

# The Effect of Limb Muscle Explosive Power, Flexibility, and Confidence Toward *Long Passing* Ability of Football Players

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**Abstract**— The purpose of this research is to find out the direct and indirect effect between exogenous and endogenous variables, which is to find out the amount of direct and indirect effects of limb muscle explosive power, flexibility, and confidence toward Long Passing ability. The method used in this research is quantitative through a descriptive and path analysis approach. The population of this research is all of the 25 football players. The sampling technique used is total sampling, with 25 players as samples. The data is gathered by using a standing board jump test, flexiometer test, questionnaire, and extended passing ability test. The result of data analysis showed that: (1) the direct effect of limb muscle explosive power toward football players' long passing ability is about 12.04%. (2) the direct effect of flexibility toward football players' long passing ability is about 12.74%. (3) the direct effect of confidence toward football players' long passing ability is about 11.97%. (4) the indirect effect of limb muscle explosive power toward football players' long passing ability through confidence is about 18.32%. (5) the indirect effect of flexibility toward football players' long passing ability through Football players' confidence is about 11.70%.

**Keywords**—Limb muscle explosive power, flexibility, confidence, long passing ability

## I. INTRODUCTION

Sport is a beneficial activity to improve physical fitness. Sport is not only used as a means of recreation, but also aims at an achievement that is carried out individually or in groups. Achievement is an appropriate reason to support development in the field of sports. Especially in the provision of sports facilities and infrastructure. In law no.3 of 2005 CHAPTER II article 4 concerning the objectives of national sports which reads:

"National sports aims to maintain and enhance health and fitness, achievements, human qualities, instill moral values and noble morals, sportsmanship, discipline, strengthen and foster national unity, strengthen national security, and elevate the nation's dignity, dignity and honor" [1].

From the explanation above, it can be concluded that the problem in this study is how much influence the explosive power of leg muscles, flexibility, and confidence of the football players fostered by the Solok

City Dispora. Because of seeing the weak ability of long passing football players fostered by the City of Solok City, the researchers suspect there are several factors that influence such as explosive power of leg muscles, self confidence, flexibility, mastery of basic techniques, facilities and infrastructure to support training, nutritional status and training methods to improve the long passing ability of football players under the Dispora City Solok.

Football is a game of two teams consisting of 11 players from each team aiming to win the match by putting the ball into the opponent's goal as much as possible and preventing the own goal from conceding". This soccer game is led by a referee who is assisted by 2 assistants and one reserve referee. This soccer match takes place in a field that measures 100-110 m long and 64-75 m wide with 2 × 45 minutes with a 15 minute break.

"Kicking the ball is an attempt to move the ball from one place to another by using the foot or part of the foot. Kicking the ball can be done when the ball is at rest, rolling, and when the ball is in the air" [2]. Ideally a football player must have good basic technical skills to be able to formulate tactics and score as many goals as possible". The understanding of basic techniques is all basic activities in the game so that someone can already play football.

One element of physical condition that has an important role in sports activities, in the effort to achieve motion techniques is explosive power. Explosive power or often also referred to as muscular power is the power to use maximum strength used in the shortest possible time. "Explosive power is the muscle power to direct maximum strength in a very fast time" [3]. "Explosive power is two components of physical conditions, strength and acceleration" [4].

Flexibility is the body's ability to do exercises with a large or broad amplitude of movement. Flexibility refers to the range of motion around a joint" [5]. It can be explained that flexibility is the ability of the wrist / joint to be able to make movements in all directions with a large and wide range of motion amplitude in accordance with the function of the joint being moved. Another term for flexibility that is often found is flexibility, flexibility and flexibility.

Confidence or "self-confidence" is the main asset for an athlete to be able to progress, because the achievement of high achievements and the record-breaking athlete itself must begin with believing that he can and can surpass the achievements he has ever achieved.

## II. RESEARCH METHODOLOGY

The research method used in this study is a quantitative approach, survey methods with measurement and test techniques, while the analysis technique uses the path analysis approach (path analysis) which is a technique for analyzing the effect of cause and effect that occurs in multiple regression if the independent variables affect the dependent variable both directly and indirectly

This research was carried out after a seminar commencing in March 2019. This research took place in the soccer field Ampang Kualo Solok. Research time is used to conduct preliminary research observations, making research proposals, seminar proposals, arranging research permits, testing instruments, testing the validity and reliability of the instrument, collecting data for as many as 2 meetings where the first meeting is to obtain data and retrieve data from the questionnaire trust self, leg muscle explosiveness, and flexibility. The second meeting was to retrieve data on the ability of long passing football players fostered by the City of Solok City Dispora. The population of Solok City Dispora-assisted soccer players No Year of Birth Amount (1) 1998 13 people (2) 1999 12 people Total of 25 people  
Source: coach of Disoka coached soccer player Solok City Solok City.

## III. RESULT AND DISCUSSION

So based on the above it can be concluded that the explosive power of leg muscles directly affects the ability of long passing football players fostered by the City of Solok City is 12.04%. While the remaining 87.96% is influenced by other factors. Obtained path coefficient result  $\rho_{YX1} = 0.347$ . Based on calculations using SPSS, the value of  $\text{sig} = 0.044$  is smaller than the probability value  $\alpha = 0.05$ .  $\rho_{yx\_1}$  is 12.04%.

So based on the above it can be concluded that the flexibility directly affects the ability of long passing football players fostered by the City of Solok City Dispora is 12.74%. While the remaining 87.26% is influenced by other factors. Obtained path coefficient result  $\rho_{YX2} = 0.357$ . Based on the calculation using the SPSS program, the value of  $\text{sig} = 0.044$  is smaller than the probability value  $\alpha = 0.05$ .  $\rho_{yx\_2}$  is 12.74%.

So based on the above, it can be concluded that self-confidence has a direct effect on the long passing ability of football players under the Dispora City of Solok in the amount of 11.97%. While the remaining 88.03% is influenced by other factors. Obtained path coefficient result  $\rho_{YX3} = 0.346$ . Based on the calculation using the SPSS program, the value of  $\text{sig} = 0.046$  is smaller than the probability value  $\alpha = 0.05$ .  $\rho_{yx\_3}$  is 11.97%.

So based on data analysis, it can be said the magnitude of the influence of leg muscle explosive power on the ability of long passing through the confidence of football players fostered by the City of Solok City is 0.183 or 18.3%. Obtained path coefficient result  $\rho_{YX2} = 0.233$ . Based on the calculation using the SPSS program, the value of  $\text{sig} = 0.046$  is smaller than the probability value  $\alpha = 0.05$ .  $\rho_{yx\_3}$  is 18.32%.

## IV. CONCLUSION

So based on data analysis, it can be said the magnitude of the influence of flexibility on the ability of long passing through self-confidence in the football players fostered by the City of Solok City Dispora is 0.117 or 11.7%. Obtained path coefficient result  $\rho_{YX2} = 0.233$ . Based on the calculation using the SPSS program, the value of  $\text{sig} = 0.046$  is smaller than the probability value  $\alpha = 0.05$ .  $\rho_{yx\_3}$  is 11.70%.

## REFERENCES

- [1] Undang-undang Republik Indonesia Nomor 3, "Tentang Sistem Keolahragaan Nasional," Jakarta. 2015.
- [2] Afrizal ,S, "Handout Mata Kuliah Sepakbola Dasar," FIK Universitas Negeri Padang; Sukabina Press. 2013, 77-88.
- [3] Bompa, T.O. & Harf, G.G, "Periodization Training for Sports Theory and Methodology of Training," Fifth Edition, United State of America; Human Kinetics. 2000, pp, 30-35.
- [4] H. Irawadi, "Kondisi Fisik dan Pengkurannya," Padang; UNP Press. 2014.
- [5] Luxbacher, Joseph A, "Sepakbola langkah-langkah Menuju Sukses," Penerjemah; Agusla, Wibawa, "Soccer Step of Succes" Jakarta; PT Raja Grafindo Persada. 2001.