

# Correlation Between Kinesthetic Perception and Confidence Against Soccer Penalty Kick Results

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#### **Abstract**

This study aims to determine the correlation between kinesthetic perception and selfconfidence in the results of soccer penalty kicks by the players of the Medan State University Student Soccer Team. And to find out the joint correlation between kinesthetic perception and self-confidence on the results of the penalty kicks of the Medan State University Student Soccer Team players. The sample consisted of 30 players from the Medan State University Student Soccer Team who were selected by simple random sampling. The results of the research carried out are: In the first hypothesis there is a significant correlation between kinesthetic perception and the results of a soccer player's penalty kick at the State University of Medan obtained a t-count of 26.39 which is greater than the t-table of 1.70. The second hypothesis is that there is a significant correlation between self-confidence and achievement in the results of the soccer penalty kicks of the Medan State University team, which has a tcount of 6.59 and is greater than a t-table of 1.70. In the third hypothesis, there is a significant correlation between kinesthetic perception and self-confidence in the results of the Medan State University soccer penalty kick with a t-count of 160 which is greater than a t-table of 3.33. So it can be concluded that there is a significant relationship between variables and jointly on the penalty kick ability of the students of the Medan State University football team.

Kata Kunci: Football, Penalties, Kinesthetic Perception, Confidence

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## A. Introduction

Football is one of the most famous and popular sports in all parts of the world. This is evidenced by the great enthusiasm of the community, both from children and parents, who are involved in this soccer game. It stated that football is one of the sports favored by the people of Indonesia, and this sport has become popular in society from the bottom to the top. As for those who are not directly involved in the game of football, they often do not miss watching it either live or through the television screen, especially when the World Cup finals are broadcast by one of the television stations. They are even willing to not sleep at night just to watch their favorite teams. The above shows that the sport of soccer is very popular with people from all walks of life in the world.

A person can play the sport of soccer if they have mastered basic technical skills and good physical abilities. In a soccer match, the players will complain about the strength of their respective teams, and this will be carried out properly. Of course, this will be determined by the technical and physical skills possessed by each individual on the team. The quality of individual abilities permanently affects the outcome of matches at various levels (Owoeye et al., 2014). Besides the technical and physical skills that determine a match, psychological

factors also greatly influence the players and the teams they are defending. Because if a player already has good technical and physical skills and is not supported by good psychological factors, it will have a big impact on his appearance online match field and this will hurt his teammates. Football is a team sport that relies on technique, tactics, and mentality to get maximum performance (Mardhika, 2017), (Kastrena, 2019). Football consists of 4 components, namely technique, tactics, physical and mental (Danurwindo et al., 2017).

In football matches, there is often physical contact between players on one team and the other team. This happens solely to maintain the prestige of the match itself and to win the match. The physical contact that occurs often results in violations between players, which result in free kicks for the injured team. This free kick can often create goals, so it will be detrimental to his team. Because this penalty kick, usually creates various forms of shots on goal, either directly or indirectly.

The violations that occur in the game of football will be able to produce several types of punishments given by the referee who leads the match. This form of punishment is usually given by direct kicks and indirect kicks, with the meaning that if a direct kick is given to a team that is

injured, then one of the injured team's players can kick the ball towards the goal, and if the ball goes in without being touched by another player, then the goal is considered valid. And vice versa, if the penalty given is in the form of an indirect kick, to be able to score a goal against the penalty given, the ball must touch at least twice of the players who are on the field, then the goal created is considered valid. If the offense involves contact, it is punished with a direct free kick (Brackenridge et al., 2020). Violations that occur outside the penalty box will result in a free-kick and a penalty kick will occur if the opposing player commits a violation in his penalty box (Pemula, 2017).

To determine whether a player has made a mistake or not is the absolute right of a referee. A referee has the policy to reprimand a player who always makes a foul. To warn a player who always makes a foul, the referee can give a warning by awarding a yellow card, indicating that the player is careful not to make the same foul. If a player who has been given a yellow card still does not heed the warning given by the referee by making the same violation, then the referee can expel the player by giving a red card.

The most dangerous form of violation is if the offense is committed by a defender within the team's 16-meter box area

because the offense committed in this area will not only result in a free-kick and a card, but it will also result in a direct free-kick from the penalty point. A penalty kick is a kick that is obtained when a player from one team violates another team player in the goal area (Achmad, 2018). If a kick from this penalty point is awarded to an opposing player, it is a sign that a goal will be scored against his team. Because of this direct free kick from the penalty spot that everyone can trust with 99.9% going to a goal. If one penalty kick does not result in a goal, of course, other factors have influenced the kicker.

We can be sure that direct free kicks taken from the penalty spot will always result in goals. (Kristina, 2018) states that the biggest chance of a soccer team is when the team gets a penalty kick. However, not a few world-class players have experienced failure in taking free kicks from this penalty point.

Failure to take a penalty kick also often occurs in student soccer players at the State University of Medan, when the team gets the opportunity to kick from the penalty spot and cannot be used properly by the kicker.

The Unimed student soccer team is one of the sports fostered by Medan State University, which is one of the leading sports. The members of the Unimed student

soccer team are selected based on the selection of all active Unimed students. The Unimed student football team won 1st place in the competition between U21 students throughout North Sumatra, won the match between U21 students who won the North Sumatra-Aceh region, and at the same time qualified for the 2018 Kemenpora Cup Finals. They won 3rd place in the competition between U21 students in the Kemenpora Cup in Bandung. The failure of the Unimed U21 soccer team to advance to the final round of the 2018 competition was due to losing to the College Tinngi team from Siliwangi city via penalty kicks. In the penalty shootout in the semi-finals, several Unimed U21 players failed to execute a penalty kick against the opponent's goal. He thus eliminates hopes of advancing to the final round and having to settle for 3rd place that year. However, for the next Kemenpora Cup U21 student competition in 2019, the Unimed U21 student football team could not take part because they did not qualify from the North Sumatra region.

One of the failures of the Unimed U21 student football team in 2019 was not being able to take advantage of the penalty kick awarded by the referee. Failure to take a penalty kick when observed on the field is the result of a lack of confidence or confidence in the kicker. Besides that, it has not been able to direct the ball to areas that are difficult to reach by the goalkeeper.

This may be due to the child's lack of flying hours in penalty kicking practice so that the kicker cannot feel the movement of kicking the penalty itself.

For people to be able to take a free-kick from the penalty spot, high technical quality is needed for them to do it. Mastery of penalty kick techniques cannot be separated from the ability of players to master basic shooting techniques. The mastery of shooting skills possessed by players plays a very large role in the success of taking free kicks from the white point or penalty area. Shooting is a kick towards the goal to get the ball into the opponent's goal (Supriadi et al., 2021). The ability to do good shooting by players will be obtained by doing shooting exercises regularly. (CROSS, 2013) states that shooting practice aims to improve the athlete's ability to direct the ball according to the target, namely directing the ball to the opponent's goal.

of understanding Aspects basic technique The execution skills relate to the feeling the player/person feels when performing the neural or sensory connections associated with correct This technical movements. can be explained as a feeling or awareness of the position of the body when moving (kinesthetic perception). Perception is a process that involves the entry of messages or information into the human brain (Suryono, 2016). (Wijayanto, 2018) states that kinesthetic perception is the process of people doing or knowing the power of and being aware of a certain movement. So, in taking a free-kick from the penalty spot, the kicker must be able to visualize where the ball should be directed, which leads to a certain target that is far from the goalkeeper's reach and can score points. So that when a player kicks at the 12 pass point (penalty), a high level of concentration is needed so that it can be interpreted that in taking a kick, someone must be able to have awareness of the position of the body and direct the ball. In other words, the perfection of a technique can usually only be done by people who are quick to detect a movement pattern and that person usually has good kinesthetic perception.

Besides kinesthetic perception, psychological factors have a very large influence on the success of taking a direct free-kick from the penalty spot. To be able to take a penalty kick is not an easy thing, because it requires strong psychological or mental factors (Kastrena, 2019). We know that the current trend of soccer power is influenced by the mental size possessed by players (Owoeye et al., 2014). As is the case with the self-confidence possessed by the player taking the penalty kick, the effect is very large, because, without the belief to be able to enter the ball into the opponent's goal, it will certainly be difficult to be able to finish it well, especially when the goal is guarded by a well-known goalkeeper. (Firmansyah et al., 2019) stated that the psychological factor that affects the success of taking a penalty kick is self-confidence. In this case, the player's confidence will have a very big role in the success of taking a free kick from the penalty spot.

From all the descriptions that have been described above, it seems that there is a very close relationship between penalty kick skills and several important elements, such as aspects of kinesthetic perception and self-confidence, but to be able to prove whether these aspects have an interrelated relationship, one the same as others, will be determined by a scientific approach through relevant and accurate research. For that researchers want to try to see the relationship through a study. Due to the limitations and considerations that exist, the study focused on aspects of kinesthetic perception and self-confidence as research variables associated with kicking skills from the penalty point of the Unimed student soccer team.

#### B. Method

This research was conducted at the Unimed multi-purpose soccer field, Jalan Willem Iskandar Pasar 5 Medan Estate. The target population in this study were all members of the Unimed student soccer team, totaling 53

people. Sampling was carried out using a simple random sampling technique, namely by drawing lots of the entire population so that a sample of 30 people was obtained. This method is carried out with the aim that each subject has the same opportunity and opportunity to be selected so that the selected sample of 30 people represents the population and avoids the subjectivity of the researcher.

By the problems and research objectives that have been described previously, the research method is a survey method and data collection techniques using tests and measurements whose purpose is to reveal a systematic, factual, and accurate picture of the phenomenon under study. This study uses two independent variables, namely kinesthetic perception and self-confidence, while the dependent variable is a penalty kick.

By the variables to be studied, there are three types of data to be collected, namely kinesthetic perception, self-confidence data, and data from penalty kicks. Kinesthetic perception data were taken using the Distance Perception Test instrument. This instrument has a level of face validity and has a test reliability level of 0.44 obtained from the re-test. To measure the level of self-confidence using a statement in the form of a questionnaire compiled using a Likert's scale that was tested and correlated using Carl Person's Product Moment, which has a reliability (r) of 0.97. As for the penalty kick data using a penalty kick penalty test by the modified FIFA match rules (Lennox et al., 2006).

The research design carried out is as follows:

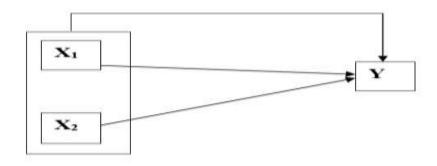


Figure 1. Research Variable Relationship Pattern

## Information:

X1: Kinesthetic Perception

X2: Confidence Y: Penalty Kick Skill

#### C. Result and Discussion

#### Result

Based on the results of the tests and measurements carried out by researchers

in the field, data was obtained that could be used as material for data analysis. Where the data is used to answer the truth of the hypothesis that has been raised.

The data obtained can be described as follows:

**Table 1: Description of Research Data** 

| Resume         | X1   | X2    | Y     |
|----------------|------|-------|-------|
| N              | 30   | 30    | 30    |
| Max            | 69   | 169   | 134   |
| Min            | 45   | 149   | 99    |
| Range          | 24   | 20    | 34    |
| Mean           | 53,8 | 159,0 | 106,5 |
| $\mathbf{S}^2$ | 7,0  | 5,6   | 9,3   |

Before testing the hypothesis, it is better to test the data analysis requirements.

## 1. Normality Test

The normality test used in this study is the Liliefors test. The purpose of this normality test is to find out if the data is normally distributed or vice versa.

The test is carried out with the condition that Ho if the maximum Lo calculation result is < from Ltable with a value of = 0.05 which significance level is used to reject or accept.

Table 2. Normality Test Results

| Var   | iable L <sub>o</sub> | L tabel | Ket    |
|-------|----------------------|---------|--------|
| $X_1$ | 0,358                | 0,86    | Normal |
| $X_2$ | 0,263                | 0,86    | Normal |
| Y     | 0,339                | 0,86    | Normal |

Information:

X1: Kinesthetic Perception

X2: Confidence

Y: Penalty Kick Skill

Based on table 2 above, the data was obtained from the calculation of the value. The results of the calculation as Lo of the sample group are less than Lt. So it can be concluded that the research sample comes from a population that is normally distributed.

## 2. Homogeneity Test

The homogeneity test was carried out using the Bartlett test with the variable

level in the study with a significance level of = 0.05. The data from the research variables are the dependent variable (Y) Penalty Kicks, and the independent variables are Kinesthetic Perception (X1) and Self-Confidence data (X2) for testing the null hypothesis, take the following steps. The summary of the homogeneity test results can be seen in Table 3 below:

Table 3: Summary of homogeneity test results

| Variable       | K  | $X^2h$ | $X^2$ t | Kesimpulan |
|----------------|----|--------|---------|------------|
| Y              |    |        |         |            |
| X <sub>1</sub> | 29 | 1,26   | 7,81    | Homogen    |
| $X_2$          | -  |        |         |            |

#### Information:

X1: Kinesthetic Perception

X2: Confidence

Y: Penalty Kick Skill

The calculation results as described in table 3 above, obtained X2h = 1.26 is smaller than X2t = 7.81 So that Ho: is accepted in the real level = 0.05. Thus it can be concluded that the three variables have the same variance (homogeneous).

## 1. Hypothesis Testing

Hypothesis testing is a test carried out using inferential statistics, which means seeing statistical regression analysis, simple correlation, and multiple correlations. Then the independent variable and the dependent variable were tested by testing the correlation coefficient (productmoment). Then to see the relationship between the variables in the study together (X1 and X2), it was carried out using regression analysis and multiple correlation techniques.

## a) Hypothesis 1

Before the correlation test, a simple linear regression test was conducted to determine the significance of the regression coefficient b and the linearity between the kinesthetic perception (X1) and the penalty

kick result (Y). Based on the calculation, the regression correlation coefficient b is 0.59 and the constant a is 74.75, so it can be concluded that the relationship between kinesthetic perception and penalty kick results is expressed by the regression line equation =  $74.75 + 0.59 \times 1$ .

Significant testing and linearity test of the regression equation = 74.75 + 0.59X1 using ANOVA (analysis of variance) or -F test so that the significance test criterion states that Fhit is greater than Ftab in other words the regression equation is declared significant and the test criteria linearity if Fhit is smaller than Ftab in other words (equation) the regression line is declared to be related (linear).

Based on the data from the significance test and the linearity of the regression equation = 74.75 + 0.59 X1 so from the data it can be concluded that the regression equation of = 37.64 + 1.28 X is very significant and linear. This means that if the kinesthetic perception is increased by one score it will have an impact on the penalty

kick result which will increase with a value of 1.28 at a constant 37.64.

After testing the significance and linearity of the similarity of the regression values =

37.64 + 1.28 X then proceed to the calculation of the simple correlation coefficient X1 with Y (ry1) of 0.45.

Table 4: Calculation Results of X1 Correlation with Y

|                       | n  | R    | $\mathbf{r}^2$ | thit  | t <sub>tab</sub> |
|-----------------------|----|------|----------------|-------|------------------|
| Correlation           |    |      |                | Vint  | 0.05             |
| X <sub>1</sub> with Y | 30 | 0.98 | 0.96           | 26,39 | 1,70             |

Based on table 4 which has been described, it can be seen that thit of 26.39 is greater than t table of 1.70, so it can be concluded that H0 is rejected, which means there is a significant correlation between kinesthetic perception and the result of a penalty kick. Based on the correlation coefficient ry1 above, the coefficient of determination is 0.96. This means that 96% of the variation in penalty kick results can be explained by kinesthetic perception.

## b) Hypothesis 2

simple linear regression test to determine the significance of the regression coefficient b and the linearity between self-confidence (X2) and the result of a penalty kick (Y). Based on the calculation, the regression correlation coefficient value b with a value of 1.55 and a constant value of a -139.43 shows that the relationship between the self-confidence variable (X2) and the result of the penalty kick dependent variable is

expressed by the regression line equation = -139.43 + 1.55 X2.

Testing the significance and linearity of the regression equation = -139.43 + 1.55 X2 using ANOVA (analysis of variance) using the -F test, the significance test criteria results in if the Fhit value is greater than the Ftab value, it can be concluded that the regression equation is stated significant while the linearity test criteria if Fhit is smaller than Ftab then the regression line equation is declared linear.

Based on the value of the calculation of the significance and linearity of the regression equation =  $-139.43 + 1.55 \times 2$ , it can be concluded that the regression equation is =  $-39.43 + 1.55 \times 2$  with a significant and linear category. This results in an explanation that increasing self-confidence will increase the penalty kick result by 1.55 at a constant -139.43. After testing the significance level and linearity in the regression similarity of = -139.43.

39.43 + 1.55 X2, then proceed with the calculation of the simple correlation

coefficient X2 with Y (ry2) of 0.93.

Table 5. Data Results Correlation Results X2 with Y

|                       | n  | R    | $\mathbf{r}^2$ | t <sub>hit</sub> _ | $t_{tab}$ |
|-----------------------|----|------|----------------|--------------------|-----------|
| Correlation           |    | T.   | •              |                    | 0.05      |
| X <sub>2</sub> with Y | 30 | 0.93 | 0.86           | 6,59               | 1,70      |

Based on table 5 which has been described by the researcher, it can be seen that this is 6.59 > t table 1.70, so from these data it can be concluded that the research hypothesis H0 is rejected, which means there is a significant correlation between kinesthetic perceptions of the penalty kick result. Based on the correlation coefficient ry2 above, the coefficient of determination is 0.93. This means that 93% of the variation in penalty kick results can be explained by kinesthetic perception.

## c) Hypothesis 3

The steps in conducting a simple linear regression test are carried out to be able to see how far the significance of the values of the regression coefficients b1 and b2 are related to each other on kinesthetic perception (X1), self-confidence (X2) indicates the value (result) of penalty kicks (Y). ). Based on the calculated value, it can be seen that the regression correlation coefficient with a b1 value is 1.25, b2 is 0.05 and a constant value is 31.3, so there is a relationship between

kinesthetic perception and selfconfidence with the results of the regression penalty kick = 31, 3 + 1.25 X1 + 0.05.X2

Testing the significance level of multiple regression = 31.3 + 1.25X1 + 0.05X2 using ANOVA (analysis of variance) with the F-test value, to produce a significance test, if Fhit > Ftab so it can be seen that the regression equation can be declared significant and if linearity test criteria, if Fhit < Ftab( $\alpha$ )(k/n-1) so it can be concluded that the data is declared significant.

From these results, it can be concluded that there is a positive relationship between kinesthetic perception and self-confidence together with penalty kicks. The relationship between the kinesthetic perception variable (X1) and self-confidence (X2) with the penalty kick outcome variable (Y) shows a multiple correlation coefficient (r) of 0.96. Then from the coefficient of determination (r2) of 0.98, this means that the variation that occurs in the penalty kick is 160

In table 6, it is shown that Fhit is 160 which is greater than Ftab 3.33 so the multiple regression equation = 31.3 + 1.25 (kinesthetic perception) + 0.05. (self-confidence) is stated to be very significant, which means that if together

kinesthetic perception (X1) and self-confidence (X2) are increased by one score, the penalty kick result (Y) will increase by 0.98 (1.25X1 + 0.05X2) score at the constant 31.3.

Table 6. Calculation Results of X1 and X2 Correlation with Y

|                  | N  | R    | r <sup>2</sup> | t <sub>hit</sub> – | $t_{tab}$ |
|------------------|----|------|----------------|--------------------|-----------|
| Correlation      | 1  | IV.  | *              |                    | 0.05      |
| Ry <sub>12</sub> | 30 | 0.96 | 0.98           | 160                | 3,33      |

After testing the significance and linearity of the multiple regression equation, then proceed with the calculation of the multiple correlation coefficient. The results of the multiple correlation calculation show the number Ry,12=0.96.

Based on table 6 which has been described by the researcher, it can be seen that Fcount with a value of 160 > F table 3.33, from these results it can be concluded that H0 is rejected with an explanation that there is a significant relationship between kinesthetic perception (X1) and self-confidence (X2) with penalty kick result (Y). Based on the Ry12 multiple correlation coefficient above, the coefficient of determination (R2) is 0.98. This means that 98% of the variation in penalty kick results can be

explained by variations in kinesthetic perception and self-confidence.

After testing the multiple correlation coefficient, then proceed with the partial correlation calculation, namely testing the coefficient by controlling the independent variables, either individually or together.

To test the value of the partial correlation coefficient ry1.2. If the variable control (X2) is carried out, the partial correlation coefficient ry1.2 is 0.73. Furthermore, to determine the value of the significance of the partial coefficient of ry1.2, it is continued with the t-test.

The value of the calculation of the partial correlation can be explained in table 4.12 below.

Table 7. Results of ry1.2. Partial Correlation Test Value

| Korelasi Parsial  | N  | r    | t <sub>hit</sub> | $\mathbf{t}_{\mathrm{tab}}$ |
|-------------------|----|------|------------------|-----------------------------|
| r <sub>y1.2</sub> | 30 | 0.73 | 5,49             | 2,04                        |

Table 7 above shows that 5.49 > ttab with a value of 2.04 and from these results, a conclusion can be drawn that the value of the partial correlation coefficient ry1.2 is 0.73. This right explains that there is a kinesthetic perception related to the penalty kick result. If the researcher

controls the adaptation variable (X2), it will show the value of the partial correlation coefficient ry2.1 with a value of 0.76, and a t-test is carried out to see the significance of the value I of the partial coefficient ry2.1.

**Table 8: Partial Correlation Calculation Results ry2.1.** 

| Korelasi Parsial  | N  | r    | t <sub>hit</sub> | t <sub>tab</sub> |
|-------------------|----|------|------------------|------------------|
| r <sub>y2.1</sub> | 30 | 0.76 | 6,08             | 2,04             |

Table 8 above shows count 6.08 > ttab with a value of 2.04 and it can be concluded that the value of the partial correlation coefficient is ry1.2 with a value of 0.76 with the result that there is a relationship between self-confidence and the result penalty kicks, although the perception variable controlled.

#### **Discussion**

Based on the results of the hypothesis testing conducted, it can be seen that the proposed hypothesis has a significantly positive relationship.

This is in line with the theoretical study stated earlier that Unimed student soccer team players who have good kinesthetic perception will be able to take penalty kicks optimally. Thus it can be said that the result of a penalty kick is related to the kinesthetic perception of the Unimed student soccer team player concerned. The importance of kinesthetic perception for athletes was expressed by (Mujahid & Subekti, 2021) in his research entitled the relationship between kinesthetic perception and soccer skills in the takraw game, the results of his research that by having good kinesthetic perception, the ability to kick soccer will also be good. (Fitriyanto 2020) in his research entitled The Relationship Between Limb Muscle Power, Flexibility, and Kinesthetic Perception With Soccer Shooting Accuracy in Players Age 12-14 Years Old SSB Matra Kebakkramat Karanganyar the result that there is a significant positive and relationship kinesthetic between perception and shooting accuracy in football. Meanwhile (Isnaini 2010) explained that there was a significant difference in influence between the factors that influenced kinesthetic perception (1) differences in the type/way of kicking the ball towards the soccer player's goal, (2) there was a significant interaction between the main factors. in the form of two-factor interaction, so from the results of research conducted by Isnaini (2010), there is a significant difference in the effect between drill and kicking accuracy (kinesthetic perception) kicking the ball towards the goal in soccer games.

Besides that, the results of this study also show that kinesthetic perception is important to be owned and improved by every Unimed student soccer team player to improve the results of their penalty kicks.

When viewed partially the relationship between kinesthetic perception and the result of a penalty kick by controlling for the kinesthetic perception variable, the partial correlation coefficient (ry12) is significant. Furthermore, the results of the control variable increased the relationship between kinesthetic perception and the

result of a penalty kick, and this proves that the value of the partial correlation coefficient is at a significant level.

Other findings obtained in this study are also closely related to the theoretical studies that have been carried out previously, that Unimed student soccer team players who have good self-confidence will be able to take penalty kicks optimally as well. It can be said that the result of a penalty kick taken by a Unimed football player is closely related to the confidence he has.

In addition, the results of this study also show that it is important for every player to have and improve self-confidence to improve the results of their penalty kicks. (Mardhika & Dimyati, 2015) in their research entitled Concentration Level Contribution to Penalty Kick Success, with the result that there is a significant relationship between concentration level and penalty kick results.

The results of this study are inversely proportional to the research conducted by (Firmansyah et al., 2019) under the title Correlation Between Self-Confidence and the Success of Penalty Kicks in Football Games, the results of the research conducted resulted in the conclusion that there was no relationship between self-confidence and penalty kick results. in the game of football.

If one observes the confidence in penalty

kicks by controlling for the control variable, self-confidence, namely the partial correlation coefficient (ry21) shows a significant value. This shows that the relationship has limited the independent variable sought. (Hutami & Iswana, 2020) in a study entitled Self-confidence with shooting results, the results of the study found a positive and significant relationship between self-confidence and shooting results. (Mahanani & Indriarsa, 2021) in a study on Psychological Analysis of Football Athletes' Confidence, the results showed that psychology had an important role in soccer athletes' confidence in a game.

Then the control variable shows an increasing relationship between self-confidence and the result of a penalty kick so that the partial correlation coefficient is significant. (Kastrena, 2019) in his research entitled the relationship between self-efficacy and anxiety on penalty kick results, the result that the correlation coefficient between self-efficacy and anxiety with penalty kick results is moderately correlated.

Research conducted on testing the hypothesis which states that there is a positive relationship between kinesthetic perception and self-confidence with the results of a penalty kick shows a very significant and linear result.

Based on the resulting multiple regression

equation, it shows that between the two independent variables, the one with the highest increase in penalty kick results is the kinesthetic perception variable. The increase in the success of taking penalty kicks will certainly be even better if it is supported by continuous exercise. The practice of kicking from the penalty spot is carried out with various variations, the most important being achieving the right target, namely, the ball cannot be blocked by the goalkeeper and creates a goal. Such as research (Hutami & Iswana, 2020) entitled the effect of fixed target training and changing target training on penalty kick accuracy, the results of this study explaining that there is an effect of penalty kick training using fixed targets and changing targets shows significant results.

Then the double correlation coefficient jointly between kinesthetic perception and self-confidence with the penalty kick result is declared significant, which means that the higher the kinesthetic perception and self-confidence together, the higher the penalty kick result. On the other hand, the lower the kinesthetic perception and self-confidence, the lower the penalty kick results for the Unimed student soccer team players.

Based on the multiple correlation coefficient (Ry12), the results of the research that has been carried out suggest the importance of the kinesthetic perception

variable and self-confidence to improve the results of penalty kicks. Therefore, the variables that have been explained by the researchers have a relationship, each of which has an effect on the result of a penalty kick with success which shows good results. Therefore, the results of this study are closely related to each of the variables described.

#### D. Conclusion

From the results of research that has been carried out by researchers, it can be concluded that there is a significant relationship between each of the variables tested resulting in a significant relationship to the penalty kick ability of Unimed student soccer team players.

## E. Acknowledgment

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## E. Conflict of Interest

In the research that has been done, there is no conflict of interest from any party.

#### Reference

- I. Achmad, (2018).Perbandingan Penalti Menggunakan Tendangan Punggung kaki, Kaki Bagian Dalam Dan Kaki Terhadap Ujung Keberhasilan Gol Siswa Pada Ekstrakurikuler Futsal Di SMA Negeri 4 Sidoarjo. *Olahraga*, 1–7.
- Brackenridge, C., Pitchford, A., Russell,

- K., & Nutt, G. (2020). Youth football. *Child Welfare in Football*, 58–71. <a href="https://doi.org/10.4324/97802030990">https://doi.org/10.4324/97802030990</a>
- CROSS, K. (2013). *The Football Coaching Process*. 1–285.
- Danurwindo, Putera, G., Sidik, B., & Prahara, J. L. (2017). *Kurikulum Pembinaan Sepak Bola Indonesia*. 166.
- Firmansyah, I., Rahayu, N. I., & Sultoni, K. (2019). Kepercayaan Diri Dan Keberhasilan Tendangan Penalti Permainan Sepakbola. *Jurnal Terapan Ilmu Keolahragaan*, 3(2), 1–5. <a href="https://doi.org/10.17509/jtikor.v3i2.1">https://doi.org/10.17509/jtikor.v3i2.1</a>
- Hutami, M. A., & Iswana, B. (2020). Kepercayaan Diri Dengan Hasil Shooting Pada Ekstrakurikuler Futsal. *Jambura Journal of Sports Coaching*, 2(2), 35–41.
- Junaidi, A., & Sutisyana, A. (n.d.). = 16,119> T.
- Kastrena, E. (2019). Hubungan Self Efficacy Dan Axienty Dengan Hasil Tendangan Penalti. *Maenpo*, 9(2), 98. https://doi.org/10.35194/jm.v9i2.935
- Kristina, P. C. (2018).Hubungan Keseimbangan Dan Power Tungkai Dengan Hasil Tendangan Penalti Pada Permainan Sepak Bola Siswa Sekolah Menengah Pertama. Seminar Nasional Pendidikan Universitas Pgri Palembang, 292-298. https://jurnal.univpgripalembang.ac.id/index.php/Prosiding pps/article/view/1835/1704
- Lennox, J., Rayfield, J., Steffen, B., James, W., Lennox, J. W., Rayfield, J., & Steffen, B. (2006). Soccer Skills & Drills National Soccer Coaches Association of America.
- Mahanani, R. A., & Indriarsa, N. (2021). Hubungan Konsentrasi Terhadap Ketepatan Shooting Pada Ekstrakurikuler Futsal Putri. *Jurnal Pendidikan Olahraga Dan Kesehatan*, 09, 139–149.
- Mardhika, R. (2017). Kontribusi Tingakat

Konsentrasi terhadap Keberhasilan Tendangan Penalti. *Sport Science Development*, 175–181.

Mardhika, R., & Dimyati, D. (2015). Pengaruh Latihan Mental Dan Keyakinan Diri **Terhadap** Keberhasilan Tendangan Penalti Pemain Sepak Bola. Jurnal 106–116. Keolahragaan, 3(1),https://doi.org/10.21831/jk.v3i1.4973

Mujahid, H., & Subekti, N. (2021). Analisis
Taktik Pertandingan Pencak Silat
Kategori Tanding Tactical Analysis of
Pencak Silat Competitions in the
Competing Category. *Journal Coaching Education Sports*, 2(2),
123–136.

https://doi.org/10.31599/jces.v2i2.693

Owoeye, O. B. A., Akinbo, S. R. A., Tella, B. A., & Olawale, O. A. (2014). Efficacy of the FIFA 11+ warm-up program in male youth football: A cluster randomized controlled trial. *Journal of Sports Science and Medicine*, 13(2), 321–328.

Pemula, P. D. (2017). No 主観的健康感を中心とした在宅高齢者における 健康関連指標に関する共分散構造分析Title. 110265, 110493.

Supriadi, A., Mesnan, M., Azandi, F., & Kasih, I. (2021). The Development of Electronic Football Teaching Materials (E-Book). Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences, 4(2), 3242–3249. https://doi.org/10.33258/birci.v4i2.20

Suryono, S. (2016). Pengaruh metode latihan dan persepsi kinestetik terhadap keterampilan groundstrokes tenis lapangan pada siswa SD. *Jurnal Keolahragaan*, 4(2), 220. <a href="https://doi.org/10.21831/jk.v4i2.1090">https://doi.org/10.21831/jk.v4i2.1090</a>

Wijayanto, A. (2018). Pengaruh Metode Guided Discovery, Dan Metode Movement Exploration Serta Persepsi Kinestetik Terhadap Hasil Belajar Pukulan Atas Bulutangkis Pada Mahasiswa Iain Tulungagung. Halaman Olahraga Nusantara (Jurnal Ilmu Keolahragaan), 1(2), 160.

https://doi.org/10.31851/hon.v1i2.197