



Inclusive learning model with local wisdom for gender equality in physical education

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ABSTRACT

This study aims to develop an Inclusive Learning Model Based on Local Wisdom, oriented towards gender equality and disability in Physical Education (PJOK), to build Fundamental Motor Skills and character in students. The research utilizes the ADDIE method, which consists of five stages: analysis, design, development, implementation, and evaluation. In the analysis phase, the causes of gaps in PJOK learning were identified through interviews and observations. The design phase produced a draft method that accommodates individual needs, focusing on gender equality and disabilities. In the development phase, validation by experts indicated that the method is based on solid theory and is practically applicable in the classroom. During the implementation phase, the product was tested on small and large groups, showing high practicality and effectiveness. Comparative testing across three schools in Buleleng further reinforced the effectiveness of the model in enhancing students' locomotor and manipulative motor skills. Statistical analysis (descriptive, normality, homogeneity, and independent sample tests) showed significant improvements in student achievement. The findings conclude that the Inclusive Learning Model based on local wisdom is effective, valid, and practical in improving students' learning outcomes in PJOK.

Keywords: inclusive learning model, local wisdom, gender equality, disability, physical education

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INTRODUCTION

The values of sports are considered identical to the values promoted by the United Nations. Furthermore, sports are used as a driving force in the context of the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs). This spirit has also become the foundation of Law No. 11 of 2022 on the National Sports System. Currently, various issues are encountered regarding the unmet goals of physical education, including fitness and physical, mental, social health, character development, and the utilization of local culture in Physical Education, Sports, and Health (PJOK) learning.

The prevalence of obesity among the population aged over 18 in Indonesia from 2013 to 2018 has increased for both boys and girls: (1) in 2013, boys: 19.60% and girls: 32.90%; (2) in 2016, boys: 24.00% and girls: 41.60%; and (3) in 2018, boys: 26.60% and girls: 44.40% (Risksdas, 2018). Physical activity in the public in Bali province is categorized as insufficient at 74.02%, and moderate at 25.92%. In Buleleng, the insufficient category is 74.10%, and the moderate category is 25.90% (Risksdas, 2018). Research findings indicate that 93.30% of students' physical activity levels are categorized as insufficient, and 6.70% of students have moderate physical activity levels (Yoda et al., 2021). Regarding physical activity in teenagers in Singaraja, 84.81% engaged in light physical activity, and 15.19% engaged in moderate activity

during the COVID-19 pandemic (Kumara, 2022). The research also found the prevalence of mental and emotional disorders in the population aged 15 and over in Buleleng at 18.09%, the highest compared to other districts in Bali, while diabetes mellitus prevalence was 1.23%, still relatively high (Riskesdas, 2018).

Meanwhile, the sports participation rate among the 11-19-year-old population in Bali province in 2021, based on the 2021 Sport Development Index study, was 0.545 (Mutohir et al., 2021). Below are several conclusions from the 2021 SDI research (Mutohir et al., 2021): (1) The national physical literacy index is 0.565, meaning the physical literacy achievement level is 56%, within the lower range of the moderate category. There is a relationship between knowledge, attitude, and behavior. Individuals with good physical literacy knowledge tend to have positive attitudes toward sports and physical activity. The analysis also proves that there is a strong correlation between physical literacy, participation levels, and fitness; (2) Nationally, 81.2% of the population engages in sports/physical activities. Of those participants, 30.1% engage in sports once a week, 34.7% twice a week, and 35.2% three times or more per week. When looking at active participation, the participation rate is 32.83%; (3) There is a considerable gap in participation rates between males (35.7%) and females (21.4%).

In terms of age, the highest participation rate is in the 10-19 age group, followed by the 20-44 and 45-60 age groups. As age increases, the level of participation in sports tends to decrease; (4) In terms of duration, most people (39.2%) engage in sports for 21-30 minutes, 27.3% for ≤ 20 minutes, and the remaining do more than 30 minutes. In terms of intensity, 58.2% engage in moderate-intensity sports, 4.2% with considerable intensity, and 1.6% with high intensity; and (5) Nationally, the average VO₂max is 26.35 ml/kg/min, with males at 28.68 ml/kg/min and females at 23.98 ml/kg/min. This study also found that fitness levels were categorized as very poor in 53.63%, poor in 22.68%, and only 5.86% were categorized as excellent or superior.

The low quality of PJOK (or Physical Education, Sports, and Health, in English) education has attracted scholars to research. One recent study states that the teacher-to-student ratio, the equipment-to-student ratio, and the utilization of learning time during PJOK lessons from elementary to senior high schools in Buleleng Regency have not been optimal or effective (Yoda et al., 2023). In another viewpoint, PJOK lessons that engage students by merely sitting and watching their peers in activities due to physical disabilities. Others also prevent activities due to taboo for women, or fear of participating in physical activities (Andika et al., 2021).

PJOK is essentially an educational process that uses physical activity to generate holistic changes in the quality of individuals, both physically, mentally, and emotionally (Puspita et al., 2024). Achieving PJOK's goals will heavily depend on how the learning process is implemented in schools. One element that should be a focus for improving and developing PJOK education is the application of teaching methods (Utamayasa, 2021). Quality teachers are the forefront of efforts to improve the quality of service and educational outcomes (Mulyatiningsih, 2008). The strategic role of PJOK teachers for the total development of students should focus on developing positive values and character in students. Thus, considering physical and motor skills as well as cognitive, mental, social, and moral aspects determines the selection and application of appropriate teaching methods. One teaching method based on the principles of involving the individual differences of all students is the inclusive learning method. The principle of individual differences foregrounds inclusive learning. In inclusive learning, education strives to meet the needs of children according to their abilities (Mosston & Ashworth, 2008).

The implementation of PJOK learning should also consider the culture in which the students grow. Considering Vygotsky's sociocultural learning theory, Purwanti and Hatmanto (2019) assert that the learning process requires the consideration of embedding local culture (local wisdom) into learning. This alignment reinforces the relevance of integrating contextuality and local wisdom in inclusive physical education. By considering relevance, learning is expected to be more meaningful and contextually rooted. Likewise, Supriyoko et al. (2022) emphasized that learning grounded in local and natural contexts enables students to exercise greater autonomy and cultural awareness. Thus, it allows education to nurture freedom, identity, and sustainability within the learning process.

Meanwhile, recent studies show that contextual and local-based movement learning in early childhood education (PAUD) and PJOK in primary education is significantly effective in improving motor skills and character (Ketut et al., 2019; Yoda, 2017). However, attention to local wisdom in PJOK learning has not been maximized, resulting in a dry or meaningless learning process. Thus, it affects many students do not master the knowledge being taught (Ardana, 2008). *Tri Hita Karana* is one of Bali's local wisdoms that serves as a strong life philosophy for the Balinese community. This philosophy has a specific concept that preserves cultural and environmental diversity amid the influence of globalization and homogenization (Pieterse, 2019). Essentially, the *Tri Hita Karana* doctrine emphasizes three relationships in human life: relationships with fellow humans, relationships with the surrounding environment, and relationships with God. All of which are interrelated (Sawitri et al., 2023). Each relationship has guiding principles to respect others and the surrounding aspects. Its principle of implementation must be balanced and harmonious (Bryndin, 2021). When balance is achieved, humans will live by restraining themselves from harmful actions (Padet & Krishna, 2020).

Based on this background, this study aims to analyze the implementation of contextual PJOK learning at the junior high school level in Singaraja, Buleleng Regency, Bali. This research also seeks to develop a local wisdom-based inclusive learning model oriented toward gender equality and disability. By accommodating those students' needs, PJOK learning is expected to build fundamental motor skills and character development in students. Furthermore, this study describes the validity, effectiveness, and practicality of the inclusive learning model in the context of PJOK education in Singaraja.

METHOD

This study is a Research and Development (R&D) using the ADDIE model. In this study, the ADDIE model is used to generate a product because this model provides a systematic and clear process for product development. The ADDIE model consists of five development steps, namely: (1) Analysis, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation (Sugiyono, 2018).

This study uses the ADDIE development model with the following phases: (1) Analysis: Identifying the causes of gaps in PJOK (Physical Education, Sports, and Health) learning through interviews with teachers and observations, covering aspects such as characteristics, learning implementation, methods, lesson plans (RPP), media, teaching materials, evaluation instruments, and facilities and infrastructure. (2) Design: Developing a draft of an inclusion-based learning method grounded in local wisdom, focusing on gender equality and disabilities, ensuring individual needs are met. (3) Development: Producing and validating the product through expert testing (content, media, learning design) to obtain validity. (4) Implementation: Testing the product on small groups (12 students) and large groups (30 students) to assess its practicality and effectiveness. (5) Evaluation: Testing the superiority of the product through a comparative test involving 300 seventh-grade students from junior high schools (SMP) in Buleleng. The expected outcome is a valid, practical, and effective learning method.

This study involves teachers and students from junior high schools (SMP) across Buleleng Regency as the population. The population consists of 72 schools based on data from the Education Ministry for Buleleng Regency. The distribution of schools includes Buleleng District (17 schools), Sukasada District (9 schools), Seririt District (6 schools), Banjar District (7 schools), Grokgak District (8 schools), Sawan District (6 schools), Kubutambahan District (8 schools), Busungbiu District (5 schools), and Tejakula District (6 schools). The sample for this study was purposively selected, involving 13 schools considered representative of the population, namely SMPN 5 Singaraja, SMPN 2 Singaraja, SMP Lab Undiksha, SMPN 3 Singaraja, SMPN 1 Singaraja, SMPN 2 Kubutambahan, SMPN 1 Gerokgak, SMPN 1 Sawan, SMPN 3 Busungbiu, SMPN 1 Seririt, SMPN 1 Banjar, SMPN 1 Sukasada, and SMPN 5 Tejakula. The data collection process was carried out from August to September 2024 at the sports fields of SMPN 1 Singaraja, SMPN 2 Singaraja, and Mayor Metra Field in Singaraja, during PJOK learning hours from 06.00 to 08.00 pm.

The data collection methods include documentation, tests, non-tests, questionnaires, and observations. The collected data is presented in the form of tables and narratives. Data analysis is performed descriptively by systematically organizing the data, compiling it into categories, synthesizing it, arranging it into specific patterns, and drawing conclusions. Data analysis is conducted to measure the validity, practicality, and effectiveness of the developed learning method.

Validity of the learning method

The product is considered valid if more than 50% of the validators state that the method is based on a strong theory and its components are interconnected. Additionally, product trials should show that their components are well-connected.

Practicality of the learning method

The method is considered practical if more than 50% of the validators and teachers state that it can be applied in the classroom. The success of the method's implementation is measured by the degree of implementation of the model, which should reach a minimum of 60%.

Effectiveness of the learning method

Effectiveness is measured based on student activity, learning achievement, and student responses to the learning method. The method is considered effective if student activity is high, 85% of students achieve good learning results according to the Minimum Completeness Criteria (KKM), and 85% of students give positive feedback. Student activity and positive feedback are analyzed using ideal criteria, while learning achievement is calculated based on learning outcomes that meet the established standards.

At the comparative test stage, the study uses a quasi-experimental design with a posttest-only control group, where measurement is performed after the treatment without a pretest. This research involves two groups: the experimental group and the control group. The experimental group will receive inclusion-based learning using local wisdom through traditional games such as Megoak-goakan and Batulima, which support locomotor and manipulative motor skills. The control group will undergo regular learning without traditional games. Both groups will have their locomotor and manipulative motor skills measured after five sessions to see the differences in outcomes between them.

The research population consists of all junior high school students in the Buleleng District, Bali. The research sample was taken from SMPN 1 Singaraja, SMPN 2 Singaraja, and SMPN 3 Singaraja, selected through purposive sampling. SMPN 1 and SMPN 3 Singaraja serve as experimental groups, while SMPN 2 Singaraja serves as the control group. Locomotor skills are measured through running/walking tests to assess speed, agility, and endurance. Manipulative motor skills are assessed through tests such as running while dribbling and passing, running while shooting, and walking in specific patterns. These instruments have been tested for validity and reliability.

The research consists of three stages: first, dividing students into experimental and control groups; second, providing treatment in the form of inclusion-based learning using local wisdom for the experimental group; and third, conducting posttest measurements to assess the motor skills of both groups. Posttest data is analyzed using an Independent Sample T-Test to compare the mean differences in motor skills between the experimental and control groups. The expected result is to determine whether inclusion-based learning using local wisdom is effective in improving motor skills in junior high school students in Buleleng District.

FINDINGS AND DISCUSSION

Findings

This study resulted in the development of an Inclusive Learning Model Based on Local Wisdom Focused on Gender Equality and Disability (ILbL), designed for Physical Education, Sports, and Health (PJOK) to build students' fundamental motor skills and character. This model

was developed using the ADDIE method, which includes five stages: (1) Analysis: Identifying the causes of gaps in PJOK learning through interviews with teachers and observations of the learning process. (2) Design: Drafting a method that accommodates individual needs with a focus on gender equality and disability. (3) Development: Developing and validating learning resources through expert tests (content, media, and design). (4) Implementation: Testing the product with a small group (12 students) and a large group (30 students) to assess the practicality and effectiveness of the product. (5) Evaluation: Evaluating the quality of the product using a comparative test involving 300 seventh-grade students in Buleleng.

During the development stage, the draft of the Inclusive Learning Method (ILbL) was tested by content experts, media experts, and learning design experts. The validation results showed that 100% of the validators stated that the method is based on a strong theoretical foundation and that the components of the method are well-connected. Additionally, more than 50% of the validators stated that the method is practical to apply in the classroom, indicating that the ILbL method is ready for testing after some revisions based on input from the validators.

In the implementation stage, the validated product was tested with 15 students in a small group trial and 30 students in a large group trial. The trial aimed to assess the validity, practicality, and effectiveness of the learning method. The small group trial results showed that the components of the method are well interconnected, with 100% of observers confirming the strong validity of the component relationships within the ILbL method. The practicality of the ILbL method was tested by measuring the implementation rate in the classroom, which reached 90.17%, demonstrating that this method can be applied effectively in practice. Therefore, this method is considered highly practical and suitable for classroom use. According to Garad et al. (2021), instructional design effectiveness is closely linked to the robustness of learning infrastructure and learners' cognitive engagement, factors also reflected in the successful implementation of the ILbL model.

The effectiveness of the learning method was also assessed based on student activity, learning achievement, and student feedback. Observation results showed that 93.3% of students were actively engaged in the learning process using this method, classifying them as very active. Furthermore, the evaluation of students' learning achievements showed positive outcomes in various learning materials, such as basketball, sprinting, and gymnastics. Overall, this study demonstrates that the ILbL learning method, based on local wisdom, is not only valid and practical but also effective in improving student learning activities and achievements, and can be successfully implemented in the classroom.

In this comparative test, three schools were used as samples: SMPN 1 Singaraja, SMPN 2 Singaraja, and SMPN 3 Singaraja. The data collected in this comparative study were subsequently analyzed using descriptive and inferential statistical techniques. Descriptive statistical testing was conducted to describe the data from each group, including the mean, minimum, maximum, and standard deviation values. The results of the descriptive statistical test are presented at Table 1.

Table 1. Results of descriptive statistical analysis of research data

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Game SMPN 1 Singaraja	66	80	93	88.09	2.870
Athletics SMPN 1 Singaraja	66	85	94	89.88	1.810
Game SMPN 3 Singaraja	66	75	92	84.50	5.500
Athletics SMPN 3 Singaraja	66	76	88	83.00	4.658
Game SMPN 2 Singaraja	66	66	83	75.08	5.252
Athletics SMPN 2 Singaraja	66	67	79	73.73	4.882

The average score for the Game in SMPN 1 Singaraja is 88.09 with a standard deviation of 2.870, and for SMPN 3 Singaraja, the mean is 84.50 with a standard deviation of 5.5. Meanwhile, SMPN 2 Singaraja has a mean of 75.08 and a standard deviation of 5.252. For Athletics, SMPN 1 Singaraja has an average of 89.88 with a standard deviation of 1.810, SMPN 3 Singaraja has an

average score of 83.0 with a standard deviation of 4.658. Meanwhile, the Athletics score for SMPN 2 Singaraja has a mean of 73.73 and a standard deviation of 4.882.

After the descriptive statistical test is conducted, the next step is to perform classical assumption tests, which include normality and homogeneity tests. The normality test aims to determine whether the data in this study come from a normally distributed population. The normality test can use the Kolmogorov-Smirnov technique when the sample size is >50 , while the Shapiro-Wilk technique is used when the sample size is <50 . Since this study has more than 50 samples in each group, the normality test is conducted using the Kolmogorov-Smirnov technique with a significant level of 5%. The data are considered normal if the significance value (sig) is > 0.05 , and not normal if the sig value is < 0.05 . The results of the normality test in this study are presented in Table 2.

Table 2. Results of the normality test

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Game SMPN 1 Singaraja	.154	66	.801	.961	66	.138
Athletics SMPN 1 Singaraja	.231	66	.310	.914	66	.240
Game SMPN 3 Singaraja	.320	66	.110	.780	66	.510
Athletics SMPN 3 Singaraja	.252	66	.780	.794	66	.090
Game SMPN 2 Singaraja	.278	66	.370	.831	66	.430
Athletics SMPN 2 Singaraja	.254	66	.810	.789	66	.151
a. Lilliefors Significance Correction						

Based on the results of the test in Table 2, all variables show a Sig. (significance) value greater than 0.05 in the Kolmogorov-Smirnov test. This indicates that the locomotor and manipulative motor skills data from each group are normally distributed.

Next, a homogeneity test was conducted to determine whether the data in this study have homogeneous variances. The homogeneity test in this study used Levene's test with a significant level of 5%. The data are considered homogeneous if the Sig. value is > 0.05 , and not homogeneous if the Sig. value is < 0.05 . The results of the homogeneity test in this study are presented in Table 3.

Table 3. Results of the homogeneity test

		Test of Homogeneity of Variances			
		Levene Statistic	df1	df2	Sig.
Score	Based on Mean	15.195	5	390	.130
	Based on Median	8.003	5	390	.090
	Based on Median and with adjusted df	8.003	5	269.755	.070
	Based on the trimmed mean	15.943	5	390	.100

Based on the analysis results in Table 3, the Sig. value is > 0.05 (Homogeneous), which leads to the conclusion that the data in this study have homogeneous variances. Since the data in this study are normally distributed and homogeneous, the hypothesis test in this study used a parametric test, namely the independent sample test, with the following results as seen at Table 4.

Table 4. Results of the independent sample test

		Independent Samples Test			
		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
Score	Equal variances assumed	20.362	130	.000	11.727
	Equal variances not assumed	20.362	105.940	.000	11.727

Based on the results of the independent sample test analysis above, the Sig. value obtained is $0.000 < 0.05$. This indicates that there is a significant difference between the experimental group and the control group. The analysis results show that traditional games based on local wisdom are effective in improving students' locomotor and manipulative motor skills. The data indicates that both skills experienced significant improvement, as evidenced by the results of the Independent Sample T-Test, with a significant value far below 0.05. Therefore, it can be concluded that the implementation of the Inclusion-Based Learning Model, Oriented Towards Gender and Disability Equality, has a positive impact on the development of students' fundamental motor skills.

Discussion

This study focuses on the development of inclusion-based learning grounded in local wisdom within the context of Physical Education, Sports, and Health (PJOK), emphasizing gender equality and disability inclusion. The aim is to understand how this inclusion approach contributes to shaping fundamental motor skills and the character development of students.

The concept of inclusion-based learning grounded in local wisdom

Inclusion-based learning is an educational approach that ensures all students, including those with special needs or disabilities, can learn together in a supportive environment. In this context, inclusion-based learning grounded in local wisdom emphasizes the importance of utilizing local cultural values and traditions that promote equality and diversity.

Local wisdom serves as the foundation for creating a more adaptive learning environment, considering the social and cultural contexts surrounding the students (Kaspul et al., 2023). Values such as cooperation, respect, and teamwork, regardless of gender or disability status, form the basis of this learning. In PJOK education, the application of local wisdom creates an inclusive climate that fosters the development of fundamental motor skills in every student.

Gender equality in PJOK learning

Gender equality in education, especially in PJOK subjects, is crucial to addressing the gender stereotypes that often arise in physical activities. Traditions that regard sports as a male domain or perceive women as less suited for physical activities need to be changed through a learning approach based on the principles of gender equality (Sotiriadou & De Haan, 2019).

The research results show that when PJOK learning integrates gender equality, both male and female students have equal opportunities to develop fundamental motor skills. This approach also helps change students' mindset in understanding that physical abilities are not limited to a particular gender but can be developed equally by all individuals.

Accommodating disability needs in PJOK learning

An important aspect of this study is the development of an approach that accommodates students with disabilities. Inclusive PJOK learning should provide opportunities for children with disabilities to participate in physical activities tailored to their needs and abilities (Adityatama & Faizah, 2024).

The study reveals that by providing materials adjusted to various types of disabilities, students can develop fundamental motor skills suited to their capabilities. An inclusive learning environment also fosters mutual respect between students with and without disabilities.

The role of PJOK learning in building fundamental motor skills

Inclusive PJOK learning based on local wisdom greatly contributes to the development of students' fundamental motor skills. By utilizing elements of local culture, such as traditional games, gymnastics, or community-based sports, students can practice basic motor movements essential for their physical development.

Physical activities based on local wisdom not only train motor skills but also provide enjoyable learning experiences that are relevant to daily life (Wibowo et al., 2024). This helps students increase awareness of the importance of maintaining an active and healthy body.

Character development through inclusion-based learning

One of the main aspects emphasized in this study is how inclusion-based learning grounded in local wisdom can build the character of students. Noble values in local culture, such as cooperation, helping others, and respecting differences, are highly relevant in character formation. Through PJOK activities designed inclusively, students learn to collaborate, respect diversity, and take responsibility (Mphahlele, 2024). The development of fundamental motor skills combined with these character values shapes individuals who are not only physically healthy but also have a positive attitude when facing life's challenges. This finding is in line with the concept of environmental-cultured education proposed by Siswanto et al. (2019), who found that embedding local cultural and ecological values within school practices significantly strengthens students' social responsibility and moral awareness. Such integration ensures that inclusive learning not only builds motor competence but also cultivates environmental and civic character as part of holistic education.

Physical Education, Sports, and Health (PJOK) is one of the subjects that plays a strategic role in developing fundamental motor skills and the character of students. In the context of inclusive education, the integration of gender equality values and disability awareness with local wisdom is a relevant approach to creating a friendly, fair, and supportive learning environment for the holistic development of students.

PJOK learning based on local wisdom not only provides cultural enrichment that is contextual but also strengthens positive character traits such as leadership, honesty, and teamwork (Cameron & Dutton, 2003). These values are essential in shaping individuals who are physically, mentally, and socially healthy, and who can contribute positively to society (Prilleltensky & Prilleltensky, 2021). For example, in traditional sports activities adapted into PJOK, all students, including those with disabilities, are given roles that match their abilities, fostering an atmosphere of mutual respect and equality.

The role of PJOK in supporting the holistic development of children encompasses physical, psychomotor, affective, cognitive, and spiritual aspects (Furkan & Salahudin, 2024). This aligns with the principle that every child has unique potential that can be maximized through an inclusive learning approach that focuses on the needs of students (Slee, 2018). In this regard, PJOK teachers act as facilitators who ensure that each student has an equal opportunity to develop according to their potential.

The integration of gender equality and disability awareness in PJOK learning also aligns with the objectives of physical education, which focuses on developing motor skills, physical fitness, movement knowledge, and character formation (Suyato et al., 2024). Inclusively designed physical activities can help students understand the importance of appreciating differences and working together to achieve common goals (Mihajlovic & Meier, 2023). This approach also reinforces students' understanding of the importance of maintaining a healthy and active lifestyle throughout life.

In the local context, the incorporation of local wisdom elements in PJOK learning provides opportunities for students to better understand their culture while developing basic motor skills (Raharjo et al., 2023). For example, traditional games that involve running, jumping, and throwing movements can be modified to meet the needs of students with disabilities without losing the cultural essence of the game. Thus, PJOK learning serves not only as a medium for physical development but also as a medium for learning relevant social and cultural values.

In line with Freeman's view (1992), physical education is an educational process through physical activity aimed at achieving desired outcomes, both physical and non-physical. In the local wisdom-based inclusive learning model, physical activities are designed to incorporate elements that facilitate students' organic, neuromuscular, social, emotional, and aesthetic adaptations. These activities are designed to ensure that every student, including those with disabilities, can actively participate and gain optimal benefits.

As part of character development efforts, physical education provides enjoyable and meaningful learning experiences, as stated by Thomas et al. (2008). Inclusive sports and game activities can enhance movement skills, physical fitness, and values such as cooperation and

sportsmanship (Panda, 2024). This is crucial in building a strong foundation of character in students, especially in shaping attitudes of mutual respect and empathy for others.

In relation to the development of fundamental motor skills, PJOK learning based on local wisdom provides space for students to practice basic movement skills that serve as the foundation for mastering advanced motor skills (Gusril et al., 2024). This approach includes physical activities involving gross motor movements such as running, jumping, and throwing, which can be modified to meet the needs of students (Donnelly et al., 2016). According to Jesse Feiring Williams (Freeman, 1992), physical education through selected physical activities can result in positive adaptations in various aspects of student development, including physical, mental, and social aspects.

Therefore, local wisdom-based inclusive learning in PJOK is an innovative approach that can address the challenges of learning in the modern era. This approach not only supports gender equality and disability inclusion but also fosters the development of fundamental motor skills and student character holistically. Additionally, physical education can play a strategic role in shaping a healthy, well-rounded generation that is aware of the importance of diversity and inclusion in society.

CONCLUSION

This study shows that the Local Wisdom-based Inclusive Learning Model, which focuses on gender equality and disability inclusion, is effective in enhancing fundamental motor skills (locomotor and manipulative motor skills) as well as the character of students in Physical Education, Sports, and Health (PJOK). Through this approach, students not only develop better motor skills but are also taught to appreciate differences and strengthen their awareness of the importance of gender equality and inclusion for disabilities. Overall, the implementation of the Local Wisdom-based Inclusive Learning Model, which considers gender equality and disability, can create a more inclusive, fair, and effective learning environment. This contributes to the improvement of the quality of PJOK education in Indonesia, while preparing a young generation that is healthy, skilled, and of noble character.

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