

# **Bridging the Silence: Exploring the Unheard Voices of Hearing-Impaired Students in Learning Physical Education**

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## **ABSTRACT**

The study explored the lived experiences of hearing-impaired learners in mainstream Physical Education (PE) classrooms, focusing on the challenges they faced and the strategies they used to navigate communication barriers. Using a transcendental phenomenological approach, the research gathered data from seven hearing-impaired learners and their PE teachers at General Santos City SPED Integrated School through in-depth interviews. Thematic analysis revealed four key themes: Reliance on Visual and Peer Cues, Emotional Complexity in Day-to-Day PE, Inclusion and Exclusion in Everyday Interactions, and Memorable Moments Shaping Daily Experience. Findings indicated that hearing-impaired students relied on visual demonstrations and peer modeling to compensate for the lack of verbal instructions. Their emotional experiences fluctuated between excitement and frustration, influenced by accessibility and social inclusion. While communication barriers limited participation, students employed adaptive strategies such as observing peers, seeking help, and practicing independently. Supportive peer interactions and teacher accommodations enhanced their motivation and engagement. The study underscored the importance of inclusive teaching strategies, structured peer support, and adaptive communication methods in fostering an equitable PE environment. The findings contributed to improving inclusive education policies and promoting accessible and engaging PE experiences for all students.

## **INTRODUCTION**

### **Background of the Study**

Inclusive education aims to provide equal learning opportunities for all students, regardless of their abilities or disabilities. Among the various subjects in the curriculum, physical education (PE) plays a vital role in promoting physical health, social interaction, and overall well-being. However, for students with hearing impairments, participation in PE classes presents unique challenges that are often overlooked. Communication barriers, lack of appropriate instructional strategies, and limited awareness among educators can hinder the effective engagement of hearing-impaired students in PE activities. Hearing-impaired students rely on visual cues, sign language, and other adaptive communication methods to learn effectively.

In the United States, research highlights both the benefits and challenges of inclusive physical education for students with disabilities. Studies show that positive peer relationships are crucial in building social skills, self-esteem, and a sense of belonging among students with disabilities (Lieberman et al., 2021). Inclusive PE programs can foster social integration, improve motor skills, and enhance overall confidence (Wilson & Clarke, 2021). However, these programs also present challenges, such as communication barriers for students with unique needs, including hearing-impaired learners who struggle to engage fully with their hearing peers. Additionally, (Anderson & Krause, 2020) a lack of teacher preparation and limited adaptive equipment can hinder the effectiveness of inclusive PE, making it difficult to meet diverse student needs.

In the Philippines, inclusive education initiatives have expanded to support students with disabilities, including those with hearing impairments, in mainstream PE programs. A study by Ramos (2018) found that while Filipino students with hearing impairments benefit from inclusive PE through social engagement, they face significant challenges in communication with their hearing peers. Peer interactions are essential in helping these students build confidence, but communication barriers can hinder their full participation in PE activities without adequate support. The Department of Education (DepEd) Region XII (2020) reported positive outcomes from initiatives promoting peer support in inclusive PE settings, noting that interactions between hearing-impaired learners and their peers have enhanced engagement and contributed to their social development. However, Cruz et al. (2021) highlighted that despite these benefits, many schools still struggle with limited teacher training, inadequate adaptive equipment, and a lack of sign language interpreters, which negatively impact the quality of inclusion in PE classes. These challenges can lead to feelings of isolation and decreased participation among students with disabilities, underscoring the need for stronger support systems and more inclusive teaching strategies.

Despite these efforts, a gap remains in the research regarding how peer dynamics specifically impact hearing-impaired learners in PE settings. Existing studies often focus broadly on students with disabilities and accessibility, overlooking the unique communication needs of hearing-impaired learners in PE. This study seeks to bridge this gap by examining how peer interactions affect the PE experiences of hearing-impaired learners at GSC SPED Integrated School. By exploring how these social dynamics influence their motivation, participation, and perception of PE, the research aims to inform inclusive practices that address their distinct needs, ultimately contributing to a more supportive and equitable educational environment.

### **Theoretical Framework**

The theoretical framework for this study is anchored in three contemporary theories that illuminate the inclusive practices essential for supporting hearing-impaired learners in physical education: Inclusive Education Theory (Loreman, Deppeler, & Sharma, 2016; Florian, 2014; Slee, 2018), the Phenomenological Approach (Moustakas, as cited in Ladd et al., 2016; Smith, Flowers, & Larkin, 2009; Van Manen, 2016), and the Social Model of Disability (Thomas & Barnes, 2017; Oliver, 1990; Shakespeare, 2013). Collectively, these theories provide insight into the educational adaptations, experiential understanding, and structural changes needed to foster a supportive and inclusive PE environment.

To begin with, INCLUSIVE EDUCATION THEORY underscores the importance of designing educational settings that accommodate all students, particularly those with disabilities. According to Loreman et al. (2016), inclusive education fosters a learning environment where all students feel valued and supported, ensuring equal opportunities for participation. Furthermore, Florian (2014) emphasizes that inclusion goes beyond physical placement in classrooms; it requires teachers to adopt flexible instructional strategies and develop an adaptive curriculum that meets diverse needs. Similarly, Slee (2018) argues that true inclusion in education challenges existing structures, calling for systemic reforms that prioritize accessibility and equity. In the context of physical education, this theory highlights the necessity of adaptive teaching strategies, specialized communication methods, and resource allocation to ensure hearing-impaired learners are fully integrated. Moreover, teachers play a pivotal role in modifying instructional approaches and fostering an environment that encourages participation, despite communication barriers.

In addition, the PHENOMENOLOGICAL APPROACH, articulated by Moustakas (cited in Ladd et al., 2016), focuses on understanding individuals' lived experiences and personal perspectives. Smith, Flowers, and Larkin (2009) emphasize that phenomenology allows researchers to explore how people interpret and make sense of their experiences, particularly in contexts where traditional methods may not capture subjective realities. Likewise, Van Manen (2016) highlights that phenomenology is crucial in educational research as it provides deeper insights into the experiences of marginalized groups, such as students with disabilities. In this study, phenomenology serves as a framework to document the unique experiences of hearing-impaired learners in PE settings, shedding light on how they navigate both challenges and opportunities. This approach aligns with

the study's objective of amplifying the "unheard voices" of these learners, ensuring their narratives contribute to a better understanding of inclusion, participation, and peer interaction in physical education environments.

Moreover, the SOCIAL MODEL OF DISABILITY, proposed by Thomas and Barnes (2017), shifts the focus from the individual's disability to the societal and structural barriers they encounter. Oliver (1990) was one of the first to introduce this model, arguing that the primary source of disability-related challenges is not impairment itself but rather the failure of society to accommodate diverse needs. Similarly, Shakespeare (2013) expands on this idea, emphasizing that reducing societal barriers—such as inaccessible infrastructure, inadequate policy implementation, and communication gaps—can empower individuals with disabilities to participate more fully in various domains, including education. In physical education, this model highlights that hearing-impaired learners primarily struggle due to insufficient communication tools, limited peer interaction, and structural barriers within the PE curriculum. Therefore, by addressing these limitations through inclusive practices, the Social Model advocates for an educational environment that minimizes obstacles and maximizes participation opportunities.

Considered together, these three theories form a comprehensive framework for understanding and supporting hearing-impaired learners in physical education. Inclusive Education Theory provides the foundation for designing adaptive and supportive learning environments. On the other hand, the Phenomenological Approach centers on understanding and valuing the unique experiences of these students. Meanwhile, the Social Model of Disability shifts the focus toward reducing societal barriers that restrict their participation. Ultimately, this interplay highlights the importance of a holistic approach—one that combines adaptive teaching practices, recognition of individual perspectives, and systemic changes—to create an inclusive physical education environment that empowers hearing-impaired learners to thrive.

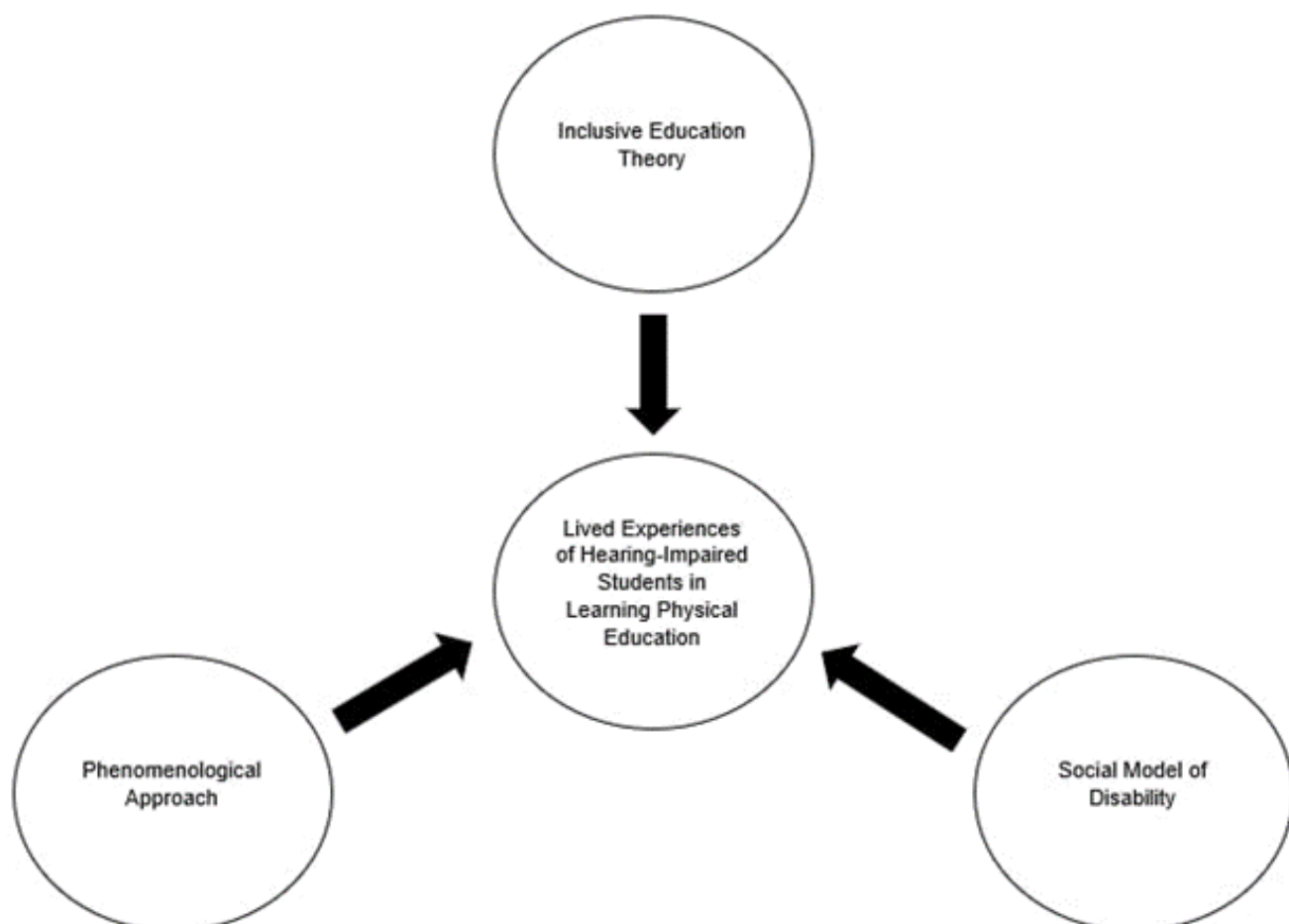


Figure 1. Schematic Diagram of the Theoretical Framework of the Study

## Research Questions

Based on Moustakas' Phenomenological Research Approach, which emphasizes understanding lived experiences from the perspective of those experiencing them, the following research questions can be developed for the proposed study:

1. What are hearing-impaired learners' lived experiences in physical education learning within mainstream classrooms?
2. How do hearing-impaired learners perceive the challenges and opportunities they encounter in physical education?
3. In what ways do hearing-impaired learners describe the impact of communication barriers on their participation and engagement in physical education activities

## Significance of the Study

This study holds significance for various stakeholders involved in the context of inclusive education, particularly in the teaching and learning of physical education for hearing-impaired students:

**Hearing-Impaired Learners.** As the primary beneficiaries, hearing-impaired learners can directly benefit from this study's findings. The study seeks to identify factors that enhance or hinder their participation in PE. It aims to improve their educational experience by fostering a more supportive and inclusive environment tailored to their unique communication and social needs

**PE Teachers.** They can gain valuable insights from this study to help them develop more inclusive teaching methods that facilitate peer support and engagement. By understanding the specific needs of hearing-impaired learners, teachers can implement strategies that enhance participation and improve the overall PE experience for these students

**School Administrators.** The recommendations derived from this study can inform school policies focused on inclusivity and accessibility in PE programs. School administrators can leverage these insights to support teachers and create an environment that promotes equal participation for all students

**Department of Education (DepEd).** Can benefit from the broader insights gained on the challenges faced by hearing-impaired learners in PE. This understanding can aid in developing inclusive, accessible curricula, policies, and resources that align with DepEd's commitment to providing equitable education opportunities

**Future Researchers.** This study can contribute to the growing literature on inclusive education, particularly physical education for students with disabilities. Future researchers can build upon these findings to explore best practices and policies supporting inclusivity for diverse learners in educational settings

## Scope and Delimitation of the Study

This study employed a qualitative phenomenological research design to investigate the lived experiences of hearing-impaired learners in physical education (PE). The phenomenological approach was utilized to gain a deeper understanding of how these students perceived and navigated their PE classes, particularly in relation to peer interactions, communication, inclusion, cooperation, and social support. The target population consisted of seven (7) hearing-impaired learners enrolled at General Santos City SPED Integrated School, who participated in regular PE classes alongside their five (5) hearing peers and two (2) respective teachers. Data collection methods included surveys, interviews, and classroom observations, ensuring a comprehensive exploration of the physical, social, and emotional experiences of hearing-impaired students during PE activities.

This study was delimited to PE classes and did not extend to other academic subjects or extracurricular activities. It also did not examine external factors such as teacher support, family background, or institutional

resources that may have impacted the experiences of hearing-impaired learners. Furthermore, the study was limited to General Santos City SPED Integrated School, as it offered inclusive education programs that integrated hearing-impaired students into mainstream PE classes. The research was conducted during the academic year 2024–2025, ensuring that findings reflected the inclusive education practices within the chosen institution.

## Definition of Terms

To help the readers understand the study, the following operational definitions are provided:

**Bridging the Silence** refers to identifying and implementing strategies to address communication barriers and improve the participation of hearing-impaired learners in PE. It was operationalized by observing classroom practices and student interactions and evaluating teaching strategies to engage these students.

**Hearing-impaired** refers to students officially diagnosed with hearing and speech impairments enrolled in General Santos City SPED Integrated School, specifically participating in Physical Education classes. These students were identified through school records and were the subjects of interviews or observations in this study.

**Mainstream Classroom** refers to the general education setting where students with diverse needs, including hearing-impaired learners, are taught together. This study focused on the specific setup in PE classes where hearing-impaired learners learn alongside their hearing peers, as observed and analyzed about teaching strategies and student engagement.

**Physical Education (PE)** refers to the lessons, activities, and assessments conducted in these classes that were observed or discussed about the experiences of hearing-impaired learners.

**Unheard Voices** refer to the unique personal experiences, perspectives, and feedback provided by hearing-impaired learners regarding their participation in PE classes. These voices were gathered through structured interviews, focus groups, or surveys and analyzed to understand challenges and areas of improvement.

## Acronyms and Abbreviations

1. **PE:** Physical Education
2. **IIEP:** Individualized Education Program
3. **SL:** Sign Language
4. **VAKT:** Visual, Auditory, Kinesthetic, and Tactile

## REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents an in-depth review of literature pertinent to understanding the lived experiences, perceptions, and communication challenges faced by hearing-impaired students in mainstream Physical Education (PE) settings. The review is organized to directly address the study's research questions, focusing on the themes of lived experiences, perceived challenges, communication barriers, and their impact on PE participation. By exploring existing research, this chapter aims to provide insights into the experiences of hearing-impaired students and highlight areas for improvement in inclusive education practices.

### Hearing-Impaired Learners' Lived Experiences in Physical Education Learning within Mainstream Classrooms

Hearing-impaired students in U.S. mainstream PE classes report significant challenges stemming from communication barriers and social isolation. Smith and Jones (2019) found that these students often feel isolated due to difficulties understanding verbal instructions and interacting with peers. Brown et al. (2020) further highlighted the prevalence of anxiety and self-consciousness, with students preferring visual



demonstrations and peer support. Wilson and Clarke (2021) also documented the students' reliance on coping mechanisms like lip-reading, indicating a clear need for improved teacher training.

The desire for instructional accommodations is a recurring theme in the lived experiences of hearing-impaired learners. Brown et al. (2020) emphasized the students' preference for teachers using visual demonstrations, written instructions, and peer support systems. Smith and Jones (2019) pointed to the frustration caused by the lack of visual communication methods. Wilson and Clarke (2021) reinforced this by highlighting the need for teachers to be trained in inclusive strategies to improve the overall PE experience.

Students actively develop adaptive strategies to navigate the challenges they face in PE. Wilson and Clarke (2021) revealed that students rely on lip-reading, peer assistance, and self-advocacy. Brown et al. (2020), while focusing on teacher actions, indirectly supports this by highlighting the value of peer support systems, which students likely utilize. Smith and Jones (2019) also, when discussing students' feelings of isolation, imply that students are searching for strategies to connect with their peers.

Inclusive education in the Philippines promotes equitable learning, but hearing-impaired students face challenges in PE due to communication barriers and limited teacher training. Traditional PE relies on verbal instruction, causing confusion and reduced confidence (Dela Cruz, 2020). Some schools use visual aids and basic sign language, but effectiveness depends on teacher preparedness (Garcia & Santos, 2021). Peer support enhances engagement, yet resource limitations persist, as students in inclusive environments show higher participation levels (Reyes, 2022). The lack of sign language interpreters and large class sizes hinder inclusive strategies. Schools with strong administrative support see better outcomes. Addressing these gaps requires policy reinforcement, funding, and continuous professional development for educators. By fostering a culture of inclusivity, schools can create a more supportive environment for hearing-impaired students in PE.

In Region 12, the integration of hearing-impaired learners into mainstream PE is an ongoing process marked by persistent communication barriers. Martinez (2020) highlights the challenge of verbal instruction, which hinders student engagement. Rivera & Dela Cruz (2021) point out that many PE teachers lack sufficient training in inclusive education, impacting implementation. Santos (2022) observes that schools offering sign language training and specialized workshops report improved student participation.

Accessibility and resource limitations create further obstacles for hearing-impaired learners. Rivera & Dela Cruz (2021) note that inconsistencies in accessibility, including limited access to interpreters and assistive technology, impede full participation. Martinez (2020) implicitly supports this by noting that without visual strategies, students disengage. Santos (2022) shows that successful programs are resource heavy, needing workshops and sign language training.

Despite challenges, effective strategies are emerging. Santos (2022) demonstrates that peer mentoring and cooperative activities boost confidence and motivation. Rivera & Dela Cruz (2021) state that schools that provide sign language training and specialized workshops see better student participation. Martinez (2020) highlights that some schools are addressing the verbal instruction barrier by using visual teaching strategies and peer assisted learning.

### **Perceptions of Challenges and Opportunities in Physical Education**

Hearing-impaired learners globally encounter obstacles in mainstream PE stemming from communication barriers, instructional methods, and social inclusion. In Europe, Williams & Patel (2020) highlighted the persistent challenge of verbal instructions lacking visual cues, leading to student disengagement. They also noted that while the absence of sign language interpreters hinders inclusion, assistive technologies like real-time captioning are proving beneficial. In Canada, Thompson & Rivera (2022) echoed this sentiment, observing that traditional verbal explanations exclude hearing-impaired students, and that visual demonstrations and written instructions improve participation. Garcia et al. (2021), focusing on Australia, illustrated the social isolation hearing-impaired students face due to peer interaction difficulties.

Social inclusion efforts, particularly through peer support, are crucial for hearing-impaired students in PE. Garcia et al. (2021) found that structured peer support programs, such as buddy systems, significantly enhance inclusion and belonging in Australia. Thompson & Rivera (2022) in Canada, indirectly support this by observing increased participation in schools using individualized feedback, which relies on close interaction. Williams & Patel (2020) although focusing on technological solutions, also implies the need for social inclusion by stating that assistive technologies improve student confidence, which is tied to social interaction.

Inclusive teaching strategies and assistive technology play vital roles in improving PE experiences. Thompson & Rivera (2022) emphasized the positive impact of visual demonstrations and written instructions in Canada. Williams & Patel (2020) showcased the benefits of assistive technologies like real-time captioning in Europe. Garcia et al. (2021) indirectly suggest the importance of teaching strategies by noting that structured peer support, which relies on teacher organization and facilitation, improves inclusion.

Hearing-impaired students in the Philippines experience a mix of challenges and opportunities within mainstream physical education classes. Communication barriers, particularly the difficulty in following verbal instructions without sign language or visual aids, are a primary concern (Mendoza, 2021). While structured group activities can improve social connections, exclusion persists in schools lacking clear inclusive policies (Rivera & Cruz, 2022). However, teacher preparedness plays a crucial role; professional development in inclusive teaching methods significantly enhances student engagement (Santos et al., 2023). Therefore, addressing communication needs, implementing inclusive policies, and prioritizing teacher training are essential for creating supportive and effective PE experiences for hearing-impaired students. Furthermore, consistent implementation of adapted equipment and visual cues can further bridge the gap. Ensuring that all students have access to appropriate resources empowers them to actively participate. Finally, fostering a culture of peer support within PE classes can also significantly improve the social and emotional well-being of hearing-impaired students.

In Region 12, hearing-impaired students navigate unique challenges and opportunities in mainstream physical education. Communication barriers, primarily the reliance on verbal instructions, impede their understanding and engagement, though visual strategies have proven effective (Reyes, 2021). Peer support plays a vital role, as pairing with supportive hearing peers significantly enhances confidence and social interaction during collaborative activities (Garcia & Mendoza, 2022). Crucially, teacher training is essential for creating inclusive environments; educators equipped with specialized skills demonstrate greater effectiveness in accommodating hearing-impaired learners, resulting in improved student performance (Cruz, 2023). Furthermore, the consistent availability of adapted equipment and visual aids is crucial for equitable participation. Implementing school-wide policies that prioritize inclusive practices fosters a sense of belonging for all students. Finally, regular feedback and open communication between teachers, students, and support staff can help refine inclusive strategies and address emerging needs.

### **The Influence of Communication Barriers on Participation**

Globally, hearing-impaired students face significant communication barriers in mainstream PE, primarily due to reliance on verbal instructions, leading to reduced confidence and participation (Spencer & Koester, 2019). This is compounded by a shortage of teachers trained in inclusive methods, resulting in exclusion and isolation (Jiang et al., 2021; Novak & Pelham, 2022). Consequently, students often experience anxiety and frustration, highlighting the need for professional development, visual aids, and peer support to foster inclusive and supportive PE environments (Sharma et al., 2020). Implementing universal design principles in PE curriculum development can proactively address diverse learning needs. Furthermore, the integration of assistive technologies, such as captioning and real-time transcription, can enhance accessibility. Finally, fostering a culture of empathy and understanding among all students can promote a more inclusive and supportive learning environment.

Hearing-impaired students in the Philippines face significant obstacles in mainstream PE classes due to the prevalence of verbal instruction and limited inclusive communication. Santos and Ramirez (2021) highlighted

that students often struggle to follow oral instructions, resulting in confusion and reduced participation, especially without visual aids or sign language. This lack of accessibility can lead to feelings of isolation. Dela Cruz and Villanueva (2020) further emphasized the critical role of teacher preparedness, noting that many PE teachers lack the necessary training in inclusive education, particularly for hearing-impaired learners. This deficiency in training hinders their ability to adapt teaching methods effectively.

Teacher preparedness, or lack thereof, significantly impacts the inclusivity of PE classes. Dela Cruz and Villanueva (2020) found that many PE teachers lack formal training in accommodating hearing-impaired students. This lack of training results in limited modifications to teaching approaches, making it hard for students to fully participate. Santos and Ramirez (2021) also noted that the reliance on oral commands and group discussions without visual or written aids discourages participation. Fernandez et al. (2023) highlighted that schools successfully implementing sign language interpreters and assistive devices had higher engagement levels, showing the effect of prepared educators and proper resources.

Conversely, successful implementation of inclusive strategies significantly improves the PE experience for hearing-impaired students. Fernandez et al. (2023) demonstrated that schools providing sign language interpreters, assistive communication devices, and peer support systems saw increased engagement. Santos and Ramirez (2021) found that visual demonstrations, written instructions, and sign language interpretation help reduce confusion and increase participation. Dela Cruz and Villanueva (2020) indirectly support this by showing that when teachers are trained, and resources are available, the students participation increases.

Locally, hearing-impaired students struggle in PE due to reliance on verbal instructions and a lack of inclusive teaching. Communication barriers, impacting understanding of rules and routines, lead to exclusion and reduced confidence (Santos & Ramirez, 2021). While some schools implement visual aids and basic sign language, effectiveness varies due to limited teacher training and resources (Dela Cruz & Villanueva, 2020). However, schools with sign language interpreters, visual cues, and assistive devices demonstrate increased student engagement and confidence (Fernandez et al., 2023). Therefore, consistent and accessible professional development for PE teachers is essential to ensure inclusive practices. Furthermore, the development of localized, culturally relevant visual aids and sign language resources is crucial for effective communication. Finally, fostering a collaborative environment with parents, support staff, and the wider community can strengthen the support system for hearing-impaired students in PE.

### **Social and Emotional Challenges in Engagement**

Hearing-impaired individuals face significant social and emotional challenges in international settings due to communication barriers, limited access to interpreters, and language differences, leading to social isolation (Marschark & Spencer, 2016). They may also experience emotional stress from exclusion or discrimination when accessibility accommodations are inadequate (Foster & MacLeod-Gallinger, 2020). Additionally, cultural differences in disability inclusion impact their ability to integrate into global networks (Emmett & Francis, 2015). Addressing these challenges requires inclusive policies, better accessibility, and increased awareness to ensure meaningful participation.

In the Philippines hearing-impaired faces significant social and emotional challenges when engaging in global settings. Limited access to interpreters and assistive technologies creates communication barriers, leading to social isolation (Mara, 2020). Many also experience emotional stress due to inadequate inclusion in international programs and workplaces, where accessibility measures are often lacking (Dela Cruz & Santos, 2021). Additionally, cultural perceptions of disability influence their opportunities, as societal attitudes toward hearing impairment vary across regions (Reyes, 2019). Addressing these issues requires stronger policies, improved accessibility, and greater advocacy for inclusive participation.

In Region XII (SOCCSKSARGEN) hearing-impaired face significant social and emotional challenges due to communication barriers, limited access to assistive technology, and a lack of inclusive policies. Many schools and workplaces struggle with providing adequate support, leading to social isolation and emotional distress



(Dela Cruz, 2021). Despite efforts to implement inclusive education, awareness and accessibility remain inconsistent, affecting the participation of hearing-impaired individuals in global and local opportunities (Reyes & Santos, 2022). Additionally, societal attitudes toward disability in the region contribute to marginalization, further limiting engagement in international activities (Mendoza, 2023). Strengthening accessibility policies, teacher training, and community awareness is essential to addressing these challenges.

### **Strategies for Overcoming Communication Barriers**

To enhance participation and engagement, several global strategies have been suggested to bridge the communication gap for hearing-impaired learners in PE. Visual-based instruction methods, including demonstration videos, written instructions, and gesture-based communication, have been found effective in improving comprehension and involvement (Spencer & Koester, 2019). Additionally, some countries have implemented technology-driven solutions such as mobile apps with real-time sign language translation to facilitate better communication in PE settings (Jiang et al., 2021; Smith et al., 2022). Research by Garcia and Lopez (2023) also supports the implementation of teacher training programs that focus on inclusive teaching practices, which have shown to significantly improve the experiences of hearing-impaired learners in physical education. Furthermore, (Tan et al., 2020; Lee et al., 2023). fostering an inclusive culture within schools through disability awareness training for both educators and peers has been shown to improve the social integration of hearing-impaired learners.

Several national studies propose strategies to address communication challenges in PE. Visual-based teaching approaches, including demonstrations, instructional videos, and written guidelines, have been identified as effective in enhancing comprehension among hearing-impaired students (Santos & Ramirez, 2021; Gonzalez et al., 2022). Moreover, the integration of sign language instruction in PE teacher training programs has been recommended to improve communication between educators and students (Dela Cruz & Villanueva, 2020). The promotion of peer support systems (Lopez & Fernandez, 2023), where hearing students are trained in basic sign language, has also shown promising results in fostering inclusion and participation.

In local studies propose strategies to address communication challenges in PE. Visual-based teaching approaches, including demonstrations, instructional videos, and written guidelines, have been identified as effective in enhancing comprehension among hearing-impaired students (Santos & Ramirez, 2021; Gonzalez et al., 2022). Moreover, the integration of sign language instruction in PE teacher training programs has been recommended to improve communication between educators and students (Dela Cruz & Villanueva, 2020). The promotion of peer support systems (Lopez & Fernandez, 2023, where hearing students are trained in basic sign language, has also shown promising results in fostering inclusion and participation.

### **Synthesis of the Review**

The review of related literature and studies highlights the challenges, experiences, and strategies related to the inclusion of hearing-impaired students in mainstream Physical Education (PE) settings. Across various educational contexts, the primary issues revolve around communication barriers, instructional gaps, and social integration. Hearing-impaired students often struggle with understanding verbal instructions, which leads to disengagement and frustration in PE activities. Studies from the United States, the Philippines, and other countries emphasize that without appropriate accommodations, these students frequently feel isolated and excluded from group activities. Furthermore, the lack of teacher training in inclusive strategies and limited institutional resources further hinder their participation.

To address these challenges, various instructional and pedagogical adjustments have been explored. Research suggests that visual-based instruction, such as pictorial demonstrations, written instructions, and video modeling, significantly improves comprehension and engagement. Schools that integrate peer-assisted learning, where hearing-impaired students work with supportive classmates, have reported higher participation rates and increased confidence levels. Additionally, teacher training in sign language and inclusive pedagogy plays a crucial role in making PE more accessible and engaging for these learners. Beyond instructional

barriers, social and emotional aspects also influence the participation of hearing-impaired students. Many faces social exclusion due to difficulties in communicating with peers, leading to lower self-esteem and reluctance to join team-based activities. Studies highlight that a lack of peer awareness about hearing impairments contributes to feelings of isolation. However, schools that implement structured peer support programs and disability awareness campaigns have demonstrated better student engagement and emotional well-being.

To further promote inclusivity, researchers have proposed various strategies to overcome communication barriers. Effective approaches include the use of assistive technology, structured peer support, and comprehensive teacher training in inclusive education. The integration of real-time captioning tools, vibrating signaling devices, and adaptive sports programs has been particularly beneficial in enhancing student participation. Additionally, policy-level interventions, such as government support for inclusive education and stronger community engagement, are essential in sustaining these efforts.

Overall, the literature underscores the need for continuous improvements in teacher training, curriculum adaptation, and school policies to ensure that hearing-impaired learners receive equitable opportunities in PE. Future research should focus on assessing the long-term impact of inclusive strategies and identifying best practices that can be implemented on a wider scale.

## METHODOLOGY

This chapter outlines the research methodology to explore peer interaction's influence on hearing-impaired learners' physical education experiences. It includes details on the research design, study locale, participants, sampling technique, instruments, data collection procedures, data analysis, ethical considerations, and the researcher's positionality.

### Research Design

The study utilized a qualitative research method, specifically Transcendental Phenomenology, to explore the participants' experiences. Qualitative research, as noted by Creswell (2016), aims to provide a rich, descriptive account of social and cultural phenomena from the participants' perspectives. This approach, which often occurs in natural settings, employs observations, interviews, and document analysis to gather in-depth data, as explained by Creswell (2017). Furthermore, Lim (2024) points out that this methodology's flexible and adaptive nature allows for adjustments during the study, enhancing data collection quality and fostering deeper insights.

A phenomenological study explores the shared meaning of lived experiences among individuals who have encountered a particular phenomenon. By identifying commonalities in participants' experiences, this approach provides a structured description of that phenomenon (Yuksel et al., 2015). The present study aimed to understand the lived experiences of hearing-impaired students in mainstream educational settings, focusing on their challenges, coping mechanisms, and perceptions of inclusion within the academic environment.

This research adopted Transcendental Phenomenology as outlined by Moustakas (1994), which emphasizes setting aside preconceived notions to focus on the essence of participants' lived experiences. According to Moustakas, Transcendental Phenomenology requires the process of epoche (bracketing), where the researcher suspends personal biases to perceive the phenomenon purely from the participants' perspectives. This method allows for phenomenological reduction, in which individual experiences are analyzed to identify core themes, and imaginative variation, which explores multiple possible meanings behind those experiences. Through this structured process, the study sought to capture the true essence of the educational experiences of hearing-impaired students in mainstream classrooms.

The study's primary data collection method was semi-structured, in-depth interviews. These interviews allowed participants to freely express their experiences related to accessibility, communication, teacher support, and peer interactions. Through this approach, the researcher gained a deeper understanding of the

participants' perspectives and fostered a collective discussion that reflected the reality of hearing-impaired students in mainstream education. The common themes that emerged from these narratives were synthesized into a comprehensive depiction of the participants' lived experiences, in line with Moustakas' (1994) structured approach to phenomenological analysis.

### Locale of the Study

The study was conducted at the General Santos City SPED Integrated School in Purok Malipayon, Barangay San Isidro, General Santos City. This school was chosen as the study site because it has established inclusive education programs where hearing-impaired learners are integrated into mainstream physical education (PE) classes, which aligns with the study's focus on exploring the experiences of these students. Additionally, General Santos City SPED Integrated School is one of the foremost institutions in the region that provides specialized education to students with disabilities, including those with hearing and speech impairments. The school was founded in 1997 as a special public elementary institution to cater to the unique educational needs of exceptional children. It was expanded in the 2000-2001 academic year to include secondary education, becoming the first integrated school in Region XII.

The Department of Education (DepEd) recognizes the importance of research in promoting inclusive and innovative educational practices, especially for learners with special needs. In line with DepEd Order No. 16, s. 2017, which emphasizes the role of academic research in shaping evidence-based policies and programs, this study seeks to address the unique challenges that hearing-impaired learners face in Physical Education classes. The school's specialized programs and experienced educators provide a rich source of insights into the challenges faced by these students and offer potential solutions for making Physical Education more inclusive and accessible to them. Furthermore, the school's commitment to accommodating diverse learners (Florian & Black-Hawkins, 2018), including those with hearing impairments, establishes it as a leading example of inclusive education within the district.

At the study site, teachers have firsthand experience in adapting Physical Education (PE) lessons for hearing-impaired learners. For instance, Mrs. Ganados, an interpreter/shadow teacher, recalled how one of her students, Mark, initially struggled to follow game instructions due to the reliance on verbal cues. By integrating visual demonstrations, hand signals, and written instructions, Mark was able to actively participate and even excel in sports activities. Similarly, Mrs. De Gracia, a senior high school teacher, shared how peer support initiatives helped bridge communication gaps. She cited Reah, a hearing-impaired student, who felt excluded from group exercises until a **peer buddy system** was introduced. With classmates learning basic sign language and using nonverbal cues, Reah gained confidence and became more engaged in PE sessions. These experiences reflect the school's commitment to inclusive education and validate its reputation as a model institution for supporting exceptional learners, aligning with DepEd Order No. 16, s. 2017 in fostering research-driven educational improvements.

### Participants of the Study

The participants included two primary groups. First, seven hearing-impaired learners enrolled in mainstream Physical Education classes at General Santos City SPED Integrated School. These students provided valuable insights into their experiences of peer interaction in the context of Physical Education. Second, two Physical Education teachers are responsible for facilitating inclusive PE sessions and overseeing the interactions between hearing-impaired learners and their hearing peers. These teachers offered perspectives on the dynamics of inclusion and the effectiveness of peer interactions in fostering a positive learning environment for hearing-impaired learners.

This study's chosen sample size of seven participants aligns with qualitative research standards, particularly for phenomenological studies exploring lived experiences. According to Moser and Korstjens (2018), a sample size of 5-10 participants is often sufficient to achieve data saturation, ensuring comprehensive coverage of themes without redundancy. Similarly, Creswell and Poth (2018) suggest that qualitative inquiries typically

involve 5-25 participants, with the lower end suitable for focused phenomenological research. This approach allows for an in-depth exploration of individual experiences while maintaining a manageable scope for detailed analysis. Furthermore, Guetterman (2015) emphasizes that smaller sample sizes are ideal in qualitative studies because the richness of the data compensates for the limited number of participants. Choosing seven participants ensures the survey captures meaningful insights while adhering to established methodological standards. These references collectively support the decision to use this sample size to achieve the study's objectives effectively.

To ensure content validity, the developed interview guide underwent a validation process involving three experts from Sultan Kudarat State University and two from the Department of Education Division of General Santos City. Additionally, a data analyst was engaged to confirm the accuracy of the identified key ideas and themes.

### **Sampling Technique**

This technique is particularly suitable for qualitative research, as it ensures that participants possess substantial experience and knowledge about peer interactions within inclusive physical education (PE) settings. According to Palinkas et al. (2015), purposive sampling effectively gathers in-depth information from well-positioned participants to provide insights into the studied phenomenon. By selecting individuals directly involved in inclusive PE classes, this study aims to capture authentic perspectives on the lived experiences of hearing-impaired learners, ensuring that the data gathered is meaningful and relevant to the research objectives.

### **Research Instrument**

Research instruments allow researchers to collect, measure, and analyze data (DeVellis, 2017). The study utilized the following instruments: Part 1 of the instrument is semi-structured interviews, which determine the primary data collection tool, allowing for flexibility in exploring the participants' experiences. Separate interview guides were prepared for hearing-impaired learners, hearing peers, and PE teachers to ensure that each group's perspectives were fully captured.

In addition, Part 2 is an observational checklist, which determines that the researcher conducted classroom observations using a checklist to note specific instances of peer interaction, communication strategies, and levels of engagement during PE classes. Five (5) experts validated the questionnaire. There were three validators specialized in special education and two guidance counselors. The study's validators included three special education experts and two guidance counselors. The special education experts ensured the research instruments were appropriate and aligned with best practices for hearing-impaired learners. The guidance counselors assessed the study's ethical considerations and its sensitivity to the social and emotional challenges of the participants. Together, they ensured the reliability and validity of the study's tools.

### **Data Gathering Procedure**

The data gathering process followed a structured and systematic approach to ensure the accuracy, credibility, and ethical integrity of the study. This procedure involved multiple phases designed to facilitate meaningful engagement with participants while maintaining the reliability of the collected data. From initial communication and orientation to interviews, transcription, and validation, each step played a crucial role in capturing the lived experiences of the participants. The following sections outline the key phases undertaken in the data collection process.

In the communication phase, the researcher reached out to potential participants through formal invitations, explaining the study's objectives and significance. The purpose, confidentiality measures, and voluntary nature of participation were emphasized. Informed consent was obtained to ensure ethical compliance and participants' willingness to share their experiences.

During the orientation of participants, the researcher provided a detailed overview of the study, including the research process, expected participation, and ethical considerations. This session also addressed any concerns or questions, ensuring that participants felt comfortable and informed before proceeding with the interviews.

A trial interview was conducted with a small group of participants to refine the interview questions and assess their clarity and effectiveness. This phase allowed the researcher to make necessary adjustments to ensure that the questions were comprehensible, relevant, and conducive to eliciting meaningful responses.

In the conduct interview phase, the researcher carried out in-depth, semi-structured interviews with the participants. These interviews focused on their lived experiences, challenges, and perceptions. The sessions were recorded, with participants' consent, to ensure accurate data collection while allowing them to freely express their thoughts.

Following the interviews, the transcription writing phase involved converting the recorded audio data into written form. The researcher ensured that the transcriptions were verbatim to maintain the authenticity and accuracy of the participants' responses. This step was crucial for a thorough and precise data analysis.

Lastly, in the member checking phase, participants were given the opportunity to review their transcribed responses. This process ensured that their statements were accurately captured and reflected their intended meaning. Any necessary clarifications or revisions were made to enhance the validity and credibility of the data.

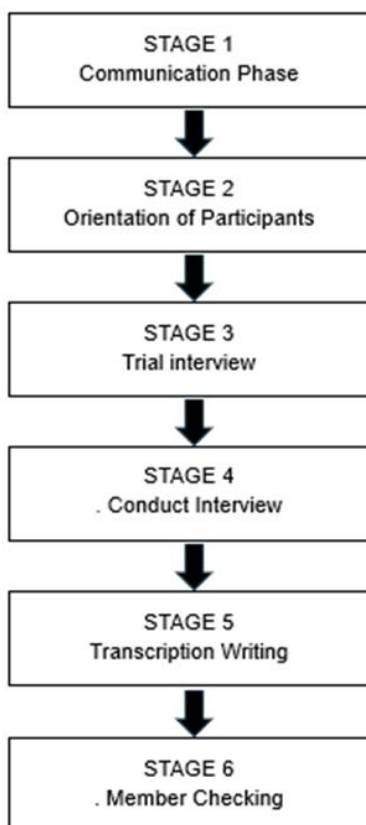


Figure 2. Research Paradigm

## Data Analysis Methods

In conducting data analysis for this study, the researcher employed thematic analysis. According to Moustakas (1994), thematic analysis emphasizes identifying, analyzing, and reporting patterns and themes within the data. It organizes and describes all data in detail. There are six (6) steps covered in thematic analysis:



Familiarizing the data. In this step, the researcher reads and re-reads the data to become familiar with its needs and pay attention to the occurring patterns. The researcher must then complete data collection.

Generating initial codes and themes (Initial themes). The researcher generates the initial code by documenting where and how patterns occur. This is done through data reduction, where the researcher collapses data into labels to create categories for more efficient analysis. Data complication is also completed here. It involves the researcher making inferences about what the codes mean.

Searching for themes (Clustered Themes). The researcher combined codes into overreaching themes that accurately depict the data. It was important to develop themes that describe exactly what the theme means, even if it does not fit. The researcher also explained what was missing from the analysis.

Reviewing themes. In this step, the researcher examined how the themes support the data and the overreaching theoretical perspective. If the analysis seems incomplete, the researcher must go back and find what needs to be added.

Defining and naming themes (Emerging Themes). The researcher presented each theme, indicating which aspects of data were being captured and what was interesting.

Producing the report. In the last step, when the researcher writes the report, the researcher decides which themes make meaningful contributions to understanding what is going on within the data.

### **Ethical Considerations**

The researcher must prioritize the participants' well-being and safeguard them from needless stress (Cacciattolo, 2015).

**Social Value.** The research aimed to contribute valuable insights into improving Physical Education accessibility for hearing-impaired learners. By identifying challenges and proposing inclusive strategies, the study benefits students, educators, and policymakers, supporting the development of more inclusive educational practices.

**Informed Consent.** Participants and their legal guardians were provided with detailed information about the study's purpose, procedures, and voluntary nature. Written informed consent was obtained before participation, ensuring they understood their rights, including the option to withdraw at any time without consequences.

**Vulnerability of Research Participants.** Recognizing that hearing-impaired learners are a vulnerable group; extra precautions were taken to safeguard their well-being. A sign language interpreter was present to facilitate effective communication, and participants were provided with support in case of any emotional distress during the study.

**Risk, Benefits, and Safety.** The study ensured that potential risks were minimized while maximizing the benefits. Participants were assured that they could skip any questions that made them uncomfortable. The findings will contribute to more inclusive Physical Education practices, ultimately benefiting learners with hearing impairments.

**Privacy and Confidentiality of Information.** Participants' personal information was anonymized, and all data were securely stored. No identifying details were disclosed in the final report, ensuring compliance with data protection regulations.

**Justice.** Fair participant selection was ensured, with all eligible individuals having equal opportunities to participate. The study's benefits were equitably distributed, with findings aimed at improving educational practices for all hearing-impaired students.

**Transparency.** The research process was conducted with full transparency, providing clear explanations of methodologies, objectives, and ethical safeguards. Participants and school administrators were kept informed throughout the study.

**Adequate Facilities.** The study was conducted in accessible, well-equipped environments, including quiet rooms for interviews and necessary assistive technologies. These facilities ensured the comfort and full participation of hearing-impaired learners.

**Transferability.** The study's findings were carefully documented to allow educators, researchers, and policymakers to apply them in similar educational contexts, enhancing their practical value.

**Dependability.** Consistent data collection and analysis procedures were followed, ensuring reliability and accuracy in interpreting participants' experiences.

**Confirmability.** The study-maintained objectivity by ensuring that findings were derived from participants' authentic experiences rather than researcher bias. Data verification strategies, such as member checking, were employed to enhance credibility.

By adhering to these ethical principles, the study ensured integrity, fairness, and respect for all participants while generating meaningful contributions to inclusive education.

### **Trustworthiness of the Study**

To establish trustworthiness in the study, the researcher adhered to the criteria of credibility, transferability, dependability, and confirmability (Accad, 2015). Credibility was ensured by accurately representing the participants' experiences through member checking, allowing participants to verify the accuracy of their interview transcripts and the researcher's interpretations. Transferability was achieved by providing detailed descriptions of the context and participants, enabling readers to assess whether the findings can be applied to similar settings. To maintain dependability, the researcher documented an audit trail outlining every research process step, including data collection, coding, and theme development, ensuring transparency and replicability. Finally, to establish confirmability, the researcher regularly reflected on their positionality and potential biases, ensuring that the findings were grounded in the participants' perspectives rather than influenced by personal assumptions.

### **Researcher's Positionality**

The researcher acknowledges the potential influence of personal biases and assumptions on the study, recognizing the importance of maintaining research credibility through ongoing professional development. To strengthen this credibility, the researcher actively participated in seminars and trainings focused on qualitative research methodologies, ensuring up-to-date knowledge and skills. The researcher's educational background in special education provides an understanding of the challenges faced by students with disabilities in mainstream educational settings. However, as Merriam and Tisdell (2016) emphasize, researchers must remain mindful of their positionality and its impact on the research process. To mitigate this, the researcher approached the study with an open mind, allowing the voices and experiences of hearing-impaired learners and their peers to guide the findings.

Additionally, the advisory committee, composed of experts in qualitative research and educational policy, provided guidance throughout the research process. Their expertise ensured that the study adhered to academic rigor, ethical standards, and methodological soundness. Their involvement helped refine the research design, validate the findings, and minimize potential biases.

By continuously reflecting on positionality and receiving input from the advisory committee, the researcher aimed to produce a study that authentically represents the participants' experiences. This reflective approach aligns with Creswell and Poth (2018), who assert that self-awareness and reflexivity are essential for ensuring

that the researcher's values and assumptions do not unduly influence data interpretation. Through this commitment, the researcher sought to preserve the integrity and authenticity of the participants' perspectives.

## PRESENTATION AND DISCUSSION OF FINDINGS

This chapter discusses the implications of the data collected during the participant interview using an interview guide questionnaire and summarizes the study's findings.

### Presentation of Findings

This section presents the findings regarding the lived experiences of hearing-impaired students in learning Physical Education within mainstream classrooms. The themes emerged through a rigorous process of thematic analysis, which involved identifying significant statements, formulating initial themes, clustering related themes, and determining the overarching themes. These findings provide insights into the challenges faced by hearing-impaired students, their coping mechanisms, and the impact of inclusive teaching strategies on their learning experiences.

### Emerging Themes on the Lived Experiences of Hearing-impaired Learners in Learning Physical Education within Mainstream Classrooms

After rigorous data analysis and interpretation, four (4) emerging themes were identified. These themes were combined from several initial and clustered themes. The four emerging themes were the following: Reliance on Visual and Peer Cues, Emotional Complexity in Day-to-Day PE, Inclusion and Exclusion in Everyday Interactions, and Memorable Moments Shaping Daily Experience. These themes characterized the lived experiences of hearing-impaired learners in learning Physical Education within mainstream classrooms.

Table 1. Lived Experiences of Hearing-Impaired Learners

Essential Themes	Core Ideas	Codes	Significant Statements (Verbatim)
<b>1. Reliance on Visual and Peer Cues</b>	<ul style="list-style-type: none"> <li>Students watch the teacher's demonstrations or classmates' actions</li> <li>Observing peers compensates for missed verbal instructions</li> </ul>	visual demonstrations, watching classmates, gestures/sign	<p>I rely on visual demonstrations to understand what the teacher wants us to do. Sometimes, I feel lost if the instructions are only spoken and not shown.</p> <p>I focus on watching my classmates to understand what we're doing. I feel sad when the teacher talks fast and doesn't look at me. I struggle to read her lips. It's hard when the teacher doesn't provide visuals or when the class is noisy...</p>
<b>2. Emotional Complexity in Day-to-Day PE</b>	<ul style="list-style-type: none"> <li>Learners experience excitement and enjoyment</li> <li>Emotions vary depending on communication success and social acceptance</li> </ul>	happy/excited, nervous/shy, sad/left out	<p>I often feel excited but also nervous and shy...</p> <p>PE class is fun for me, but I also feel nervous. Hearing students talk and laugh... it makes me feel like I don't belong sometimes.</p> <p>When we dance, I feel excited, but I also feel frustrated when I can't understand what they are saying.</p> <p>I feel happy when I can do the activity and join the game, but I feel sad when I miss things because I cannot hear.</p>

<b>3. Inclusion and Exclusion in Everyday Interactions</b>	<ul style="list-style-type: none"> <li>- Learners feel left out if they cannot keep up with discussions</li> <li>- Teacher's quick or purely verbal explanations lead to confusion</li> <li>- Feeling invisible if overlooked in class</li> </ul>	feeling left out, invisible, confused	<p>My PE class is fun, but there are moments when I feel left out... I rely on watching others to figure out what I need to do...</p> <p>I'm sad and puzzled by what they're doing. I can't hear, and I don't have any idea.</p> <p>I enjoy dancing and playing games, but sometimes I feel left out of activities. It's hard to talk with classmates...</p>
<b>4. Memorable Moments Shaping Daily Experience</b>	<ul style="list-style-type: none"> <li>- Positive memories often center on teacher accommodations</li> <li>- Negative memories involve being uninformed</li> </ul>	teacher using signs, personal achievement, Being overlooked	<p>The teacher used sign language... I felt very happy because I understood what to do. That day was very special for me. One time, I didn't know the teacher changed the rules... Everyone looked at me, and I felt bad.</p> <p>I felt sad when the teacher didn't explain what we were doing in class. I stood and waited... It made me feel invisible.</p> <p>I caught the ball and scored in a basketball game... I felt like I belonged.</p> <p>I remember when the teacher used pictures to show me what to do... I enjoyed it a lot.</p>

### Emerging Theme 1: Reliance on Visual and Peer Cues

This theme highlights the crucial role of visual demonstrations and peer observations in helping hearing-impaired students comprehend lessons. Since they struggle with verbal instructions alone, they rely on watching their teachers' demonstrations or their classmates' actions to understand tasks. Students feel lost, frustrated, or excluded from the learning process when visual support is lacking. The frequent mention of this concern underscores the need for educators to incorporate clear visual aids, gestures, and demonstrations to create a more inclusive and accessible learning environment.

### Participants shared their experiences

I rely a lot on visual demonstration to know what the teacher wants us.... do. ....Sometimes, I don't know if the instruction is only spoken and not showed. I enjoy the activity,...but talk with my classmates during dance is hard because I can't hear and talk.wait.. {I rely on visual demonstrations to understand what the teacher wants us to do. Sometimes, I feel lost if the instructions are only spoken and not shown. I enjoy the activities, but communicating with my classmates during dance is difficult because I can't hear and talk.} - Nova

I focus on watching my classmates to know what we doing... I get sad when teacher talk fast and not look me...I struggle to read her lips, its fast...hmmm. {I focus on watching my classmates to understand what we're doing. I feel sad when the teacher talks fast and doesn't look at me. I struggle to read her lips..} -Clover

It hard when teacher not give visual or when class is noisy. The best day is when teacher or classmate try to include me with simple sign or writing things. {It's hard when the teacher doesn't provide visuals or when the

class is noisy. The best days are when the teacher or my classmates try to include me with simple signs or by writing things down.} -Oishi

Approximately 6 out of 7 participants indicated they rely on visual demonstrations and peer observations to understand lessons, especially when verbal instructions are unclear or inaccessible.

### **Emerging Theme 2: Emotional Complexity in Day-to-Day PE**

This theme highlights the emotional complexity that hearing-impaired students experience in their Physical Education (PE) classes. While they often feel excitement and enjoyment when participating in activities, their emotions can shift depending on their ability to understand instructions and feel socially included. Feelings of nervousness, frustration, and exclusion arise when communication barriers prevent them from fully engaging with their peers. The mix of positive and negative emotions suggests that successful social interactions and accessible communication methods are crucial in shaping their overall PE experience.

#### **Participants shared their thoughts:**

I feel too good to PE, but it hard.... me because I can't follow when they give lot instructions. I try my best to watch others and do like them, but sometimes I feel confused. {I feel good about joining PE, but sometimes it is hard for me because I cannot follow when they give many instructions. I try my best to watch others and do what they do, but sometimes I feel confused} -Piattos

PE class is fun me,... but I nervous. Hearing students talk and laugh, but I don't know what they say, and it makes me feel I don't belong sometimes. {PE class is fun for me, but I also feel nervous. Hearing students talk and laugh, but I don't know what they are saying, and it makes me feel like I don't belong sometimes.} -Lala

When we.. dance, I feel excited, but I also feel frustrate when I can't understand they say.my classmates do again and again to know.... {When we dance, I feel excited, but I also feel frustrated when I can't understand what they are saying. so they explain things again so that I can understand.} -Clover

... Me feel happy when I can do ...the activity and join me..., but I sad when miss things because I can't hear. I think my classmates don't to ignore me..., and me lonely. {I feel happy when I can do the activity and join the game, but I feel sad when I miss things because I cannot hear. I think my classmates don't mean to ignore me, and I feel lonely.} -Oishi

All 7 participants expressed experiencing a range of emotions in PE, with excitement and enjoyment often accompanied by feelings of nervousness, frustration, or sadness, depending on the success of communication and social inclusion.

### **Emerging Theme 3: Inclusion and Exclusion in Everyday Interactions**

This theme emphasizes hearing-impaired students' challenges in feeling included during everyday interactions in PE classes. They often feel left out, invisible, or confused when they struggle to keep up with verbal discussions or if the teacher's explanations are quick and purely verbal. These students rely on visual cues and observing their peers to understand what is happening, but without adequate support, they may miss out on essential interactions or activities. The theme underscores the need for more inclusive communication practices to ensure all students feel engaged and visible in the classroom.

#### **Participants shared their thoughts:**

One time... me... not know teacher change rule, and I play wrong. All look at me, and I feel bad. I never forget because it makes me very shy. {One time, I did not know the teacher changed the rules, and I played wrong. Everyone looked at me, and I felt bad. I will never forget it because it made me feel very shy.} -Chippy



I remember badminton. I did not hear the teacher start, so I was late. Ahhhh..But I ran fast and finished third. I feel good because everyone claps for me. {I remember when I played badminton. I did not hear the teacher start, so I was late. But I ran fast and finished third. I felt good because everyone clapped for me.} -Lala

I catch ball and score in Basketball..... All my classmates smile at me..., and I feel like I belong. I always remember that. {I caught the ball and scored in a basketball game. My classmates smiled at me, and I felt like I belonged. I will always remember that.} -Cheezy

Approximately 5 out of 7 participants felt left out or invisible during PE classes, particularly when they could not keep up with verbal discussions or the teacher's quick explanations. This highlights the challenges of inclusion and communication.

#### **Emerging Theme 4: Memorable Moments Shaping Daily Experience**

This theme highlights the significant impact of positive and negative experiences on hearing-impaired students' daily lives in PE classes. Positive memories often stem from accommodations made by the teacher, such as using sign language or visual aids, which help students feel included and capable. On the other hand, negative memories are tied to moments when students feel uninformed, overlooked, or excluded, such as when teachers fail to communicate effectively or update rules. These experiences underline the importance of inclusive teaching practices that make students feel seen, heard, and part of the group.

#### **Participants shared their thoughts:**

Me... teacher use sign to explain game.... I am happy because I know what to do. That day was very special for me. {The teacher used sign language...I felt very happy because I understood what to do. That day was very special for me.} -Nova

One time. I did not know the teacher had changed the rules, and I played wrong. All look at me, and I feel bad. I will never forget it because it makes me very shy. {One time, I did not know the teacher changed the rules... Everyone looked at me, and I felt bad.} -Chippy

I felt sad when the teacher did not explain what we were doing in class. I stood and waited, but no one told me. It made me feel invisible. {I felt sad when the teacher did not explain what we were doing in class. I stood and waited... It made me feel invisible.} -Clover

I catch ball and score in Basketball..... All my classmates smile at me..., and I feel like I belong. I always remember that. {I caught the ball and scored in a basketball game... I felt like I belonged.} -Cheezy

I remember teacher... use picture to show me what to do in play.... It is easy to follow, and I enjoy it a lot. {I remember when the teacher used pictures to show me what to do... I enjoyed it a lot.} -Oishi

Approximately 6 out of 7 participants shared that their memorable moments in PE were shaped by the teacher's accommodation, such as using sign language or visual aids, which made them feel included. At the same time, negative memories often arise from feeling uninformed or overlooked.

#### **Emerging Themes on the Challenges and Opportunities Encountered by Hearing-Impaired Learners in Physical Education**

Through thorough data analysis and interpretation, three emerging themes were identified and synthesized from a range of initial and grouped themes. The three emerging themes were Specific Activity-based Challenges, Positive Opportunities for Skill and Confidence, and Strategies for Overcoming Challenges. Collectively, these themes highlight the balance between challenges and growth, emphasizing the importance of inclusive practices in promoting meaningful participation.

Table 2. Challenges and Opportunities Encountered by Hearing-Impaired Learners in Physical Education

Essential Themes	Core Ideas	Codes	Significant Statements (Verbatim)
<b>1. Specific Activity-based Challenges</b>	<ul style="list-style-type: none"> <li>Learners find certain activities difficult when instructions are mostly verbal, or everyone speaks simultaneously</li> </ul>	<ul style="list-style-type: none"> <li>hard activities, noisy group games, lack of clarity</li> </ul>	<p>The hardest part is when the teacher talks too fast and doesn't write anything down. I don't know what to do, and it makes me feel lost.</p> <p>I think group games are difficult because everyone talks at the same time... confusing for me to follow.</p> <p>Acting is hard because the teacher just talks and doesn't show. I need to see an example.</p> <p>Basketball is difficult for me. My teammates talk about strategy, but I don't know what they are saying.</p>
<b>2. Positive Opportunities for Skill and Confidence</b>	<ul style="list-style-type: none"> <li>Moments of success lead to pride and feeling included</li> <li>Clear demonstrations or extra time to practice help them excel</li> </ul>	<ul style="list-style-type: none"> <li>moments of success, feeling proud/confident, teacher demonstration</li> </ul>	<p>I remember when we played Basketball, and I made a good shot... I felt very proud.</p> <p>The teacher gave me a chance to lead the dance with the help of television.</p> <p>I like it when we do activities where I can just watch and copy... It makes me feel confident.</p> <p>I feel good when the teacher gives me time to practice alone before the group activity.</p>
<b>3. Strategies for Overcoming Challenges</b>	<ul style="list-style-type: none"> <li>Learners watch peers, ask friends or teachers for clarification, or break down steps</li> <li>Standing closer to see gestures or using personal practice to build confidence</li> </ul>	<ul style="list-style-type: none"> <li>observational learning, asking peers for help, self-initiated practice</li> </ul>	<p>I always watch the teacher... Even if I don't hear instructions, I try to follow their moves.</p> <p>I ask my friends to explain what to do in the activity...</p> <p>When I don't understand, I tell the teacher I need help...</p> <p>I try to learn by watching videos or practicing. This helps me be ready...</p> <p>I focus on the simple first. If I get that right, it's easier to add more steps later.</p> <p>I stand in front of the class so I can see the teacher better.</p>

### **Emerging Theme 1: Specific Activity-based Challenges**

Hearing-impaired students face significant difficulties in Physical Education (PE) when instructions are primarily verbal, or group activities become too noisy and chaotic. Without written or visual guidance, they often feel lost and struggle to understand what is expected of them. Activities such as Acting, group games, and sports that involve verbal communication, like Basketball, pose particular challenges since students rely heavily on visual cues to follow along. These challenges highlight the need for clearer instructional methods, such as written explanations, visual demonstrations, and structured communication strategies, to ensure all students can actively participate.

#### **Participants shared the following:**

The hardest part is when... aaah..hmm.okay.. teacher talk too fast and not write anything down. I do not know what to do, which makes me feel lost. {The hardest part is when the teacher talks too fast and does not write anything down. I do not know what to do, which makes me feel lost.} -Nova

I think group games... is difficult because everyone talks simultaneously. I cannot hear, and it confusing me who to follow. {I think group games are difficult because everyone talks simultaneously. I cannot hear, and it is confusing to follow.} -Piattos

Hmmmmm, acting is hard because the teacher just talks and does not show. I need to see an example to know what I will do. {Acting is hard because the teacher just talks and does not show. I need to see an example to know what to do.} -Clover

Basketball is difficult for me. Friends talk to me, but I do not know what they say. I just guess and hope I do right. {Basketball is difficult for me. My teammates talk about strategy, but I do not know what they are saying. I just guess and hope I am doing it right.} -Cheezy

All participants noted that certain PE activities were particularly difficult when instructions were mostly verbal or group settings became noisy, making it hard for them to follow along without clear visual guidance.

**Emerging Theme 2: Positive Opportunities for Skill and Confidence** Despite the challenges, moments of success in PE foster a sense of pride, confidence, and inclusion among hearing-impaired students. When teachers provide clear demonstrations or allow extra time for individual practice, students feel more capable and engaged in activities. Positive experiences, such as making a successful basketball shot, leading a dance with the help of visual aids, or simply observing and replicating movements, reinforcing their self-esteem. These instances emphasize the importance of structured support and inclusive teaching strategies that empower students to develop their skills at their own pace.

#### **Participants shared the following:**

I remember when I played basketball and shot. They cheer to me, and I feel very proud. {I remember when we played Basketball, and I made a good shot. Everyone cheered for me, and I felt very proud.} -Piattos

The teacher allowed me to lead dance with TV. {The teacher gave me a chance to lead the dance with the help of television.} -Lala

Like me, we do activities where I watch and copy. It is easy for me to follow, and I am good. It makes me feel confident. {I like it when we do activities where I can just watch and copy. It is easy for me to follow, and I do well. It makes me feel confident.} -Clover

Me feel good.... when teacher give me time to practice alone before group..... I learn better and do well with others after. {I feel good when the teacher gives me time to practice alone before the group activity. I learn better and do well with others afterward.} -Oishi

Approximately 6 out of 7 participants shared moments of success in PE, such as making a good play or receiving extra time to practice. These moments boosted their confidence and sense of inclusion, especially when teachers demonstrated clearly.

### **Emerging Theme 3: Strategies for Overcoming Challenges**

To navigate the difficulties they face, hearing-impaired students develop their strategies for understanding and participating in PE activities. Many rely on observational learning by closely watching their teachers and peers, while others seek clarification from friends or instructors when instructions are unclear. Some students take a proactive approach by practicing independently, breaking down complex movements into simpler steps, or positioning themselves closer to the teacher to see gestures and demonstrations better. These strategies underscore students' adaptability and highlight the importance of fostering an environment where they feel comfortable seeking support and utilizing visual learning methods.

#### **Participants shared the following:**

I watch teacher Beth and classmates what they do. Even if I do not hear instructions, I follow their moves. {I always watch the teacher, Beth, and their classmates to see what they do. Even if I do not hear instructions, I follow their moves.} -Nova

I ask my friend to explain it to me. They help me understand. {I ask my friends to explain what to do in the activity. They help me understand better.} -Piattos

When I do not understand, I tell the teacher... I need help. Sometimes, they use hands or write things down for me. {When I do not understand, I tell the teacher I need help. Sometimes, they use gestures or write things down for me.} -Chippy

I watch videos or practice. This helps me be ready for class, and I am more confident. I try to learn by watching videos or practicing. {This helps me be ready for class and feel more confident.} -Lala

I focus on simple first. If I am right, it is easier to add more steps later. {I focus on the simple first. If I get that right, it is easier to add more steps later.} -Clover

I stand in front of class ....me I see teacher Beth better. It help me catch their hand or mouth movement. {I stand in front of the class so I can see the teacher better. It helps me catch their gestures or mouth movements.} -Cheezy

All participants mentioned using personal strategies, such as watching their peers, asking for help, or practicing independently, to overcome challenges and improve their participation in PE activities.

### **Emerging Themes on the Impact of Communication on their Participation and Engagement in Physical Education Activities**

After rigorous data analysis and interpretation, three (3) emerging themes were identified. These themes were combined from several initial and clustered themes. The three emerging themes were Difficulties Comprehending Instructions and Feedback, Adaptive Communication with Teacher and Classmates, and Impact on Engagement and Participation. These emerging themes highlight the significant role of communication in shaping the participation and engagement of hearing-impaired learners in Physical Education activities.

Table 3. Impact of Communication on Their Participation and Engagement in Physical Education Activities

Essential Themes	Core Ideas	Codes	Significant Statements (Verbatim)
<b>1. Difficulties Comprehending Instructions and Feedback</b>	<ul style="list-style-type: none"> <li>- Teacher not facing them, not available, or not proficient in sign language</li> <li>- Lack of visual aids</li> <li>- Language mismatch (Filipino vs. sign)</li> </ul>	teacher not facing, no sign skills, no TV/written aids, language barrier	<p>I don't hear when the teacher explains while facing the other way. It makes me confused...</p> <p>I can't understand the Filipino language, and if teacher Zol is not around.</p> <p>The teacher has no idea on how to do the sign language.</p> <p>The teacher doesn't have any presentation on television and doesn't know how to write anything.</p>
<b>2. Adaptive Communication with Teacher and Classmates</b>	<ul style="list-style-type: none"> <li>- Relying on sign language, gestures, or pointing</li> <li>- Writing notes, texting, or using paper to clarify questions</li> <li>- Seeking classmate support when the teacher is busy</li> </ul>	sign language, writing/texting, asking peers for clarity	<p>I point to the teacher when I need help... I make signs...</p> <p>I write questions on paper... or ask a friend to help explain.</p> <p>I use my phone to text the teacher if something is unclear. I ask my friend to tell me what the teacher is saying.</p> <p>I sign to the teacher... If the teacher is busy, I write on paper to ask for help.</p>
<b>3. Impact on Engagement and Participation</b>	<ul style="list-style-type: none"> <li>- Feeling bored, frustrated, or left out</li> <li>- Some withdraw from activities or do unrelated tasks (e.g., drawing)</li> <li>- Missing out on learning and group interaction</li> </ul>	frustration/boredom, withdrawing/not joining, feeling left out	<p>When no one helps me to understand, I get lost in class. And I get bored.</p> <p>I feel frustrated... I don't join the game because I'm not sure what to do.</p> <p>I will get bored, and I will do the drawing.</p> <p>It makes me feel left out. I want to play, but I don't understand...</p> <p>Without support, I don't know what to do... I feel like I'm missing out on all the activities.</p>

### Emerging Theme 1: Difficulties Comprehending Instructions and Feedback

This theme highlights hearing-impaired learners' struggles in understanding instructions and feedback due to various communication barriers in Physical Education. When teachers do not face them while speaking,



students miss essential visual cues, leading to confusion and frustration. Additionally, the lack of proficiency in sign language among some educators makes it challenging for students to receive clear guidance. The absence of visual aids, such as written instructions or presentations, further contributes to difficulty following lessons. Language mismatches, particularly between Filipino and sign language, also create misunderstandings. These barriers collectively hinder the student's ability to engage in class activities and effectively learn new skills fully.

### **Participants shared the following:**

Me...not hear when teacher explain while facing other way. It make me confused because I don't know what to do. {I don't hear when the teacher explains while facing the other way. It makes me confused because I don't know what to do.} -Nova

I cannot understand Filipino. No teacher, zol. {I can't understand the Filipino language, and if teacher Zol is not around.} -Chippy

Teacher, no idea sign language. {The teacher has no idea on how to do the sign language.} -Lala

Teacher, no screen on television, and I do not know how to write. {The teacher doesn't have any presentation on television and doesn't know how to write anything.} -Clover

All participants reported experiencing difficulties understanding instructions and feedback due to communication barriers.

### **Emerging Theme 2: Adaptive Communication with Teacher and Classmates**

This theme emphasizes hearing-impaired learners' different strategies to navigate communication challenges in Physical Education. Students rely on sign language, gestures, or pointing to convey their needs to compensate for the lack of direct verbal communication. Some learners use written notes, text messages, or paper to clarify questions when instructions are unclear. Additionally, they often seek assistance from classmates to interpret or explain what the teacher is saying, especially when the teacher is busy or unable to use sign language. These adaptive strategies enable students to participate more actively in class, demonstrating their resilience and resourcefulness in overcoming communication barriers.

#### **Participants shared the following:**

I.... point to the teacher when I need help. Sometimes I make signs to ask what to do next or to clarify instructions. {I point to the teacher when I need help. Sometimes, I make signs to ask what to do next or to clarify instructions.} -Nova

I writing question on paper to teacher ...if I not understand. Sometimes I ask friend to help explain. {I write questions on paper to the teacher if I don't understand. Sometimes, I ask a friend to help explain.} -Clover

I use my phone to text to teacher if something unclear. I ask my friend to tell me what teacher saying. {I use my phone to text the teacher if something is unclear. I ask my friend to tell me what the teacher is saying.} -Clover

I sign to teacher for asking question. If teacher busy, I write on paper for help. {I sign to the teacher to ask a question. If the teacher is busy, I write on paper to ask for help.} -Oishi

All participants indicated that they relied on various adaptive communication strategies to overcome challenges in Physical Education.

### Emerging Theme 3: Impact on Engagement and Participation

This theme illustrates how communication barriers affect the level of engagement and participation of hearing-impaired learners in Physical Education. Many students experience boredom, frustration, or exclusion when they struggle to understand instructions. As a result, some withdraw from activities, choosing to sit out or engage in unrelated tasks such as drawing instead. The lack of clear communication makes them feel isolated, leading to missed learning opportunities and reduced peer interaction. Without proper support and inclusive teaching strategies, these students may disengage from Physical Education activities, ultimately limiting their overall learning experience and development.

Participants shared the following:

When no one help me to understand, I lost in class. I get bored. {When no one helps me to understand, I get lost in class. And I get bored.} -Nova

I feel frustrate cause can't follow teacher talk. I no join game cause I not sure what to do. {I feel frustrated because I can't follow the teacher's instructions. I don't join the game because I'm not sure what to do.} - Piattos

me get bored and drawing instead. {I will get bored, and I will do the drawing.} -Chippy

It make me feel left alone. I want play but I don't understand what teacher or students saying. {It makes me feel left out. I want to play, but I don't understand what the teacher or students are saying.} -Lala

Without support, I no know what to do in lesson. I can't follow and feel missing out from all activity. {Without support, I don't know what to do in the lesson. I can't follow along and feel like I'm missing out on all the activities.} -Oishi

All participants expressed that communication barriers significantly impacted their engagement and participation in Physical Education.

## DISCUSSION OF FINDINGS

### Emerging Themes on the Lived Experiences of Hearing-Impaired Learners in Learning Physical Education within Mainstream Classrooms

The integration of hearing-impaired students into mainstream Physical Education (PE) classrooms presents unique challenges and opportunities that shape their learning experiences. A comprehensive thematic analysis of their lived experiences revealed four major themes: (1) Reliance on Visual and Peer Cues, (2) Emotional Complexity in Day-to-Day PE, (3) Inclusion and Exclusion in Everyday Interactions, and (4) Memorable Moments Shaping Daily Experience. These themes highlight the students' reliance on non-verbal communication, the emotional highs and lows they navigate, and the impact of inclusive or exclusionary classroom practices on their overall participation. Understanding these themes provides valuable insights into the barriers they face and the strategies that can be employed to foster a more inclusive and supportive learning environment.

### Emerging Theme 1: Reliance on Visual and Peer Cues

Hearing-impaired students often depend on visual aids and peer interactions to navigate PE activities. For instance, a study by Celis et al. (2018) highlighted that these learners frequently observe and imitate their peers to understand and perform physical tasks. Similarly, Tan and Nonis (2017) found that visual demonstrations by instructors are crucial for conveying instructions effectively to hearing-impaired students. Also, Lieberman

et al. (2021) emphasized the importance of visual cues and peer modeling in enhancing the participation of deaf students in inclusive PE settings, reinforcing the role of structured, non-verbal communication in fostering engagement.

Building on these findings, the theme of Reliance on Visual and Peer Cues highlights the need for adaptive teaching strategies that support accessibility. The Inclusive Education Theory (Loreman et al., 2016) underscores the importance of modifying instruction to accommodate diverse learners. Students with hearing impairments rely on visual demonstrations and peer observations due to challenges with verbal instructions. UNESCO (2020) noted that when visual aids are insufficient, students often feel excluded. Similarly, Wang and Wang (2021) emphasized that multimodal teaching methods enhance comprehension and participation. Also, Ainscow (2020) reinforced that inclusive teaching strategies help bridge communication gaps and promote engagement.

To foster inclusion in PE, educators should integrate strategies such as sign language, visual demonstrations, and structured peer interactions. Peñaflorida et al. (2019) found that visual-based methods significantly improve student engagement. Similarly, Li and Dong (2022) emphasized that incorporating peer-assisted learning helps create a more inclusive environment. Also, Smith et al. (2023) highlighted that ensuring equitable access to instructional materials allows students to feel valued and capable of full participation.

These findings emphasize the necessity of incorporating visual learning strategies in mainstream PE classrooms. Teachers should prioritize clear visual demonstrations, ensure visibility for all students, and actively promote peer collaboration. Similarly, they should use structured non-verbal communication methods to enhance engagement and comprehension. Also, fostering a supportive and accessible learning environment ensures that hearing-impaired students can participate meaningfully in PE activities. Specifically, teachers should consider implementing universal design for learning (UDL) principles, which advocate flexible and adaptable teaching methods to accommodate diverse learners (CAST, 2018). Furthermore, the integration of technology, such as video modeling and interactive whiteboards, can significantly enhance visual instruction (Edyburn, 2016). Finally, (Waitoller & Thorius, 2016) ongoing professional development for PE teachers focused on inclusive pedagogy and communication strategies is critical for sustained improvements in accessibility.

## **Emerging Theme 2: Emotional Complexity in Day-to-Day PE**

Hearing-impaired students experience mixed emotions in PE classes, ranging from excitement and enjoyment to nervousness and frustration. Their emotional responses largely depend on their ability to communicate effectively and feel socially included. Positive experiences arise when they can participate fully, while negative emotions emerge when they struggle to understand instructions.

The emotional landscape for hearing-impaired PE learners is multifaceted and influenced by communication barriers and instructional methods. The Inclusive Education Theory (Loreman et al., 2016) emphasizes the need for equitable learning environments, yet Alves et al. (2021) reported that hearing-impaired students often feel excluded due to a lack of tailored support. Similarly, Dalbudak and Yigit (2019) noted that while some students show enthusiasm, others feel marginalized, (UNESCO, 2020 reinforcing the need for inclusive strategies.

Ensuring emotional well-being in PE requires structured support, including visual-based instruction and peer collaboration (Peñaflorida et al., 2019). Research by Wang and Wang (2021) confirms that multimodal teaching enhances engagement, reducing anxiety. Moreover, Smith et al. (2023) found that inclusive practices foster a sense of belonging, aligning with the principles of Inclusive Education Theory. Addressing these challenges promotes a supportive environment (UNESCO, 2023). where hearing-impaired students can fully participate and thrive

The emotional landscape for hearing-impaired PE learners is shaped by communication barriers and instructional approaches. The Inclusive Education Theory (Loreman et al., 2016) highlights equitable learning,

yet Alves et al. (2021) found that many students feel excluded. The Phenomenological Approach (Moustakas, as cited in Ladd et al., 2016) emphasizes understanding students' experiences, including both joy and frustration. Gura et al. (2023) also noted that anxiety arises when instructions are not adapted, reinforcing the need for inclusive strategies.

Addressing these challenges requires multimodal teaching. Vygotsky's (1978) Social Development Theory supports peer-assisted learning (Peñaflorida et al., 2019), while Dalbudak and Yigit (2019) found that some students feel marginalized without proper support. Wang and Wang (2021) confirmed that visual-based methods improve engagement. Smith et al. (2023) emphasized structured communication strategies, and UNESCO (2023) reinforced the need for adaptive teaching to foster inclusion.

### **Emerging Theme 3: Inclusion and Exclusion in Everyday Interactions**

Hearing-impaired learners often feel excluded when they struggle to keep up with verbal discussions or when teachers fail to accommodate their needs. Some students reported feeling invisible or left out when their participation was overlooked, which affected their overall classroom experience and engagement.

The degree of inclusion for hearing-impaired students in PE varies significantly. Alves et al. (2021) highlighted that many learners feel overlooked during PE classes, leading to isolation. Lieberman et al. (2021) discussed the challenges in communication between hearing-impaired students and their hearing peers, which can impede meaningful interactions. Furthermore, Tan and Nonis (2017) pointed out that hearing-impaired students may struggle to engage fully in PE activities without proper support and inclusive strategies.

The Social Model of Disability (Thomas & Barnes, 2017) shifts the focus from individual impairments to the societal and structural barriers that hinder full participation. The theme of Inclusion and Exclusion in Everyday Interactions directly relates to this model, as it highlights the impact of communication barriers and instructional shortcomings on students' sense of belonging. Alves et al. (2021) found that hearing-impaired students often feel isolated when teachers rely solely on verbal instructions. Similarly, Gura et al. (2023) reported that inadequate peer inclusion leads to disengagement. Wang and Wang (2021) emphasized that inclusive strategies, such as visual aids, improve participation and foster a sense of belonging.

Hearing-impaired students reported feeling overlooked when teachers provided only verbal instructions or classmates did not actively include them in discussions. These findings underscore the need for systemic changes, such as training teachers in sign language, integrating assistive communication tools, and fostering peer awareness of inclusive practices (Peñaflorida et al., 2019). The Social Model of Disability advocates for structural improvements that eliminate barriers, allowing hearing-impaired students to engage meaningfully in PE activities (Smith et al., 2023). Ensuring inclusion in PE classes requires intentional teaching strategies. Educators should adopt a proactive approach to fostering communication accessibility, utilizing non-verbal instructions, and encouraging peer involvement to create a more supportive environment (UNESCO, 2023).

### **Emerging Theme 4: Memorable Moments Shaping Daily Experience**

Hearing-impaired students recall both positive and negative experiences in PE. Positive memories often involve teacher accommodation, while negative experiences stem from being left uninformed or overlooked. Students felt a strong sense of inclusion when teachers used sign language or visual aids.

Significant experiences, both positive and negative, profoundly impact on the daily lives of hearing-impaired PE learners. Gura et al. (2023) found that introducing adaptive sports activities increased confidence and skill development among these students. Conversely, Alves et al. (2021) noted that miscommunication or lack of understanding during PE sessions can lead to frustration and exclusion. Lieberman et al. (2021) emphasized that successful inclusion efforts, such as peer tutoring and sign language, create positive and memorable experiences that enhance the overall well-being of hearing-impaired students.

The theme, Memorable Moments Shaping Daily Experience, reinforces the significance of teacher accommodations in shaping positive learning experiences. The Inclusive Education Theory (Loreman et al., 2016) supports the view that students thrive when educators actively create accessible learning environments. Alves et al. (2021) found that hearing-impaired students feel more engaged when teachers use inclusive strategies such as sign language and visual support. Similarly, Wang and Wang (2021) emphasized that visual-based instruction improves comprehension and fosters a sense of belonging. Smith et al. (2023) highlighted that direct teacher engagement enhances students' confidence and participation, reinforcing the importance of accessibility in PE settings.

Conversely, negative experiences often stemmed from when students felt uninformed, overlooked, or isolated due to communication gaps. Alves et al. (2021) found that hearing-impaired students frequently experience exclusion when teachers rely solely on verbal instructions. Gura et al. (2023) emphasized that a lack of inclusive teaching strategies can lead to anxiety and disengagement in PE settings. Li and Dong (2022) highlighted that social isolation negatively impacts students' motivation and participation. These findings emphasize the need for structured efforts to make PE classrooms inclusive, ensuring hearing-impaired students are actively engaged and supported. Teachers should consistently employ visual and non-verbal instructional methods to enhance classroom inclusivity. Recognizing and addressing the specific needs of hearing-impaired students can lead to a more positive and enriching PE experience.

### **Emerging Theme on the Challenges and Opportunities Encountered by Hearing-Impaired Learners in Physical Education**

The inclusion of hearing-impaired learners in Physical Education presents distinct challenges and opportunities that influence their overall participation and engagement. Through a comprehensive analysis of their experiences, three major themes emerged: (1) Specific Activity-Based Challenges, (2) Positive Opportunities for Skill and Confidence, and (3) Strategies for Overcoming Challenges. These themes highlight the barriers students face in activity comprehension, the moments of success that boost their confidence, and the adaptive strategies they employ to navigate difficulties. Understanding these themes provides valuable insights into fostering an inclusive and supportive learning environment for hearing-impaired learners in Physical Education.

#### **Emerging Theme 1: Specific Activity-Based Challenges**

Hearing-impaired students face challenges in PE activities that rely heavily on verbal communication. Group discussions, unclear instructions, and fast-paced activities contribute to confusion and difficulty in participation.

Hearing-impaired students often face unique obstacles during PE activities. For instance, the noise levels in gymnasiums and outdoor areas can make it difficult for these students to hear instructions, leading to potential safety concerns and misunderstandings (CID, 2019). Additionally, the reliance on auditory cues in many sports can disadvantage hearing-impaired learners, necessitating the adaptation of these cues to visual signals to ensure inclusivity (PE Scholar, 2023). Furthermore, the lack of awareness and training among PE teachers regarding the needs of hearing-impaired students can exacerbate these challenges (Saroja & Priya, 2023), highlighting the need for specialized professional development.

The challenges identified in this study, such as Specific Activity-Based Challenges, align with the Social Model of Disability, which emphasizes that limitations arise due to environmental and structural barriers rather than the disability itself. Thomas and Barnes (2017) highlighted that communication obstacles in group activities can exacerbate feelings of exclusion among hearing-impaired students. Similarly, Alves et al. (2021) found that verbal-centered instructions in PE classes hinder the active participation of students with hearing impairments. Also, Gura et al. (2023) emphasized that incorporating visual and interactive teaching methods helps reduce these barriers, promoting a more inclusive learning environment. Participants reported difficulties



in group activities, where verbal communication played a central role, making it challenging to follow instructions or contribute effectively. This finding suggests that PE curricula should incorporate more visual and interactive teaching strategies to minimize these barriers. Addressing these challenges requires teachers to adopt more accessible instructional approaches. Incorporating visual demonstrations, breaking down instructions into clear steps, and providing written guides can enhance understanding and engagement among hearing-impaired learners.

### **Emerging Theme 2: Positive Opportunities for Skill and Confidence**

Despite communication barriers, hearing-impaired learners experience moments of success that build their confidence and skill development. Activities with clear demonstrations and individualized practice opportunities contribute to their sense of achievement.

Despite these challenges, PE offers significant opportunities for hearing-impaired students to develop essential skills and build confidence. Engagement in adapted physical activities can enhance social interactions, promote physical fitness, and improve overall well-being (CCHAT Sacramento, 2023). Participation in sports has been shown to boost self-esteem and foster a sense of belonging among hearing-impaired students as they navigate and overcome communication barriers (Povlakić Hadžiefendić, 2023). Furthermore, (Lieberman & Grenier, 2019) cooperative learning strategies within inclusive PE settings increase social competence and reduce feelings of isolation.

At the same time, the theme, Positive Opportunities for Skill and Confidence, illustrates the empowering impact of inclusive teaching strategies. When given clear demonstrations and additional practice time, hearing-impaired students developed confidence and excelled in PE activities. Similarly, Wang and Wang (2021) found that structured visual instruction significantly enhances skill acquisition and self-efficacy among hearing-impaired learners. Also, Li and Dong (2022) emphasized that providing tailored accommodations, such as modified instructions and extended practice opportunities, fosters a sense of competence and inclusion. Furthermore, Smith et al. (2023) highlighted that adaptive teaching methods help mitigate disability-related challenges, reinforcing the principles of the Social Model of Disability and ensuring equitable participation in PE.

Educators can create a more empowering learning environment by recognizing and reinforcing these moments of success. Providing tailored instruction, offering additional practice time, and celebrating achievements can boost the self-confidence of hearing-impaired learners. Specifically, implementing a strengths-based approach, which focuses on identifying and building upon students' existing skills and talents, can significantly enhance self-efficacy (Rappaport, 2017). Furthermore, utilizing formative assessment techniques, such as providing specific and actionable feedback, can help hearing-impaired students understand their progress and identify areas for improvement (Wiliam, 2018). Finally, establishing a peer-mentoring program (Topping, 2017), where hearing-impaired students can support and learn from one another, can foster a sense of community and promote mutual encouragement.

### **Emerging Theme 3: Strategies for Overcoming Challenges**

Students employ various strategies to navigate challenges in PE, including observational learning, seeking peer support, and self-initiated practice. These self-directed learning methods help them adapt to their environment and improve participation.

Several effective strategies have been identified to address the unique needs of hearing-impaired learners in PE. Utilizing non-verbal cues, such as visual demonstrations and signals, can significantly aid in conveying instructions (PE Scholar, 2023). Regular communication and collaboration with the student's educational team and parents are essential to stay informed about changes in the student's hearing status or equipment, ensuring

appropriate accommodation is in place (CID, 2019). Additionally, fostering an inclusive classroom (Saroja & Priya, 2023), environment through adaptive teaching methods and promoting social interaction can help hearing-impaired students feel more integrated and supported in PE settings.

Encouraging self-directed learning strategies in PE can further support hearing-impaired students. Teachers should create an environment that promotes observational learning, peer assistance, and step-by-step instructional methods to facilitate comprehension. For example, teachers can utilize video modeling, where students observe and imitate desired skills, which has proven effective in promoting independent learning (Bellini & Akullian, 2017). Additionally, incorporating self-monitoring checklists and visual schedules can empower students to track their progress and manage their learning independently (Carnahan et al., 2015). Finally, providing opportunities for students to engage in self-evaluation and reflection (Zimmerman, 2015), such as through journal writing or peer feedback sessions, can foster metacognitive skills and promote lifelong learning habits.

### **Emerging Theme on The Impact of Communication on Their Participation and Engagement in PE Activities**

Effective communication plays a crucial role in the participation and engagement of hearing-impaired learners in Physical Education. Through an in-depth analysis of their experiences, three major themes emerged: (1) Difficulties Comprehending Instructions and Feedback, (2) Adaptive Communication with Teachers and Classmates, and (3) Impact on Engagement and Participation. These themes highlight the challenges students face in understanding instructions, the strategies they use to bridge communication gaps, and the effects of these barriers on their overall involvement in class activities. Recognizing these themes provides valuable insights into creating a more inclusive and accessible learning environment for hearing-impaired learners in Physical Education.

#### **Emerging Theme 1: Difficulties Comprehending Instructions and Feedback**

Communication barriers such as teachers facing away, lack of sign language proficiency, and insufficient visual aids hinder comprehension and participation in PE.

Hearing-impaired students often struggle with understanding verbal instructions and feedback in PE settings, leading to confusion and decreased participation. The fast-paced nature of many physical activities may not allow sufficient time for these students to process auditory information, resulting in missed cues and potential safety issues (Barboza et al., 2019). Similarly, Alves et al. (2021) found that inadequate communication strategies in PE can limit engagement and increase feelings of exclusion among hearing-impaired students. Also, Gura et al. (2023) emphasized that communication barriers hinder skill development and reduce the overall effectiveness of the PE experience, highlighting the need for more inclusive instructional methods.

The findings regarding communication difficulties, including Difficulties Comprehending Instructions and Feedback, further validate the Inclusive Education Theory and the Social Model of Disability. Participants struggled when teachers did not face them while speaking, lacked sign language proficiency, or failed to use visual aids. These barriers directly impacted on their ability to engage in PE activities. To improve comprehension, educators should integrate clear communication methods, including sign language, written instructions, and consistent use of visual aids. These strategies can enhance accessibility and participation for hearing-impaired students. Specifically, implementing Universal Design for Learning (UDL) frameworks can address these communication barriers by providing multiple means of representation, expression, and engagement (CAST, 2018). Furthermore, the use of augmentative and alternative communication (AAC) devices can support hearing-impaired students in expressing their needs and understanding instructions (Beukelman & Mirenda, 2016). Finally, fostering a culturally responsive teaching approach (Gay, 2018), which acknowledges and respects the diverse communication styles and needs of all students, can create a more inclusive and equitable learning environment.

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## Emerging Theme 2: Adaptive Communication with Teachers and Classmates

Students use adaptive communication methods, such as sign language, gestures, and written notes, to clarify instructions and seek assistance.

Implementing adaptive communication methods is essential to bridge the gap between hearing-impaired students and their hearing peers and instructors. Strategies such as using sign language, visual aids, written instructions, and ensuring that the student's attention is obtained before speaking can greatly enhance understanding (Anderson & Krause, 2020). Similarly, Peñaflorida et al. (2019) emphasized that combining visual and non-verbal communication improves engagement and comprehension in PE settings. Also, Mitchell and Karchmer (2023) highlighted that teachers should maintain eye contact, speak clearly, and use gestures or demonstrations to supplement verbal instructions. Furthermore, Lieberman, Ponchillia, and Ponchillia (2021) reinforced that these inclusive practices not only aid comprehension but also foster a supportive learning environment where hearing-impaired students feel valued and empowered.

On the other hand, the theme of Adaptive Communication with Teachers and Classmates demonstrates the resilience of hearing-impaired learners. Participants developed strategies to bridge communication gaps by relying on gestures, writing notes, or seeking peer help. Similarly, Alves et al. (2021) found that hearing-impaired students often create their own communication methods to navigate classroom interactions effectively. Also, Tan and Nonis (2017) emphasized that peer support plays a crucial role in fostering inclusion and ensuring these students remain engaged in PE activities. Furthermore, Smith et al. (2023) highlighted that implementing structured adaptive communication strategies can enhance participation and create a more inclusive learning environment.

Promoting adaptive communication strategies in PE can bridge gaps in understanding. Encouraging gestures, writing, and peer support can foster a more inclusive and engaging learning environment. Specifically, the implementation of visual communication systems, such as Picture Exchange Communication System (PECS), can facilitate effective communication between hearing-impaired students and their peers and teachers (Bondy & Frost, 2011). Furthermore, the integration of technology-based communication tools, like real-time captioning and video sign language apps, can provide accessible and immediate communication support (Bryen & Gallagher, 2015). Finally, fostering a culture of collaborative communication (Light & McNaughton, 2015), where teachers and students actively negotiate meaning and adapt their communication styles to meet individual needs, can create a more supportive and inclusive learning environment.

## Emerging Theme 3: Impact on Engagement and Participation

Communication barriers often lead to frustration, boredom, and social withdrawal among hearing-impaired students. Without proper support, students feel left out and disengaged from class activities.

Effective communication directly influences the engagement and participation of hearing-impaired students in PE activities. When communication barriers are addressed through adaptive strategies, these students are more likely to participate actively and confidently in physical activities (Palinkas et al., 2015). Similarly, Lieberman, Ponchillia, and Ponchillia (2021) emphasized that improved communication fosters greater physical fitness, social interaction, and overall enjoyment of PE classes. Additionally, Mitchell and Karchmer (2023) highlighted that the absence of appropriate communication methods can lead to feelings of isolation, decreased motivation, and reluctance to participate. Therefore, prioritizing effective communication is crucial in fostering an inclusive and supportive PE environment for hearing-impaired learners.

However, without proper support, hearing-impaired students reported withdrawal from activities, frustration, and boredom due to communication barriers. Alves et al. (2021) found that inadequate communication strategies in PE settings contribute to disengagement and exclusion among hearing-impaired students.

Similarly, Gura et al. (2023) emphasized that communication barriers often lead to frustration and reduced motivation in physical activities. Also, Thomas and Barnes (2017) reinforced the Social Model of Disability, arguing that societal and institutional failures, rather than individual impairments, are the primary obstacles to inclusion. Addressing these barriers through inclusive policies, teacher training, and structured communication strategies can enhance student participation and engagement.

Promoting adaptive communication strategies in PE can bridge gaps in understanding. Encouraging gestures, writing, and peer support can foster a more inclusive and engaging learning environment. Specifically, utilizing multimodal communication approaches, which combine various forms of communication such as sign language, gestures, and visual aids, can enhance comprehension for hearing-impaired students (Rowland, 2018). Creating opportunities for peer-mediated interventions, where hearing peers are trained to facilitate communication and provide support to hearing-impaired students, can also promote social inclusion and enhance communication skills (Carter et al., 2016). Finally, fostering a classroom environment (Florian & Black-Hawkins, 2018) that values and celebrates diverse communication styles can encourage all students to actively participate and contribute to the learning process.

### Simulacrum



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## SUMMARY, CONCLUSION, AND RECOMMENDATION

This chapter summarizes findings, conclusions, and recommendations based on the lived experiences of hearing-impaired learners in learning Physical Education within mainstream classrooms. The study explored the challenges and opportunities these learners encounter and the impact of communication barriers on their participation and engagement. The results provide insights into the importance of inclusive teaching strategies and adaptive communication methods to enhance the learning experience of hearing-impaired students in Physical Education.

### Summary

The study explored the lived experiences of hearing-impaired learners in mainstream physical education classrooms by describing lived experiences, challenges, and opportunities for hearing-impaired learners and the impact of communication barriers on their participation and engagement in physical education activities within mainstream classrooms.

Key findings revealed four primary themes regarding lived experiences: (1) Reliance on Visual and Peer Cues, (2) Emotional Complexity in Day-to-Day PE, (3) Inclusion and Exclusion in Everyday Interactions, and (4) Memorable Moments Shaping Daily Experience. Hearing-impaired learners depend on visual demonstrations and peer modeling to follow instructions. Emotional responses vary, with excitement and enjoyment tempered by frustration and exclusion due to communication barriers. Social interactions play a crucial role in their engagement, with moments of inclusion fostering a sense of belonging and exclusion leading to withdrawal.

Challenges and opportunities identified in the study were categorized into three themes: (1) Specific Activity-Based Challenges, (2) Positive Opportunities for Skill and Confidence, and (3) Strategies for Overcoming Challenges. Verbal instruction-based activities and group discussions posed difficulties, while clear demonstrations and individualized practice provided opportunities for skill development. Students employed personal strategies such as watching peers, seeking help, and practicing independently to navigate challenges.

Regarding communication barriers, three themes emerged: (1) Difficulties Comprehending Instructions and Feedback, (2) Adaptive Communication with Teachers and Classmates, and (3) Impact on Engagement and Participation. The lack of sign language proficiency among teachers, the absence of visual aids, and language mismatches hindered comprehension. Students relied on sign language, gestures, writing notes, and peer assistance to compensate. Communication barriers led to frustration, withdrawal, and reduced participation.

### Conclusions

The following conclusions are based on the synthesized emerging themes and the participants' experiences.

Hearing-impaired students in mainstream Physical Education (PE) classrooms face significant challenges related to communication barriers, instructional accessibility, and social inclusion. Many struggle to comprehend verbal instructions and feedback, particularly when teachers rely solely on spoken communication without accompanying visual aids or gestures. This leads to confusion, disengagement, and feelings of exclusion. The fast-paced nature of PE activities further exacerbates these difficulties, making it harder for students to process information and participate effectively.

Despite these challenges, hearing-impaired students experience moments of success and confidence when inclusive teaching strategies are implemented. Visual demonstrations, peer support, and individualized learning approaches play a crucial role in fostering engagement and skill development. The study highlights that when teachers integrate sign language, written instructions, and structured peer collaboration, hearing-impaired students feel more valued and included in class activities. Their emotional responses in PE fluctuate depending on the level of social interaction and the effectiveness of instructional methods. Clear



communication fosters enthusiasm and motivation, whereas a lack of accessibility leads to frustration and withdrawal.

To navigate communication challenges, hearing-impaired students develop adaptive strategies such as watching their peers, using gestures, writing notes, or seeking clarification from classmates. However, these self-initiated efforts should be reinforced by systematic changes in teaching practices. Educators need to modify their instructional methods proactively, ensuring that all students—regardless of their hearing ability—receive clear and equitable learning opportunities.

For PE classrooms to become fully inclusive, intentional reforms in teaching strategies and institutional support are necessary. This includes teacher training in adaptive communication methods, the integration of assistive technologies, and the promotion of peer awareness programs to encourage a more supportive environment. Schools must prioritize accessibility in curriculum planning, ensuring that hearing-impaired students receive the necessary tools and accommodations to participate actively. By fostering a multimodal approach to teaching, educators can create a more engaging, equitable, and empowering learning experience for hearing-impaired students in PE.

## Recommendations

Based on the conclusions, the following recommendations are proposed:

1. Teachers may integrate visual learning strategies such as demonstrations, written instructions, and multimedia resources to enhance comprehension and engagement for hearing-impaired students in PE.
2. The Department of Education (DepEd) may provide teacher training in inclusive education, covering basic sign language, communication strategies, and best practices to create a more accessible PE environment.
3. School administrators and PE teachers may promote peer support programs and use visual aids and non-verbal cues to improve accessibility. DepEd should also provide clear guidelines and resources for inclusive PE instruction.
4. Future researchers may examine cultural and social factors, technology-based interventions, and instructional strategies to improve the integration of hearing-impaired learners in PE. Expanding research to educators and policymakers can lead to more effective inclusion strategies.