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THE RELATIONSHIP OF AGILITY AND LIMB LENGTH WITH THE ABILITY TO DRIVE THE BALL IN THE GAME PS TONDANO MINAHASA FOOTBALL

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Abstract:

The problem in this research is Problem in study This is : Is There is connection agility with the ability to dribble the ball in the Tondano Minahasa football game? 2. Is there a relationship between leg length and ball dribbling ability in the Tondano Minahasa football game? 3. Is there a relationship between agility and length limbs together to ability dribbling the ball in the game football Tondano Minahasa ? Research Objectives : 1. To what extent is the relationship between agility and ball dribbling ability in the Tondano Minahasa football game. ? 2. To what extent is leg length related to the ability to dribble the ball in the Tondano Minahasa soccer game? ? 3. To what extent is the relationship between agility and leg length and the ability to dribble the ball in the Tondano Minahasa football game. ? Research Hypothesis: 1. There is a relationship between agility and ball dribbling ability in the Tondano Minahasa football game . 2. There is a relationship between leg length and ball dribbling ability in the Tondano Minahasa football game . 3. There is a relationship between agility and leg length together with the ability to dribble the ball in the Tondano Minahas football game a. The research method used is method descriptive with correlation technique . Population is the entire population that covers player Tondano football Minahasa , numbering 30. The research sample used was a total sample, namely the entire population which included Tondano Minahasa football players, totaling 30 people.Instruments collection data :1. Test agility,2. Leg length test and 3. Dribbling test , Design study using : Product moment correlation . From the results research that has proven with did it training And testing based data analysis the variable being measured , so can withdrawn something conclusion that There is a relationship between agility and leg length and the ability to dribble the ball in the PS Tondano Minahasa football game.

Keywords: *Agility, Leg Length, Ability to Dribble the Ball*

INTRODUCTION

Game football is a large ball game played by two teams or two teams playing against each other face to face . Deep goals game football is put the ball into the goal against as much as possible and maintain area Alone from attack against . Enhancement performance sports, esp sport much needed football noticed is concerning potency body or physical which includes: balance, agility, strength, flexibility and power. stand (endurance). This matter is is condition physically able support achievement performance somebody player. In game football that became size performance is speed play.Speed play a player football determined by agility , speed , as well as ability mastery techniques basis at the moment dribble. To be able to excel in sports, apart from having talent, a player is required to master the basic techniques in the game of football, because mastering basic techniques is the main requirement for becoming a quality player and has high skills in the game of football. This is as stated by Jef Sneyers (1988) that "In the sport of football, the factor that really determines the success of a team is the mastery of basic techniques." The basic techniques in playing football are as follows: 1) Receiving the ball, 2) Kicking the ball, 3) Heading the ball, 4) Dribbling the ball, 5) Feinting with the ball, 6) Grabbing the ball, 7) Throwing the ball, 8) Goalkeeper technique.

Dribbling is movement in game containing football element art that because exists use a number of the kicking leg or touch with method roll the ball on the ground while run . As stated by Arma Abdullah : " You can dribble the ball

interpreted art use a number of feet touching or keep rolling the ball continuously on the ground while run (Arma, 1981).limbs is one of the the part that doesn't Can separated from every movement sport . Because the limbs can guard balance body in do something activity sport Good strenuous exercise nor moderate sport . That Lots possible factors ive influence For results in herding deep ball game football is long limbs . One of factor the is circumstances anatomy body or component muscles involved is limbs. Movement dribbling the ball is coordination movement between running and stepping in matter This long Legs have a big influence on length resulting steps For get closer self on the ball and very fast in dribbling or Dribbling the ball deep pass fight and can protect the ball from against .

The Essence of Agility

In line with the development of the game of football, football players are always required to always move in an effort to escape from the opponent's control. Both when carrying the ball and without the ball. In carrying the ball or dribbling the ball, players must be able to control and master movements, both body movements and ball movements. Meanwhile, to make movements without the ball, every football player needs to have good agility. According to Nala Ngurah (1988) that "Agility is the ability to change body position or direction of body movement quickly when moving quickly without losing balance or awareness of body position."

The factors that influence agility according to Dangsina Moeloek and Arjadino Tjokro are:

1. Body Type.
2. Age.
3. Gender.
4. Weight.
5. Fatigue.

There are various forms of agility training, namely: a) Shuttle Run, b) Zig-zag Run, c) obstacle course. From the example above we can see that various agility exercises can be created

The Nature of Leg Length

Leg length is the vertical distance between the foot and the thigh which is measured by standing upright. Leg length as part of body posture has a very close relationship with dribbling. Leg length as one of the lower limbs has an important role in sports performance. As a lower limb, leg length functions as a support for the movement of the upper limbs, as well as determining movement in walking, running, jumping and handling the ball.

One part of the body that can support football performance is the length of the legs which are useful for kicking, running, jumping and when handling the ball. The limbs have the strength to carry out these activities because they have strength. According to HP Soeharno, one of the factors determining strength is "Depending on the size of the body frame, the bigger the skeleton, the greater the strength". This opinion shows that someone who has a large body frame (including long legs) can influence the achievement of football achievements, especially in dribbling the ball.

METHOD

Design research used in study This is *product moment and multiple correlation* The data collection techniques in this research are as follows: agility At every " ready " signal testi standing behind star line or first line, on the signal " yaa " testi immediately make a zig-zag movement from the first to the last, a tester only makes one zig-zag movement. With each javelin the distance is 1 meter. After arriving at the last pole and passing through stopwatch finish line stopped . Zig- zag agility is calculated until with 0.1 or 0.01 seconds. Data collection: The testee stands upright and is measured from the bottom of the thigh to the sole of the foot with a meter

DISCUSSION

For determine technique exact statistics in test hypothesis research , then need done testing condition analysis is a must fulfilled in analysis correlation , namely normality test and linearity test .

1. Lilliefor Testing

Lilliefor test is wrong a normality test was used For test is sample originate from normally distributed population . As for the steps testing as following .

a) *Formulate a hypothesis*

HypothesisTesting ;

Ho : Sample originate from normally distributed population . _

Ha : Sample originate from a population that does not normally distributed .

b) *Level Real ;* α = 0.05

c) *Determine Criteria Testing .*

Accept Ho if ; Lo ≤ Ltab or , Reject Ho if ; Lo > Ltab .

Count mark Zi, F (zi) and S(zi) and enter to in table following This . For needs in test normality This moreover formerly is known average and standard values the deviation . As data values based on table 1 show that the average agility (X1) = 39.435 and the standard deviation (Sd1) = 2.177.

From the results calculation as in table 2 is obtained the highest difference is _ the result of L observation (Lo) is 0.12237 . Based on criteria value or L table value (Ltab) at α = 0.05 with n; 30 found Ltab = 0.1610. Reality This denotes L observation more small from L table or in other words Lo = 0.12237 < Ltab = 0.05

In accordance with criteria testing ; accept Ho if Lo ≤ Ltab , where formulation from hypothesis zero (Ho) is sample originate from population normally distributed . With thereby based on criteria testing can concluded that data representative agility sample in study This originate from normally distributed population .

2. Testing Linearity

Guess Equality Linear Regression between X1 and Y

Equality linear regression in question ;

$\hat{Y} = a + bX1$

The result of the equation linear regression between agility (X_1) with ability dribbling the ball (Y) namely $\hat{Y}$ = 3.1215 + $_{0.9319}$ give meaning if There is increase in agility so ability dribbling increases . Finally We can conclude that variable linked agility _ with ability dribbling the ball has linear data.

Guess Equality Linear Regression between X_2 with Y Equality linear regression in question ;

$\hat{Y} = a + bX_2$

The result of the equation linear regression between long legs ($X_{2)}$ with ability dribbling the ball (Y) namely $\hat{Y}$ = 2.0411 + $_{0.8867}$ give meaning if There is increase in length limbs so ability dribbling the ball more and more increase . Finally We can conclude that variable long connected limbs with ability dribbling linear data.

3. Research hypothesis testing

For test connection between agility X_1 with Y, can done with steps as following ;

a) Formulation Hypothesis

Ho : $rx_1y = 0$ (Not found functional relationship _ between X_1 with Y)

Ha : $rx_1y > 0$ (Exists functional relationship _ between X_1 with Y)

b Real level : α = 0.05

c. Criteria testing ;

Thank Ho if $r_{ob} < r_{tab}$ (α;n)

The calculation results obtained r observations equal to r_{ob} = 0.95 if compared to with r table (n; α = 0.05) is obtained as big as r_{tab} = 0.361. From the results This show that r_{ob} value = 0.95 > value r_{tab} = 0.361 means that Ho _ rejected and accepted H_a which states that there is functional relationship _ between agility (X_1) with ability dribbling the ball (Y) .

Based on results calculation with the product moment correlation test statistics turned out to be between agility with ability dribbling the ball in the game PS Tondano football player Minahasa .

there is connection linear, with equality linear regression $\hat{Y}$ = 3.1215 + 0.9319 X_1 . It means that if There is increase in agility so ability dribbling the ball in the game PS Tondano football player Minahasa .

will increase or increase amounting to 0.9319 units .

From the results testing coefficient correlation obtained equal to rx_1y or r_{ob} = 0.95 with big coefficient determination r^2 = 0.9025, this means that agility can give donation or contribution to variation ability dribbling the ball in the game PS Tondano football player Minahasa .

amounted to 90.25 percent , meanwhile remainder other amounting to 9.75 percent caused by him exists factor outside .

1) Leg Length (X_2) with ability Dribbling Y

Based on results calculation with correlation test statistics *product moment* it turns out between long limbs with ability dribbling the ball in the game PS Tondano football player Minahasa .

there is connection linear, with equality linear regression $\hat{Y}$ = 2.0411 + 0.8867 X_2 . It means that if There is increase in length limbs so ability dribbling the ball in the game PS Tondano football player Minahasa will increase or increase amounting to 0.8867 units .

From the results calculation with testing coefficient correlation obtained equal to rx_2y or r_{ob} = 0.91 with big coefficient This determination r^2 = 0.82.81 means that long limbs can give donation or contribution to variation ability dribbling the ball in the game PS Tondano football player Minahasa .amounting to 82.81 percent , meanwhile remainder other amounting to 17.19 percent caused by him exists factor outside .

2) Agility (X_1) and length limbs (X_2) with ability dribbling the ball Y

From the results testing linearity between agility X_1) and leg length (X_2) with ability dribbling the ball (Y) in the game PS Tondano football player Minahasa who have proven before , then in a way together _ if There is increases in agility and length limbs will abilities also increase dribbling the ball in the game PS Tondano football player Minahasa ..

Based on results calculation with use multiple correlation test statistics or correlation double it turns out between agility and length limbs in a way together with ability dribbling the ball in the game PS Tondano football player Minahasa .

there is connection of Ryx_1x_2 = 0.92 with big coefficient This determination R^2 = 0.8464 means that agility and length limbs in a way together can give donation or contribution to variation ability dribbling the ball in the game PS Tondano football player Minahasa amounted to 84.64 percent , meanwhile remainder other amounting to 15.36 percent

caused by him exists factor outside . Factors beyond that Possible between another is agility , agility beginning as well as long limbs .

This result has strengthened with a significant test coefficient correlation double , where proven that agility and length limbs in a way together ability dribbling the ball in the game PS Tondano football player Minahasa own coefficient significant correlation .

Measurement results Variables X_1, X_2 and Y

No	**Agility (X_1)**	**Leg Length (X_2)**	**Dribble _ (Y)**
1	5.15	17.5	10
2	4.54	15.5	9
3	3.55	17.5	10
4	7.00	17	11
5	7.33	14	7
6	5.44	14	10
7	6.44	15.5	10
8	5.55	18	11
9	5.33	18.5	11
10	5.23	12	8
11	6.02	18	15
12	7.05	13	7
13	4.59	17.5	7
14	5.07	18.5	10
15	6.45	17.5	11
16	6.25	16.5	7
17	6.45	17	10
18	6.54	19	11
19	4.55	19	10
20	6.36	17	11
21	7.00	N	7
22	5.47	16	6
23	6.37	16.5	8
24	6.52	17	8
25	4.55	17.5	10
26	7.32	17.5	11
27	6.35	20.5	10
28	637	18.5	8
29	5.46	15.5	8
30	6.42	19.5	10

CONCLUSION

Based on results research and discussion so can withdrawn a number of conclusion as following .

1. There is connection between agility with ability do dribbling the ball in the game PS Tondano football player Minahasa .
2. There is connection between long limbs with ability dribbling the ball in the game PS Tondano football player Minahasa .
3. There is connection between agility and length limbs in a way together with ability dribbling the ball in the game PS Tondano football player Minahasa .

SUGGESTION

1) For increase ability herding ball is necessary exists attention and preparation ability physical , especially on components agility .
2) As material input for trainer and builder in apply method proper exercise For increase ability dribble .
3) Recommended exists study advanced with involve components physique others , like Power explode muscle limbs , speed motion arm as well as long limbs .

4) Doesn't close possibility results study This become addition information To use study more carry on .

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