



Exploration of Disabled Students' Experiences in Adapting to Physical Activities

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Abstract

Background: Participation in physical activity supports the holistic development of students with disabilities by improving physical fitness, social interaction, emotional well-being, and self-confidence. However, diverse physical, cognitive, and behavioral characteristics often create adaptation challenges in special education, making understanding students' experiences essential for developing inclusive, responsive physical education environments.

Aims: This study aimed to explore the experiences of students with disabilities in participating in and adapting to physical activities at SLB N Kenteng Banjarnegara, Indonesia.

Methods: A qualitative phenomenological approach was employed to capture the lived experiences of participants. Six informants consisting of five students with disabilities and one physical education teacher were selected using purposive sampling. Data were collected through semi structured interviews, participant observation, and documentation. Data credibility was ensured through source and method triangulation as well as member checking. Thematic analysis following the Miles and Huberman framework was applied to identify patterns and meanings within participants' experiences.

Result: The findings revealed five main themes: participation and involvement in physical activities, personal experiences during physical education, teacher support and activity adaptation, social environment, and students' motivation and perceptions. Students generally demonstrated positive engagement when activities were adapted to their abilities. Supportive teacher guidance and positive peer interactions were found to significantly enhance students' confidence, enjoyment, and willingness to participate.

Conclusion: Adaptive physical education that emphasizes individualized support, inclusive social interaction, and meaningful participation can effectively promote positive learning experiences for students with disabilities.

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INTRODUCTION

Physical education is an integral component of the educational process that plays a crucial role in developing students' physical abilities, movement skills, social attitudes, and self-confidence (Kalina et al., 2018; Silva et al., 2022). For students with disabilities, participation in physical activities is not only important for improving physical fitness and motor development but also serves as a medium for fostering social interaction, independence, emotional well-being, and the formation of positive self-identity (Scifo et al., 2019; Yang et al., 2023). Through appropriately designed physical activities, students with special needs can experience meaningful learning that supports their holistic development.

Special schools (Sekolah Luar Biasa/SLB) are formal educational institutions specifically designed to serve students with diverse disabilities. However, the implementation of physical

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education in SLB presents unique challenges, particularly in adapting activities to accommodate students' varied physical, cognitive, and emotional characteristics (Y. Liu et al., 2023; Yotta, 2023). These adaptations extend beyond modifying learning materials or equipment; they also require flexible teaching strategies, empathetic approaches, and individualized instructional methods that align with each student's abilities and needs.

SLB N Kenteng Banjarnegara is one of the special education institutions that provides educational services for students with various types of disabilities, including intellectual disabilities, physical impairments, and autism spectrum disorders. Given this diversity, it is essential to understand how students experience and adapt to physical activities that have been adjusted to their conditions. Previous studies have highlighted the importance of modifying physical education programs in terms of planning, curriculum, games, assessment, and instructional strategies to better meet the needs of students with disabilities (Ben Rakaa et al., 2025; Tindall & Foley, 2011). Nevertheless, these studies have largely focused on technical adaptations rather than students' lived experiences during physical activity participation.

Exploring the experiences of students with disabilities is essential, as it provides deeper insight into their perceptions, challenges, emotional responses, and the forms of support they receive during physical activities (Kuriakose & Amaresha, 2024; X. Liu et al., 2025). Understanding these experiences is valuable not only for improving physical education programs in special schools but also for informing educational policies and strategies aimed at creating more inclusive, responsive, and effective learning environments (Hidayat et al., 2024; Soeharto et al., 2024). By examining students' perspectives, educators can better design physical education practices that promote inclusion and meaningful participation.

Several studies emphasize that adaptive physical education should prioritize students' individual experiences and active engagement rather than focusing solely on performance outcomes. Meaningful participation in physical activities enables students with disabilities to feel accepted, valued, and capable within their learning environment. However, empirical studies that specifically explore how students with disabilities perceive and experience adapted physical activities, particularly in the context of Indonesian special schools, remain limited.

Therefore, this study aims to deeply explore the experiences of students with disabilities in participating in and adapting to physical activities at SLB N Kenteng Banjarnegara. By adopting a phenomenological approach, this research seeks to capture students' lived experiences, including the meanings they assign to physical activities, the obstacles they encounter, and the adaptation strategies employed by teachers and the school. The findings of this study are expected to contribute to the development of more inclusive and student-centered adaptive physical education practices in special education settings.

METHOD

This study used a qualitative approach with a phenomenological study method, which aims to explore in depth the experiences of students with disabilities in adapting to physical activity in special education environments. The phenomenological approach was chosen because it can explore the subjective meaning of the experiences of individuals who directly experience the phenomenon (Creswell & Creswell, 2018). The subjects in this study were six students with disabilities from SLB N Kenteng Banjarnegara who were selected through a purposive sampling technique, with the criteria of actively participating in physical education activities and being willing to provide information openly. Data collection techniques were carried out through in-depth interviews, participant observation, and documentation. Data validity was maintained through source and method triangulation techniques, as well as member checking with informants to ensure the validity of the researcher's interpretation. Data analysis was conducted thematically using the Miles and Huberman model which includes three stages: data reduction, data presentation, and conclusion drawing (Miles et al., 2014).

Participants

The population of this study comprised students with special needs who participated in physical education activities at SLB N Kenteng Banjarnegara. The research participants consisted of five students with disabilities and one physical education teacher. Participants were selected using

purposive sampling, which focuses on selecting individuals who are considered capable of providing rich and relevant information related to the research objectives (Fraenkel et al., 2019). The selection criteria included students who were actively involved in physical education lessons, had identified disabilities as documented by the school, and were able to communicate their experiences during interviews.

Research Design

This study employed a qualitative research approach using a phenomenological method to explore the lived experiences of students with disabilities in adapting to physical activities at SLB N Kenteng Banjarnegara. The phenomenological approach was selected because it allows researchers to gain an in-depth understanding of how individuals perceive, experience, and interpret a particular phenomenon in their daily lives (Creswell & Creswell, 2018). Through this approach, the study focused on capturing the subjective meanings of students' experiences during participation in physical education activities.

Instruments

The main instrument used in this research is the human instrument, where the researcher plays a direct role in the research and acts as a data collector (Fraenkel et al., 2019). In this research, the researcher also uses supporting instruments in the form of a semi-structured interview guide that is prepared based on the aims and objectives of the research. This guide contains 10 questions for each student and physical education teacher. These questions are designed to explore the experiences, obstacles, and forms of adaptation of students in participating in physical activities.

Data Collection Techniques

Data were collected through multiple qualitative techniques to ensure depth and credibility of the findings. Semi-structured interviews were conducted with the students and the physical education teacher to explore their experiences, perceptions, challenges, and adaptation strategies related to physical activities. The interview guide consisted of ten open-ended questions designed to encourage participants to share their experiences freely. In addition to interviews, participant observation was carried out during physical education activities to capture students' interactions, engagement, and responses in natural settings. Documentation, such as lesson plans and school records, was also used to support and contextualize the data.

Procedures

The research was conducted in four main stages (Miles et al., 2014). The first stage was the preparation stage, which involved conducting a literature review, designing research instruments, and obtaining permission from relevant authorities. The second stage was data collection, during which semi-structured interviews, observations, and documentation were carried out. The third stage was data analysis, in which the collected data were transcribed, coded, and analyzed thematically. The final stage was reporting, where the findings were organized into a descriptive narrative that reflects students' experiences in adapting to physical activities.

Data Analysis

Data analysis was conducted using thematic analysis to identify patterns and meanings within the participants' experiences. The analysis followed the model proposed by Miles and Huberman, which consists of three interconnected steps: data reduction, data display, and conclusion drawing (Miles et al., 2014). To enhance data trustworthiness, triangulation of sources and methods was applied, and member checking was conducted by confirming the interpretations with the participants.

RESULTS AND DISCUSSION

Results

The results of this study are derived from in-depth interviews with five students with disabilities and one physical education teacher at SLB N Kenteng Banjarnegara, supported by participant observation and documentation. The analysis yielded several main themes that represent

students' experiences in participating in and adapting to physical activities. These themes include: (1) participation and involvement in physical activities, (2) personal experiences during physical education, (3) teacher support and activity adaptation, (4) social environment, and (5) students' motivation and perceptions toward physical activities.

Participation and Involvement in Physical Activities

The findings indicate that most students actively participated in physical activities that were adjusted to their individual abilities and conditions. The activities commonly implemented included light gymnastics, short-distance jogging, simple ball games, push-ups, and group-based physical activities. Although the activities were relatively simple, students demonstrated enthusiasm and willingness to engage. Several students expressed enjoyment during physical education lessons, despite experiencing physical fatigue at times. One student stated, *"I am happy to exercise with my friends, even though sometimes I feel tired."* This response reflects students' positive involvement in adapted physical activities.

Personal Experience During Physical Education

Students' personal experiences varied depending on their abilities and levels of confidence. Positive experiences were commonly associated with situations in which students felt capable, appreciated, and able to participate alongside their peers. One student shared that their most enjoyable experience occurred when they succeeded in completing an activity or outperforming their peers in a simple competition. However, some students also reported difficulties, particularly when required to follow complex movements or instructions. A student mentioned, *"I get confused when the movements are too difficult."* These experiences highlight both positive engagement and challenges encountered by students during physical activities.

Teacher Support and Activity Adaptation

On the topic of support and adaptation, almost all students stated that their teachers always helped them when they encountered difficulties, for example by repeating directions, physically assisting them (holding their hands or guiding them while walking) or giving instructions slowly. One student also stated:

"I was told to go slowly, and they didn't scold me."

This demonstrates that teachers provide personalized support and adapt appropriate methods for each student. It also demonstrates that teachers can create a comfortable environment and make physical exercise a fun activity without being overly pushy, so that students feel supported, and exercise becomes enjoyable.

Social Environment

Regarding the social environment, most students stated that their friends were kind and always supportive during physical activity. One student revealed that he often received applause from his friends when he finished an activity. This demonstrated positive support from his peers for exercising. Another student also stated:

"My friend likes to invite me to play sports together."

However, the teacher also emphasized that this caring attitude among friends still requires guidance and supervision from teachers and the school. Guidance and reinforcement of inclusive values are also essential so that students continually learn to accept and cooperate with one another.

Motivation and Perception

On the theme of motivation and perception, the students admitted that they want to continue exercising because it makes them happy and their bodies healthier. The physical education teacher also emphasized that sports are a very important part of education to improve fitness, cheerfulness,

and self-confidence, especially for children with special needs. The physical education teacher also said:

"I hope that sports activities in SLB receive more support from the school, parents, and the government. Hopefully, in the future, there will also be more disability-friendly sports equipment and training for teachers to develop further."

The students also hope that sports in school continue to be fun, fair, and can be participated in by all friends without feeling different.

Discussions

Based on interviews with students at SLB N Kenteng Banjarnegara, it shows that student involvement in physical activities is considered quite high, with types of activities adjusted to the abilities of each student. Although simple, activities such as gymnastics, jogging, ball games, and group activities can provide an inclusive space for all students. Children's involvement in physical activities is very important in supporting motor, emotional, and social development, especially for children with special needs (Crumbley et al., 2020; Zhang et al., 2024).

The majority of students also stated that they feel happy and enthusiastic about physical sports activities at school. Adaptive sports provide opportunities for children with special needs to develop a positive self-identity and a sense of achievement (Mueller et al., 2026; Shao et al., 2025). This is in line with the findings of the interviews, where students feel happy to be able to adapt, feel capable, and not marginalized in physical activities. Although there are certain challenges such as fatigue and limited movement, student enthusiasm remains high. This shows that adaptive sports are not only a means for physical health but also functions as social, emotional relations, and self-identity formation of students.

Personal Experience

The results of the interview reveal that students' personal experiences in participating in physical activities at SLB N Kenteng Banjarnegara are relatively diverse but positive when students feel they can participate actively and receive appreciation from teachers and their peers. One student even mentioned that their best experience was when they won a running competition with their friends. This indicates a sense of achievement and happiness from active participation in physical activities. This aligns with the theory of competence and autonomy, which states that their intrinsic motivation will grow when they feel competent, autonomous (involved in decision-making), and socially connected (Morris et al., 2022; Ryan & Deci, 2020). When students feel capable of completing physical tasks, they tend to be motivated to engage in those activities again.

On the other hand, the importance of flexible and individualistic learning strategies to embrace differences in abilities, cognitive levels, and characteristics of each student is crucial (Goyibova et al., 2025; Morris et al., 2022). This is in line with Winnick's opinion, which states that in adaptive sports learning, it is important to understand that each student has a unique combination of limitations and potential, so physical activities need to be adjusted to be accessible to all students. Therefore, the role of teachers is vital in designing adaptive activities, providing positive reinforcement, and creating a supportive environment so that every student feels capable and accepted, regardless of their limitations.

Support and Adaptation

The results of the interview reveal that the role of teachers is crucial in helping students to engage maximally in physical sports activities. The majority of students stated that teachers always provide assistance when they encounter difficulties. This reflects an empathetic, patient, and supportive approach from teachers and the school, which is essential in creating a positive learning experience for students, especially for students with special needs.

In adaptive physical education, individual support and activity modifications must be carried out so that students with special needs can feel safe and adapt maximally. This includes adjustments in instruction, repetition of movements, physical assistance, and creating a comfortable learning atmosphere (Son, 2025). Moreover, the success of physical education activities is not only determined by skill mastery but also by the teacher's ability to adjust teaching methods and create an inclusive

environment. In this regard, the teacher's attitude of not being forceful, not punishing, and being willing to repeat instructions according to the students' abilities demonstrates responsive pedagogical practices. When students feel understood, not pressured, and given the opportunity to develop at their own pace, they are more likely to remain engaged in physical activities and enjoy the learning process as a whole.

Social Environment

A supportive social environment is very important in the physical activities of students with special needs. When they feel accepted, invited to play, and socially rewarded, they will be more confident and actively engaged. Most students at SLB N Kenteng Banjarnegara express that they feel supported and appreciated by their peers when participating in sports activities. This indicates the presence of positive social support from peers that can enhance students' self-confidence, motivation, and comfort in participating in physical activities. Positive social interactions can foster students' self-confidence and stimulate adaptive behaviors. When students receive support from friends, they will be more motivated to try the same physical activities, thus increasing their participation (Laird et al., 2018).

Physical education teachers must also act as facilitators of a supportive social climate by creating an inclusive atmosphere through proactive classroom management strategies, positive reinforcement, and diverse group arrangements. Guidance on the value of openness that teachers intend is very important so that students not only help each other spontaneously but also have a deeper understanding and social awareness. Values such as empathy, tolerance, and equality.

Motivation And Perception

It must be part of daily learning, especially in special schools that have diverse needs. In this theme, students express that they want to continue participating in sports activities because they feel happy and their bodies become healthier. This intrinsic motivation is an important factor in maintaining long-term student engagement in physical activity. In Self Determination Theory (SDT), intrinsic motivation is motivation that arises because the activity itself is enjoyable or satisfying (Kamberi, 2025; Patrick & Williams, 2012). This motivation is the strongest and most sustainable form of motivation. When students say they enjoy exercising, it means that the activity has become a source of pleasure and reward for them.

Teachers also express hope for greater support from schools, parents, and the government, especially in the form of providing disability-friendly sports equipment and training teachers to have adaptive skills in teaching physical education. One important factor in the success of adaptive physical education is adequate resources and ongoing professional training for teachers. Teachers need to understand activity modification techniques and psychological approaches so that learning remains inclusive and effective. With support from teachers, as well as hope for attention from various parties, sports activities can become a powerful tool to strengthen health, togetherness, and self-confidence. Therefore, there needs to be an improvement in facilities, teacher training, and strengthening of an inclusive culture so that sports activities can truly be enjoyed by all students fairly and comprehensively

Implications

The findings of this study provide several important implications for the development of adaptive physical education practices in special education settings. First, the results highlight the importance of designing physical activities that are responsive to the diverse abilities of students with disabilities. Adaptive activities that emphasize participation rather than performance enable students to engage meaningfully in physical education while fostering confidence, enjoyment, and social interaction. Teachers should therefore prioritize flexible instructional strategies, simplified movement patterns, and individualized support to ensure that all students can participate comfortably and safely.

Second, the study underscores the critical role of teachers as facilitators of inclusive learning environments. Supportive teacher attitudes, clear instructions, and patient guidance were found to significantly influence students' willingness to participate in physical activities. This suggests that professional development programs focusing on adaptive physical education strategies, inclusive

pedagogy, and disability awareness are essential for improving the quality of physical education in special schools. Furthermore, the presence of positive peer support indicates that fostering inclusive social values such as empathy, cooperation, and mutual respect is equally important in promoting meaningful participation among students with disabilities.

Research Contribution

This study contributes to the field of adaptive physical education by providing empirical insights into the lived experiences of students with disabilities in participating in physical activities within a special school context. By exploring students' perspectives, the research highlights the importance of student-centered approaches that emphasize emotional well-being, social inclusion, and meaningful engagement rather than solely focusing on physical performance outcomes. In addition, the findings provide practical guidance for educators and school administrators in designing inclusive physical activity programs. Understanding students' experiences helps educators develop more responsive teaching strategies, adapt learning environments, and strengthen collaboration between teachers, schools, and families. The study also supports broader educational initiatives aimed at promoting inclusive education and equitable access to physical activity opportunities for students with disabilities.

Limitations

Despite providing valuable insights, this study has several limitations that should be considered when interpreting the findings. First, the number of participants involved in the study was relatively small and limited to a single special school. Consequently, the findings may not fully represent the experiences of students with disabilities in other educational contexts or regions. Second, the study focused primarily on students' subjective experiences during physical education activities. While this approach provides rich qualitative insights, it does not include quantitative measurements of physical performance or long-term developmental outcomes. Furthermore, differences in the types and severity of disabilities among participants may have influenced their experiences and perceptions of physical activity participation.

Suggestions

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CONCLUSION

This study concludes that students with disabilities at SLB N Kenteng Banjarnegara generally demonstrate positive motivation and active participation in physical activities when these activities are adapted to their individual abilities and needs. The findings indicate that meaningful participation in physical education is strongly influenced by responsive activity adaptation, supportive teacher practices, and an inclusive social environment. Teacher support plays a crucial role in facilitating students' engagement by providing flexible instruction, encouragement, and individualized assistance, which enables students to feel accepted and confident during physical activities.

Furthermore, peer support contributes significantly to students' positive experiences by fostering a sense of belonging and cooperation. Although students face certain challenges such as physical fatigue and difficulty following complex movements, these obstacles do not diminish their willingness to participate when appropriate adaptations are implemented. However, this study is limited by the small number of participants and the specific research context, which may affect the generalizability of the findings. Future research is therefore recommended to involve a wider range of participants and settings to further explore adaptive physical education practices. Overall, this

study emphasizes the importance of developing student centered adaptive physical education that supports inclusion, health, and overall well-being of students with disabilities.

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AUTHOR CONTRIBUTION STATEMENT

YA conceptualized and designed the study, conducted the data collection through interviews, observations, and documentation, and performed the qualitative data analysis. YA interpreted the research findings, prepared the manuscript draft, and revised the article critically to ensure the clarity, coherence, and academic quality of the final manuscript. YA approved the final version of the manuscript and takes full responsibility for the integrity and accuracy of the research.

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