



Motor Skill Levels of Basketball Extracurricular Participants at SMP Ar-Rahman Medan

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Abstract

Objectives:

This study aims to determine the level of motor skills of students participating in the basketball extracurricular program at SMP Ar-Rahman Medan.

Materials and Methods:

This study employs a survey method, utilizing tests and measurements for data collection. The subjects of the study are 24 students participating in the basketball extracurricular program at SMP Ar-Rahman Medan.

Results:

The results of this study indicate that the motor skill levels of students participating in the basketball extracurricular program at SMP Ar-Rahman Medan were distributed as follows: 3 students (12.5%) in the very high category, 6 (25%) in the high category, 4 (16.7%) in the moderate category, 10 (47.7%) in the low category, and 1 (4.2%) in the very low category.

Conclusions:

The motor skill level of basketball extracurricular participants at SMP Ar-Rahman Medan falls into the poor category.

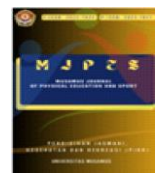
Keywords: Skills; Motor Skills; Basketball.

Introduction

Formal education in schools is a planned effort to develop students' potential and improve their overall quality so that they can become better individuals. This educational process is carried out in stages, beginning from elementary school to senior high school, with the general objective of developing students' intellectual, social, and practical skills. In its implementation, education has specific characteristics, including structured subjects, one of which is physical education. Physical education plays a very important role because it functions to stimulate the overall growth and development of students.

Physical Education, Sports, and Health is an integral part of the education system at all school levels. In the curriculum, students are required to achieve certain competency standards that have been systematically designed. Through planned physical activities, physical education is not only aimed at improving physical fitness but also at developing character, intelligence, and positive values in daily life (Ari Tri Fitrianto, 2023). Therefore, physical education is an important means of developing well-rounded Indonesian individuals in terms of physical, mental, and social aspects.

Education also serves as a foundation for developing various basic abilities required in the learning process. One important aspect that needs to be developed is kinesthetic intelligence, which refers to the ability to use the body effectively to perform various activities. Developing this type of intelligence is important so that students become more skilled and capable of mastering various forms of movement. In this regard, motor skills are one of the main aspects that educators need to consider. Motor skills are basic abilities related to human body movement (Erik Efriyansyah, 2022). Almost all human activities involve movement; therefore, mastering motor skills is highly important, particularly from an early age. Childhood is an ideal phase for learning basic movements because physical development and body coordination occur rapidly during this stage.



With good movement skills developed from an early age, individuals will find it easier to adapt and become more skilled in facing various activities in the future.

Physiologically, motor processes involve the coordination of the nervous system, brain, and muscles. Motor nerves function to transmit impulses from the brain to the muscles, resulting in muscle contractions that produce movement, whether voluntary or reflexive. Motor skills also reflect an individual's general ability to perform various activities, including activities in the field of sports (Yayang, 2024). Therefore, these abilities are an important factor in supporting athletic performance.

Motor skills belong to the psychomotor domain, which is related to the quality of movement. The components that contribute to motor skills include strength, speed, explosive power, endurance, balance, flexibility, and coordination. The development of these abilities is strongly influenced by regular and continuous training. If children engage in insufficient physical activity, their motor development may be impaired, which can subsequently affect their overall physical skills.

One sport that requires good motor skills is basketball. This game is played by two teams, each consisting of five players, with the objective of scoring as many points as possible by putting the ball into the opponent's basket while preventing the opposing team from scoring. Basketball has become a popular sport among students at regional, national, and even international levels (Agus Putra, 2026). Improved facilities and the increasing number of competitions have also contributed to students' growing interest in this sport. In basketball, mastery of basic techniques such as dribbling, passing, and shooting is essential. In addition, the game requires effective offensive and defensive strategies, as well as the ability to move quickly and accurately. Therefore, basketball players need to possess optimal motor skills in order to perform effectively and efficiently.

The development of basketball playing skills in schools can be carried out through extracurricular activities. These activities provide an opportunity for students to develop their talents, interests, and skills outside regular class hours. In addition to improving sports skills, extracurricular activities also play a role in developing students' personality, creativity, and discipline (Asri Darwanti, 2024). Thus, extracurricular activities are an important component of sports development and achievement in schools.

At SMP Ar-Rahman Medan, basketball extracurricular activities are conducted regularly every week. However, based on observations, several challenges remain, particularly regarding students' motor skills. Many students do not yet have adequate endurance and therefore become tired quickly during training sessions and competitions. In addition, their speed, strength, and mastery of basic techniques such as dribbling and shooting still need to be improved. This indicates that the existing training activities have not yet been fully optimized to improve students' physical abilities.

Nevertheless, students' discipline and enthusiasm in participating in extracurricular activities are generally good. Students arrive on time and demonstrate enthusiasm during training sessions. Differences in motor skill levels among students also present a particular challenge, as some students have high levels of ability while others still have relatively low levels of ability (Priska Aprilia, 2024). Therefore, coaches play an important role in designing appropriate training programs to improve the abilities of each individual student.

In addition, limited facilities and infrastructure also constitute an obstacle to the implementation of extracurricular activities. The limited number of basketballs and inadequate condition of the available facilities make training less effective. With a relatively large number of participants, the limited availability of equipment inevitably affects the quality of the training and learning activities provided.



Materials and Methods

Study Design

This study is a descriptive study employing a quantitative approach; it describes the current situation and, consequently, does not utilize hypotheses in its research procedure.

Study Participants

The population for this study consisted of all participants in the basketball extracurricular activity at SMP Ar-Rahman Medan. The sample comprised the entire population of basketball extracurricular participants at SMP Ar-Rahman Medan, totaling 24 students. The sampling technique employed in this study was.

Study Organization

Tes yang digunakan untuk mengukur tingkat kemampuan motorik peserta ekstrakurikuler bola basket di SMP Ar-Rahman Medan menggunakan tes kemampuan motorik Adapun instrumen tersebut menggunakan Barrow Motor Ability Test dari Harold M. Barrow berupa tes dengan koefisien validitas sebesar 0,92 terdiri dari enam butir tes yaitu: Standing Board Jump, Soft ball throw, Zig-zag Run, Wall pass, Medicine Ball Put, lari 60 yard dash'(50 m).

Statistical Analysis

The data analysis technique employed in this study is descriptive, utilizing a quantitative approach. The skill level categories to be calculated are based on the standing broad jump, softball throw, zig-zag run, wall pass, medicine ball put, and 60-yard dash. The raw scores for each of these items are converted into T-scores.

Results

The raw scores from the six test items, converted into T-scores, were summed and divided by the total number of test items; the resulting figure served as the basis for determining the motor ability of students participating in the basketball extracurricular program at SMP Ar-Rahman Medan. The overall motor ability scores showed a maximum of 64.22, a minimum of 37.56, a mean of 50, and a standard deviation of 10.

The motor ability of students participating in the basketball extracurricular program at SMP Ar-Rahman Medan was classified into five (5) categories: very high, high, moderate, low, and very low. Based on the established categorization formula, the analysis of the motor ability data for these students is presented below:

Table 1. Frequency Distribution of Motor Ability Among Students Participating in the Basketball Extracurricular Program at SMP Ar-Rahman Medan.

No	Interval	Category	Frequency	Percentage (%)
1.	≥ 62	Very High	1	4,2%
2.	55 – 61	High	8	41,7%
3.	47 – 54	Moderate	4	16,7%
4.	39 – 46	Low	10	41,7%
5.	≤ 38	Very Low	1	4,2%
Total			24	100%

The following histogram illustrates the frequency of motor skills among students participating in the basketball extracurricular activity at SMP Ar-Rahman Medan.

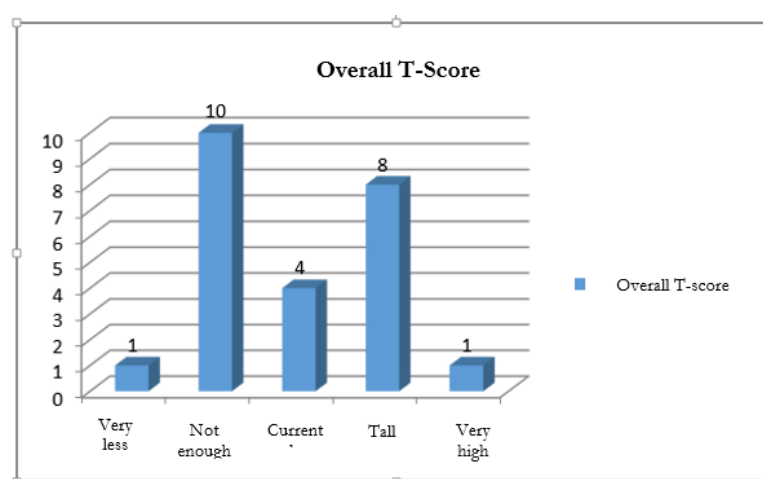


Figure 1. Histogram of Motor Skills of Students Participating in the Basketball Extracurricular Program at SMP Ar-Rahman Medan

Based on the table and histogram above regarding the students' overall motor skills, it is evident that among the 24 students, 1 (4.2%) fell into the very high category, 8 (33.3%) into the high category, 4 (16.7%) into the moderate category, 10 (41.7%) into the low category, and 1 (4.2%) into the very low category.

Discussion

This study aims to determine the level of motor ability of students participating in the basketball extracurricular program at SMP Ar-Rahman Medan. The results varied due to several factors, including differences in each student's lifestyle, gender, and physical condition at the time of data collection. Some students were in good physical condition, while others were less fit. Based on the results of the motor ability data analysis of 24 students, 1 student (4.2%) was categorized as very high, 8 students (33.3%) as high, 4 students (16.7%) as moderate, 10 students (41.7%) as low, and 1 student (4.2%) as very low.

These results indicate that students participating in the basketball extracurricular program at SMP Ar-Rahman Medan have different levels of motor ability, with the majority falling into the low category, consisting of 10 students (41.7%). This indicates that the students' motor ability in performing physical activities is still relatively low. This condition may be attributed to the fact that some students have relatively similar movement experiences but possess different levels of skill. The greater a student's repertoire of basic movements, the more skilled they are likely to become in performing other motor skills. Physical fitness components such as speed, strength, agility, coordination, and endurance play an important role in basketball performance. Speed, coordination, endurance, strength, and agility are biomotor components that contribute significantly to basketball performance. The results of the six test items showed that arm power, measured through the medicine ball put test, and speed, measured through the 60-yard run test, were the most dominant components. This indicates that participants in the basketball extracurricular program at SMP Ar-Rahman Medan have relatively dominant arm power and speed compared with the other components measured in the six test items.

Based on the analysis of the data obtained, it can be seen that the motor ability of students participating in the extracurricular basketball program at SMP Ar-Rahman Medan has not yet reached an optimal level, with the largest proportion falling into the "low" category, consisting of 10 students (41.7%). This finding is consistent with the results of the initial observations of the basketball extracurricular activities, which also indicated that the students' performance had not yet reached an optimal level. This



finding is in line with the theory proposed by Sukintaka (2001:47), which states that motor ability refers to the quality of an individual's movement performance, including the ability to perform movements both in general physical activities and in sports, as well as the maturity of motor performance. The higher a person's motor ability, the greater their potential work capacity, and vice versa. Therefore, motor ability can be viewed as an indicator of success in performing movement-related tasks.

The motor development of each student progresses with increasing age, as some students may have relatively similar movement experiences but different levels of skill. Motor ability involves the development of maturity, body movement control, motor skills, and motor control. Students' skills cannot develop optimally without adequate motor control. Motor control cannot function optimally without sufficient physical fitness, and physical fitness cannot be achieved without appropriate physical training. Therefore, the aspects that need to be developed in students include motor, cognitive, emotional, social, moral, and personality development.

Conclusions

Based on the analysis of the students' motor skill levels, the results show that 3 students (12.5%) fell into the very high category, 6 students (25%) into the high category, 4 students (16.7%) into the moderate category, 10 students (41.7%) into the low category, and 1 student (4.2%) into the very low category. Thus, it can be concluded that the majority of students participating in the basketball extracurricular program at SMP Ar-Rahman Medan specifically 10 students (41.7%) fell into the low category.

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Conflict of Interest

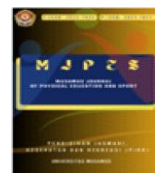
The authors declare no conflict of interest.

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