

# *Teachers' Readiness, Restrictions, And Responsiveness In Inclusive And Adapted Physical Education*

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**Abstract**– Inclusive and Adapted Physical Education aims to provide accessible and equitable physical activity for students with or without special needs. Teachers' readiness and responsiveness are pivotal to alleviate the restrictions and the success of the implementation of inclusive and adapted physical activities. The readiness, restrictions, and responsiveness of teachers were meta-synthesized. A systematic search from three databases, Cross Ref, Open Alex, and Google Scholar, was done for studies published between 2020 and 2025. Following the PRISMA 2020 guidelines, 10 studies were selected for inclusion. The chosen 10 studies underwent screening utilizing the Critical Appraisal Skills Programme (CASP) checklist. Using thematic analysis, Teachers' Readiness, Restrictions, and Responsiveness in Inclusive and Adapted Physical Education were meta-synthesized. Four themes emerged, namely, teachers' awareness and perception in inclusive and adapted physical education, teachers' need for growth and support for inclusive and adapted physical education, teachers' challenges experienced in inclusive and adapted physical education, and teachers' practices in inclusive and adapted physical education. The meta-theme was teachers' readiness, restrictions, and responsiveness in inclusive and adapted physical education. The meta-synthesis highlights the multifaceted journey of teachers in an inclusive and adapted physical education. Being ready to face any form of restrictions would help the teachers find ways on how to respond to the varying educational needs of the learners. It is recommended that educational institutions offer professional teacher training and programs, provide accessible resources, and a supportive school culture for teachers to continually offer quality instruction.

**Keywords:** readiness, restrictions, responsiveness, inclusive physical education, adapted physical education

## I. INTRODUCTION

The worldwide demand for inclusive education emphasizes the necessity of guaranteeing equitable access to high-quality learning for all, particularly for students with special needs (Benitez et al., 2025). The United Nations Sustainable Development Goal 4 promotes high-quality, equitable, inclusive, and accessible education (UNESCO, 2023). In recent decades, several countries have enacted legislation and policies to guarantee inclusion in education for students with special needs in all schools. In the context of Physical Education, a key component of holistic development, this commitment manifests in the form of Inclusive Physical Education (IPE) and Adapted Physical Education (APE) which are programs that are theoretically informed and empirically validated, designed, implemented, and assessed to the diverse needs of students (Rakaa et al., 2025). With these initiatives, it ensures equal access to high-quality and meaningful physical activities for all students in a classroom setting.

In the Philippines, Physical Education is an essential element of the K-12 Basic Education Curriculum, designed to foster lifelong wellness and holistic development (DepEd, 2016). The Most Essential Learning Competencies established by the

Department of Education indicated that physical education is outcome-oriented and competency-based. Physical Education instruction in schools follows a blended modality (DepEd, 2020). The Department of Education promulgated DepEd Order 72, s. 2009, which asserts that no child should be excluded from educational opportunities. This indicates that students ought to assert their right to a suitable education within a standard or inclusive classroom. The Department of Education's Inclusive Education Program, supported by the entire educational system and stakeholders, guarantees that every child, irrespective of their abilities, has equitable access to formal education. Furthermore, DepEd Order No. 44, s. 2021, offers a framework for delivering programs and services to the special needs of students. It highlights the significance of Adapted Physical Education, a program that modifies learning competencies to align with the needs of the students. These programs are directed by each learner's Individualized Education Plan (IEP), which delineates required accommodation and modifications to facilitate meaningful engagement in physical activities.

It is essential to consider the educational policy guidelines pertaining to disability, as well as the sociocultural attitudes towards disability within society. The rising enrollment of students with disabilities in inclusive physical education classrooms indicates a growing acknowledgment of their rights to participate in educational activities (Alhumaid, 2023). The success of these practices is contingent upon the proficiency of physical educators' training and the institutional framework that facilitates such inclusion (Jung et al., 2022).

Furthermore, studies collectively discussed that while teachers recognize the concepts of Inclusive and Adapted Physical Education, many underwent difficulties. This lack of preparedness stems from insufficient training and limited access to professional development (Tarantino et al., 2022; Karamani et al., 2024) affects the ability and confidence of the teacher to address complex needs of the students (Benová et al., 2022; Kalyva et al., 2022). Moreso, teachers have reported systemic challenges that had led to frustration, restricted ability to accommodate students' needs, and limited differentiated instruction methods (Orhan et al., 2025; Clare, 2025; Thompson, 2025; Azubuike et al., 2023). Despite the setbacks, many teachers have implemented inclusive strategies based on the Universal Design for Learning (UDL) which highlights differentiated instructions (Cats, 2022; Lieberman & Grenier, 2021).

Moreover, teachers' readiness and responsiveness are essential to effectively deliver inclusive and adapted physical education and to alleviate the growing concern about teachers' restrictions to provide meaningful learning experiences for students with special needs. While several teachers show commitment to inclusive goals, their efforts must be strengthened. As suggested by Kilag et al. (2024), qualitative research is required to enrich the many quantitative studies on teachers' readiness, restrictions, responsiveness in inclusive and adapted physical education.

Domain of Inquiry: This paper meta-synthesizes the teachers' readiness, restrictions, and responsiveness in inclusive and adapted physical education.

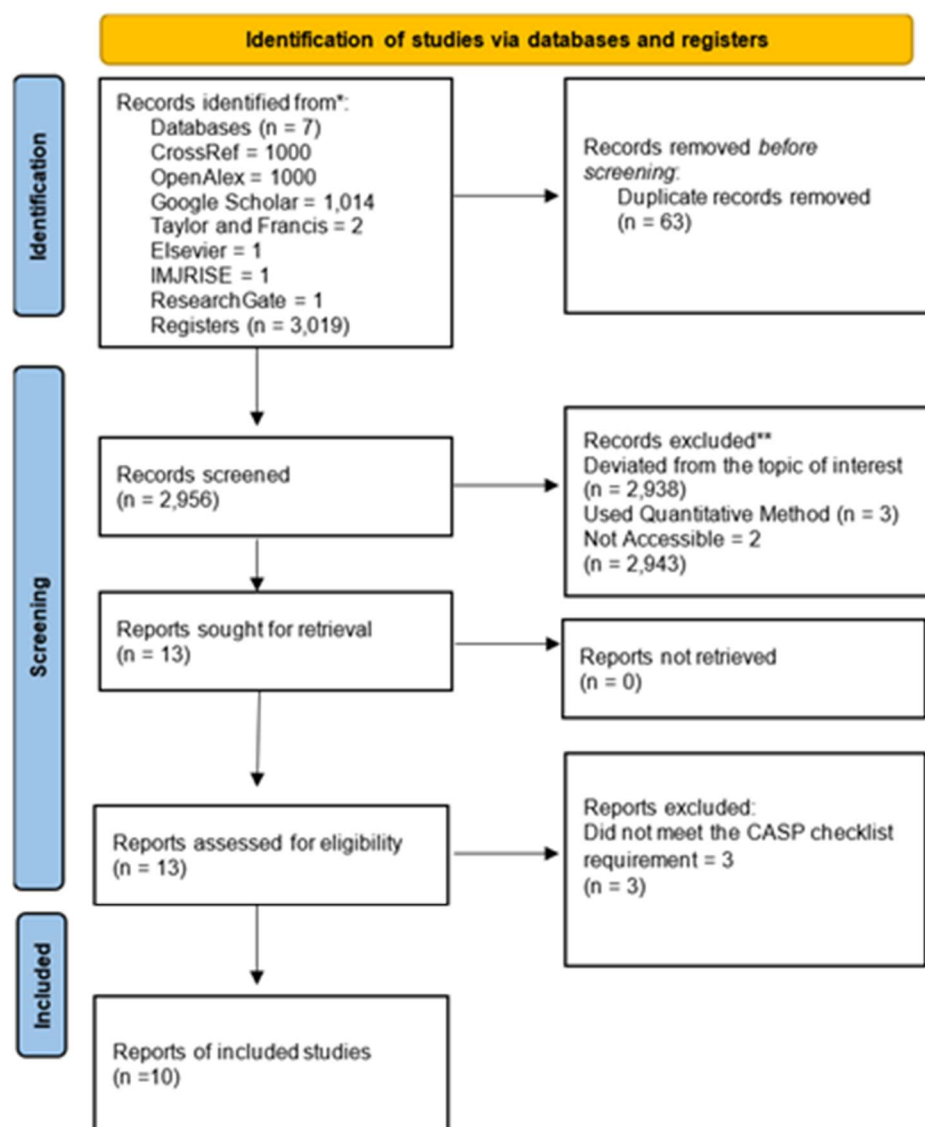
## II. METHODOLOGY

The study used a meta-synthesis qualitative approach in bringing together qualitative evidence from research on teachers' readiness, restriction, and responsiveness in adapted and inclusive physical education settings. Meta-synthesis is an interpretive strategy approach that attempts to do more than simply summarize a review of what is already known. Meta-synthesis uses critical analysis and reinterpretation of qualitative data from various studies to arrive at new knowledge and a deeper understanding of a phenomenon (Walsh & Downe, 2005). The study thus investigated teachers' readiness, restriction, and responsiveness with regard to educational progress in an adapted and inclusive setting.

The research design used is appropriate for the aim of the study in investigating the teachers' readiness, restrictions, and responsiveness strategies they use in adapted and inclusive physical education. Thus, it allowed for the inclusion of different viewpoints and experiences in diverse settings. The study derived and established key themes relevant to inclusive education theory and practice using the integration of qualitative results.

With the help of the Publish or Perish software (Harzing, 2007), the researcher accumulated studies using Cross Ref, Open Alex, and Google Scholar. This will be based on the keywords, teachers, readiness, restrictions, responsiveness, adapted physical

education, inclusive physical education, and basic education. The whole course of the review of the search results was reported and used the PRISMA 2020 Flow Diagram (Page et al., 2021) to guide and document the process to guarantee a transparent and systematic manner to review the available literature, as shown in Figure 1.



**Figure 1: Literature Search and Screening Using the Prisma Flow Diagram**

Figure 1 represents the literature search and screening procedures adhering to the PRISMA flowchart. The initial database research produced 3,019 articles: Crossref= 1000, Open Alex = 1000, Google Scholar = 1,014, Taylor and Francis = 2, Elsevier = 1, IMJRISE = 1, and ResearchGate = 1, which were subsequently refined through manual checking to eliminate 63 duplicates, leaving 2,956 for further screening. Abstract review led to the exclusion of 2,943 articles, based on predefined criteria: 2,938 articles deviated from the topic, 3 articles used quantitative methods, and 2 articles were inaccessible. 13 studies were sought for retrieval and assessed for eligibility from the database. Finally, a rigorous full-text appraisal utilizing the CASP Checklist (2018) resulted in the exclusion of 3 articles as they were quantitative studies, and the abstracts were not consistent with the study's scope, yielding 10 articles that adhere to the inclusion criteria.

To maintain the trustworthiness and standards of the chosen studies, the researchers employed the Critical Appraisal Skills Programme (CASP) checklist. This checklist evaluated every study on the critical components, including the articulation of aims, methodology, overarching research design, participant recruitment, data collection techniques, reflexivity, ethics, detailed critique about rigor within the analysis of data, conveying of results, and appraisal of research significance. Every study underwent evaluation and was graded against these measures.

From the 13 studies evaluated with the CASP checklist, 3 were excluded due to not meeting the methodological criteria or discrepancies between their abstracts and full texts. As Willig and Wirth (2018) indicate that the final number of studies included in the process of meta-synthesis should include at least 10 or 12 from primary studies. Only 10 studies received high CASP scores, demonstrating qualitative rigor and meeting the criteria.

These 10 studies published between 2020 and 2025 spanned English publications and focused solely on the instructors' readiness, constraints, and adaptation responsiveness in inclusive and modified physical education, as shown in Table 1.

**Table 1: Studies focusing on teachers' readiness, restrictions, and responsiveness in inclusive and adapted physical education**

No.	Authors / Year	Setting	Publication Type/ Research Design	Participants	Grade Level	Focus of the Study	Teachers' Readiness, Restrictions, and Responsiveness in: <ul style="list-style-type: none"> <li>• Inclusive Physical Education</li> <li>• Adapted Physical Education</li> <li>• Inclusive and Adapted PE</li> </ul>
S1	Rakaa et al. (2025)	Morocco	Article/ Qualitative	Teachers  Total number of participants not specified	Basic Education	Adapted Physical Education & Inclusive Physical Education	1. Adapt physical activities, implementing inclusive pedagogical models, and utilizing specific teaching resources are essential for ensuring active and equitable participation among students.  2. Collaborative teaching and peer tutoring have been shown to enhance student engagement and socialization for both students with and without disabilities.  3. Develops educational policies and training programs that support inclusion and accessibility in physical education.  4. Collaboration among teachers, administrative staff, and educational communities play a key role in fostering inclusive and sustainable learning environments.
S2	Orhan et al. (2024)	Istanbul and Ankara	Article/Qualitative	27 Adapted Physical Educators		Adapted Physical Education	1. Teachers working with ASD individuals, in general, do not have sufficient knowledge, pedagogical education specific to special needs, or the skill sets to deliver consistent or adequate APE courses.  2. Educators are faced with frequent and often intense behavioural problems during the lessons, and they have not been trained to deal with this in a way that is safe physically and mentally for themselves or the ASD individuals.
S3	Tarantino et al. (2022)	Ireland	Article/ Mixed Method	34 Teachers	Basic Education	Inclusive Physical Education	1. Teachers reported a lack of knowledge, which they perceived as being due to shortfalls in pre-service training.  2. Physical education teachers reported that they needed to learn formally (e.g., attend CPD workshops or conferences about inclusion) or informally (e.g., independently research pedagogical strategies).  3. Teachers' experience overcoming (perceived or actual) barriers to working directly with SEND children (and subsequently seeing them progress) can be a strong attitudinal reinforcer for teachers.  4. Teachers' experience of working effectively with SEND children in physical education built confidence and thereafter positively affected attitudinal judgments.  5. There was a general sense across studies that teaching students with mild disabilities was easier because it required fewer adaptations to lesson planning and individual in-class activities.  6. Larger class sizes negatively influenced teachers' beliefs

							<p>about the feasibility of including SEND children</p> <p>7. Teachers were concerned about both the safety of lessons for SEND children, and also the quality of teaching being delivered to support individual SEND learners.</p> <p>8. Teachers were inclined to feel more confident and competent teaching SEND children in smaller groups, where more individual attention could be given and where safety concerns could be closely and directly monitored.</p> <p>9. The degree of support teachers perceived they had influenced (either positively or negatively) their attitudes.</p> <p>10. The more support the teachers received, the more favorable their attitudes and perceived efficacy.</p> <p>11. Supporting behaviors between teachers were also widely reported.</p> <p>12. Many studies show that collaboration helped teachers to 'achieve' greater inclusion of SEND children.</p> <p>13. Support from parents was an important factor affecting inclusion.</p> <p>14. Found that teachers with favorable attitudes were also teachers who developed written plans for their classes – including considerations about how to differentiate one's teaching strategy to proactively enable inclusion. Thinking about modifications that would be required in a lesson plan – and making sure that one had the necessary equipment to support these modifications – were reported by teachers as strategies that were necessary for including SEND children.</p> <p>15. Consider safety and broader environmental factors affecting SEND children's engagement in physical education. For example, teachers found that it was easier to be inclusive during indoor activities. This is because they</p>
							<p>had more control over the range of possible environmental factors (e.g., easier to keep an eye on the group; access through the changing rooms for wheelchairs) affecting SEND children.</p>
S4	Lucero (2023)	United States of America (New Mexico)	Dissertation/Qualitative	1 General PE Teacher	Basic Education	Inclusive Physical Education & Adapted Physical Education	<p>1. Lack of support and professional development from other teachers left Kai feeling frustrated as a new teacher in his integrated PE classes.</p> <p>2. Lack of appropriate resources and support has led Kai to constantly ask the EAs and other people in the school questions about his students.</p> <p>3. Teaching PE in an environment with little resources, support, and adequate space increased his desire to pursue more professional development opportunities.</p>
S5	Karamani et al. (2024)		Article/Qualitative	PE teachers, Physical Educators, and General Teachers  Total number of participants not specified	Basic Education	Inclusive Physical Education	<p>1. PE teachers talked about the child as presenting one of the main barriers to inclusion.</p> <p>2. There was a general feeling across those studies that teaching students with mild disabilities was easier because it required less adaptation/modification in planning and less one-to-one support.</p> <p>3. Teachers also argued that the negative attitudes held by some of the peers (and some of the parents) towards marginalised groups presented a significant challenge to IPE.</p> <p>4. Parents' negative views about their children interacting socially with 'others' were also perceived to be detrimental as they influenced children's views of PE and their interactions with others</p> <p>5. There was consistent evidence that PE teachers perceived engagement in Continuing Professional Development (CPD) necessary to support inclusive provision.</p>



						<p>6. Teachers viewed themselves as 'inadequately' prepared to meet students' unique, complex needs and this was the outcome of limited Initial Teacher Education (ITE) and untargeted CPD.</p> <p>7. Teachers articulated concerns related to systemic barriers to inclusion and these were related to policy and curriculum, school resources, equipment/facilities and staff (un)availability</p> <p>8. The curriculum was described as narrow, inhibiting the appropriate accommodation of learners' differences</p> <p>9. The competitive nature of PE was also believed to be a constraining factor, leading to arguments and tensions between native and refugee students</p> <p>10. Argued that without adequate resources (e.g. specialised equipment, space, class size), support (e.g. time for planning) and adequate weekly time for PE, it was difficult to address the needs of all students, especially those with SEND and other marginalised groups.</p> <p>11. Inadequate resources were primarily about limited human resources. The lack of availability of additional support staff in lessons, such as Teaching Assistants (TAs), was a barrier identified, especially when class sizes were large.</p> <p>11. Lack of support staff equated to teachers' inability to provide SEND students (especially those with severe and complex needs) the one-to-one teaching required to stay engaged in tasks</p> <p>12. Teachers underlined that TAs need to be knowledgeable, show enthusiasm, and have the required skills in PE to add value</p>
						<p>13. Teachers argued that engaging students actively in the learning process and giving them choice made the learning environment more inclusive.</p> <p>14. Reported that learner-centred pedagogies, alongside a strengths-based, can-do approach, were advocated by teachers as enabling inclusion.</p> <p>15. Teachers offered opportunities to students to get involved in learning by creating their own games in PE and this was perceived as a powerful way to make learning experiences more inclusive.</p> <p>16. Teachers offered students choice of activities 'based on students' individual interests' to increase participation</p> <p>17. For SEND students, DI was perceived to provide access to educational resources, affording appropriate participation and tailored opportunities for practice so that students experienced success</p> <p>18. Teachers reported differentiating by equipment, rules and various aspects of the learning environment, including grouping arrangements (e.g. small group modified tasks), use of space and time for practice.</p> <p>19. Teachers raised concerns that DI could result in SEND students being singled out or even marginalised, with potentially significant negative impact on their psychological and physical development.</p> <p>20. Observed that the provision of additional support through DI needs to be done in a way that SEND students stand out in a positive light;</p> <p>21. Utilising cooperative practices with heterogeneous grouping (e.g. tasks that require input from all, collaborative problem solving and positive interdependence) was a key approach to inclusive education.</p>

							<p>21. For some teachers, teaching PE inclusively meant the facilitation of nurturing relationships between students (Majoko 2019), and the creation of an atmosphere of ownership (Furuta et al. 2022) that 'embrace multiple perspectives and provide equitable opportunities for learning'</p> <p>22. Building positive peer relationships for effective inclusion was not an established practice across the different studies reviewed.</p> <p>23. Teachers raised serious concerns about those students who were negative towards otherness, lacking the knowledge, understanding and skills to interact productively and meaningfully.</p>
S6	Azubuike et al. (2023)	United States of America and United Kingdom	Book/Qualitative	Teachers Total number of participants not specified		Adapted Physical Education	<p>1. Insufficient knowledge of Adapted Physical Education</p> <p>2. Lack of special equipment</p> <p>3. Unfriendly school environment</p> <p>4. Lack of time for adaptive physical education</p> <p>5. Lack of support personnel</p> <p>6. Large class size</p> <p>7. These teachers should know how to customize physical education to meet the needs of people with disabilities which is adapted to physical education.</p>
S7	Thompson (2025)	New Hampshire	Article/Qualitative	14 Physical Education Teachers	Basic Education	Adapted Physical Education	<p>1. Teachers' biggest barriers were inadequate physical space, limited equipment, no funding or financial support, lack of paraprofessional help in the classroom, oversized classes, and specific challenges when working with students that have Social Emotional Learning disabilities.</p>
							<p>2. Physical Education teachers also reported that managing paraprofessionals, behavior management, and time management are some of their most challenging obstacles.</p> <p>3. Three biggest barriers were time, paraprofessional support, and non-disabled students that have negative attitudes towards the students in the class that have disabilities.</p> <p>4. The administrators (i.e., superintendent, principal, assistant principal, and special education director) at their school think there is a sort of mindset that students with special needs will just be fine in Physical Education because it is PE, and they can be active.</p> <p>5. Many of the participants in this study have experience using modified equipment and modifying the rules of the game.</p> <p>6. The lack of funding and financial resources has resulted in her inability to purchase and obtain proper and necessary equipment for students with disabilities in her class.</p>
S8	Grech (2021)	Malta	Dissertation/Qualitative	6 PE Teachers	Basic Education (Primary and Secondary)	Adapted Physical Education	<p>1. More than half of the interviewed participants replied that their schools have policies regarding students with SEND namely inclusive school approach policies and accessibility policies.</p> <p>2. The majority of the participants remarked that their schools have various large premises for PE lessons while only Edward argued that the school lacks in facilities</p> <p>3. The notion of inclusion Responsibilities of PE teachers and SEN students' rights in education</p> <p>5. The majority of the participants feel that the training provided by the University of Malta was either not useful or</p>

							<p>not enough. In addition, all PE teachers agreed that the University had not prepared them enough to implement APE and that more training should be given.</p> <p>6. According to the majority of the participants in this study, knowledge and proper training are the most crucial aspects to educate individuals with diverse needs and to help them be successful. Others strongly feel that training and years of experience are crucial to feel competent in adapting PE.</p> <p>7. Despite the lack of training, the majority of the respondents claimed that they still feel confident teaching SEN students, adapting PE to different needs and progressing activities to their abilities. Findings show that the experience gained throughout their teaching career has enhanced their confidence in adapting PE.</p> <p>8. Additionally, half of the PE teachers admitted that experience was the only source that has provided them with knowledge on APE and how to deal with SEN students.</p>
S9	Kilag (2024)		Article/Mixed Method	Teachers Total number of participants not specified	Basic Education	Inclusive Physical Education	<p>1. An overall mean of teachers' attitudes that leans towards positivity, indicating a general inclination towards inclusive practices within PE settings.</p> <p>2. Teachers who possess comprehensive knowledge about inclusive pedagogy and have received specialized training may exhibit more positive attitudes towards inclusion compared to those who lack such preparation (Hodge et al., 2009).</p> <p>3. Positive experiences of successfully including SEND students in PE activities may foster a sense of efficacy and fulfillment, leading to more favorable attitudes towards inclusion (Sato &amp; Hodge, 2009).</p>



						<p>4. Teachers who perceive themselves as lacking sufficient knowledge about disabilities and inclusive pedagogy may exhibit more cautious or hesitant attitudes towards inclusion (Hersman &amp; Hodge, 2010).</p> <p>5. Teachers' prior experiences of working with SEND children play a significant role in shaping their attitudes towards inclusion in PE.</p> <p>6. Challenges or negative encounters may lead to feelings of frustration or inadequacy, influencing teachers' attitudes towards the feasibility and desirability of inclusive practices (Hodge et al., 2004).</p> <p>7. The type and severity of disabilities present among students can also influence teachers' attitudes towards inclusion in PE.</p> <p>8. Studies indicate that educators may feel more confident and competent in working with students with mild to moderate disabilities compared to those with severe or complex needs (Hutzler &amp; Barak, 2017).</p> <p>9. Teachers may express preferences for specific disability categories based on their perceptions of manageability and adaptability within the PE context (Morley et al., 2005).</p> <p>10. Understanding the unique challenges associated with different types of disabilities can inform educators' attitudes and approaches towards inclusion.</p> <p>11. The size of the class and student-teacher ratios can impact teachers' perceptions of the feasibility and effectiveness of inclusion in PE.</p> <p>12. Collaboration among teachers and access to teaching assistance are critical factors that influence attitudes towards PE inclusion.</p>
						<p>education.</p> <p>4. Teachers often need to address a range of disabilities, including mental disabilities and physical injuries, and adapt their teaching methods accordingly. This can involve repeated instructions, the use of visual cues, and creating alternative activities to ensure all students can participate effectively.</p> <p>5. However, it is challenging for the novice PE teachers specially that they lack experience and knowledge in handling this kind of learners.</p>

						<p>4. Teachers who perceive themselves as lacking sufficient knowledge about disabilities and inclusive pedagogy may exhibit more cautious or hesitant attitudes towards inclusion (Hersman &amp; Hodge, 2010).</p> <p>5. Teachers' prior experiences of working with SEND children play a significant role in shaping their attitudes towards inclusion in PE.</p> <p>6. Challenges or negative encounters may lead to feelings of frustration or inadequacy, influencing teachers' attitudes towards the feasibility and desirability of inclusive practices (Hodge et al., 2004).</p> <p>7. The type and severity of disabilities present among students can also influence teachers' attitudes towards inclusion in PE.</p> <p>8. Studies indicate that educators may feel more confident and competent in working with students with mild to moderate disabilities compared to those with severe or complex needs (Hutzler &amp; Barak, 2017).</p> <p>9. Teachers may express preferences for specific disability categories based on their perceptions of manageability and adaptability within the PE context (Morley et al., 2005).</p> <p>10. Understanding the unique challenges associated with different types of disabilities can inform educators' attitudes and approaches towards inclusion.</p> <p>11. The size of the class and student-teacher ratios can impact teachers' perceptions of the feasibility and effectiveness of inclusion in PE.</p> <p>12. Collaboration among teachers and access to teaching assistance are critical factors that influence attitudes towards PE inclusion.</p>
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Moreover, in the six-phase thematic analysis by Braun and Clarke (2006), the researchers first used initial codes independently and then built interim themes through rigorous and systematic discussion with the data. To enhance its credibility and confirmability, an expert was subjected to a cross-check of the researchers' emergent themes. To further evaluate the themes based on their consistency, coherence, and relevance with the data corpus, research experts identified the themes and sub-themes cross validation. Furthermore, so that the themes were not based on the researchers' interpretation alone, this was built into a methodological triangulation that incorporated multiple viewpoints—the researchers' and the external experts. The experts' feedback allowed reflective deliberation by the research team which led to further clarification and refinement of the themes. It enhanced the validity of the findings by reducing potential research bias and enhancing thematic validity through the triangulation process.

#### Inclusion and Exclusion Criteria

The research studies integrated in this meta-synthesis were chosen using specific inclusion criteria. The study addressed teachers' readiness, restrictions, and responsiveness in inclusive and adapted physical education. Only qualitative or mixed-method studies with qualitative data presented clearly were considered for inclusion. Articles focused exclusively on student outcomes, purely quantitative, or that did not examine teachers' readiness, restrictions, and responsiveness were excluded from the study. Only studies published between 2020-2025 were included, must be written in English and available in full text. Willig and Wirth (2018) affirm that meta-synthesis studies should consist of 10-12 articles. Thus, this study was conducted with 10 relevant articles that aligned with the research objectives. To achieve rigor, the qualitative research CASP checklist (2018) was used to assess the quality of the included studies, which in this case was the Critical Appraisal Skills Programme. This instrument assisted the researchers in determining the methodological rigor, relevance, and transparency of each study to ensure only robust and dependable findings would be used in the meta-synthesis.

## Data Analysis

The extracted data pertains to teachers' readiness, restrictions, and responsiveness within inclusive and adapted physical education. The data was analyzed using thematic analysis by Braun and Clarke (2006). Their 6-stage process combines familiarization with the data, creation of initial codes, identification of the theme, theme review, theme definition and naming, followed by report writing. As a result, themes emerge to describe recurring readiness, restrictions, and responsiveness by teachers in inclusive and adapted physical education settings. The flexibility and ability to identify patterns across qualitative studies and the potential for interpretive depth led to the use of thematic analysis.

## III. RESULTS AND DISCUSSIONS

The results are then analyzed in alignment with the objectives, based on the meta-synthesis of the studies that were selected. Teachers' Readiness, Restrictions, and Responsiveness in Inclusive and Adapted Physical Education was identified as the meta-theme. Furthermore, four (4) themes emerged from the meta-theme, namely, teachers' awareness and perception in inclusive and adapted physical education, teachers' need for growth and support for inclusive and adapted physical education, teachers' challenges experienced in inclusive and adapted physical education, and teachers' practices in inclusive and adapted physical education.

### Theme 1: Teachers' Awareness and Perception in Inclusive and Adapted Physical Education

This theme highlights teachers' awareness and perception in inclusive and adapted physical education on delivering an efficient and effective lesson to all of the students including those with special needs.

#### Subtheme 1.1: Perceptions on Inadequate IPE and APE training

To produce a quality teaching and learning experience, teachers must have adequate training in IPE and APE. However, teachers reported that because of gaps in training, they are not that prepared to deliver Inclusive and Adapted Physical Education. In the study of Tarantino et al. (2022) and Ramos et al. (2022), teachers perceived that a lack of focused content in their pre-service training frequently made them ungrounded with enough knowledge and confidence to effectively support diverse needs of students. Thus, as stated in Karamani et al. (2024), teachers commonly viewed themselves as 'inadequately' prepared especially to meet students' complex and unique needs that are brought by inclusion. The lack of targeted and ongoing professional development is the result of their unpreparedness in addition to early training. Moreover, as a result of insufficient support for specialized training, numerous teachers are struggling to feel confident and capable of delivering to all students' quality, inclusive physical education experiences.

#### Subtheme 1.2: Perceptions on Teaching IPE and APE

The knowledge, experiences, and support received by educators in their professional environment deeply influence teachers' perception of teaching Inclusive Physical Education (IPE) and Adapted Physical Education (APE). A recent study emphasizes that there is a direct relationship between pre-service training and teachers' attitudes toward students with disabilities. Thus, teachers' attitudes toward students with special needs become more positive and their confidence improves only if there is early exposure of pre-service teachers to both theoretical and practical training on inclusion (Kalyva et al., 2022). In spite of that, self-efficacy can actually decline over time if there is no continued exposure to specialized training and inclusive practices.

In the Slovak context, research by Benová et al. (2022) found that it would leave educators feeling a lack of preparedness to support students' complex behavioral and sensory needs if there is a lack of APE-specified preparation in teacher education programs. Moreover, these recent studies highlight that to finally embrace inclusive teaching for physical education classes with competence and confidence, then there must also be consistent training and systemic support for teaching IPE and APE.

#### Subtheme 1.3: Special Needs Awareness

Teachers' methods and approach in inclusive physical education highly depend on their awareness of the different needs of all the learners, including those with disabilities. While some teachers were quite sure of the potential of these students, others were not. There are teachers that prefer and are more confident instructing learners with only mild disabilities rather than those with

severe ones (Sari et al., 2022). Research reveals that teachers are better equipped to adapt different teaching methods and would provide a supportive learning environment, only if they have understood the different and specific challenges associated with diverse types of disabilities (Kilag et al., 2024). With this awareness, not only do they build empathy and openness toward inclusive practices, as well as help them respond to students' needs more effectively. Since teachers have become more informed, they are more likely to feel confident and view inclusion as a meaningful part of teachers' role in equity and participation of all learners, rather than viewing it as a burden.

## Theme 2: Teachers' Need for Growth and Support for Inclusive and Adapted PE

This theme displays the teachers' career growth opportunities, specifically it discusses the continuous professional growth of teachers. It also indicates the collaboration and professional support of stakeholders to teachers handling inclusive and adapted PE.

### Subtheme 2.1: Continuous Professional Development

The professional development of teachers played a vital role in enhancing their capacity to deliver inclusive and adapted physical education. Teachers' participation in inclusive courses, seminars, and training workshops strengthen their quality to foster an equitable learning setting. Research revealed that professional development training positively impacts the targeted training programs for inclusion which enhances teachers' attitude towards inclusive PE (Kilag et al., 2024). Hence, teacher participation in professional development training and seminars focused on inclusive PE contributed to teachers' practices and attitudes in IPE (Echavez Jr, et al., 2024). Findings showed that attending conferences, CPD seminars, and independent research about IPE is an important requirement for teachers (Tarantino et al., 2022) as it is deemed as crucial in developing guidelines for inclusion (Karamani et al., 2024). Haegele et al. (2020) reported that teachers are obliged to keep up with the latest educational strategies, knowledge, and technology used in IPE and APE. These results highlighted the importance of continuous professional growth of teachers in teaching special needs students.

### Subtheme 2.2: People Support

Coordinating with other experts while growing and supporting one's development is the important way to encourage a safe environment. In addition, collaboration among colleagues, admin officers and academic groups helped teachers to accomplish greater inclusion of SEND children (Tarantino et al., 2022; Rakaa et al., 2025). These findings were supported by Dubey (2024), who found that inclusive programs are most effective when grounded in a culture of open dialogue and shared responsibility for teaching and learning. His studies showed that peer tutoring and skills tasks thrive best in environments where teachers are well and regularly trained and are encouraged to collaborate across subject areas. These strategies are not only designed to increase the participation of students with special needs but also foster an environment that is more accessible and responsive to the needs of all students. Moreover, outside of the classroom, it was also clear that acceptance and support from friends and guardians played a key role in shaping teachers' mindsets, which further influenced their attitudes and perceived efficacy toward IPE (Tarantino et al., 2022; Kilag et al., 2024). Furthermore, Rakaa et al. (2025) mentioned using collaborative teaching and learning strategies to enhance student engagement. Kim et al. (2021) suggested that collaboration and support among teachers highly contributed to the improvement of APE programs as well as increased job satisfaction among APE teachers. In addition to that, it clearly stated that inclusive and encouraging connections among students and teachers help guarantee that each learner realizes the matter and feels involved in their development (Fajardo et al., 2024). Finally, promoting a sense of cooperative responsibility and collaboration, ongoing proficiency helps contribute to the raising of inclusive point of view and practices among Physical Education teachers (Kilag et al., 2024).

## Theme 3: Teachers' Challenges Experienced in Inclusive and Adapted PE

This theme discusses the real-world barriers that teachers face in inclusive and adapted physical teachers. These barriers not only make teaching less effective, but they also affect teachers' motivation and ability to create a truly welcoming space for all students.

### Subtheme 3.1: Systemic Barriers

Systemic Barriers impede the successful delivery of inclusive and adapted physical education programs. The insufficient development programs and training for teachers dealing with students with special needs is an existing problem (Rakaa et al., 2020; Maher & Fitzgerald, 2020; Orhan et al., 2025). Teachers disclosed that they did not get adequate training on inclusion, accessibility, and teaching techniques in administering inclusive and adapted physical education (Orhan et al., 2025). This reveals that training programs for teachers highlighting professional development should include instructions on accessibility, inclusive practices, and skills for inclusive and adapted physical education.

Additionally, lack of structured curriculum led to a downfall in inclusive educational goals. Teachers conveyed their concerns concerning the limited and restricted curriculum as it impeded their ability to successfully deliver and accommodate the diverse needs of students with special needs (Karamani et al., 2024). In addition, lack of additional staff support placed full responsibility on the teachers, it impeded the effective implementation of inclusive and adapted physical (Karamani et. al, 2024). Teachers have to deal with diverse special needs of students on their own, which makes it hard to create appropriate and necessary accommodation (Clare, 2025).

Moreover, teachers found it challenging to impart lessons on empathy and inclusion in environments where discriminatory behavior towards students with special needs were tolerated or inadequately addressed by the school (Azubuike et. al, 2023). Additionally, teachers emphasized that the lack of appropriate resources and overpopulated classrooms reduced the effectiveness of differentiated instruction (Grech, 2021; Tarantino, 2022). In connection to this, Thompson (2025) stated that teachers' biggest barrier was the lack of funding or financial support. They expressed their frustration on the limited budget allocation which compelled them to utilize outdated or insufficient materials, and, in certain instances, finance necessary classroom supplies personally.

#### Subtheme 3.2: Teacher Attitudes and Preferences

Teachers' readiness and confidence to implement inclusive and adapted physical education practices are closely related to their attitudes and preferences, which shaped their experiences of teaching students with disabilities. Another factor that influenced the attitude of teachers towards teaching inclusion in PE was the specific type and degree of students' disabilities (Bertills & Björk, 2024; Kilag et al. 2024). Antala et al. (2022) stated that, the majority of the teachers' attitudes were hesitant and did not feel capable of handling students with special needs. As reported by Li (2024), learners with intense intellectual disabilities, autism, or serious problem behavior are the most challenging to involve. However, the majority of the findings have shown that teachers preferred to teach inclusive and adapted PE to students with mild disabilities as they found it easier to teach and required lesser adaptation in lesson plan making and class activities (Tarantino et al., 2022; Karamani et al., 2024). In addition to this, the class size appears to influence the attitude and confidence in teaching inclusive PE. Tarantino et al. (2022) reported that smaller class size enabled teachers to feel competent and highly confident in teaching inclusive and adapted PE. This is supported by the study of Gal (2025), lesser class sizes can support and provide more individualized attention for students with special needs. Despite the broad support for inclusion, teachers' attitudes and preferences tend to be more favorable when educating students with mild disabilities and in classes with fewer students.

#### Theme 4: Teachers' Practices in Inclusive and Adapted Physical Education

This theme focuses on the ways in which the teachers work in order to make teaching physical education inclusive and adapted for all students with special needs. It emphasizes the ways in which teachers build a supportive learning environment, enact modification, and encourage participation in inclusive and special education contexts.

##### Subtheme 4.1: Selecting and employing instructional strategies

Educators select instructional strategies that are motivating, inspiring, inclusive and attends to the needs of a diverse array of learners. Teachers employ a number of strategies to make sure that everyone is engaged by making use of everything they can at their disposal. Such strategies are aligned with the principles of Universal Design for Learning (UDL) (CATS, 2022). UDL suggested that all instructions should be designed at the start in order to accommodate learners.



Teachers discovered that adapting physical activity and using inclusive teaching strategies are inseparable; they are the necessary conditions for producing a niche in which everyone can enter learning (Rakaa et al., 2025). Teachers also found it was much easier to be inclusive when inside the classroom because they could control the environment to a greater extent in terms of space, noise levels, and equipment access. This degree of control led to more secure and targeted instructional modifications, especially for students with sensory or mobility challenges (Tarantino et al., 2022). Teachers use teaching approaches that are sensitive to the different abilities of students and give students choice and flexibility in their studies (Karamani et al., 2024). Teachers also allow students to participate in creating physical activities and games that they themselves would be involved in, promoting motivation and an increased sense of responsibility for sports. This emphasis on cooperative learning, mixed-ability grouping, and task differentiation elevates all peer group members to the level of active participants in tasks and promotes positive social interactions between group members.

As Lieberman and Grenier (2021) noted, UDL in Physical Education offers an organized set of strategies that promote multiple means of engagement, representation, action and expression to support equitable access and opportunity for all students. They stress that instruction needs to be able to adjust to students in multiple modalities such as visual, auditory, kinesthetic and incorporate peer support and flexible choices in equipment selections. Holland et al. (2023) supported this strategy by representing student's perspective: students with disabilities felt more included and motivated to learn when teachers engaged them with pedagogical practices such as modifying tasks, providing individual instruction, and promoting meaningful peer interactions. What was clear in their qualitative data is that everyone experienced that "everyone wants to be part of it."

Moreover, when using UDL-informed practices, such as the provision of diverse presentations of information, cooperative working tasks, and options for student responses, PE teachers are likely to provide welcoming, equitable, and engaging learning environments that enable all students to feel appreciated. The selection and employment of inclusive teaching strategies by teachers provide an active, fair, cooperative physical education environment where all students are recognized as valued participants regardless of ability.

#### Subtheme 4.2: Modification of Activities for Special Needs Learners

This relates to the strategies that the teachers utilize to adapt physical education activities to suit the students with special needs. These modifications are fundamental to allow all the students regardless of their ability level to meaningfully participate in physical education.

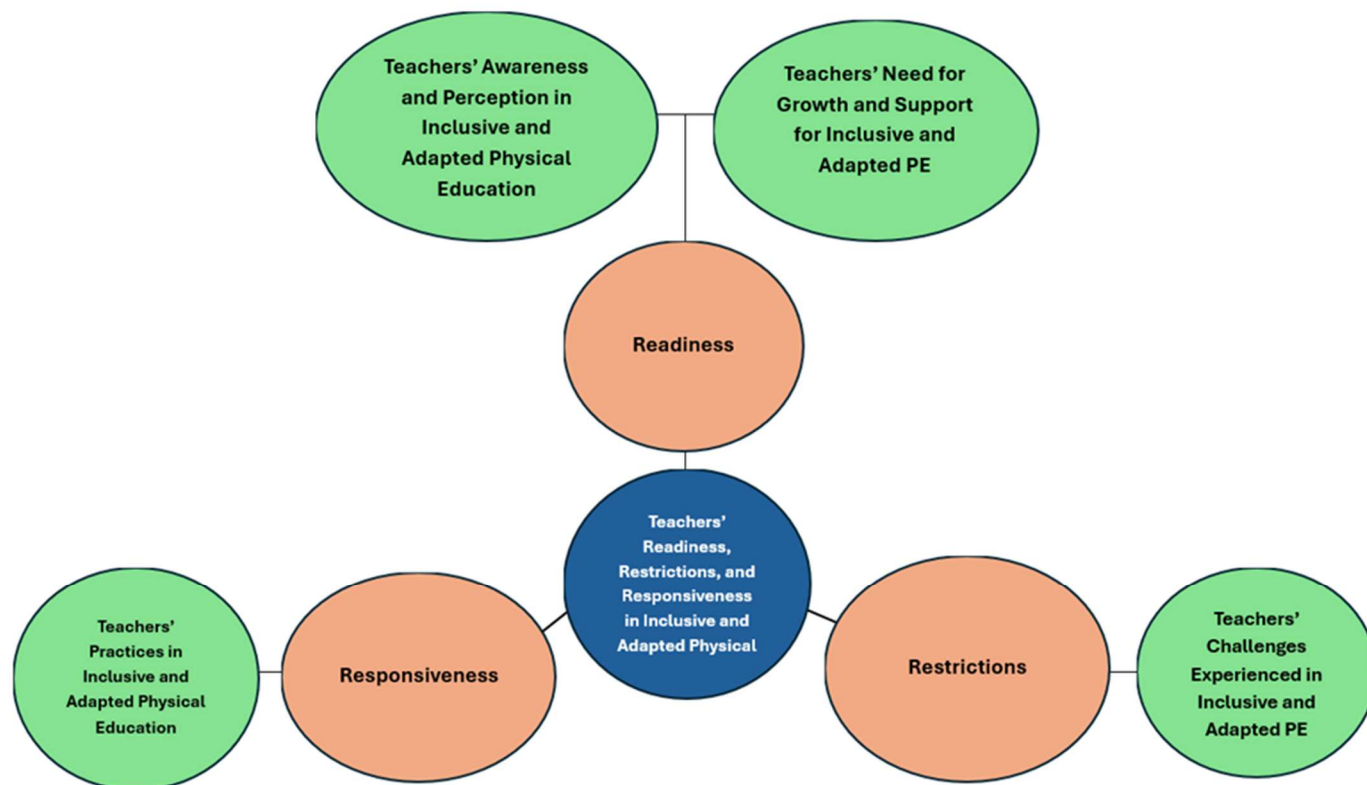
Teachers explained how they adapt or simplify instructions, use visual aids, or adapt equipment in response to their students' individual needs. According to Rakaa et al. (2025), being aware of how to modify teaching methods and selecting suitable materials can foster another kind of positive classroom atmosphere. Moreover, Azubuike et al. (2023) emphasize that "these teachers should be aware of how to adapt physical education for use by persons who are disabled and adapted to physical education" an indication of the knowledge and skills required to deliver teaching for diversity. Likewise, Alam et al. (2024) stated the effectiveness of changing rules, pacing, or difficulty of activities and using assessment types to keep students with disabilities engaged effectively.

Furthermore, teachers assigned groups based on students' ability, planned flexible lessons and tailored exercises to individual strengths and needs (Grech, 2021). They also stressed the importance of offering frequent feedback and closely watching students to help guide their adjustments. Fajardo and Ocdenaria (2024) noted that working with students with diverse special needs typically involved repeated instructions, use of visual aids, and different forms of activities or tasks to keep the students engaged and actively participating. Despite the barriers, teachers remain true in their commitment and creativity in adapting Physical Education activities to ensure that students with special needs are accommodated, supported, and enjoying physical education activities.

#### Meta-theme: Teachers' Readiness, Restrictions, and Responsiveness in Inclusive and Adapted Physical Education

The four (4) themes were synthesized to generate one (1) meta-theme, which is the "Teachers' Readiness, Restrictions, and Responsiveness in Inclusive and Adapted Physical Education". The meta-theme constituted the foundation of "3R Framework for Inclusive and Adapted Physical Education". This framework signifies the key factors that influence teachers' readiness, restrictions, and responsiveness in delivering inclusive and adapted physical education. By concentrating on these domains, teachers are

empowered to deliver inclusive and adapted physical education strategies that are meaningful and responsive to students' needs. Addressing these areas ensures that teachers are equipped to provide accessibility and appropriate accommodation for all students, particularly those with special needs.



**Figure 2: 3R Framework for Inclusive and Adapted Physical Education**

#### IV. CONCLUSION AND RECOMMENDATION

Teachers faced complex realities in delivering effective, inclusive and adapted physical education. The findings emphasize the importance of targeted initiatives to improve teacher proficiency and effectiveness while fostering inclusive and tailored educational environments. To facilitate the effective implementation of inclusive and adapted physical education, it is recommended that institutions in the academe may offer sufficient professional development programs and training, ensure the availability of appropriate and accessible resources, foster a supportive school environment, and cultivate positive relationships with stakeholders. Addressing these areas will enhance and fortify teachers' ability to accommodate diverse needs and promote meaningful learning experiences for students with special needs.

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