

Survey of Junior High School Athletic Learning Quality

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Abstract The objective of this research is to determine the effectiveness of athletic learning in junior high school. This descriptive study employs a mixed method design, combining quantitative and qualitative data as primary and secondary data. This study sample consisted of 100 junior high school physical education teachers in Yogyakarta and East Java who were chosen as the best athletic development centers in Indonesia based on the results of the O2SN competition for junior high schools over the previous five years. This research instrument, known as QPE, is an online questionnaire based on Walter King Yan Ho's (Quality Physical Education). The results showed that: (1) Quality teaching of the 6 indicators asked, 43.5 percent chose the answer Yes and as many as 56.5 percent chose the answer No. (2) Skill Development Bodily Awareness of the eight indicators tested, 45.5 percent chose Yes and 54.5 percent chose No. (3) Cognitive Skill Development: Of the five indicators asked, 40.8 percent chose Yes, while 59.2 percent chose No. (4) Habituated Behavior out of the four indicators tested, 51.5 percent chose Yes and 48.5 percent chose No. According to the findings of this study, the majority of respondents still find it difficult to meet the quality of physical education learning for athletic material because the average "yes" answer is 45.33%, which falls into the poor quality category.

Keywords Quality, Physical Education Learning, Athletic Material

1. Introduction

Physical activity assessments of movement skills such as running, jumping, and throwing could serve as building blocks for lifelong physical activity, so children who do not develop these skills early in life may be less likely to meet or exceed daily physical activity recommendations days later [1]. The importance of physical activity for early adolescents provides an overview for junior high school physical education teachers to be able to provide interesting learning services and increase student activity. Middle school students are more active during physical education and enjoy it more than they do during their leisure time physical activities at home [2]. This indicates that high school students still require innovative guidance or stimulation from teachers in order to provide more opportunities for physical activity by students. Physical education has a positive impact on the physical activity of early adolescent students in order to increase optimal growth and development [3]. Through physical education, early adolescent students develop good physical activity habits both inside and outside of the curriculum, allowing them to optimize their development of fitness, social, psychology, and knowledge [4]. Early adolescent physical activity determines the formation of motor development foundations with more detailed and complex patterns for the next age phase [5].

Teenage motor development at the age 13-16 years is critical for improving objective lifestyles such as learning motivation, interactive socialization with peers and parents, and increasing children's confidence in daily activities [6]. Motor development in early adolescents is broadly centered on the basic movements of all sports, including limb and arm coordination, agility, sprinting, flexibility, and explosive motion such as jumping and throwing [7][8]. According to experts [8], athletic activities such as walking, running, jumping, and throwing provide the majority of motion that contributes to children's overall growth. Athletic activity or sport is the world's oldest sport and is even referred to as the Mother of Sports, i.e. the mother or parent of all sports, due to the fact that it was the first sport in the world [9]. Athletic learning has an individual and measurable nature of activity; if packaged with 21st century learning principles, it is hoped that this athletic learning will be easier to achieve overall learning objectives [10].

The researchers will conduct a survey of the quality of physical education learning on junior high school athletic materials for junior high school physical education teachers.

The purpose of this study was to determine the level of quality of physical education learning in athletic material at the junior high school level utilizing survey results. The research questions are: How is the quality of physical education learning for junior high school athletics based on the results of a survey given to middle school PJOK teachers?

2. Materials and Methods

2.1. Participants

Junior High School Physical Education teachers in the Special Region of Yogyakarta (DIY) and East Java were polled, with a sample size of 100 from 60 schools. The

research areas of DIY and East Java were chosen based on the results of a survey on the development of athletic sports at the junior high school level, which was very well studied from the results of sports competitions between schools throughout Indonesia (O2SN) for junior high schools. However, because this study was only conducted online via a questionnaire, the review of the survey results relied solely on a review of the learning device file documentation uploaded by the respondents and would be studied qualitatively.

2.2. Procedure

This study employs a quantitative and qualitative descriptive research design (mix method) with an online questionnaire instrument adapted from a proprietary questionnaire [11] by distributing a questionnaire link through the Physical Education Teacher MGMP in each targeted area. The questionnaire contains four variables drawn from the physical education learning quality instrument (QPE), namely: (1) Quality Teaching, (2) Skill Development of Bodily Awareness, (3) Cognitive, and (4) Habituated Behavior. There are 23 questions in all variables with answer choices Yes and No, and in each answer choice there is a complete document or explanation of experience if you choose the answer Yes, and a column of reasons for the difficulties experienced if you choose the answer No. More details about the questionnaire used in this investigation are provided in Table 1.

In each variable, data analysis will be performed to determine the level of implementation of athletic material physical education learning to support optimal learning outcomes for junior high 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 in each answer choice in a majority (qualitative) as information on the quality of learning. A structured research design is illustrated in Figure 1.

Table 1. Questionnaire Instruments

Variable	Indicator	Question Number
Skill Development and Bodily Awareness (SDBA)	Improve their physical skills	1
	Improve students' understanding of sports terminology	2
	Giving students the opportunity to take part in different physical activities	3
	Increase students' knowledge in various activities	4
	Give students the opportunity to learn and interact with their classmates	5
	Teach students the importance of activity in the growth process	6
	Help students to understand how their bodies work	7
	Assisting students in developing the habit of attending sports after school and making good use of their free time in sports	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
	Effectively communicate ideas and feelings to others	11
	Basic motor skills in the context of low-organizational physical activity	12
	Demonstrate fundamental skills in decision making, communication, and so on	13
	Develop a proper understanding of health and wellness at the middle school level, including setting and achieving personal goals for a healthy life	14
Cognitive Skill Development (CSD)	Assisting students in developing their critical thinking abilities	15
	Improve students' problem-solving abilities	16
	Improve students' innovative thinking	17
	Improve students' independent thinking	18
	Assisting students in developing socially acceptable moral thinking and behavior	19
Habituated Behaviour in Physical Activities (HBPA)	Demonstrate the habit of exercising regularly	20
	Understand the relationship between physical activity and sport with personal and social development	21
	Take appropriate responsibilities to serve a sports club or other related activities in the school or community	22
	Develop advanced proficiency in various physical activities and sports	23

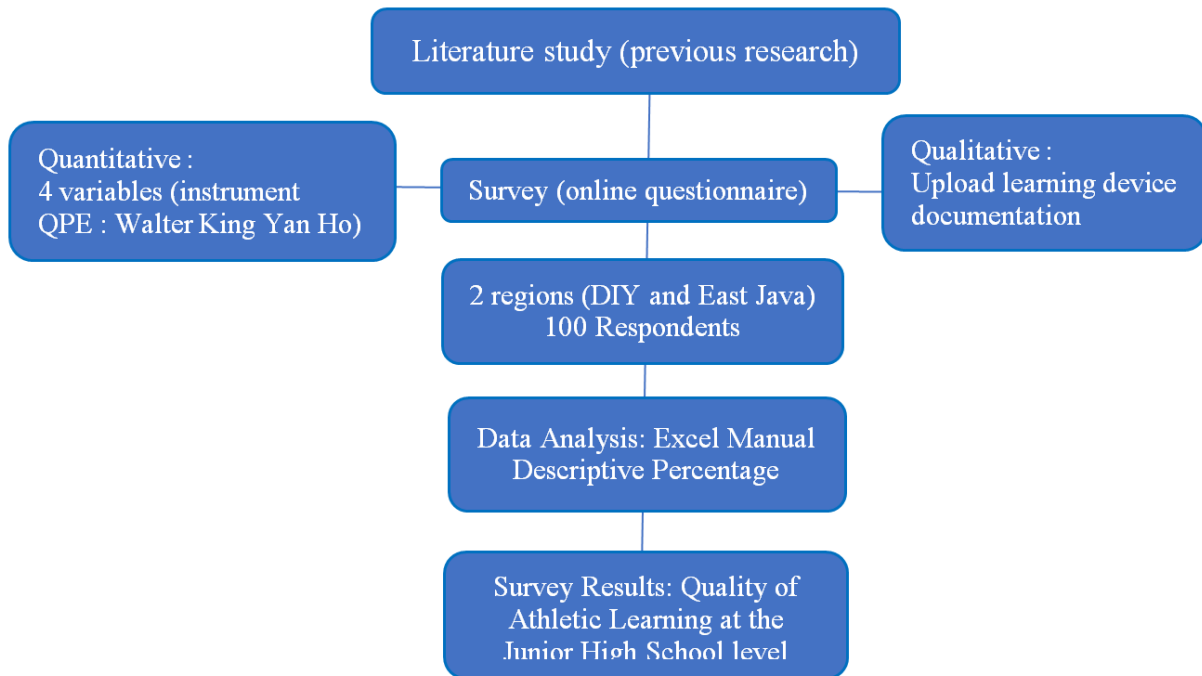


Figure 1. Research Design

3. Results

Using 100 online survey respondents as the research sample, different data were gathered from their responses in accordance with the circumstances of each teacher's school. The average figures found for each variable are generally as follows: (1) Quality of instruction: of the 6 indicators, 43.5 percent selected "Yes" while 56.5 percent selected "No." (2) Development of Skills Bodily Awareness of the 8 indicators posed, up to 45.5 percent selected "Yes," while 54.5 percent selected "No." (3) Cognitive Skill Development of the 5 indicators, up to 40.8 percent of respondents selected "Yes," and up to 59.2 percent selected "No." (4) Habituated Behavior out of the 4 indicators, 51.5 percent chose "Yes" and 48.5 percent "No".

Respondents generally select No for each of these variables, but in order to obtain more detailed information, it is necessary to explain more specifically about each

variable's indicator. The majority of these variables can also be described using a qualitative approach. Data are displayed systematically in figure 2.

Based on the calculations and explanations in tables 2, 3, 4, and 5, table 6 shows the overall quantitative results and the numerical values for each computed variable. Additionally, table 6 includes the average calculation outcomes for all research variables. From a scale of 100 respondents divided into two answer categories, Yes and No, the lowest number in the positive answer choice (Yes) out of the four variables lies in variable 3, or Cognitive Skill Development, which is shown in table 4. This number is 40.8. Of the 4 variables examined, most of the calculations for the answer choice Yes were not significantly different, whereas the other variables from the calculation varied from 43 to 51. The highest data is found in variable 4 with results that only reach 51.5, however this result also does not show a significant positive answer for any of the variables.

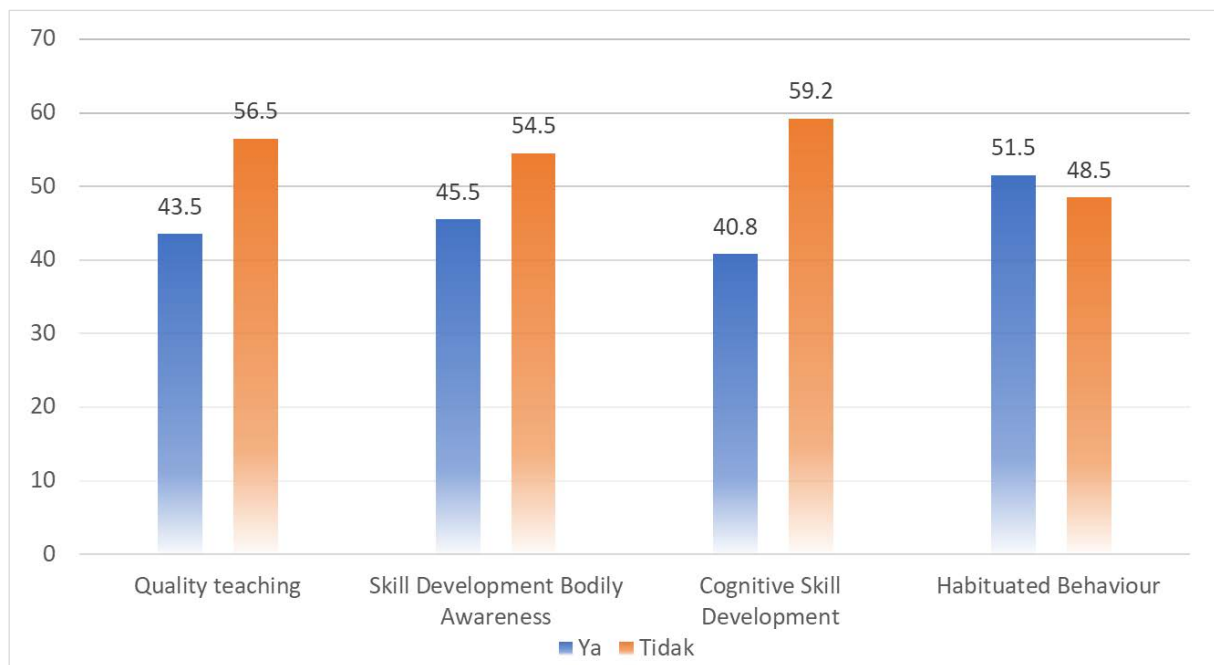


Figure 2. The average diagram of all variables

Table 2. Variable Quality teaching

Indicator	N	Yes		No	
		Total	Mean	Total	Mean
Demonstrate a basic understanding of the importance of physical activity and health	100	27		73	
Effectively communicate ideas and feelings to others	100	30		70	
Basic motor skills in the context of low-organizational physical activity	100	54		46	
Demonstrate fundamental skills in decision making, communication, and so on	100	53	43,5	47	56,5
Develop a proper understanding of health and wellness at the middle school level, including setting and achieving personal goals for a healthy life	100	61		39	
Demonstrate a basic understanding of the importance of physical activity and health	100	36		64	

Qualitative Data

Answer	Mean	Qualitative Description
Yes	43,5	The majority of teachers can demonstrate the basic skills of good and effective communication with evidence of written explanations related to the systematic learning flow
No	56,5	The majority of teachers find it difficult to provide examples of movement and theoretical understanding related to athletic material due to limited experience in athletic practice, weak literacy and the age of the teacher who has entered the elderly

Table 3. Variable Skill Development Bodily Awareness

Indicator	N	Yes		No	
		Total	Mean	Total	Mean
Improve their physical skills	100	51		49	
Improve students' understanding of sports terminology	100	45		55	
Giving students the opportunity to take part in different physical activities	100	32		68	
Increase students' knowledge in various activities	100	30		70	
Give students the opportunity to learn and interact with their classmates	100	35	45,5	65	54,5
Teach students the importance of activity in the growth process	100	55		45	
Help students to understand how their bodies work	100	60		40	
Assisting students in developing the habit of attending sports after school	100	56		46	

Qualitative Data

Answer	Mean	Qualitative Description
Yes	45,5	The teacher is able to provide illustrations for understanding the work of student body movements, the importance of student physical activity and developing students' habits in participating in sports activities after school
No	54,5	Teachers find it difficult to develop a variety of athletic activities, improve students' cognitive skills in athletics during the learning process, and do not provide a means of interaction for athletic materials during the learning process. Because, so far, the majority of teachers have only used a direct learning approach or direct instruction

Table 4. Variable Cognitive Skill Development

Indicator	N	Yes		No	
		Total	Mean	Total	Mean
Assisting students in developing their critical thinking abilities	100	35		65	
Improve students' problem-solving abilities	100	28		72	
Improve students' innovative thinking	100	45	40,8	55	59,2
Improve students' independent thinking	100	59		41	
Assisting students in developing socially acceptable moral thinking and behavior	100	37		63	

Qualitative Data

Answer	Mean	Qualitative Description
Yes	40,8	The teacher is able to provide direction to students during athletic learning so that students are able to develop their movement skills independently through the examples provided by the teacher through videos or direct examples
No	59,2	Teachers have difficulty developing critical thinking skills, problem solving, innovative and socially acceptable thinking or behavior in the athletic learning process because the teacher's packaging is still focused on improving students' skills or abilities in athletic material

Table 5. Variable Habituated Behaviour

Indicator	N	Yes		No	
		Total	Mean	Total	Mean
Demonstrate the habit of exercising regularly	100	40		60	
Understand the relationship between physical activity and sport with personal and social development	100	46		54	
Take appropriate responsibilities to serve a sports club or other related activities in the school or community	100	61	51,5	39	48,5
Develop advanced proficiency in various physical activities and sports	100	59		41	

Qualitative Data

Answer	Mean	Qualitative Description
Yes	51,5	Teachers are able to invite students to participate in activities at school or in the athletic sports community to further develop their athletic skills
No	48,5	Teachers have struggled to establish a regular monitoring system for student athletic activities in their respective homes and have been unable to provide an overview of the importance of participating in athletic sports for their growth and development into adulthood. This occurred as a result of the teacher's inability to master the athletic material in theory and practice

Table 6. Average Respondent Answers

Answer	V1	V2	V3	V4	Average
Yes	43,5	45,5	40,8	51,5	45,33
No	56,5	54,5	59,2	48,5	54,67

Note: V1 = Variable 1 (Quality Teaching); V2 = Variable 2 (Skill Development Bodily Awareness); V3 = Variable 3 (Cognitive Skill Development); V4 = Variable 4 (Habituated Behaviour)

4. Discussion

Analysis of research data using manual calculations based on excel formulas is to calculate percentages for each variable studied.

Based on the findings of the preceding study, which

provides a wealth of information about how athletic learning is implemented by physical education teachers at the junior high school level, whether it is of high quality or not. In each variable and indicator, numerical data has been described, and qualitative data related to supporting data or reasons for teacher difficulties have been described in the

form of written data. Looking at the quantitative data described in the research results section, it is clear that there are still many teachers who face difficulties or lack appropriateness in the implementation of athletic learning at the junior high school level, particularly on the variable of developing students' cognitive skills, with an average of 59.2 percent of teachers answering No, indicating that they have not implemented the indicators requested as in the description of table 4. These findings are in line with the research quote by Tonnessen et al, who state that the majority of early adolescent students can perform well in athletic learning even though the skills have not been optimally developed in each student, but they have not been able to develop optimally in the cognitive and affective aspects. Its emergence was discovered as a result of a learning system that did not prioritize learning outcomes on students' cognitive and affective competencies [12]. The learning objectives in physical education, particularly athletic material, are still focused on movement skills or psychomotor competencies. As a result from this survey, the cognitive domain has been unable to monitor its development following the athletic learning process carried out by teachers and students. There must be a solution, particularly in the learning package, by implementing learning innovations carried out by teachers as learning facilitators, such as modifying learning models and media in order to increase learning achievement in basic competence, core competence, indicators, and learning objectives of physical activity in all academic aspects [13].

The difficulty conveyed by the teacher through qualitative data in the table 4 of the variables of developing cognitive skill, the majority said that the lack of literacy in physical education learning models and literacy on athletic material made it increasingly difficult for teachers to develop innovations in the implementation of learning, particularly athletic material. Given that athletic sports are included in individual sports, teachers in schools must have a caring attitude or sensitivity in order to provide innovative models and approaches in their movement activities by early adolescent students to improve all of their learning competencies, and teachers must continue to develop pedagogical competencies, particularly in athletic material. [14,15].

The second variable from quantitative data that causes difficulty for the majority of teachers is related to the teaching quality variable, with data showing that 56.5 percent of teachers answered No as described in table 2. This variable examines the teacher's role in providing learning services, especially when it comes to athletic material. The teacher demonstrating and providing direct and specific motion corrections from all of the material being taught is one indicator that becomes a point of difficulty as described in table 3. There are three main reasons for this. The first is that most of the teachers have reached retirement age, making it difficult to provide examples of appropriate movements. (2) Furthermore,

many teachers do not thoroughly understand athletic material, so the basic athletic skills demonstrated and corrections provided are ineffective. There are some interesting responses from respondents, such as (3) the lack of athletic learning references, which forces teachers to rely solely on teacher and student books provided by the government.

Teachers who are unable to use current technology and adapt to new developments, technologies, and ideas will be unable to raise individuals who will become future architects [16]. Because students want optimal learning outcomes, teachers must have good 21st century educator competencies [17][18][19]. Teachers are required to keep up with the times and scientific developments in this 21st century in order to adapt to the needs and characteristics of today's students. Teachers must also master all teaching materials, both theoretically and practically, in order to serve as role models for their students and as one of the learning resources required by students. Teachers will be able to facilitate their role in illustrating material and obtain many learning resources, particularly athletic material by utilizing technology [20]. Because each medium has its own characteristics, media refers to the system used to present instructions, such as book-based media, video-based media, or computer-based media [21]. The benefits of using media in learning include making the learning process clearer and more interesting, improving understanding of the material, saving time and energy, and improving the quality of student learning outcomes [22]. Learning media is one of the most effective tools in physical education for making learning more interesting and for directing students' attention with new perspectives so that students can gain new experiences [23].

Developing body awareness skills is the third variable with a high percentage of difficulty. In this variable, respondents chose No as much as 54.5 percent of the time, which is still relatively high or higher than the answer Yes. This variable focuses on the development of physical abilities and skills in general, so that it becomes the dominant part of the learning process in physical education, particularly athletics. However, many teachers had difficulty with some of the indicators asked in this research instrument. Among them are the variables (1) thinking awareness during physical activity, (2) a variety of activities with varying levels of difficulty from which students can choose, and (3) accommodations for students to discuss the material and activities they learn.

The ability to think becomes the initial phase before every student steps up and performs their activities; even during the activity process from beginning to end, brain function will be very important so that every student who performs can feel awareness of student body movements [24,25]. Increased student movement activity is a manifestation of successful student thinking ability in directing each student's step [26,27]. Students can develop their thinking abilities or skills by assisting in the analysis of colleagues' movements and providing evaluations or

judgements regarding the effectiveness of the movements made by the observed friends [28,29]. As a result, the importance of continuing to sharpen students' thinking awareness sends a signal to teachers to always innovate toward the development needs of students' thinking skills toward body movement awareness [30].

Furthermore, the majority of middle school physical education teachers believe that indicators of activity variations with varying degrees of difficulty are difficult to implement. Because the teacher assumes individual and measurable athletic sports [31], this material contains less innovative thinking.

There are still many activities in physical education learning that uniform the abilities of all students [32], so students with certain abilities have difficulty carrying out activities because their ability limits are not the same, resulting in low student activity [33].

Teacher creativity is required to enable students who are less able to participate in learning to feel capable of carrying out each process, which will lead to these students finding interest and meaning in physical education classes [34,35].

The fourth component, habituated behavior, is the highest outcome in a positive situation of the three factors previously stated with varied findings and discussions (answer Yes). However, the numerical data on this variable, as detailed in table 5, yields results that are not significantly different from other variables. One of the weakest indicators in table 5 is demonstrating the habit of regular athletic activities in leisure time. Teachers hardly ever provide this since indirectly sporting activities, which are actually quite simple to perform, are disliked by the general public, even by those who are knowledgeable about sports [36]. Since teachers are not familiar to give students systematic activity guides outside of class, students do not have access to beneficial, well-monitored activities in their everyday school activities [37].

Based on the descriptions of the quantitative and qualitative data provided above, the study concludes that it is easier to see the weak side of every experience carried out by teachers in teaching athletics to junior high school students in their respective schools. All of the variables mentioned above are domains or competencies that students in physical education must attain, namely cognitive, affective, and psychomotor competencies.

Furthermore, there is how the teacher's teaching skills in providing physical education learning services on athletic material.

The four variables studied are the main descriptions of the quality of learning that teachers must possess in order to overcome problems in the classical school environment through high quality physical education learning, particularly in athletic material, which is the foundation of student movement in early adolescence.

5. Conclusions

Physical education has a recreational nature that is implemented through physical activity, so there needs to be developed from various perspectives so that the quality of physical education learning, particularly athletic material, is improved. With an average result of 45.33% for all "yes" answer variables and a result of 54.67% for all "no" answer variables, the quality level of SMP PJOK teachers in providing athletic learning to junior high school students is in the poor category. Of the four variables, only the habituation behavior variable has a percentage greater than 50% of teachers responding to answers that are able to fulfill questions by attaching documentary evidence or providing an appropriate explanation of experience. However, the other three variables are still considered difficult for junior high school physical education teachers to carry out optimally. Given that athletic material is the foundation of motion for all types of motion, the various difficult conditions mentioned above can be used as additional research data to be given action. Athletic material is critical to learn in order to support the effectiveness of each student's movement. This data serves as the foundation for other researchers to conduct more comprehensive and in-depth research in order to obtain solutions from various perspectives of the study of sports science. So that practitioners, who are at the frontline of implementing changes in the quality of physical education learning in athletic materials, can obtain a variety of research findings in order to create athletic learning designs that are appropriate for junior high school students.

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