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Identifying the Quality of Lower-Grade Primary School Rhythmic Activity Learning
Identificación de la calidad del aprendizaje de actividades rítmicas en los grados inferiores de la escuela primaria

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Abstract. This study aims to determine the quality of learning Physical Education Sports and Health (PJOK) material on rhythmic activities implemented by PJOK teachers. This research includes descriptive research using a mixed method design by combining quantitative data as the primary data and qualitative as secondary data. The sample of this study was 116 elementary physical education teachers in DIY using a random sampling method. This research instrument uses an online questionnaire adopting the QPE (Quality Physical Education) instrument, modified according to research needs. There are three variables and 19 questions in this instrument, with the results namely (1) Quality teaching as many as six indicators, of all respondents there were 39% respondents chose the answer Yes, and as many as 61% chose the answer No. (2) Skill Development and Bodily Physical Education as many as six indicators. (2) Skill Development and Bodily Awareness as many as eight indicators, 42% of respondents chose the answer Yes, and 58% chose the answer No. (3) Cognitive Skill Development as many as five indicators, 37% of respondents chose the answer Yes, and 63% chose the answer No. The results illustrate that most respondents still choose Yes, and 63% choose No. These results illustrate that most respondents still cannot correctly fulfill the quality of rhythmic activity learning due to various factors according to the qualitative data presented in each variable, with the average data of the answer "yes" of 39%, which is in the category of poor quality.
Keywords: Quality of Learning, Rhythmic Activity, Lower Primary School

Resumen. Este estudio tiene como objetivo determinar la calidad del aprendizaje del material de Educación Física, Deporte y Salud (PJOK) sobre actividades rítmicas implementadas por los docentes del PJOK. Esta investigación incluye investigación descriptiva utilizando un diseño de método mixto al combinar datos cuantitativos como datos primarios y cualitativos como datos secundarios. La muestra de este estudio fue de 116 profesores de educación física de primaria en bricolaje mediante un método de muestreo aleatorio. Este instrumento de investigación utiliza un cuestionario en línea que adopta el instrumento QPE (Educación Física de Calidad), modificado de acuerdo con las necesidades de la investigación. Hay tres variables y 19 preguntas en este instrumento, con los resultados a saber (1) Enseñanza de calidad hasta seis indicadores, de todos los encuestados, el 39% de los encuestados eligió la respuesta Sí, y hasta el 61% eligió la respuesta No. (2) Desarrollo de Habilidades y Educación Física Corporal hasta seis indicadores. (2) Desarrollo de habilidades y conciencia corporal hasta ocho indicadores, el 42 % de los encuestados eligió la respuesta Sí y el 58 % eligió la respuesta No. (3) Desarrollo de habilidades cognitivas hasta cinco indicadores, el 37 % de los encuestados eligió la respuesta Sí, y el 63 % eligió la respuesta No. Los resultados ilustran que la mayoría de los encuestados aún eligen Sí, y el 63 % elige No. Estos resultados ilustran que la mayoría de los encuestados aún no pueden cumplir correctamente con la calidad del aprendizaje de actividades rítmicas debido a varios factores de acuerdo con el cualitativo. datos presentados en cada variable, siendo el promedio de datos de respuesta “sí” del 39%, lo que se ubica en la categoría de mala calidad.
Palabras clave: Calidad del Aprendizaje, Actividad Rítmica, Escuela Primaria Inferior

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Introduction

Rhythmic activity learning is key for primary school students as children love mass, fun activities with or without musical accompaniment (Laure & Habe, 2023). In Indonesia, learning rhythmic activities is also a weekly routine in primary school education units for a mass activity that is fun and efficient in terms of time and supporting facilities (Faridah et al., 2022). There are also benefits of learning rhythmic activities for lower-grade elementary school students, including cognitive, language, social, and emotional development, as well as religious and moral values that can be integrated with rhythmic movement activities or rhythmic activities (Mulyaningsih et al., 2022). A rhythmic movement is a form of gross motor stimulation packaged in an attractive form because it accompanies songs that excite children to move. Developing rhythmic awareness in children means developing an internal time structure that is consistent and meaningful to the child. The essential elements of rhythm are pulse, accent, size, pattern, and quality, which are internalized and reinforced through the chosen movement activity (Özmenteş, 2010). However, from previous research literature studies regarding rhythmic activity learning at various age levels, there is still unfavorable data, especially in educational units in recent years. Starting from Li Yuan's research states that rhythmic activity activities in the school environment in the last eight years have experienced a decline in routine implementation due to several contributing factors (Lin, 2014). Other research results state that the interest of upper and lower primary school students has decreased due to sedentary behavior and the lack of school policies to encourage students and all school members (Williams & Berthelsen, 2019). Considering that rhythmic activity learning is essential and fun for elementary school students, especially lower-grade students, it is necessary to survey the quality of rhythmic activity learning at the lower-grade elementary school level. The aim of this research will be obtained with the following two questions, namely (1) what is the quality of rhythmic activity learning at the lower elementary school level, and (2) what is the biggest factor in the success of rhythmic activity learning.

Materials and Methods

Participants

The subjects of this study were elementary school physical education teachers in the Special Region of Yogyakarta, totaling 116 teachers from 89 schools. The sampling system uses a random sampling method without any requirements considering all research subjects needed are homogeneous. The identity of the research subjects taken by random sampling on average was (1) the average age of the teachers was around 45 years, (2) the male gender was 45 teachers and the female gender was 71 teachers.

This research was only conducted online through a questionnaire considering that the territorial area of Yogyakarta is vast. Hence, the research results only use a review of the documentation of learning device files uploaded by respondents and are reviewed qualitatively.

Procedure

This research uses a descriptive quantitative and qualitative research design (mixed method) with an online instrument adopted from a standardized questionnaire (Ho et al., 2021). The questionnaire was administered through the KKG of Primary School Physical Education Teachers in each target area. The questionnaire contained three variables taken from the quality of physical education learning (QPE) instrument, namely: (1) Teaching Quality, (2) Body Awareness Skill Development, and (3) Cognition. There were 19 questions on all variables with Yes and No answer options. On each answer option, there was an entire document or explanation of the experience of choosing the Yes answer and a column of reasons for difficulties experienced if choosing the No answer. Further details about the questionnaire used in this study are presented in Table 1.

In each variable, data will be analyzed to determine the level of implementation of rhythmic activity learning to support optimal learning outcomes for lower-grade elementary school students by describing data in the form of numbers related to the number and average answers of research respondents using distribution tables (quantitative) and translation using sentences on each answer choice in the majority (qualitative) as information on learning quality. The structured research design is illustrated in Figure 1.

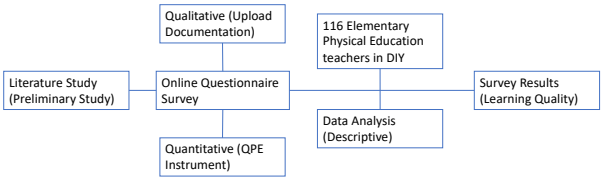

Figure 1. Research design

Table 1.
Instrument Quality Physical Education

Indicators	Question Item
Skill Development and Bodily Awareness (*SDBA*)	
Improve students' physical skills	1
Improve students' knowledge of sports-related terms	2
Provide students with opportunities to take part in different physical activities	3
Increase students' knowledge in various activities	4
Allow students to learn and interact with classmates	5
Teach students how important activity is for the growth process	6
Help students to understand how their bodies work	7
Help students learn to attend sports activities after school and use their free time wisely.	8
Quality Teaching of Physical Education (*QTPE*)	
Learn and develop the basic skills of various physical activities and sports	9
Demonstrate a basic understanding of the importance of physical activity and health	10
Communicate ideas and feelings effectively with others	11
Fundamental motor skills in the context of appropriate physical activities of low organization	12
Demonstrate basic skills in decision-making, communication, etc	13
At the middle-grade level, develop an appropriate understanding of health and fitness, including setting and achieving personal goals for healthy living.	14
Cognitive Skill Development (*CSD*)	
It helps students to develop their critical thinking skills	15
Improve students' ability to problem solving	16
Enhance students' innovative thinking	17
Enhance students' independent thinking	18
Helping students to develop socially acceptable moral thinking and behavior	19

Results

The results of filling out the questionnaire conducted by respondents of as many as 116 elementary school physical education teachers obtained diverse data according to each teacher's and school's conditions. The majority of the average number data on each variable gets the following data: (1) Quality teaching from 6 indicators, namely as many as 39% chose the answer Yes and as many as 61% chose the answer No. (2) Skill Development Bodily Awareness from 8 indicators, namely 42% chose the answer Yes and 58% chose the answer No. (3) Cognitive Skill Development from 5 indicators, namely, 37% chose the answer Yes, and 63% chose the answer No. The majority of respondents chose the answer No based on the data.

Most respondents chose No based on quantitative data on all research variables. However, to get more concrete data, it needs to be complemented with numerical data per indicator and the description of secondary data, namely qualitative data.

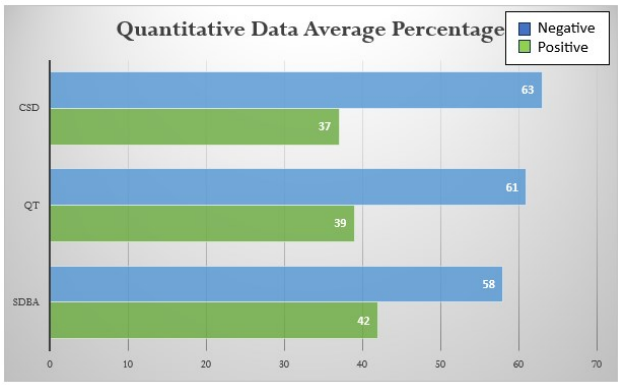

Figure 2. Quantitative Data Mean Diagram of All Variables

Table 2.
Variable Quality teaching

Indicators	N	Positive		Negative	
		Total	Mean	Total	Mean
Learn and develop the basic skills of various physical activities and sports	116	41	39	75	61
Demonstrate a basic understanding of the importance of physical activity and health	116	33		83	
Communicate ideas and feelings effectively with others	116	49		67	
Basic motor skills in the context of appropriate physical activities of low organization	116	39		77	
Demonstrate basic skills in decision-making, communication, etc	116	56		60	
Develop an appropriate understanding of health and fitness for a healthy lifestyle	116	55		61	

Table 3.
QT Variable Qualitative Data Results

Answer	Mean	Qualitative Description
Positive	39	A minority of teachers can demonstrate excellent and practical teaching skills with evidence of systematic and up-to-date lesson plans.
Negative	61	Most teachers struggle to provide movement examples and theoretical understanding of rhythmic activity materials due to limited practical experience and poor literacy.

Table 4.
Variable Skill Development Bodily Awareness

Indicators	N	Positive		Negative	
		Total	Mean	Total	Mean
Improve their physical skills	116	62	42	54	58
Improve students' knowledge of sports terms	116	41		75	
Provide opportunities for students to take part in different physical activities	116	36		80	
Increase students' knowledge in various activities	116	48		68	
Allow students to learn and interact with classmates	116	37		79	
Teach students how important activity is for the growth process	116	64		52	
Help students to understand how their bodies work	116	52		64	
Help students develop the habit of attending after-school sports activities	116	47		69	

Table 5.
SDBA Variable Qualitative Data Results

Answer	Mean	Qualitative Description
Positive	42	Teachers can illustrate rhythmic activities with various approaches, including movement skills, the latest learning media, and knowledge literacy in the form of questions and projects optimally.
Negative	58	Teachers have difficulties in developing a variety of rhythmic activities, increasing students' cognition of rhythmic activity material during the learning process and providing less opportunity for interaction during the rhythmic activity learning process.

Table 6.
Variable Cognitive Skill Development

Indicators	N	Positive		Negative	
		Total	Mean	Total	Mean
It helps students to develop their critical thinking skills	116	39	37	77	63
Improve students' ability to problem-solving	116	41		75	
Enhance students' innovative thinking	116	43		73	
Enhance students' independent thinking	116	44		72	
Helping students to develop socially acceptable moral thinking and behavior	116	47		69	

Table 7.
CSD Variable Qualitative Data Results

Answer	Mean	Qualitative Description
Positive	37	A minority of teachers can provide direction to students during rhythmic activity learning so that students can develop critical, social, independent, and innovative thinking skills.
Negative	63	Most teachers find it difficult to develop critical thinking skills, problem-solving, innovative and socially acceptable thinking or behavior in the learning process of rhythmic activities because teacher packaging still focuses on improving students' psychomotor skills.

Table 8.
Average Results of Respondents' Answers on All Research Variables

Answer	QT	SDBA	CSD	Average
Positive	39	42	37	39
Negative	61	58	63	61

Discussion

Based on the above research results, namely in descriptive data analyzed using Excel formula calculations to obtain a percentage on each variable studied. Based on these results, objective information has been obtained regarding the quality of rhythmic activity learning implemented by elementary school physical education teachers running with good quality. Quantitative data has been described on each variable and indicator, with qualitative data reinforcing data from the primary data that has been obtained to see the reasons for the difficulties of elementary school physical education teachers in implementing rhythmic activity learning.

Quantitative data on the variable development of students' cognitive skills get an average of 63% of respondents choosing the negative answer, which means that they have not implemented the indicators asked about the teacher's teaching experience in rhythmic activity learning. These results align with research quotes by Kosheleva, which state that the skills of elementary school students in physical education learning can be carried out well. Still, their development cannot be detected in cognitive and affective aspects due to a learning system that does not focus on learning outcomes for students' cognitive and affective competencies (Kosheleva, 2022). The psychomotor aspect is an advanced goal after cognitive and affective aspects can be implemented optimally through physical activity. However, the limited knowledge of elementary school physical education teachers makes the learning designed for students cannot be developed optimally according to the research results on cognitive development variables. Rhythmic activity learning is structured and demands creativity, making it more difficult for primary school physical education teachers to develop students' cognitive domains.

The difficulties conveyed by teachers through qualitative data on the cognitive skills development variable mainly conveyed the lack of literacy regarding rhythmic activity learning innovations that are very detailed and specific. Rhythmic activities are simple learning and favored by children, but if the teacher does not have extensive literacy experience, the teacher's ability to develop learning will be limited (Safay Honarvari & Moshkbid Haghighi, 2019). Considering the importance of rhythmic activities, teachers must provide innovative models and approaches for lower-grade elementary school students in all learning competencies and for teachers to deepen their knowledge of rhythmic activity materials (Sobarna, 2016; Spector et al., 2016). This also happens because there is no interesting and credible method in rhythmic activities, namely using the BAPNE method which has been tested in learning rhythmic activities which utilizes various musical and analytical methods (Arnau-Mollá & Romero-Naranjo, 2024a; F. J. Romero-Naranjo et al., 2023)(Andreu-Cabrera & Romero-Naranjo, 2022) (A. A. Romero-Naranjo et al., 2014a, 2014b; Romero, 2023) (Arnau-Mollá & Romero-Naranjo, 2024b; Mas-Mas et al., 2023; Romero-naranjo et al., 2023; Romero Naranjo & Cabrera, 2023).

The second variable from the quantitative data with a high percentage of difficulty is the variable of teaching quality, with 61% of elementary physical education teachers choosing the negative answer. Teaching quality variables are essential to the learning process because students depend on the teacher's performance while facilitating students, providing direction, illustrating, and designing the entire learning process. Two indicators get the lowest score or teachers prefer to answer No, namely (1) teachers are less able to develop creativity in rhythmic activities. Hence, students lack complex and sustainable rhythmic motion experiences. Furthermore, namely (2) the lack of references by the specifications of rhythmic activity material, especially in the lower grades, to attract students' attention at that age, both from written references and rhythmic activity models or musical accompaniment media.

Physical education teachers are currently required to have a high level of innovation, especially in the mastery of technology, which is the leading media to adjust the conditions of students who love technology, such as smartphones. Suppose the teacher cannot fulfill this situation. In that case, there are several disadvantages; one is that the coached students will be left behind by competition from the output of students who get services according to the needs of this modern era (BAHADIR et al., 2019). 21st-century learning allows teachers to continue to learn and provide the best service to students as needed because if students want optimal learning outcomes, teachers must have good 21st-century educator competencies (Brun & Hinostroza, 2014; Kereluik et al., 2013; UNESCO, 2015). Teachers must keep up with the times and science in this millennial era so that teachers can adjust to the needs and characteristics of today's students, especially in lower grade elementary school students. Teachers must also master all teaching materials in theory and practice to become role models for their students as one of the learning resources students need. Using technology, teachers can facilitate their role in providing material illustrations and get many learning resources that will be studied together during learning, especially rhythmic activity material (Hu et al., 2020). Media development aims to achieve learning objectives, and the limited conditions of students and facilities can get easy help from the media developed. For now, media that can optimally support one of them is audio-visual media that can reach two senses, namely vision and hearing (Gambari et al., 2014). The benefits of media in learning are that the learning process becomes more precise and more enjoyable, understanding the material is more optimal, time and energy efficiency, and improving the quality of student learning outcomes (Rumahorbo, 2020). In physical education, learning media is one of the best weapons to make learning more exciting and can direct students' attention with a new perspective so that students will

get some new experiences (Arjmandnia et al., 2021).

The last variable with a lower percentage than the previous two variables is the variable of skill development and body awareness, with a percentage of negative answers of 58% and is still classified as not good. The physical skill variable is the output of the final stage of the learning series. In contrast, physical education focuses on learning through physical activity, one of which is rhythmic activity material (Zarian et al., 2021). Whereas in the indicators asked in the skill development and body awareness variables, there are several great difficulties, including (1) awareness of thinking during physical activity, (2) a variety of activities with various levels of difficulty so that students can choose, and (3) accommodating students so that they can discuss the material and activities they learn.

The ability to think becomes the initial phase before each student will steps and do the activity; even during the activity process from start to finish, the brain function will be significant so that the awareness of student body movements can be felt by each student who does the activity (Padulo et al., 2014; Prakash et al., 2015). The increase in student movement activity is a form of the success of students' thinking skills in directing each step taken by each student (Alesi et al., 2015; Donnelly et al., 2017). After students can experience their movements, they can develop their thinking skills by helping to analyze the movements of their peers and provide evaluations or judgments regarding whether the movements performed by the observed peers are effective (De Giorgio et al., 2018; Gregory et al., 2012). So it can be concluded that the importance of students' thinking awareness to continue to be honed signals teachers to continuously innovate towards developing students' thinking skills towards their body movement awareness.

After reviewing the data thoroughly through quantitative and qualitative perspectives, the weaknesses of rhythmic activity learning at the lower-grade elementary school level can be obtained in detail and complexity. The diversity of data from all research subjects illustrates that rhythmic activity learning still needs much improvement from all perspectives of learning quality. Through physical education learning, student competence covers all cognitive, affective, and psychomotor domains. So that physical education teachers must be able to design effectively and appropriately for elementary school students, significantly lower grades.

Another interesting indicator is the teaching skills of elementary school physical education teachers on rhythmic activity materials that need to be significantly improved and adapted to the characteristics of the material and lower-grade elementary school students. Teachers are required to be able to master rhythmic activity material and be able to innovate to provide solutions to the weaknesses of learning implementation in schools on rhythmic activity material (Frey et al., 2022). With the various studies of the results of this research that provide an overview of the quality of rhythmic activity learning, it is hoped that it can develop rhythmic activity materials so that they can be taught to students in an attractive, fun, variety of rhythmic activities that are of increasingly high quality and beneficial for the growth and development of lower grade elementary school students.

Conclusion

Physical education is one of the subjects that provide opportunities for students to develop through dominant physical activity. Through physical activity, students' potential is optimally developed in all domains, namely cognitive, affective, and psychomotor, through quality learning. Rhythmic activity learning is interesting learning for elementary school students, significantly lower grades whose motor systems are not yet optimally directed, so the rhythmic movements of rhythmic activities will be able to teach lower-grade elementary school students to improve from the point of view of motion coordination, rhythmic motion, and all other structured motion potentials.

From the description of the research results and the review of the discussion, it can be concluded that the quality of learning rhythmic activities by elementary school physical education teachers in DIY is classified as low or poor quality. So it can be concluded that the quality of primary school physical education teachers in providing rhythmic activity learning to primary school students is in the poor category because the percentage of negative answers exceeds the percentage of positive answers significantly.

The illustration of the data states that elementary school physical education teachers in providing rhythmic activity learning still have a lot of difficulties.

Rhythmic activity material is essential to learn to support the improvement of rhythmic movement activeness of lower-grade elementary school students. This data is the basis for many researchers to conduct further research that is more comprehensive and in-depth to provide solutions from various points of view of sports science studies. So that practitioners, as the spearhead of implementing changes in the quality of rhythmic activity learning, can get various research results to make rhythmic activity learning designs that are right on target for lower-grade elementary school students.

Suggestions given by researchers in developing rhythmic activities in elementary school classes include using the BAPNE method which has been tested in rhythmic activities with a musical approach. This can be an alternative variation for teachers to deepen rhythmic activity material with a musical approach to increase interest in learning and the quality of learning provided by teachers to students.

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