



Analysis of Needs for Fitness Activity Tools in Physical Education Learning in Schools

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Abstract. Physical Sport and Health Education (PJOK) based on the observations of researchers, most educational units in Karawang Regency do not yet have media fitness equipment in the form of single bars, mats, beams, bench presses and others as a means of supporting the improvement of students' physical fitness. From the 2007 Sport Development Index data, it shows that the quality of physical fitness of Indonesian students is in the low category (less) 66.68%. From these data it is clear that efforts are needed to improve physical fitness, because the level of physical fitness can have a positive relationship with learning outcomes. The implementation of learning physical fitness activities at school, from the results of interviews with Physical Education teachers and junior high school students, the responses obtained were learning that tends to be monotonous without using learning aids so that students get bored and lack enthusiasm in participating in the learning being carried out. From these problems, the researcher aims to analyze the need for physical fitness aids as a medium for learning physical activity in PJOK learning for PJOK teachers in Karawang Regency. Tools/media for fitness activities in schools that can improve students' physical fitness which can make Indonesian children healthy and fit to prepare Indonesian people to have the ability to live as individuals and citizens who are faithful, productive, creative, innovative, and affective and able to contribute to life society, nation, state, and world civilization, in accordance with the objectives of the 2013 Curriculum

Keywords: Needs analysis, Learning media, Fitness activities, Physical education

Introduction

1 The implementation of physical education learning often collides with media problems or learning tools that are minimal or not even owned by schools as educational unit institutions [1]. One of the lacks of physical fitness learning tools in schools as a media for fitness activities in learning Physical Sports and Health Education (PSHE) based on the observations of researchers, most educational units in Karawang Regency do not yet have media fitness equipment in the form of single bars, mats, catwalk beams banch press and others as a means of supporting the improvement of students' physical fitness.

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From the 2007 Sport Development Index Data shows the quality of physical fitness of Indonesian students in the low category (less) 66.68% [2]. From these data it is clear that efforts are needed to improve physical fitness, because the level of physical fitness can have a positive relationship with learning outcomes.

The WHO Indonesia representative stated "Right now many people in the world are not active, so physical fitness is very low" [3]. This indicates that the low quality of physical fitness can result in a person's low performance. The implementation of learning physical fitness activities at school, from the results of interviews with Physical Education teachers and junior high school students, the response obtained was that learning tends to be monotonous without using learning aids so that students are bored and lack enthusiasm in participating learning done [3].

From these problems, the researcher aims to analyze the need for physical fitness aids as a medium for learning physical activity in physical education learning for physical education teachers in Karawang Regency. Tools/media for fitness activities in schools that can improve students' physical fitness which can make Indonesian children healthy and fit to prepare Indonesian people to have the ability to live as individuals and citizens who are faithful, productive, creative, innovative, and affective and able to contribute to life society, nation, state, and world civilization, according to the objectives of the 2013 Curriculum [4].

Therefore, it needs to be investigated by analyzing the media needs for physical fitness activities. if simple physical fitness media is needed in schools, to facilitate learning researchers will develop fitness tools that can be used by schools in multifunctional based physical activity learning [5]. Besides being able to be used as a physical education learning media, the development of multifunctional physical fitness tools can also be used by extracurricular participants and school members in maintaining their physical fitness. This study aims to improve students' skills and abilities in using this learning media. So that learning will be more effective and maximal.

Physical education and sports are an integral part of total education which contributes to the development of individuals through the media of human movement and scientific physical activity [6]. Physical Education is part of the subjects given at school, by using physical activity as a learning medium, so that from a psychomotor perspective it will have a percentage that is more widely used than affective or cognitive use [7]. In the context of education, physical education in the learning process cannot be separated from learning media which is useful as an intermediary in conveying the material intended for movement activities. Learning is a communicative-interactive process both from learning resources, teachers who teach and students, namely giving and exchanging information.

According to Oemar Hamalik, learning is a combination that has an arrangement of human elements, facilities, procedures, materials, and equipment that will influence each other so that learning objectives are achieved [8]. Learning is basically an effort to develop the potential that children have into something actual. The success of learning can be known based on the achievement of educational goals to be achieved. The higher the effectiveness in the learning process, the more successful a teacher is said to be in teaching. Learning has the goal of impacting changes in student behavior in a more positive direction, which can be addressed in various forms such as understanding

attitudes, changes in knowledge, as well as behavior and skills, as well as other aspects that exist in every student at school [9].

Media as a tool has a function to assist in activities, which can make it easier for those who use it [10]. According to Suprpto et al, states that learning media is an effective auxiliary tool that can be used by teachers to achieve the desired goals. Oemar Hamalik added that learning media are tools, methods and techniques used in order to make communication and interaction more effective between teachers and students in the process of education and teaching in schools [11]. Media is the plural of medium, derived from Latin which means intermediary or introduction [12]. This literal understanding then lowers various definitions of media in tune with technological developments in education, as said by the lecturer of the D2 PGSD Physical Education Program. The Association for Education and Communication Technology (AECT) defines media as any form that is used to process the distribution of information. While the National Education Association (NEA) defines that media is everything that can be manipulated, seen, heard, read or discussed along with its devices for these activities. Media is often also referred to as software which not only contains messages or teaching materials to be channeled through certain tools but can also stimulate thoughts, feelings and wills so that they can encourage the learning process to take place within themselves [13].

Physical fitness means the ability of each individual to carry out a physical activity for a relatively long time, which is done quite efficiently and does not cause significant fatigue [9]. Another definition, namely physical fitness, can also be interpreted as someone who has the ability to do a daily job efficiently without causing excessive fatigue so that the free time they have can still be enjoyed. The elements of physical fitness include strength, flexibility, accuracy, agility, speed, reaction, balance of endurance, coordination and muscle power [12].

A person's physical fitness is the ability of a person's body to carry out daily work activities without feeling significant fatigue. Good physical fitness is being able to carry out activities effectively and efficiently without feeling significant fatigue. Does not cause significant fatigue, namely after a person has carried out an activity or activity, he still has enough enthusiasm and energy to enjoy his free time and for other sudden needs. The components of physical fitness consist of 10 components, namely 1) Strength, 2) Endurance, 3) Muscular Power, 4) Speed, 5) Flexibility, 6) Agility, 7) Coordination, 8) Balance, 9) Accuracy, 10) Reaction [5].

2 Method

The approach in this study uses a quantitative approach, with survey research methods. Survey research is "Survey research is research conducted on large and small populations, but the data studied is data from samples taken from the population, so that relative events, distribution, and relationships between sociological and psychological variables are found." [14].

The population in this study were all vocational high school teachers in Karawang Regency, totaling 97 people. Sampling using probability sampling technique. Probability sampling technique is a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a member of the sample. The sample taken in this study, from the entire population of the physical education teacher population who filled out the Google form, was 35 people. The stages carried out in this study are as follows Fig. 1.

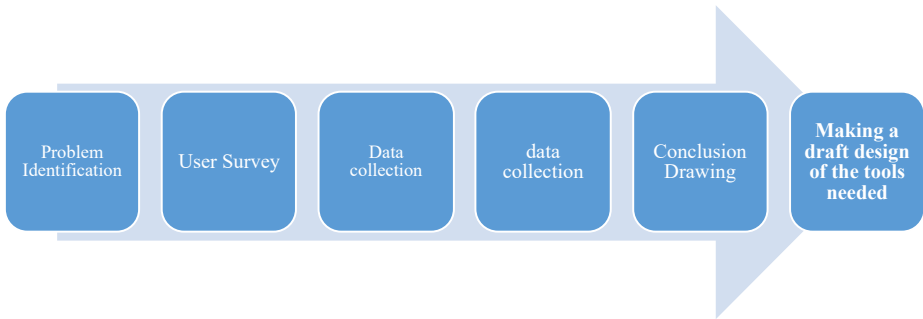


Fig. 1. Research Flowchart

In this study, researchers found problems that occur in learning fitness activities in terms of learning media/tools. Then to clarify the existing problems, the researcher conducted a survey of users regarding the problem that the researcher identified. The research continued with data collection using a questionnaire to uncover problems and needs as a solution to physical activity learning problems. After the data is collected and processed, the results of the information or conclusions from this research will be used as a basis for researchers to develop instructional media needed by users in the field, in this case, Physical Education teachers.

The data analysis technique used in this study is a descriptive statistical technique with a percentage survey of the needs of physical activity learning media in physical education subjects. alternative answers using 2 scales, namely the Gutman Scale (Table 1). After that, look for the categorization of these answers and then look for the percentage of each data and percentage it. Furthermore, the data is presented in the form of a frequency table and then categorized and presented in the form of a histogram.

Table 1. References to Classification of Category Answers to Statements [14]

Intervals	Category
$X \geq M + 1,5 SD$	Very needed
$M + 0,5 SD \leq X < M + 1,5 SD$	Needed
$M - 0,5 SD \leq X < M + 0,5 SD$	Simply needed
$M - 1,5 SD \leq X < M - 0,5 SD$	Less needed
$X \leq M - 1,5 SD$	Very Less needed

Information: X = Score; M = Mean; SD = Deviation Standart (the most widely used dispersion measure.)

The data obtained by the author is quantitative with a Likert scale so it needs to be processed for the process of drawing conclusions. The data analysis technique used is arithmetic descriptive analysis technique to describe the research variables in measurement and does not use inferential statistics because there is no hypothesis in this study.

The statistical technique used in this study is the percentage. The percentage for each possible answer is obtained by dividing the frequency obtained by the number of samples, then multiplied by 100%. The formula is as follows:

$$p = \frac{f}{N} \times 100\% \quad (1)$$

Information: P = Percentage; f = Frequency of each selected answer; N = Number of Cases (Number of subjects or respondents)

3 Results and Discussion

This study is entitled Analysis of Learning Media Needs for Physical Fitness Activities in Education Units. The research method used in this research is a survey with a quantitative approach. Needs analysis was carried out to find out information on the needs of learning media for physical fitness activities in schools with the Needs Questionnaire instrument. The questionnaire was compiled in the form of an open questionnaire which was loaded in a Google form which was distributed to sports and health physical education teachers in Karawang district.

The sampling technique used is simple random sampling, which is in accordance with the contents in the Google form that is distributed. A total of 35 samples filled out in the form were obtained from the responses data base. The researcher processed the data using descriptive statistics, by first knowing the Mean (M) and Standard Deviation (SD) in the research data so that the interval in the category of scores obtained was known. Table 2 shows the results of the tabulation of survey data on the need for physical fitness activity tools in physical education subjects in Karawang Regency.

Table 2. Needs Survey Data

No	Indicator	Amount	Percentage
1	Curriculum	35	100
2	Execution	22	62,8
3	Simple Tool	17	48,6
4	Modification Tool	18	51,4
5	Tool difficulty	26	74,3
6	Solution	19	54,3
7	Development	17	48,6
8	Effective	13	37,1
9	Development idea	11	31,4
10	Tool Requirements	35	100

From these data, the value of the interval score of the respondent's answer is calculated according to the following Table 3. The classification of category answers needs analysis development of physical fitness activity tools shown in Table 4.

Table 3. Interval Score

M	21,3
SD	8,34
M-1,5SD	8,79
M-0,5SD	17,13
M+0,5SD	25,47
M+1,5SD	33,81

Table 4. Classification of Category Answers Needs Analysis Development of Physical Fitness Activity Tools

Category	Interval
Much less needed	$X < 8,79$
Less needed	$8,79 < X \leq 17,13$
Simply needed	$17,13 < X \leq 25,47$
Needed	$25,47 < X \leq 33,81$
Very needed	$X > 33,81$

3.1 Curriculum

100% The sports and health physical education curriculum in Vocational High Schools contains material on physical fitness activities, which include aspects of physical fitness - flexibility, balance, agility, speed and strength that need to be trained to obtain good physical fitness.

3.2 Execution

62.8% of the material for physical fitness activities is carried out in physical education subjects. Some teachers who do not implement physical fitness activity material admit that they are constrained by the tools to support the learning, sometimes carrying out activities that do not require tools.

3.3 Simple Tools

48.5% of schools have simple physical fitness tools/media, so teachers can still apply physical fitness activity material in sports and health physical education subjects.

3.4 Modification Tool

51.4% of teachers have self-made modified media for the ongoing physical fitness activity material at school. The modifications created by the teacher are very helpful in the learning process to provide a learning experience that supports the improvement of students' physical fitness.

3.5 Tool Difficulty

74% of teachers experience difficulties during the learning process of physical fitness activities, for teachers who are less creative and innovative in providing an optimal learning process for students will face difficulties in learning, especially in physical fitness activity material. This is because most schools pay little attention to the completeness of learning facilities and media in physical fitness activities in physical education subjects.

3.6 Solution

54.2% of teachers have alternative solutions in overcoming the difficulties of tools/media in physical fitness activity material. In practice, teachers are still required to have creative solutions to the unavailability of physical fitness tools/media in schools.

3.7 Tool development

48.5% of teachers have developed media/physical fitness from the results of small studies. Some teachers have developed media with small trial research results of their own development.

3.8 Effectiveness

37.1% of teachers stated that physical fitness material was quite effective in the implementation process. Basically, physical fitness material is still held in physical education learning, but it is implemented soberly.

3.9 Creativity

31.4% of teachers have ideas for developing tools/media for learning physical fitness activities in Vocational High Schools. There are still few teachers who have the idea to seriously develop simple tools for the benefit of learning physical fitness activities.

3.10 Need for Multifunction Tools

100% of Physical Education teachers in Vocational High Schools need simple, multifunctional tools as learning media for physical fitness activities at school. With the existence of physical fitness activity material in the physical education curriculum in all educational units, as well as the limited fitness equipment/media owned by each school, physical education teachers in each educational unit need to develop simple physical fitness activity tools but can be used in several aspects of physical fitness activities. included in the physical education curriculum.

From the results of processing the research data above, a table of categories of needs for each indicator is obtained, as shown in Table 5.

Table 5. Category Level of Need

No	Indicator	Score	Percentage	Criteria
1	Curriculum	35	100	Much needed
2	Implementation	22	62,8	Sufficiently needed
3	Simple tools	17	48,6	Sufficiently needed
4	Modification Tool	18	51,4	Sufficiently needed
5	Difficulty of tools	26	74,3	Required
6	Solution	19	54,3	Sufficiently needed
7	Development	17	48,6	Sufficiently needed
8	Effectiveness	13	37,1	Sufficiently needed
9	Development ideas	11	31,4	Sufficiently needed
10	Tool Requirement	35	100	Much needed

4 Conclusion

This study is entitled Analysis of Learning Media Needs for Physical Fitness Activities in Education Units. The research method used in this research is a survey with a quantitative approach. Needs analysis was carried out to find out information on the needs of learning media for physical fitness activities in schools with the Needs Questionnaire instrument. The questionnaire was compiled in the form of an open questionnaire which was loaded in a Google form which was distributed to sports and health physical education teachers in Karawang district. The sampling technique used is simple random sampling, which is in accordance with the contents in the Google form that is distributed. A total of 35 samples filled out in the form were obtained from the responses data base. The researcher processed the data using descriptive statistics, by first knowing the Mean (M) and Standard Deviation (SD) of the research data so that the intervals in the category of scores obtained were known. The following table shows the results of the tabulation of survey data on the need for physical fitness activity tools in Physical Education subjects in Karawang Regency. Learning media needed in the learning process include: volleyball, soccer ball, futsal ball, bullets, javelin discs, baton relay, and so on. Apart from having to be present in a certain quantity, the quality must also be in good condition to support an effective learning process.

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