


Adaptive Physical Education in Futsal For Children With Mild Intellectual Disabilities at SLB Sumbersari, Bandung

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ABSTRACT

This study explores the implementation of adaptive physical education through futsal for children with mild intellectual disabilities at SLB C Sumbersari, Bandung. These children often face difficulties in participating in regular physical education due to cognitive and physical limitations. Adaptive physical education aims to tailor activities to individual abilities, enabling optimal participation. The study investigates how futsal can be modified to meet the needs of children with special needs. A descriptive qualitative method was used, with data collected through observation, interviews, and document analysis. Participants included physical education teachers and students aged 11-17 years with mild intellectual disabilities. Findings show that futsal can be effectively played by these children when adjustments are made to the rules, duration, number of players, and by using visual and verbal aids. Key challenges include limited facilities, varying individual abilities, and a lack of teacher training. Solutions implemented include renting futsal courts and providing specialised training for teachers. In conclusion, adaptive futsal has a positive impact on the physical and social development of students. It also supports their participation in competitive events such as O2SN-PDBK and the Special Olympics, highlighting the importance of inclusive and structured physical education for children with intellectual disabilities.

Keywords: *Implementation of Adaptive Physical Education, Futsal, Children with Intellectual Disabilities.*

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INTRODUCTION

Physical education is an essential part of the educational curriculum, aimed at promoting physical fitness, motor coordination, and social-emotional growth in learners. It provides structured opportunities for students to engage in physical activity, build cooperation skills, and develop a healthy lifestyle. Beyond improving physical health, physical education encourages character development, discipline, and the ability to work collaboratively in group settings (Sherrill, 2004). However, children do not begin from the same baseline of ability. Standard physical education programmes are often designed for typically developing students, which inadvertently excludes children with special needs who may require tailored approaches to participate effectively.

Among children with special needs, those with mild intellectual disabilities face particular challenges. According to the American Association on Intellectual and Developmental Disabilities (AAIDD, 2010), intellectual disability is characterised by significant limitations in both intellectual functioning and adaptive behaviour, originating before the age of 18. Children with mild intellectual disabilities typically have an IQ ranging between 50 and 70 and display developmental delays, especially in areas such as reasoning, problem-solving, and abstract thinking. Although their motor development may be close to that of typically developing peers, they often experience difficulties in understanding multi-step instructions, following complex rules, and maintaining attention in group activities (Bouffard, Watkinson, Thompson, Causgrove Dunn, & Romanow, 2005).

In the context of physical education, these difficulties manifest in several ways. First, children with mild intellectual disabilities may struggle to comprehend game rules and roles within a team structure. For instance, during ball games such as futsal, they may not differentiate between attacking and defending roles. Second, limitations in gross and fine motor skills can impair their ability to perform basic actions such as kicking, passing, or dribbling a ball (Winnick & Porretta, 2017). Third, low concentration levels often result in decreased focus during physical activities, especially in noisy or dynamic environments. Fourth, social integration is often hindered by challenges in communication and cooperation, which can lead to feelings of isolation or rejection. Finally, children with intellectual disabilities often experience low self-esteem and anxiety, which can make them reluctant to participate, particularly when they fear making mistakes or being judged.

To address these issues, Adaptive Physical Education (APE) offers a structured and inclusive approach. APE is defined as a specially designed physical education programme intended to meet the unique needs of students with disabilities through modifications to content, teaching strategies, and learning environments (Block, 2007). It aims not only to improve physical fitness and motor proficiency but also to enhance self-confidence, foster social interaction, and promote emotional well-being. According to the Indonesian Ministry of National Education (Depdiknas, 2003), adaptive physical education should involve appropriate adjustments in materials, equipment, rules, and instructional methods, ensuring that all children—regardless of ability—can actively participate in meaningful physical activity.

Implementation of APE requires collaboration between teachers, parents, and health professionals. Teachers must be equipped with the pedagogical knowledge and skills to adapt sports activities to each child's capabilities. This includes breaking down complex movements, using visual and verbal cues, and simplifying rules. For example, using lighter balls, reducing team sizes, shortening game durations, or incorporating cooperative games can support engagement and success (Lieberman & Houston-Wilson, 2018).

Despite the growing advocacy for inclusive physical education, much of the existing literature still focuses on general strategies rather than examining specific sports in detail. In particular, the sport of futsal—a fast-paced indoor variant of football—has received limited attention in the context of APE. Futsal offers significant potential benefits for children with intellectual disabilities, including the development of coordination, balance, cardiovascular endurance, and cooperative skills. However, its cognitive and motor demands also present unique challenges for this population. Previous research has largely overlooked how futsal can be adapted and implemented effectively in special education settings in Indonesia, particularly in public special schools (SLBs).

Preliminary observations at SLB C Sumbersari in Bandung reveal that futsal is used as part of the school's adaptive physical education programme. This initiative aims to promote motor development, build confidence, foster social interaction, and identify students with potential to participate in competitive events. The implementation process involves three stages: preparation, execution, and follow-up. During the preparation stage, teachers assess students' abilities and plan appropriate modifications. The execution phase focuses on instruction and active participation using adapted methods. Finally, the follow-up stage includes evaluation of student progress and planning for future activities. Adjustments to futsal include simplified rules, reduced team sizes, shorter play durations, and the use of frequent demonstrations and verbal instructions.

While this programme has shown promising outcomes, it is not without challenges. Teachers report constraints such as limited facilities, insufficient training in adaptive methods, and the need for greater parental involvement. Furthermore, the wide range of ability levels among students requires highly individualised instruction, which can be difficult to manage in a classroom setting with limited resources.

Therefore, this study aims to examine the implementation of Adaptive Physical Education through futsal at SLB C Sumbersari in Bandung. Specifically, the objectives are: (1) to describe the strategies used to adapt futsal for children with mild intellectual disabilities,

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(2) to identify challenges encountered during implementation, and (3) to analyse the educational, physical, and social impacts of the programme on the students involved. This research seeks to contribute to the literature by providing context-specific insights into adaptive sports education in Indonesia and offering practical recommendations for enhancing inclusion in physical education programmes.

METHOD

This study employed a descriptive qualitative method to examine the implementation of adaptive physical education through futsal for children with mild intellectual disabilities at SLB Sumber Sari in Bandung. The primary aim was to provide an in-depth account of the actual learning conditions, teaching strategies, and challenges encountered during futsal instruction.

The research subjects included three students aged 12–16 years with mild intellectual disabilities and one physical education teacher. Participants were selected purposively based on their direct involvement in the adaptive futsal programme. Data were collected over a two-month period, from March to April 2025, using in-depth interviews, direct observation, and document analysis. The teacher was interviewed three times to explore instructional approaches and the challenges faced in adapting futsal. Observations were conducted during futsal lessons to document student engagement, social interaction, and instructional modifications. Documents analysed included student progress reports, learning outcomes, and official school records related to the futsal programme.

The data were analysed using Miles and Huberman's model, which involves data reduction, data display through thematic tables, and the drawing and verification of conclusions. Data credibility was strengthened through source triangulation with classroom teachers and parents. The findings provide a contextualised understanding of how adaptive futsal is delivered in a special education setting, highlighting its role in supporting the physical and social development of students with mild intellectual disabilities. The study also offers insights into the strategies required for inclusive practice in physical education.

FINDINGS AND DISCUSSION

Results

The implementation of adaptive physical education in the form of futsal for children with mild intellectual disabilities at SLB C Sumber Sari in Bandung City involved a series of activities designed to accommodate the needs of students with mild intellectual disabilities. The school is located at Jl. Majalaya 2 No.29, Antapani Wetan, Antapani District, Bandung City, West Java, and focuses on providing education tailored to the characteristics of each student.

SLB C Sumber Sari has a strong history, established on 1 October 1983, and is committed to providing access to quality education for children with special needs, particularly those with intellectual disabilities. The implementation of futsal sports education at SLB C Sumber Sari begins with simple yet important initial activities to prepare students physically and mentally.

The activity begins with gathering the children in the schoolyard and then proceeding to the futsal field. Upon arrival, the teacher starts with a group prayer, attendance check, warm-up exercises, and jogging. This activity aims to prepare the children's bodies to be more ready and motivated before starting the futsal lesson.

The core activities in the futsal learning process include four basic techniques taught to the children, namely passing, shooting, dribbling, and heading. Each technique is taught using an approach tailored to the children's needs and abilities. In the passing technique stage, the teacher first explains and demonstrates the passing movement, then gives the children a chance to try it themselves. The children's responses show their understanding of the technique, which is then corrected and practised with the help of the teacher, and eventually the children are able to perform the technique without assistance.

In the shooting technique, the teacher explains the correct body position, including the proper stance and use of the feet, before giving the children a chance to ask questions. After that, the children try to demonstrate the technique with guidance from the respondents. Once the children feel more confident, they continue to perform the shooting technique without assistance. Similarly, with dribbling and heading techniques, children were given the opportunity to observe, ask questions, and try to perform the techniques. Demonstrations and exercises were carried out repeatedly so that the children could master the techniques well.

However, in implementing this futsal learning, a number of obstacles arose, most of which were related to the limitations of facilities and infrastructure that support the needs of children with mild intellectual disabilities. One of the obstacles faced is the limited availability of futsal fields suitable for children with special needs. Although the school has tried to overcome this by working with third parties to rent futsal fields, the need for better futsal fields that are more suitable for children with mild intellectual disabilities remains an issue that must be addressed. To that end, the school is also seeking donors so that it can have its own futsal field that is more adequate.

In addition, the varying abilities of children with mild intellectual disabilities require different learning approaches. Not all children can grasp information or instructions quickly, so adjustments in teaching methods are necessary. For example, children with lower motor skills may require simpler instructions and more repetitive practice.

Therefore, differentiated and individualised learning approaches are very important to ensure that all children can participate in learning effectively. Another challenge faced is the lack of teachers' ability to design and implement physical education that is appropriate to the characteristics and needs of children with mild intellectual disabilities. Many teachers do not fully understand the principles of Adaptive Physical Education, so they often find it difficult to design appropriate activities for children.

As a solution, schools should provide regular training and workshops on Adaptive Physical Education, either organised by the education department, professional organisations, or other training institutions. Teachers should also be encouraged to participate in forums for sharing good practices or professional communities, such as PLPG and SLB seminars, to improve their competence in teaching children with special needs.

In addition, another problem arises at the beginning of the learning activity, especially when doing stretching exercises. Children sometimes find it difficult to concentrate, which makes warm-up activities less effective. To overcome this, teachers can use methods that are more fun and attract children's attention, so that they are more motivated and find it easier to focus. For example, teachers can turn warm-up activities into interesting games, which can increase children's interest in participating enthusiastically.

During the main learning activities, especially when explaining basic futsal techniques such as passing, shooting, dribbling, and heading, difficulties often arise due to differences in ability among children. Not all children can follow the lesson at the same pace, which makes learning less effective. To overcome this, teachers can use direct demonstration and video models, which can help children understand the movements more clearly.

In addition, gradual repetition of exercises and the use of small games tailored to the children's abilities can help them learn in a more enjoyable and less burdensome way. Learning evaluation is also a challenge, especially because the children's conditions are not always conducive. Difficulties in assessing children's abilities are caused by disharmony or chaos in the learning environment.

To overcome this, evaluation should be done using an informal and continuous approach, using direct observation and simple rubrics. These rubrics can objectively measure children's participation, effort, and motor development. Teachers also need to work together with classroom teachers and parents to assess children's achievements holistically, so that the evaluation is more comprehensive and covers all aspects of children's development.

Overall, the implementation of futsal lessons at SLB C Sumbersari shows that despite various obstacles, the improvement efforts made by the school can increase the effectiveness of learning. With the cooperation of third parties, the improvement of teachers' competencies

through training, and the application of teaching methods that are appropriate to the characteristics of the children, it is hoped that futsal lessons at SLB C Summersari can run better and provide maximum benefits for children with mild intellectual disabilities. In this case, it is important for all parties to continue to collaborate in order to create a conducive learning environment that supports the optimal development of children with special needs.

Discussion

The discussion on the implementation of adaptive physical education in the form of futsal for children with mild intellectual disabilities at SLB C Summersari in Bandung covers several aspects that are major challenges in the learning process. Futsal, as a sport that requires motor and social skills, demands adjustments to teaching methods to meet the needs of children with intellectual disabilities. Therefore, the efforts made by educators to overcome the challenges that arise are crucial to enhancing the effectiveness of the learning process.

Firstly, it is important to note that adaptive physical education aims to accommodate the needs of students with various physical or cognitive impairments. In this context, children with mild intellectual disabilities have varying abilities in terms of motor skills and cognition, so teaching futsal requires a very different approach from teaching typical children. As stated by Koyimah and Sidik (2022), one of the methods often used in education for children with special needs is role playing, which helps improve the interaction skills of children with intellectual disabilities. In this case, role playing can be applied in futsal training to improve the social and communication skills of children through fun and structured interactions (Koyimah & Sidik, 2022).

The main challenge encountered in implementing futsal education at SLB C Summersari is the limited facilities and infrastructure that do not fully support the physical and motor needs of children with mild intellectual disabilities. One solution proposed by the school is to collaborate with third parties to rent a futsal field, as the existing field at the school is inadequate for futsal activities. Research conducted by Adimayanti and Siyamti (2019) also shows that limited physical facilities in special schools are one of the main obstacles in the implementation of play therapy and guidance that can support the adaptive behaviour development of children with developmental disorders. Therefore, the need for adequate facilities must be pursued more seriously to support the smooth running of learning.

In addition, variations in abilities among individuals in the classroom also pose a significant obstacle to the implementation of futsal learning. Each child with intellectual disabilities has different levels of ability in receiving information and performing basic futsal techniques. This requires a more individualised learning approach, tailored to the conditions and needs of each child. According to Widiadnya and Purnami (2024), a differentiated approach in learning is very important to give more attention to each student based on their abilities. By using this approach, teachers can group children based on their level of ability in futsal skills and provide instructions that are more appropriate to their understanding. This will enable children to learn more effectively without feeling pressured or burdened by differences in ability within the class.

In addition to issues of facilities and differentiated approaches, the implementation of futsal lessons at SLB C Summersari also faces difficulties in terms of improving teacher competence. Teachers who teach at special schools often do not have adequate training in designing and implementing adaptive sports lessons. This is in line with the findings of Kliwon and Nurhidayah (2019), who stated that many teachers in special schools still experience difficulties in implementing appropriate methods for children with mental retardation. Therefore, there is an urgent need for regular training programmes and workshops to improve teachers' understanding and skills in teaching children with special needs. In addition, these training programmes can also encourage teachers to share best practices in teaching children with developmental disorders.

On the other hand, poor concentration among children during warm-up activities is also one of the challenges often faced by teachers. Many children have difficulty focusing, especially on activities that require calmness and attention, such as stretching or warming up before physical activity. In this case, it is important for teachers to use methods that are more

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fun and interesting for children. According to Husna (2020), one effective way to improve children's attention and concentration is to use a fun approach, such as games or physical activities that are integrated with learning. This approach can increase children's motivation to be more involved in activities and strengthen their concentration.

In the core futsal learning activities, namely teaching basic techniques such as passing, shooting, dribbling, and heading, the main problem faced is the difference in motor skills among children. Each child has different abilities in mastering basic physical skills, and this poses a major challenge for teachers in teaching these techniques effectively. As stated by Adimayanti and Siyamti (2019), the application of play therapy for children with intellectual disabilities needs to consider their slower motor development stages compared to typical children. Therefore, the exercises must be repeated and tailored to each child's abilities. This approach is particularly relevant for futsal, where basic techniques need to be practised gradually, with sufficient time given to each child to master each technique before moving on to more complex ones.

Teachers also face challenges in evaluating student progress, as children often struggle to focus on a single task or instruction for extended periods. This makes formal evaluation particularly difficult. As a solution, evaluations should be informal and ongoing, focusing on observing children's participation in each training session. The use of simple rubrics that measure children's participation, effort, and motor development can help teachers conduct more objective and comprehensive evaluations. This is also in line with what was stated by Kliwon and Nurhidayah (2019), who revealed that evaluation in the education of children with developmental disorders should be carried out using a more flexible approach, such as direct observation and experience-based learning.

Overall, although the implementation of futsal lessons at SLB C Sumbersari faces various obstacles, the improvement efforts made by the school can increase the effectiveness of learning. With cooperation to obtain better facilities, improve teacher competence through training, and apply methods that are more enjoyable and suitable for children with mild intellectual disabilities, it is hoped that futsal lessons can run more smoothly and have a positive impact on the motor and social development of children. As stated by Husna (2020), social and religious values internalised in learning also need to be considered in educating children with special needs to shape better character in the future.

CONCLUSIONS

The implementation of adaptive physical education through futsal at SLB C Sumbersari in Bandung demonstrates that, with appropriate modifications and instructional strategies, children with mild intellectual disabilities can meaningfully engage in sport. This study highlights how adjusted game rules, visual and verbal aids, and gradual instruction enable active participation and skill development. Despite challenges such as limited facilities and varied student abilities, the school's collaborative efforts and teacher training have supported effective programme delivery. The findings show that adaptive futsal not only enhances motor skills but also strengthens self-confidence, social interaction, and motivation to learn. This study contributes to the growing evidence that adaptive physical education is a practical and inclusive approach that should be expanded in both special and inclusive education settings.

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