



## The Relationship Between Physical Fitness and Sports Motivation of 13-15 Year Olds in the Sport of Football

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**Abstract:** Physical fitness is the ability to perform activities without excessive fatigue. Physical fitness is achieved because of the encouragement or stimulation in the form of sports motivation. This study aims to determine the relationship between physical fitness and sports motivation in the sport of soccer aged 13-15, because at this age there are psychological and physical changes in the body. The instruments in this study used the Physical Fitness Test (TKJI) to measure the level of physical fitness and the Sport Motivation Scale (SMS) questionnaire to determine the sports motivation of the players with a sample population of PS BRT Subang academy players. Data analysis used the Shapiro-Wilk test, Levene Statistic, and Pearson Correlations with the help of the SPSS 29 application. Based on data processing and analysis, it can be found that there is a significant relationship between the relationship between physical fitness and sports motivation aged 13-15 years in the sport of soccer with a value The significance shows a value of  $0.026 < 0.05$ . High sports motivation also has high fitness. impact on control in performing physical exercises.

**Keywords:** Physical Fitness; Sports Motivation; Football

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### INTRODUCTION

FIFA as a world organization defines football as a game played by two ball teams with eleven members each (Suprianto, 2017). Football as a team sport consisting of eleven people played using all parts of the body except the hands, but the goalkeeper is allowed to use his hands in the game. Football emphasizes teamwork with the aim of getting the ball into the opponent's goal as much as possible and defending your own goal from being conceded. In a football match, one of the factors that is considered is physical fitness. Where the match is played for 2 x 45 minutes and requires good physical fitness. Physical fitness is the body's ability to carry out physical activities without feeling excessive fatigue in carrying them out (Sadoso, 2021).

Physical fitness itself can be achieved through regular and routine exercise or sports. In carrying it out, there needs to be encouragement in carrying out these activities, this encouragement is in the form of sports motivation. Sports motivation is a source of drive or encouragement that exists within a person in doing something (Komarudin, 2022). Someone who has high sports motivation has high drive or enthusiasm in sports that become capital in achieving physical fitness. Sports motivation has differences caused by needs and interests when associated with football physical fitness, especially at the age of 13-15 years, it is necessary to understand. Where at the age of 13-15 years is the adolescent phase that experiences a psychological change and physical growth of

the body that needs to be considered. At the adolescent stage, they are still not used to the changes that occur in their bodies, including the urges that accompany these changes (Prihandrijani, 2016; Azimah, A., & Ramadan, R., 2024) . Changes in adolescents have an impact on self-control, decision-making, and feelings. For example, when in a training session related to physical fitness, there is a feeling of laziness, unwillingness to fight fatigue, lack of enthusiasm when exercising, and inconsistency which results in the quality of exercise. In addition, it is difficult to regulate oneself, impacting discipline in training when given tasks by the trainer, often not carried out according to the trainer's instructions. With sports motivation, you can find out the urge or direction of stimulation in training, which is important when related to physical fitness where there are often mental symptoms that become obstacles to training.

## METHOD

At a minimum, it contains the methods used, population and sampling techniques, research instruments and data analysis techniques used. In this study, the researcher used descriptive methodology. According to Sugiyono (2017), descriptive research is a study conducted to determine the value of independent variables, either one or more variables (independent) and make comparisons or connect with other variables. Furthermore, the population that the researcher used was students of the Brt Subang Academy aged 13-15 years totaling 39 people. The Brt Academy comes from Subang where the technical director is a former Persib player, coach Mulyana. Then the researcher used the total sampling technique, namely taking sample members from the population randomly without considering the strata in the population and all individuals are given an equal opportunity to be selected as sample members (Sugiono, 2019). The sample taken was students of the Brt Subang Academy aged 13-15 years totaling 39 people.

The research instruments are divided into two, namely tests used by teachers in schools to assess the level of physical fitness and sports motivation questionnaires. Physical fitness tests are a set of tests used by teachers in schools to assess the level of physical fitness of their students in schools. The Indonesian Physical Fitness Test (TKJI) which was compiled by the Ministry of National Education in 2010 (Komarudin, 2020) The test is divided into four categories based on the age of the students: (1) 6-9 years, (2) 10-12 years, (3) 13-15 years, and (4) 16-19 years. This test has a level of validity and reliability that meets the standards, as shown in the table below:

**Table 1.** Validity and Rehabilitation of TKJI 1

School Level	Validity	Reliability
Elementary School (Age 6 – 12 years)	0.92	0.89
Junior High School (Age 13-15 years)	0.95	0.96
High School (Age 16-19 years)	0.92	0.72

The Indonesian Physical Fitness Test consists of several test items, namely: Sprint, Pull Up, Sit Up, Vertical Jump and Medium Distance Running. Data analysis used is using the normality test to determine whether the data is normally distributed or not. The homogeneity test aims to determine whether the data in this study has the same variance or is homogeneous and the correlation test in a study uses the Pearson Product Moment Correlation Test ( $r$ ) to assess the level of relationship between variables (X) and variables (Y). The relationship between the two variables can be positive or negative.

**Table 2.** Correlation strength level criteria 1

Correlation Coefficient Value	Correlation Strength Level
0.00 – 0.25	Very weak
0.25 – 0.50	Enough
0.51 – 0.75	Strong
0.76 – 0.99	Very strong
1.00	Perfect

Percentage formula  $P = \frac{f}{n} \times 100$  P = Percentage of answers F = Frequency of answers N = Number of The data obtained from the questionnaire results were processed by looking for the presentation and analyzing it descriptively, namely: if the score obtained was 25-50 (low category), score 50-75 (medium category), and score 75-100 (high category) (Sudijono, 2022). The sport motivation scale questionnaire is a research instrument that aims to determine sports motivation. 24 SMS items are divided into six subscale factors, namely intrinsic motivation, integrated regulation, identified regulation, introjected regulation, external regulation, and amotivation (Jan Blecharz, 2015).

## RESULT AND DISCUSSION

### Result

The results of the study indicate that physical fitness with sports motivation aged 13-15 years has a significant relationship.

**Table 3.** Spearman correlation test

Variables	Statistical Test	Significance Value (p)	Correlation Coefficient (r)	Interpretation of the Relationship
Physical Fitness and Sports Motivation (Ages 13–15)	Spearman Rank Correlation	0.026	0.357	Significant relationship with moderate strength

This is evidenced by the Spearman correlation test which shows a significance value at  $0.026 < 0.05$ , then there is a significant relationship between physical fitness and sports motivation. With a correlation coefficient value of 0.357 which means the correlation between physical fitness and sports motivation at a sufficient level of strength.

### Discussion

Individuals who actively exercise have higher intrinsic motivation compared to those who are inactive, as seen from their compliance with the exercise program (Lago Portela, 2019). This is related to the results of this study, where physical fitness has a significant relationship with exercise motivation. When someone exercises regularly, their enjoyment, stress management, and increased physical fitness are different from those who rarely move. With motivation in exercising, it can provide an attitude or perception of physical fitness through enjoyment and stress management in achieving good physical fitness.

This study aims to determine the significant relationship between physical fitness and sports motivation of 13-15 year old in the sport of soccer. The results of the research

that have been conducted and analyzed require further discussion so that the results of this study provide clarity on the flow of significant relationships between physical fitness and motivation.

Regarding physical fitness, the instrument used is the Indonesian Physical Fitness Test (TKJI) which consists of various tests according to the fitness components being tested. The results of the physical fitness test from 39 samples contained 3 people categorized as very lacking, 9 people were sufficient, 20 people were moderate, and 7 people were categorized as good. Most of the research samples from the physical fitness test results were categorized in the moderate category.

The physical fitness test is divided into Sprint, Pull Up, Sit Up, Vertical Jump and Medium Distance Running. The sprint test at the PS BRT academy in the context of football aims to measure the speed of players in running short distances, which is very crucial for performance on the field. With a distance of around 50 meters, this test helps evaluate the player's ability to sprint quickly when chasing the ball or avoiding opponents. The results of the sprint test, most of the 20 people had a good level of speed, which is important for coaches to develop appropriate training programs, as well as to identify players with high potential.

A correlation coefficient of 0.357 indicates a moderate positive relationship, suggesting that higher levels of motivation are associated with better physical fitness outcomes. Similar studies have demonstrated that motivation significantly influences levels of physical activity, with intrinsic motivation showing a strong correlation with physical fitness in adolescents (Oktadinata et al., 2024).

Participation in sports has been linked to improvements in physical fitness metrics such as strength and endurance, especially during adolescence (Linker et al., 2022). Adolescents who regularly engage in sports activities tend to exhibit better physical performance, reinforcing the importance of motivation in sustaining long-term participation.

Research indicates that boys generally exhibit greater improvements in physical fitness compared to girls during adolescence, particularly after the age of 13 (Greier et al., 2019). These differences may influence motivation levels and the overall relationship between fitness and motivation across genders.

## **CONCLUSION**

The relationship between physical fitness and sports motivation has a significant relationship between the two at the age of 13-15 in the sport of soccer. This is reinforced in the results of this study where high motivation has high fitness too. This can be caused when having high sports motivation will result in the regulation or self-control of players in the urge to do exercise or activities involving physical.

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## **CONFLICT OF INTEREST**

Clearly explain whether there are any conflicts of interest related to the reported research.

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