



Physical Fitness Level of Football School Players (SSB) Dispora Mandiri Kota Binjai U13 in 2026

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Abstract

Objectives:

This study aims to determine the physical fitness level of U-13 players from the Dispora Mandiri Football School (SSB) in Binjai City (2026).

Materials and Methods:

The study employed a quantitative descriptive research method, utilizing purposive sampling.

Results:

The results indicate that the physical fitness level of the U-13 players from SSB Dispora Mandiri Binjai City (2026) falls into the fair category. Among the 17 players, 0 (0%) were in the excellent category, 6 (35%) were good, 8 (47%) were fair, 2 (12%) were poor, and 1 (6%) was very poor.

Conclusions:

Based on the findings, it can be concluded that the physical fitness level of the U-13 players from SSB Dispora Mandiri Binjai City (2026) falls into the fair category.

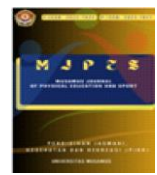
Keywords: Physical Fitness; Football; SSB Dispora Mandiri Kota Binjai U13.

Introduction

Sport plays an important role in improving the quality of human life, both in terms of physical health and mental and social development. Regular participation in sports activities can improve endurance, muscle strength, and movement coordination. According to Maksum (2020), sport is a physical activity carried out in a planned and systematic manner to improve physical fitness, health, and an individual's quality of life. In the context of early education and sports development, sport serves as a means of establishing healthy lifestyle habits from an early age. Proper sports development can have a positive impact on children's growth and development. Therefore, sports should be introduced and developed systematically.

Football is a highly popular sport in Indonesia and is enjoyed by people of various age groups, including children. According to Luxbacher (2019), football is a team sport played by two teams, each attempting to score goals against the opposing team in order to win the match. Football requires players to engage in high-intensity movements, such as running, jumping, kicking, and rapidly changing direction. Through football, children can develop their physical, mental, and social abilities in a balanced manner. These activities require good physical condition and physical fitness. Without adequate physical fitness, players can easily become fatigued and experience a decline in performance. Thus, physical fitness is an important factor in football.

Physical fitness refers to the body's ability to perform physical activities effectively and efficiently without experiencing significant fatigue. Physical fitness also enables individuals to maintain reserve energy after completing activities. According to Giriwijoyo and Sidik (2020), physical fitness is an individual's ability to perform daily activities effectively without excessive fatigue while retaining sufficient energy reserves for other activities. In football, physical fitness greatly influences players' ability to maintain their performance during both training and competition. Fit players are better



prepared physically and mentally. Therefore, physical fitness levels should be a primary concern in the development of young football players.

Youth football development, particularly in the U13 age group, is an important aspect of sports development. The age of 13 is an important phase in children's physical growth and development. At this age, improvements occur in motor abilities, muscle strength, and endurance. According to Bompá and Buzzichelli (2019), early adolescence is an important period for developing basic physical abilities that will serve as a foundation for improving sports performance at subsequent stages. Therefore, sports development for U13 players should be conducted in a planned manner and adapted to the characteristics of children's development. Inappropriate training programs may hinder development or even cause injuries. Consequently, monitoring physical fitness is essential for this age group.

Football Schools (Sekolah Sepak Bola/SSB) are training institutions that play an important role in developing children's talents and interests in football. In addition to teaching basic techniques and game understanding, SSBs are also responsible for improving players' physical condition. According to Wein (2020), youth football development should be carried out progressively, emphasizing the development of technical skills, physical condition, and overall game understanding. Effective development programs at SSBs can serve as a foundation for players' future performance. Therefore, SSBs should have structured training programs based on the physical condition of their players. One important aspect that needs to be considered is the players' physical fitness level. SSB Dispora Mandiri Kota Binjai is one of the youth football development centers that actively conducts regular training activities. The SSB trains players from various age groups, including the U13 category. Training activities are conducted regularly, focusing on basic techniques, physical fitness, and game play. However, to date, there has been no written data describing the physical fitness level of the players comprehensively. This condition provides an important basis for conducting the present study.

Based on initial observations conducted in the field, the team's performance in previous age groups was relatively stable in participating in various matches and competitions. However, the U13 players in 2026 represent a new generation without a clear record of previous achievements. This condition creates a need for an initial evaluation to identify factors that may support the team's future performance. One important factor considered to influence such performance is the players' physical fitness level (Sukadiyanto & Muluk, 2019). Physical fitness plays an important role in supporting sports performance. A good level of physical fitness helps players perform game activities optimally, whereas low physical fitness may hinder their performance during competition. Therefore, physical fitness should be a primary concern in the development of young football players (Sajoto, 2018).

In practice, training programs at SSBs often place greater emphasis on technical and game aspects, while physical fitness is not always evaluated optimally. In fact, physical fitness is an important foundation for supporting players' technical and tactical abilities. Without good physical condition, improving sports performance can be difficult. This highlights the importance of regularly evaluating players' physical fitness (Harsono, 2018). Measuring physical fitness levels is necessary to objectively determine the players' physical condition. The measurement results can be used as a basis for developing training programs that are appropriate to the players' needs and as a reference for improving performance and achievement. In addition, physical fitness measurements can be used to monitor changes in players' physical condition over time (Widiastuti, 2017).

To date, the physical fitness level of U13 players at SSB Dispora Mandiri Kota Binjai has not been determined because there is no written data that can serve as a reference. This



condition presents an obstacle to the evaluation process and the development of effective training programs. Without objective data, efforts to improve players' performance may not be carried out optimally. Therefore, research is needed to determine the players' physical fitness level as a basis for supporting the improvement of their sports performance (Ismaryati, 2018).

Materials and Methods

Study Design

This study employs a quantitative research method with a descriptive approach. The descriptive quantitative research method is used to systematically, factually, and accurately describe a situation or phenomenon based on data obtained in the field.

Study Participants

The population of this study consisted of 32 students from the Dispura Mandiri Football School (SSB) in Binjai City. From this total population of 32, a sample of 17 individuals was obtained who met the study's criteria.

Study Organization

The instrument used in this study was a test.springt 30 meters to measure speed,shuttle runto measure agility, andbleep testto measure the cardiorespiratory endurance of players.

Statistical Analysis

In this study, the researcher analyzes the data using descriptive statistics. Descriptive statistics is a method used to describe or analyze a dataset without drawing generalized conclusions (inference). The aim of descriptive statistics is to describe or explain the collected data systematically, factually, and accurately through tables, graphs, percentages, and averages, thereby ensuring high-quality and accurate research results.

Results

In this section, the researcher presents the findings regarding the Physical Fitness Levels of U-13 Players at the Dispura Mandiri Binjai City Soccer School (SSB) in 2026. The study was conducted from May 14 to May 17, 2026. The research results are described as follows:

Table 1. Distribution of Fitness Test Results for U-13 Players at the Dispura Mandiri Binjai City Soccer School (SSB) in 2026

Intervals	Category	Number of Students	Presentation (%)
4.21 - 5.00	Very good	0	0%
3.41 - 4.20	Good	6	35%
2.61 - 3.40	Enough	8	47%
1.81 - 2.60	Poor	2	12%
1.00 - 1.80	Very Poor	1	6%
Total		17	100%

To clearly determine the physical fitness level of the U-13 players from the Dispura Mandiri Binjai City Football School (SSB) for the year 2026, the physical fitness test results are presented in the following graph.

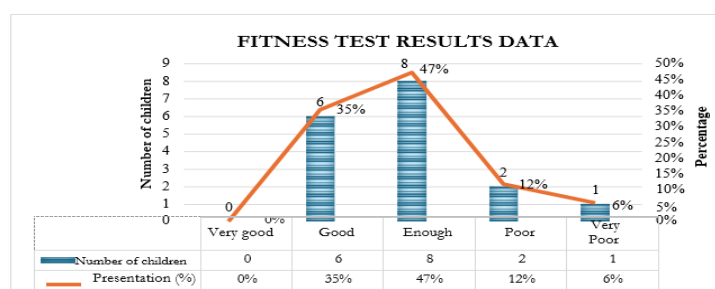




Figure 1. Distribution of Fitness Test Results for U-13 Players from the Dispora Mandiri Binjai City Football School (SSB), 2026.

Based on the physical fitness test results for the U-13 players of the Dispora Mandiri Binjai City Football School (SSB) in 2026, the distribution is as follows: 0 players (0%) in the Very Good category, 6 players (35%) in the Good category, 8 players (47%) in the Fair category, 2 players (12%) in the Poor category, and 1 player (6%) in the Very Poor category. Consequently, the physical fitness level of the U-13 players at the Dispora Mandiri Binjai City Football School (SSB) in 2026 falls into the Fair category.

Discussion

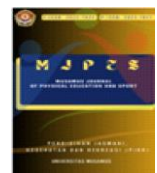
Based on the results of the research conducted, it was found that the physical fitness level of the U13 players at SSB Dispora Mandiri Kota Binjai in 2026 was categorized as fair. This can be seen from the physical fitness test results, which showed that 8 players (47%) were in the fair category, 6 players (35%) were in the good category, 2 players (12%) were in the poor category, and 1 player (6%) was in the very poor category. These results indicate that the players' physical fitness levels were not yet evenly distributed and therefore still need to be improved through a structured and continuous physical training program to optimize their playing abilities.

The suboptimal physical fitness condition was observed during the training sessions. Several players appeared to experience a decline in performance toward the end of the training session, as indicated by reduced movement speed, decreased concentration, and less effective movement during gameplay. In addition, some players required longer rest periods as the training intensity increased. These conditions indicate that the players' physical endurance still needs to be improved through a more structured and continuous training program.

Physical fitness in this study was measured using the sprint, shuttle run, and bleep test. The sprint test was used to assess the players' speed, the shuttle run test was used to measure agility, and the bleep test was used to assess cardiorespiratory endurance. These three components are important in football because players are required to move quickly and agilely and to maintain performance during high-intensity play. According to H. Y. S. Giritwijoyo and Didik Zafar Sidik (2020), physical fitness is an individual's ability to perform activities without experiencing significant fatigue while still having sufficient energy reserves to perform other activities. In football, a good level of physical fitness is essential to enable players to maintain their performance during both training and matches.

The findings of this study are consistent with the research conducted by Muhammad Ridho (2023), which reported that the physical fitness level of young football players was mostly in the moderate category. The study explained that players' physical condition is influenced by training regularity, training intensity, and their daily lifestyle. Players with inadequate physical condition tend to experience fatigue more quickly, resulting in decreased playing ability.

Similar findings were also reported by Rizky Pratama (2022), who explained that football training among school-age players often focuses more on technical skills than on physical conditioning. Consequently, players' endurance, speed, and agility may not develop optimally. This condition can make it difficult for players to maintain their performance when participating in high-intensity training sessions. Based on the discussion above, physical fitness plays an important role in supporting football playing ability. Players with good physical condition are better able to follow the coach's instructions, have greater endurance, and maintain their playing quality for a longer period. Conversely, low



physical fitness can cause players to fatigue more quickly, lose concentration, and face an increased risk of injury.

Therefore, physical fitness evaluation should be conducted regularly to enable coaches to monitor the development of players' physical condition. Physical fitness test results can be used as a basis for developing training programs that are more appropriate to the players' needs. Through planned and continuous physical training, the physical fitness level of the U13 players at SSB Dispora Mandiri Kota Binjai is expected to improve, thereby supporting improvements in their performance and sporting achievements.

Conclusions

Based on the research findings, the physical fitness level of U13 players at SSB Dispora Mandiri Kota Binjai in 2026 was categorized as fair. Of the 17 players, 6 (35%) were in the good category, 8 (47%) in the fair category, 2 (12%) in the poor category, and 1 (6%) in the very poor category. The test results indicated that cardiorespiratory endurance was relatively good, while speed and agility still needed improvement. Therefore, a structured, planned, and continuous physical training program is needed to support the players' performance.

Acknowledgments

The author extends their gratitude to the Binjai City Dispora Mandiri U-13 Football School (SSB) and the Bina Guna College of Sports and Health, as well as the researchers and writers who participated in and supported this research activity.

Conflict of Interest

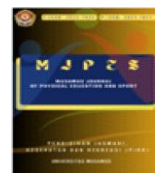
The authors declare no conflict of interest.

Funding

This research received no external funding.

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