

Physical education (PE) for improving skills of special needs students

I Gede Suwiwa¹, I Ketut Budaya Astra², I Gede Doddy Tisna M.S³, I Made Satyawan⁴,
I Made Gede Arta Mahardika⁵

Pendidikan Jasmani Kesehatan dan Rekreasi¹²⁴, Ilmu Keolahragaan³, SLB Negeri 2 Denpasar⁵

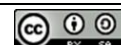
*Corresponding author: gede.suwiwa@undiksha.ac.id

Abstract

Physical Education (PE) can improve special needs students' skills, competencies, and accommodate social behaviours from several aspects, such as cognitive, motoric, and social aspects. Physical Education becomes an important and essential role in improving the special needs students' quality of life. This study aims to provide a systematic and scientific reviews regarding to the improvement and positive impacts of Physical Education for special needs students. The findings of this study showed that: (1) The Importance of Physical Education for Special Needs Students and (2) The Improvement Skills of Special Needs Students through Physical Education. As the results, Physical Education gives a great and many opportunities to special needs students, which it caused by the improvement in the concentration and cognitive skills. On the other hands, it also gives various important things, such as stimulate the special needs students' mindset, movements, and psychomotor.

Keywords: physical education, skills, special needs

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Received: 03-05-2025

Revised: 07-05-2025

Accepted: 13-05-2025

Published: 25-05-2025

Authors' Contribution: A – Conceptualization; B – Methodology; C – Software; D – Validation; E - Formal analysis; F – Investigation; G – Resources; H - Data Curation; I - Writing - Original Draft; J - Writing - Review & Editing; K – Visualization; L – Supervision; M - Project administration; N - Funding acquisition

INTRODUCTION

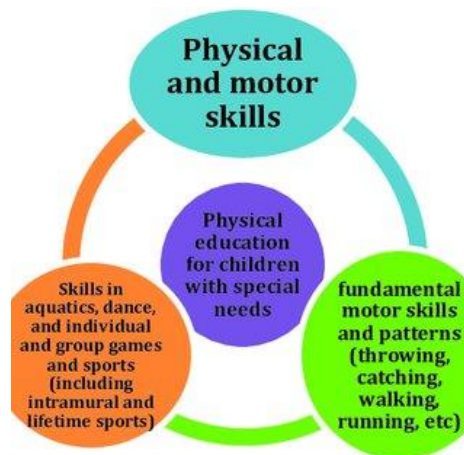
The first Physical Education for Special Needs Students was carried out in United States of America. Which, United States was experiment the effectiveness of Physical Education for children, especially for special needs students. Basically, every child needs to deserve a chance to experience movement, sports, teamwork, and competition (Baglama & Demirok, 2018). In this 21st Century, Physical Education (PE) is used by many teachers to considerable interest in sport pedagogy (Oğuzhan & Hunuk, 2018). Based on Physical Education lessons and materials, both in physical and social behaviour, are really crucial for special needs students in every school. Furthermore, teaching Physical Education for special needs students sometimes raised some challenges. For instance, teachers or instructors are required to be more patient in dealing with and controlling their activeness in class. On the other hands, there are also several students who do not want to join and participate the Physical Education class properly because of their limitations or diagnosis. Therefore, here, researcher involve lessons to this kind of situations, which, special needs students are able to participate the lessons by giving them duties through games or playing something (Salas García &

Rentería, 2024). Thus, Sport and Physical Education might growth the competencies and cognitive skills comprehensively (Klavina & Kudlacek, 2011). There will be no differences and gaps between Physical Education class for regular or special needs students. This article explores how Physical Education might bridge this GAP and it shows how Physical Education might improve skills of special needs students. several studies showed that the best approach to improving special needs students skills is through Physical Education learning (Baltabayev et al., 2019).

In addition, sport can also improve students' values. For instance, there is a student who practice to be a sport time – keeper or score keeper, then, they are used to making a report. In the inclusive and special needs students' concept, having a Physical Education will also improve their values. For instance, special needs students who taught to play a game in group or peer, they will have responsible character and able to work by team or community (Resmiaty et al., 2021)

Physical education and activities can improve individual's skills, such as physical and physiological aspects in their life (Griban et al., 2020). For instance, for special needs students, they can be stimulated through the sports or physical activities, i.e. for autism students they can improve their focus skills through balance activities or dance in Sport Education. Moreover, according to Baglama (2018), Physical Education also can be stimulated the special needs students motoric and behaviour in daily life or activities. Various games, activities, and movements that implemented in Physical Education can emphasized and improve special needs students many life skills. Additionally, it also provide and support special needs students to train their focus, mindset, motoric, and psychology (Marta Putra, 2019). Since Physical Education being an essential and crucial thing in improving and stimulate special needs students' skills, Physical Education is expected to be able to fulfil the special needs students' needs and requirements (Griban et al., 2020). For instance, in this study, researcher implement Physical Education based on students' needs i.e, for autism students' they will get materials, practices, and exercise which related to the students' requirements and diagnosis. Thus, it will impact to the special needs students' skill improvement.

Figure 1. Physical education supported the special needs students' daily skills



According to the Figure 1 above, it might be seen that special needs students' skills can be stimulated and improved through several ways in Physical Education (PE), such as group games, catching something, throwing, dances, etc. For instance, in a Physical Education class, students are required to make groups and do catching balls among others. Through this activity, it might stimulate and exercise special needs students to be able to focus on something. Moreover, Physical Education (PE) are prepared and taught based on special needs students' requirements and needs (Constantin, 2021). Teachers need to do preparation process, such as planning, counselling, teaching, and assessing. On the other words, Physical Education (PE) must be prepared and structured by teachers or trainers based on special needs students' individual diagnosis and their levels (Toptaş Demirci & Tzarova, 2021). Thus, Physical Education can build their creativity and develop their competences.

Fundamentally, when Physical Educations are implemented for special needs students, it aimed to contribute them in terms of being a settle student and be more concentrated in their learning or daily activities. For instance, according to the results of (Toptaş Demirci & Tzarova, 2021)' research that special needs students need 3 stages of learning. First, special needs students need to adapt the Sport Education. Then, in the second stage of learning, special needs students are required to be able to do something based on the units. Last, special needs students need to maintain their concentrate. Thus, through those various stages, it might improve skills of special needs students.

Moreover, according to (di Palma et al., 2019) Physical Education (PE), activities, and practices not only improve the learning skills for special needs students, instead, they also can improve their communication and social behaviour. Which, through Physical Education,

special needs students usually do several group or pairs activities. Therefore, special needs students can also fulfil the other several skills (Sgambelluri et al., 2021), as the followings:

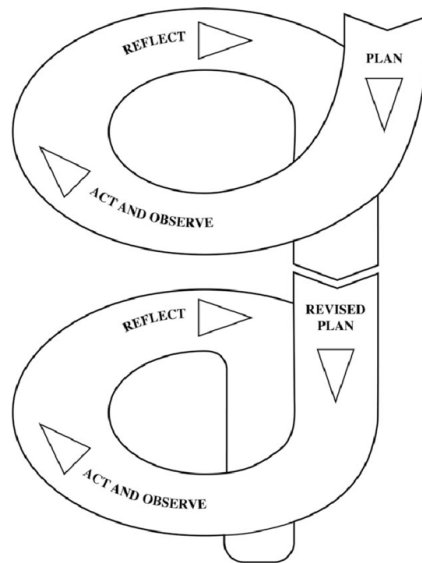
1. Participating various physical movements and activities based on their ages, level, and diagnosis.
2. Enhancing the development of their body structures.
3. Enhancing their strengthen and endurance.
4. Improve their daily skills and social behaviour (Wiley & Cory, 2013).

In their totally, Physical Education can support and improve special needs students' skills, such as physical development, teamwork, social adaptation and behaviour, and develop another valuable daily skills which needed for their future of life or careers (Colombo-Dougovito, 2015).

METHOD

In order to achieve the purpose of this study, researcher used Classroom Action Research. Classroom Action Research (CAR) is one of research methods that used to develop or increase several practices in classroom, which it used several ways in defining and identifying the students' needs and requirements (Oğuzhan & Hunuk, 2018). Additionally, Classroom Action Research (CAR) also known as a method that used to problem solving strategies which use several real actions, solutions, and process (Oktavia, 2020). Classroom Action Research (CAR) can provide and gain many information and insights according to the classroom situation and conditions. Thus, in this study Classroom Action Research (CAR) use and focus in 3 kinds of activities, such as teaching, practical, and assessment (Meesuk et al., 2020). Hence, Classroom Action Research used in this study to discover how Physical Education (PE) can improve skills of special needs students. According to (Kemmis & McTaggart, 1988)' theory, there are four stages in implementing this method, which are: planning, observing, action, and reflection. Therefore, researcher used applied 4 kinds of stages in this study. The 4 stages might be seen on this following picture.

Figure 2. Kemmis and Mc. Taggart Action Research Model



Planning: In the planning stage, researcher will identify and classify problems that occur in the classroom. The researcher also collecting information according to the classroom environment and needs. Then, she/he will create and develop a research plan according to the situation and conditions.

Observing: Through the observation phase, researcher will find out more about the lack and needs of the special needs students. For instance, at this phase, researcher will find several answers for their questions, i.e. What are the needs and requirements of the special needs students? What materials that suitable to them? How to handle the special needs students, especially in order to improving their skills? etc.

Action: This phase is known as a step of data collection and analysis. Which, in this study, researcher will obtain data through teaching Physical Education (PE) to the special needs students.

Reflecting: This phase consists of two important things, such as findings and discussions. Additionally, the researcher also makes a reflection related to this study. The reflecting stage contains 2 matters of reflecting, which are: process and report during implementing the study.

Participants

In this research, there are 14 special needs students that participated in this study. They divided into group, which they divided themselves into 3 groups. They also divided according to their diagnosis, age, and level. The detail features of the special need students' data presented below:

Table 1. Special Needs Students Data

Feature of the Disability of the Children	N	Age	Gender
ADHD (Attention Deficit Hyperactivity Disorder)	5	8 – 10 years	Male and Female
Autism Spectrum Disorder	3	9 – 11 years	Male
Autism Spectrum Disorder – ADHD (Attention Deficit Hyperactivity Disorder)	6	8 – 10 years	Male and Female

Instruments

There are variety instruments used in this study. Here are some instruments in implementing Physical Education (PE) for special needs students in order to improve their skills:

1. Observation Sheets

Based on Creswell' theory which stated observation is one of process in obtaining data, whether open – ended questions, information through several individuals, and situations and conditions in the location of a research (Toptaş Demirci & Tzarova, 2021). Here are below the observation sheets that used by researcher in this study.

Table 2. Observation Sheets

Questions	Descriptions/Explanation
Students are able to respond teachers/instructors properly	
Students are able to focus during the Physical Education (PE) class	
Students have specialized or specific skills in Physical Education (PE)	
Students are able to improve their skills through learning Physical Education (PE)	
Students show their interest and learning motivation during the Physical Education (PE) class	

Questions	Descriptions/Explanation
Students show their improvement by learning Physical Education (PE)	
What are the students with special needs diagnoses in the Physical Education (PE) class?	
What are the most common special needs diagnoses in that Physical Education (PE) class?	
How do the teachers in the class encourage and improve the special needs students through learn Physical Education?	

2. Pre – Test and Post – Test

The pre – test and post – test stage was carried out by giving several physically test by the researcher. Which, students are given physical activities in the form of throwing and catching balls. In the pre – test activity, special needs students reached average score 55.00. This number showed that their understanding and skills in Physical Education are still lower than the average benchmark score. Moreover, in the post – test, 5 students are able to reach high scores in 89.00. Here the followings are the criteria of benchmark score according to their level/abilities.

Table 3. The Criteria of Students' Benchmark Scores Based on *Penilaian Acuan Patokan*

Score	Predicate
90 – 100	Very Good
80 – 89	Good
65 – 79	Sufficient
55 – 64	Insufficient
Less than 55	Poor

3. Interview

Here, the researcher will ask several related questions to the teachers and students. Through this interview stage, researcher will know the advantages and disadvantages occurred during the Physical Education (PE) class.

Data Collection

Regarding to the inclusive and special needs students' education, researched used interview to the Physical Education teacher.

RESULTS AND DISCUSSIONS

The Importance of Physical Education for Special Needs Students

Nowadays, Physical Education being a popular and an important role in learning for every individual. According to (Swadesi et al., 2021), Physical Education is a really essential thing for special needs students, which it can improve their physical, motoric, and emotional skills, such as discipline, motivation, competition, social behaviour, teamwork, etc. On the other word, Physical Education also can play in the roles of social and daily activity. Physical Education is not about a subject that only learn about physical education (Sgambelluri et al., 2021), instead, it might stimulate the special needs students mindset, movements, and psychomotor. Additionally, Physical Education might develop special needs students focus, understanding, responsibilities, collaboration, and communication among others (Bertills et al., 2018).

Furthermore, according to Morris & Schulz' theory, Sport and Physical Education help children in various aspects of life, especially for special needs students. Which, it helps them to control their aggressive and impulsive behaviours (Jariono et al., 2022). For instance, during implemented this study, researcher found that special needs students be more able to control in their daily activity. For the ADHD students' group, they are easier to be controlled in doing things in the classroom, especially when learning Physical Education. It was proven by the post – test score, which they were able to reached the highest score in 79.80.

Fundamentally, Physical Education (PE) for special needs students lead students to be able to participate in social environment (Ilkim et al., 2018). Therefore, special needs students also can be the part of the social individuals and community as well (Access, 2021).

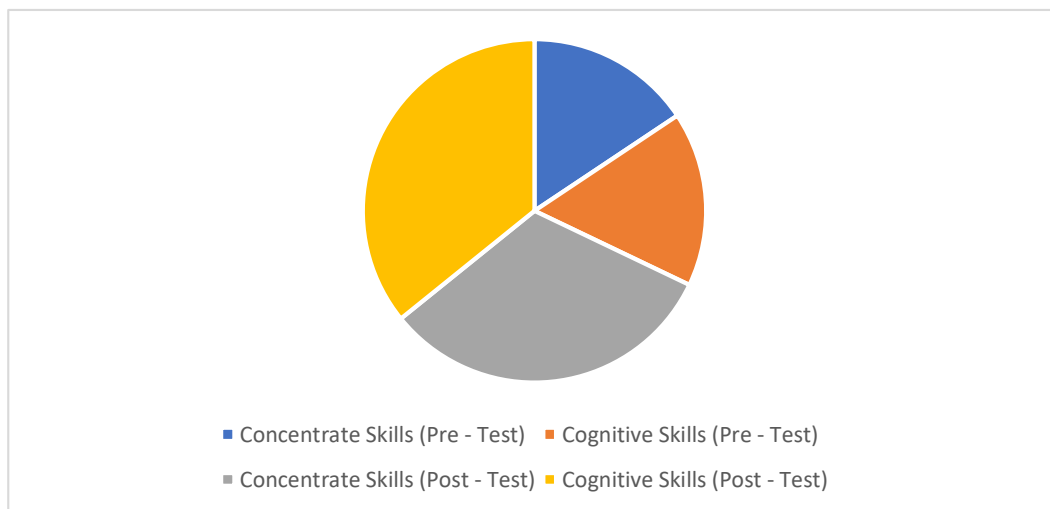
The Improvement Skills of Special Needs Students through Physical Education

Fundamentally, Physical Education being an essential role in life and help special needs students to be a calm, happy, responsibility, and self – sufficient person in life (Fajar Pradipta & Arif Dewantoro, 2020). In addition, Physical Education also known as a subject that learn about how to improving children skills, physically as well as social adaptation skill (Pressé et al., 2011). In the other word, Physical Education can improve the special students' needs abilities, skills, and competencies.

In this study, researcher found that Physical Education has big impacts in special needs students' performance, ability, and skills. Physical Education develops concentrate and

cognitive skills of special needs students. Through the activities, movements, and any participation of the special needs students, Physical Education can lead their better concentration in academic and non – academic as well. Thus, it will potentially increase the learning outcomes of the special needs students itself. The graphic of special needs students' concentration and cognitive skills can be seen on the Figure 3 below.

Figure 3. Special Needs Students Skills (Concentration and Cognitive Skills)



According to the chart above, it shows that there is an improvement in the outcomes of concentrate and cognitive skills of special needs students. Which, in the Pre – Test, the number of concentrate skills just reached 38% and 40% for cognitive skills. Then, students are able to reach 78% for concentrate skills and 89% for cognitive skills. It caused by the presence of Physical Education that helps them to train and practice to do activities or actions that are related to cognitive level, focus, concentration, and attention, so that they can improve their skills as well, especially concentration and cognitive. Here are below the table of specific aspects of the special needs students' improvement throughout Physical Education (PE) learning process.

Table 4. Specific Aspects of Special Needs Students' Improvement by Grouping Model

Feature of the Disability of the Children	Exercise/Materials	Description
ADHD (Attention Deficit Hyperactivity Disorder)	Throwing and Catching Balls and Tennis	Through these Physical Education activities, ADHD' students group are able to keep their focus, concentrate,

Feature of the Disability of the Children	Exercise/Materials	Description
		and more calm and careful in doing something, especially when they meet many people or in grouping.
Autism Spectrum Disorder	Running and Athletic	As the researcher have implement these two activities, the autism students are be able to control themselves. Which, Normally, they are difficult to control and focus their attention on an action, through these two Physical Education activities, they become easier to control and control their focus, attention, and actions.
Autism - ADHD (Attention Deficit Disorder)	Athletic and Throwing and Catching Balls	Regarding to these two Physical Education activities, the third group of special needs students are easier in controlling and maintaining themselves. Which, previously, they were difficult to sit properly or pay attention to the teachers or instructors, now they can enjoy and follow the lessons through the Physical Education activities.

According to the table above, it can be described that through those activities in Physical Education, special needs students might improve their skills, physically as well as cognitively. Previously, they used to be more active and difficult to control their focus and aggressive characters, now they are able to improve their cognitive skills and behaviour.

CONCLUSIONS

Nowadays, Physical Education has become an important and essential subject for students, especially for special needs students. Which, Physical Education might improve the individual skills, quality of life, social behaviours, and communication among community. This study provided the evidences of how Physical Education can improve and impacted to special needs students. The Physical Education is not only used for introducing a new sport or physical activity, develop sport experiences, and invite students to do several practices or exercises, instead, it used to improve the concentrate and cognitive skills and develop the social skills for special needs students (Klefbeck, 2023). In conclusion, Physical Education gives many opportunities for special needs students, especially in the terms of positive ways. For instance, special needs students are able to participate in positive actions and activities considering to their skills, competences, and interests.

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