success. One of the primary solutions for research success is thorough and strategic planning. Palpably speaking, before embarking on a research project, it is crucial to define clear objectives, develop a detailed research plan, and establish a timeline (Bryson et al., 2018). Hence, identifying research questions, selecting appropriate methodologies and outlining the necessary resources and a well-thought-out plan helps ensure that the research is focused and organized while minimizing the risk of scope creep and allowing for a more systematic approach.

The following are some of the participants' quoted experiences (in local dialect):

“Time management, usa nga importante nga butang ha research para ka makakuha hin damo nga learnings. Kay kun diri ka maaram magmanage hit imo time, diri ka

makakatima hit imo manuscript labi nan ga damo an mga tasks pag teacher ka”. [Trans: Time management is an important aspect of the research subject to achieve a high grade. If you don't know how to manage your time, you won't be able to complete your manuscript, especially since the tasks increase when you are a graduating student]. SHS PE T8

“Dako hin duro nga challenge an diri paprehas han amon gin-uulian nga brgy kay talagsa la kami magkirigta. Pero na overcome namon hiya tungod han time management ngan resource allocation plan”. [Trans: A major challenge was not living in the same barangay, so we rarely met in person. However, we overcame this through time management and a resource allocation plan]. SHS PE T9

“Na overcome namon an challenge han pagtima han amon research han mayda kami proper time management nga bisan man kun nagkukuri kami paghimo han amon manuscript basta mayda la proper time management madagmit namon hiya matima”. [Trans: We overcame the challenge of completing our research through proper time management. Even though we struggled with writing our manuscript, with proper time management, we were able to finish it quickly]. SHS PE T10

Collaborative efforts can enhance the research process by bringing diverse perspectives and expertise, leading to more robust and well-rounded findings. It is when teacher-researchers should actively participate in academic discussions, attend conference and seek input from knowledgeable individuals to refine their work and address any potential gaps or weaknesses.

Lastly, effective communication of research results is essential for success. Researchers should present their findings clearly and comprehensively, using appropriate formats and platforms for their audience. Thus, clear communication ensures that the research is accessible and understandable by allowing for

the dissemination of knowledge and the potential for further impact following best practices in presenting research, this is the time when the researchers can effectively share their work and contribute to the broader academic and professional community.

Theme 6 Effective Research Techniques into PE Teaching. One crucial technique is active learning, which involves engaging with the material through various methods rather than passively reading or listening. And so, techniques such as self-quizzing, using flashcards and creating concept maps can also reinforce understanding and memory by actively interacting with the content, students can deepen their comprehension and retain information more effectively (Idsardi, 2020).

The following are some of the participants' quoted experiences (in local dialect):

"Ako kasi na teacher kay bisan traditional pero madagmit ko maintindihan an concepts ngan kun diri kun nahihibaru-an kay napakiana ak dayon hit amon mentor labi nah an mag terms ha research nga makuri maintindihan". [Trans: As a millennial teacher, I focus on the lessons and trends, which is why I quickly understand the concepts. If there is something I don't know, I immediately ask our mentor, especially when it comes to difficult terms in research] **SHS PE T7**

"Kun mayda man ako diri naiintindihan labi nah an methodology nga part diri ako naawod magpakiana ha akon mentor kay para diri hanging an akon learning, asya an akon technique para mas mahabaro". [Trans: If there's something I don't understand, especially the methodology part, I am not ashamed to ask my mentor because I don't want my learning to be incomplete. That's my technique to learn better]. **SHS PE T8**

"Balance kasi an akon pag tutdo ngan nag eskwela gud ako han Masters sanglit diri ako kinurian pag intindi han concepts han research, mayda times nga makuri pag

intindi pero diri ako hesitant magpakiana han amon teacher". [Trans: I balance my study time in teaching and studying my Master, so I don't have difficulty understanding the concepts of research. There are times when it's hard to understand, but I am not hesitant to ask our teacher]. **SHS PE T10**

More so, another effective technique in teaching PE while integrating research is the use of spaced repetition. Spaced repetition leverages the psychological spacing effect, which helps strengthen memory retention and recall. Meanwhile, tools like spaced repetition software or creating a study schedule with periodic reviews can help students implement this technique by distributing study sessions, and so, students can avoid burnout and enhance long-term retention of the material (Idsardi, 2020).

Additionally, incorporating practices like active notetaking, using mnemonic devices, and employing relaxation techniques to manage stress can further enhance the effectiveness of study sessions by optimizing the study environment and teachers can create conditions that support focused and efficient learning.

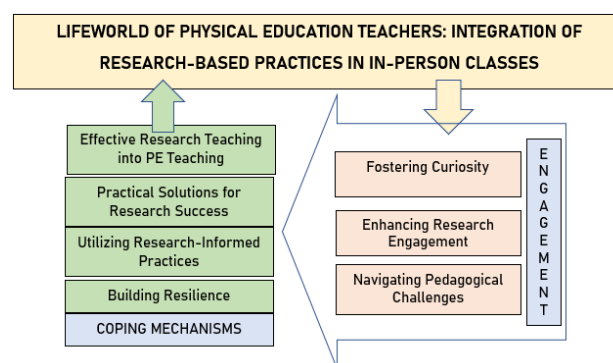


Figure 1
Thematic Map

Conclusion. The study revealed that physical education (PE) teachers actively engaged with research-based practices despite facing various challenges. Key themes emerged from the interviews, such as fostering curiosity and enhancing engagement, which highlighted the importance of creating an environment that

stimulates teachers' interest in research. Participants emphasized that interactive, hands-on learning experiences and the connection of research topics to real-world applications were crucial in maintaining motivation and curiosity. Teachers also adopted effective strategies like time management, collaboration and seeking support to overcome challenges, which helped them persist in their research activities despite difficulties like limited resources and complex methodologies. Moreover, the study underscored the significance of building resilience and using practical solutions for research success. Teachers developed resilience through repeated efforts, overcoming setbacks, and applying constructive feedback during the research process. They also identified the importance of strategic planning, clear objectives, and time management in ensuring successful outcomes. Effective research techniques, such as active learning and spaced repetition, were used to enhance both the research process and PE teaching. Overall, the study highlighted the multifaceted approach required for integrating research-based practices into PE teaching, which contributed to teachers' professional development and improved student outcomes.

Recommendations. Based on the study's findings, the following recommendations are suggested to enhance Physical Education Teachers' engagement and success in research-related practices:

1. Schools and educational institutions should offer ongoing professional development programs that focus on research-based teaching strategies. These programs should include training on time management, research methods and how to integrate research findings into PE curriculum, helping teachers overcome common challenges.
2. Create opportunities for PE teachers to collaborate with colleagues, researchers, and academic communities. Establishing structured research groups or support networks can foster shared learning and

provide mutual support in overcoming challenges related to research.

3. Institutions should prioritize allocating sufficient time and resources for teachers to engage in research activities. This could include dedicated research time within the work schedule, access to research materials and support for overcoming financial or logistical barriers to conducting research.
4. Encourage the integration of inquiry-based learning techniques into PE courses, allowing students and teachers to explore real-world problems through research. This approach can enhance engagement, critical thinking, and problem-solving skills among students, while also deepening teachers' understanding and application of research in their teaching.

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