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The Influence of Physical Condition, Skill, and Mental Factors on The ability to Play Football

Chairul Arif Utama^{1A-E*}, Ali Maksum^{2B-D}, Advendi Kristiyandaru^{3B-D}

1.2.3 Faculty of Sport and Health Sciences / Surabaya State University / East Java / Indonesia chairul.21019@mhs.unesa.ac.id1*, alimaksum@unesa.ac.id2, advendikristiyandaru@unesa.ac.id3

ABSTRACT

This study aims to determine the contribution of physical condition, skills and mental factors to the ability to play football by players of the Mitra Surabaya Football School in the age category of 15 years in the 2024 period. In this study, quantitative descriptive is used with a correlational approach. Data collection was carried out based on all variables, including 1) physical condition (strength, movement speed, explosiveness, agility and endurance), 2) skill (passing & stopping), 3) mental (pre-match preparation mental assessment questionnaire), and 4) game performance assessment instrument (GPAI). Using descriptive statistical techniques, linearity tests, and multiple regression analysis. Based on the results of the data that have been obtained and processed through statistical procedures, the results are explained that simultaneously the factors of physical condition, skill, and mental have a significant effect on the ability to play football with a significant value of 0.017 to a value of 31.9%. Meanwhile, partially, the physical condition factor had an effect with a significance value of 0.030 with a magnitude of 0.383, the skill factor had a significant effect with a value of 0.041 at a magnitude of -0.355 which meant an inverse relationship, and the mental factor did not have a significant influence with a value of 0.164 at a magnitude of -0.236. It can be concluded that simultaneously all factors affect the ability to play, and mentally becomes a support when the capacity, physical condition and skill of the player are qualified considering that all factors affect simultaneously.

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AUTHORS' CONTRIBUTION

- A. Conception and design of the study;
- B. Acquisition of data;
- C. Analysis and interpretation of data;
- D. Manuscript preparation;
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INTRODUCTION

Football is a game sport that is included in the category of big balls, and this sport is very popular with almost all people in the world, not only as fans but also many people who are connoisseurs and actors with football the times develop becomes more competitive in every aspect specifically. This sport is certainly one of the aspects of supporting the physical and spiritual health of the body, meaning that from every side it will be affected such as physical, knowledge, and mental (Permadi & Fernando, 2021). So



with the development of a player, it is undeniable that all aspects of his ability will increase by following what he has obtained every training session or match.

A player, of course, in the sport of football, individually must have the ability to carry out each of his activities, considering that each gesture has a certain purpose. A player must have a qualified foundation with the goal of being a form of football playing ability, not a few people master it. Several techniques in football such as passing, dribbling, control, and shooting, are the main references that a person can play the sport of football. Basic techniques are very important as an element of the quality of a player's ability in football (Juita et al., 2022). In football, for a player, it is a must to have qualified basic technical skills to achieve a desired goal (Nusufi, 2016). Football players can achieve the target of the game, namely scoring goals, but must master basic technical skills, namely kicking (shooting), giving the ball/passing and receiving the ball (passing & control), heading the ball (heading), and shooting the ball (shooting) towards the opponent's goal (Anwar, 2013). Basic techniques in football play a very important role so that the willingness to achieve the desired target is not only the main goal but can also be carried out well, therefore players can package a technique to become a maximum way of playing. The team game will achieve the goal if several factors can be described in it, especially the qualified physical condition so that the player can achieve the target of moving in the football game. Several components are the dominant influence in the game of football, namely strength, speed, endurance, flexibility, and agility (Permadi & Fernando, 2021).

Exercise is inseparable from the role of physical conditions where this sport is dominant and more complex in the activity of all limbs. Several components are the dominant influence in the game of football, namely strength, speed, endurance, flexibility, and agility (Permadi & Fernando, 2021). The quality of play will greatly increase if the aspect of physical condition can encourage body performance in moving according to the desired goal, therefore this physical condition must be always done as an effort to support all activities optimally. Physical condition, especially in football, basically plays an important role with the aim that the resulting performance gets maximum results (Firmansyah et al., 2021). Thus, if the physical condition is in very good condition, then the players in one team can carry out everything that is the player's task with various tactics and strategies.

In a football match, it is often found that players experience disturbances in carrying out their duties considering the pressure and anxiety that is so great that it affects the quality of the player's ability (Donie et al., 2023). About the results of maximum football achievements, mental which is one of the aspects of psychology has a top role. According to Kaur, (2018), mentality is an aspect of psychology that has a role as the main parameter to be able to produce a winning match in football. A well-structured thing narrows down to playability or performance, from each task in a performance match monitored with various instrument developments based on basic science for learning models (López et al., 2013). The team's performance will get maximum points if the team's

goals can be achieved, which is seen in terms of physical, skill, and mental condition, as a whole must be qualified.

It needs to be understood more deeply by coaches in football that not only achieving the team's goal of winning a match is focused on only technical matters. The success rate in a football match depends on technical, physical and mental factors, of which the three factors are a combination that is a reference in the ability to play football (O'Reilly & Wong, 2013).

Therefore, the design of this study has the purpose of conducting research from three factors simultaneously on the ability to play football, this research was carried out on the continuity of the training of the Surabaya Partner Football School Team in the 15 Years Age Category, especially to find out the relationship between physical, skill, and mental condition factors to the player's ability to play football and find the value of the greatest contribution to the ability to play football of the three factors among them. With this research, it can be done to be a form of effort on how a coach can arrange a training program well looking at the factors that most affect the player's ability to play football.

METHODS

This type of research plan will look for a relationship, therefore the type of nonexperiment in the category of quantitative descriptive research that uses a correlational methodology is the design of this study. According to Maksum (2009), correlational research is research that connects one or more independent variables with one bound variable where there is no attempt to influence that variable. This research plan was carried out at the Mitra Surabaya Football School KU-15 Years. In this study, a correlational design is used with a model of relationships between variables, namely in the form of causal relationships. According to Maksum (2018), the correlational design is a form of relationship between causal variables, namely research in which there are variables with roles as cause and effect. The existing group of variables makes the focus of the research, there are independent variables that are the influence of 1) Physical Condition Factors, 2) Skill Factors, and 3) Mental Factors. Meanwhile, the bound variable in this study is the ability to play (football sport). Sample data collection was carried out at the Poral football field in Lidah Wetan Village, Lakarsantri District-Surabaya City. The population used in this study is all players of the Surabaya KU-15 Partner Football School in the 2024 period. From the technique of taking the research subject as a whole, the sample was taken based on the number of players of the Surabaya KU-15 Year Partner Football School, which was 30 players.

Data collection follows the characteristics of football sports, on the physical condition factor includes the strength component with a strength test instrument using the Leg Dynamometer tool, the speed using a 60-meter running speed test instrument, the explosiveness is taken through the Vertical Jump Test, the player's agility is obtained from the data results from the Agility Test, and the last component used is

endurance with the instrument Bleep Test. The collection of player data on skill factors uses basic technical instruments, namely Passing & Stopping, and the last factor, namely mental using Mental Assessment assessments in the form of questionnaires conducted before players run the match. In the strain variable, there are aspects of playability, and data collection techniques using the Game Performance Assessment Instrument.

The data collection technique uses descriptive quantitative which uses interval data measures, data processing produces statistical forms that are studied using the help of statistical software programs, namely Statistic Program For Social Science (SPSS) version 21. The results of all data are analyzed with a linearity test as a condition for knowing the variability of the data produced According to Maksum, (2018) the linearity test is a requirement test that seeks to see whether the linearity or not distribution of data in the research is causal. This means that the distribution of data obtained in a study can be produced linearly or not so that the advanced process in data processing can be determined. In this study, statistical analysis techniques can be used to find out both the magnitude of the relationship form, as well as the direction contained in the physical, skill, and mental conditions, of the ability to play football. According to Maksum, (2018) explained that regression analysis is a statistical analysis technique that aims to determine the relationship, direction, and magnitude of the correlation coefficient between independent variables and bound variables. The data analysis technique uses multiple linear analysis because the number of variables is more than one to determine the contribution of the free variable to the bound variable.

RESULTS AND DISCUSSION

Explanation of the relationship that has an influence, from the aspect of research design The following are the results of simultaneous statistical data processing from the results of the Statistical Program For Social Science (SPSS) version 21 test.

Table 1.Contribution Value

Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	.565ª	.319	.241	5.09043			

Table 2.Simultaneous Statistical Test

Model		Sum of Square	df	Mean Square	F	Sig.
	Regression	315.741	3	105.247	4.062	.017 ^b
1	Residual	673.726	26	25.913		
	Total	989.467	29			

In the display of the table above, it can be explained simultaneously that the amount of independent variables, namely physical conditions, skills, and mental conditions, has an influence value according to **Table 1** it can be seen that the R Square column (.319) means 31.9%, and the rest, namely 68.1%, is influenced by other factors that cannot be

explained in this study. Furthermore, according to **Table 2**, it can be explained that the F value is 4.062 with a significance of .017 is smaller than 0.05 which means that physical, skilful, and mental conditions simultaneously have a significant influence.

Table 3.Partial Statistical Test

		Coefficients					
Model		Under standardized Coefficients		Standardized Coefficients	t	Sig.	
		Frequency	Percentage	Frequency			
1	(Constant)	32.128	11.502		2.793	.010	
	Physical Condition	.790	.345	.383	2.291	.030	
	Skill	855	.398	355	-2.150	.041	
	Mental	269	.188	236	-1.431	.164	

In the display of the table above, it can be explained simultaneously that the amount of independent variables, namely physical conditions, skills, and mental conditions, has an influence value according to **Table 1**, it can be seen that *the R Square* column (.319) means 31.9%, and the rest, namely 68.1%, is influenced by other factors that cannot be explained in this study. Furthermore, according to **Table 2**, it can be explained that the F value is 4.062 with a significance of .017 is smaller than 0.05 which means that physical, skilful, and mental conditions simultaneously have a significant influence.

Based on the results of the data analysis, it can be explained partially, that there are independent variables (physical conditions) that have a significant influence, as seen in the table that the Beta of 0.383 in the positive direction at the significance of .030 is less than 0.05 meaning that physical condition has a great influence on the ability to play. In line with the research of Permadi & Fernando, (2021) explained that the physical condition of football players is a support in a match, and the importance of the role of physical condition is a tangible form to show all the ability to play football to the maximum. This explanation is reinforced by the statement, that if there are several aspects of qualified conditions, it will be able to trigger other aspects specifically and get more maximum outputs, meaning that in general physical conditions have a great contribution to the game of football (J. L. Mayhew et al., 1989). The factor of physical condition in football is the initial capital of a person in carrying out activities to carry out their duties on the field, with the hope that the team can achieve victory in the match, then this becomes an inseparable unit so that the harmony of quality with the results will be appropriate.

The independent variable (skill) had a significant influence seen in the Beta value table of -0.355 at a significance of .041 less than 0.05, meaning that skill has a negative influence on playability. In line with research conducted by Permadi & Fernando, (2021) explained that football has an attraction to purity in the game so player skills must be possessed in the perfect direction, of course, with the habit of practising to perform skills effectively and efficiently can certainly achieve the goal of the game itself. Football skills are one of the factors that have an important role because they are a support to show maximum playing performance (Nusufi, 2016). At the same time, it can be strengthened by the explanation (Anwar, 2013) that playing football requires a person to have qualified basic

techniques so that they can carry out the task of playing football well. When someone understands and has excellent quality in applying football skills, then it can be ensured that players can apply the ability to play according to the goal in the match.

In the last independent variable (mental) according to the table above the Beta value is -236 with a significance of .164 which means that mental does not influence at all on the ability to play. The results of mental factor research can be corroborated by the latest research in line with the one produced by Guntoro et al., (2020) explaining that psychology in the mental sense does not affect the performance of football players, this can be explained that person's mentality and personality are predominantly influenced by other factors such as referee decisions or encouragement from supporters when a person displays his or her ability to play in a match. This is also psychologically strengthened by not having a significant influence with a very weak level on the game of football, this explanation occurs because football is one of the most complex sports based on its movement activity, so all components are dominant in the maximum body movement (Firmansyah et al., 2021). Therefore, mentality does not affect the ability to play, considering the specifications of the dominant football sports characteristics on the player's physical activity.

Football is a sport that has very complex body movement characteristics so every player in carrying out tasks as a team is required to have the capacity needed to be very qualified. Based on the statistical data that has been processed, there is the most dominant contribution value between physical condition, skill, and mental factors to the ability to play football which is following the results of the field, it can be concluded that the factor that has the greatest contribution value is physical condition.

Of all the variables in this study, the physical condition factor has the greatest contribution value or influence on the ability to play football with a total value of 0.383 in the positive direction. In line with the explanation of Firmansyah et al., (2021) physical condition plays an important role for a player in carrying out individual tasks to achieve movement to a specific level effectively and efficiently, such as running, changing the direction of movement, and resisting fatigue in moving, of course, players can pay full attention to improve and maintain physical condition regularly.

This explanation is strengthened by research by Hulfian, (2019) stating the importance of players in knowing the improvement and maintenance of physical condition so that it can support the speed of increasing abilities from all aspects of a player. Thus, the ability to play with maximum movement specifications can occur if a soccer player understands the important role of physical condition to achieve the best level of performance in the sport of football.

CONCLUSION

This study was carried out in one data collection which produced an explanation that simultaneously physical, skill, and mental conditions have a significant influence on the ability to play football. Furthermore, the results obtained partially show that the

factor that has the greatest influence is physical condition. This means that football has specific characteristics of body movements so physical condition plays a very important role in achieving the goal of maximum movement.

This study requires a study from further research regarding the contribution of factors of physical condition, skill, and mental to the ability to play in football in a more specific phenomenon, meaning that it is carried out with different populations, samples, and time constraints. Such as looking for contribution values based on a larger sample or with different time frames to ensure more specificity of various factors.

This study refers to the study to find the variable aspects that have the greatest influence on the bound variables, so the data processing uses multiple regression analysis techniques where it is not possible to present specific results, meaning that it is only limited to the general values that have been narrowed down instead of referring to the assessment at the level of each individual. With the multiple regression analysis technique model, it is not possible to conduct a continuous study of the results in the sense that it is only carried out on the player's condition at one time.

These results can be a form of further research that is designed on a panel data regression model so that the results of the study obtained are more specific in the specified period. Panel data regression is a form of analysis technique that can describe data from the same individuals within a certain time series or period (Robinson Sihombing, 2021). The technique is included in a multivariate statistical model with one characteristic of reducing the risk of bias in processing data based on dynamic changes from the sample studied.

Furthermore, regarding data that has insignificant values, it can occur as a result of the collection of values not carried out directly, but following the distribution of one instrument to each individual who is reported independently. In the next study, it is expected to be able to make measurements with questionnaire instruments that are carried out with more than one model objectively. Therefore, several aspects in the mental factor can be used as a study of data results to be more optimal, such as motivation, cooperation, and confidence. Following the explanation of the results of the study by Apriansyah et al., (2017) stated that mental conditions in the aspects of motivation, cooperation, and confidence have a significant influence on athlete achievement based on the peak performance of football sports. The irony of this study is that it has a more objective point of view so that it can be an appropriate result to explain the existing phenomenon.

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