

Effect of Speed and Balance Against Soccer Dribbling on Out of School Students of SD Negeri 78 Palembang

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Abstract: The purpose of this study is to determine the effect of speed and balance training on soccer dribbling performance in extracurricular activities in SD Negeri 78 Palembang. The exploratory research method used was a one-group pre-test and post-test design experiment. With a one-group pre-test and post-test design. The population in this research was students who were involved in football extracurricular activities, the sample in this research was 30 people. The research instrument used was the soccer dribbling test. The treatment in this study took the form of agility and balance exercises performed for 6 weeks at a training frequency of 3 times per week. Test the performance using the experimental method with the results of the characteristic "t test" $\alpha = 0.05$, obtained t-count = (23.6), while t-table = (1.70), 1, so that H_a can be accepted, while H_0 rejects. According to the findings of the research that H_a is acceptable, then agility and balance exercises affect the improvement of soccer dribbling. The implication of this research is that agility and balance exercises can be used as a type of exercise to improve soccer dribbling.

Keywords: Agility, Dribbling, Extracurricular, Soccer, Speed

A. Introduction

The sport is currently experiencing very rapid progress. Everyone likes to exercise these days. Sports cannot be separated from people's lifestyle. A person who engages in exercise has various goals, one of which is to fill time, fitness, health and also achievements. One of the goals of people who exercise is to achieve achievements. Achieving peak performance in the golden age requires an intensive training process and is not easy to achieve, in sports training a process is required from early childhood, both technically, tactically, mentally and physically. All this proves the existence of man's creative place in the field of sports.

A sport that is very popular among Indonesians today, both children, teenagers, adults and parents, men and women, is soccer. Football is already in the school in extracurricular activities to adapt to the talents of students. Outside the school, there is also a soccer academy for training talented players. When playing soccer, players must master the basic types of techniques, by mastering soccer techniques they can.

Control or play the ball in any situation, create teamwork to achieve victory. One of the basic techniques that players must master is the ability to handle the ball. A player needs to have a really good ball handling technique to support the other basic techniques. According to (Supriadi, 2015), soccer players must master the basic techniques of dribbling and good physical condition.

Based on the movement pattern, ball control involves multiple elements of movement from multiple limbs. To control the ball correctly, the parts of the body involved in controlling the ball must be well coordinated. Good speed must be supported by dribbling ability, which is evident from many examples of professional soccer players who have good speed, on average, also have good dribbling skills. A beginner can have good speed but not necessarily good dribbling, this is because the dribbling practice hours are still limited and the number of balls is also insufficient for the number of children practicing. Balance and speed training will not have a positive effect on dribbling ability if there is no good communication between the coach and the students.

The ability of out-of-school students of Palembang Primary School 78 to understand and use forms. Balance training and speed training are still lacking, it has been proven that in practice there are fundamental errors that affect the training program prepared by the coach. Good and correct ball handling technique requires programmed and continuous training in order to achieve maximum results. Driving techniques can be practiced in several forms or types of training, such as driving the ball over obstacles, driving the ball forward straight and then turning, zigzagging and many other forms of training. To be able to master the sport cannot be achieved just by following the match from one place to another, but it must be done through systematic and programmed exercises.

Efforts to achieve achievements are multi-complex efforts that include many factors, both internal and external, including the quality of training, which is the main support for achieving sports achievements. The purpose of the exercises is to master the skills of tactics, technique and game strategy, to have the desire to become a successful player or athlete. The purpose of this study is to improve the ability to drive or handle the ball through balance and speed exercises. Balance and exercises. According to (Afrilliyana, et al., 2018) dribbling is a basic technique in trying to bring the ball forward in attacking play and serves as an opening for players to score. According to (Rohman & Soegiyanto, 2013) Balance is the ability to maintain body balance when placed in various positions.

Speed, namely training by running in turns (zig-zag) by passing cones that are placed at a distance. Based on the background described, the authors are interested in conducting research titled *The Effect of Balance Training and Speed Training on Improving Ball Handling Skills of Soccer Extracurricular Students at SD Negeri 78 Palembang*.

A ball game played by two teams, each team consisting of five people, namely football. Placing the ball in the opponent's goal is a goal. In addition to the main players, each team has reserve players. Football is also known by various other names. The term "soccer" is an international term derived from the Spanish or Portuguese words soccer and sala. Soccer is very similar to soccer, except that it is played five-on-five on a small field, a smaller goal and a smaller and relatively heavy ball. In the game of football, the movement of the player is very important and the players must continue to pass. It is not uncommon for 90% of football games to involve a lot of passing. Football is a team innovative game activity (invasive games) played five against five in a certain time, goals, fields and balls are relatively smaller than football, in the game football, which requires movement speed, fun and safe to play, and the victory of the team is determined by the maximum number of goals scored against the opponents.

In 1930, Juan Carlos Ceriani created football in Montevideo, Uruguay. Many Brazilian players develop their skills with the ball by playing soccer. One of the famous Brazilian stars, namely Pele, developed his talent in football. While Brazil is still the center of world football, the game is now played under the auspices of the International Football Association all over the world, from Europe to Central and North America and Africa, Asia and Oceania.

Soccer adopts the game of soccer in the form of the law of the game, which is adapted to the equalization of indoor soccer games around the world by FIFA. This shows the seriousness of FIFA in the development of football because it is an element that can support the improvement of football. The game of soccer is synonymous with a smaller field and is played with fewer players than in soccer. Football and soccer games differ in the rules of the game for basic techniques and the rest, namely playing with the ball with the feet (except the goalkeeper may use the hands) to score or prevent a goal.

Soccer then became a popular sport in South America, soccer became the main choice on rainy days. The international football competition was first organized in 1965. A surprise happened when Paraguay won the South American Cup. In the years that followed until 1979, Brazil dominated and won six consecutive championship trophies." With the help of FIFUSA (before its members joined FIFA in 1989), the first FIFA World Cup was held in Sao Paulo, Brazil in 1982 and Brazil became the first or champion. At the second World Cup in 1985 in Spain, Brazil won for the second time, at the third World Cup in 1988 in Australia, Brazil lost against Uruguay. In December 1985, the first international football game was held in the United States at Sonoma State University in Rohnert Park, California.

The rules of the game consist of two 45-minute periods, no breaks and only minimal substitutions. It is not surprising that the game of football is the athlete's most fitness endurance (Luxbacher, 2011). Football can also hypnotize someone into going crazy

and even beyond that. Soccer is the most popular sport in the world and a global game in almost every country in Europe, South America, Asia and Africa. Internationally known as “soccer”, this sport seems to have become a unifying language for different languages in the world with different historical and cultural backgrounds, as a means of global unification that can transcend political, ethnic and religious boundaries. differences (Budianto, 2012). The game of soccer is a very interesting game because of the expertise of the players in playing the ball on the field, among which is the skill of the players when dribbling becomes the main attraction for the people around who enjoy the game. dribbling player. Soccer is a team game, so teamwork is a requirement of soccer games that any team that wants to win must fulfill. Victory in football will only be achieved with the cooperation of the team. Victory cannot be achieved individually in team games, apart from that, each individual or player must have good physical condition, good basic techniques and a good mentality to compete. Different types of soccer playing techniques such as dribbling is one of the basic techniques that are often used in games, so soccer players must master them because dribbling is one of the main components of soccer games. With good dribbling techniques, players will be able to carry and direct the ball as well as possible and make it easier for their friends to get the ball. In addition, good ball control will make it easier for players to control the ball for as long as possible and make it difficult for opponents to dribble. Dribbling ability requires support and other abilities to support the quality of players’ dribbling technique. In addition to the talent of the players, there are many supporting factors that will affect the quality of his dribbling ability.

B. Methods

This study uses experimental research methods in relation to causal relationships, experimental research is research that is conducted by providing a treatment or treatment to a sample until it is seen whether there is a change or not. This experimental study used a two-group pre-test and post-test research design, which can be schematically described as follows: $\text{Percentage increase} = \frac{\text{different mean}_X}{100\% \text{ pretest mean}}$

Operational definition of research variables

Sumadi Suryabrata (2006) suggests that an operational definition is a definition based on the properties of defined things that can be observed (observed). Arikunto, (2006) suggests that “variables are the object of inquiry or that which is the object of study”. The operational definition of a variable is intended to provide an overview of how the research variable will be measured so that there is no misunderstanding of the problem under study. The definition is as follows:

Balance exercise

Balance training, namely a zigzag running exercise by passing cones, which were arranged for extracurricular football students at SD Negeri 78 Palembang as fast as possible to the finish line, which was carried out in 16 sessions.

Speed training

Speed training is the ability to cover the shortest possible distance at sprint running speed, which was set for extracurricular soccer students at SD Negeri 78 Palembang.

Ability to lead

Dribbling is the ability of SD Negeri 78 Palembang soccer extracurricular students to dribble the ball quickly and efficiently while running at full speed. Dribbling skills are measured by the Bobby Charlton Dribbling Skills Test (Mielke, 2007).

Variant mean = post-test mean - pre-test mean



Figure 1. Research plan (Sugiyono, 2011)

In: Population of household workers: Pretest

S : Sample PT : Post test

X : Treatment

The population in this study was 30 students as researchers. According to Suharsima Arikunto (2010). Population is the subject of research. According to Sugiyono (2011), a population is a field of generalization consisting of: objects/subjects that have certain properties and characteristics that are determined by researchers to study and then draw conclusions from. The sample is a part or representative of the studied population, which according to (Arikunto, 2010) says: "If the sample is less than 100 subjects, it is better to use a population survey or if the subject is large, it can be found that 10% - 15% or 20% - 25% of the total population". The population is only 30 people, so automatically the entire population becomes the sample in this study.

C. Results and Discussion

Research results of 30 samples taken at SD Negeri 78 Palembang. From the pretest data, the highest data was 22.12, the lowest data was 33.27, the mean was 28.501, the standard deviation was 2.33, and the slope of the curve was 0.21. The data after testing got the highest data 20.30, the lowest data 29.10, the mean 25.538, the standard

deviation 2.07 and the slope of the curve 0.40. It can be seen that the maximum number of values is 22.12, the minimum value is 33.27, the mode value is 27.99, the range is 11.15, the mean obtained from the pretest is 28.501, and the standard deviation from the pretest results is 2.33.

The highest number of values is 20.30, the lowest number is 29.10, the range is 8.8, the mean obtained from the posttest is 25.538, and the standard deviation obtained from the posttest results is 2.07.

Table 1. List of Comparisons of Pretest and Posttest Results

	H	N	NTG	NTR	M	P
<i>Pretest</i>		30	22,12	33,27	28,501	
<i>Posttest</i>		30	20,30	29,10	25,538	2,963

H : The result

N : Population

NTG : Highest rated

NTR : Minimum value

M : It means

Q : Difference between pretest and posttest mean

The comparison of the results of the above pretest and posttest can be seen from the results of the comparison of the pretest with the highest leadership ability with a time of 22.12 and the lowest leadership ability with a time of 33.27. The data from the posttest results for the highest driving ability with time 20.30 and the lowest driving ability with time 29.10 and obtained mean or mean of pretest 18.501 and posttest 25.538, so the difference between the mean of pretest and posttest is 2.963.

Table 2. List of Improved Pre-Test and Post-Test Football Management Scores

	H	N	DST _i	DST _r	M	P	Mo	SD
<i>Pretest</i>		30	22,12	33,27	28,501		27,99	2,33
<i>Posttest</i>		30	20,30	29,10	25,538	2,963	24,696	2,07

- H : The result
- N : Population
- DSTi : The ultimate soccer dribble
- DSTr : The lowest soccer dribble
- M : It means
- Q : Increase in pre- and post-test averages
- Mo : The way
- SD : Standard Deficiency

Comparison of pre-test and post-test soccer dribbling scores with a total value of 30 N. From the table above, it can be seen that the highest pre-test dribbling score with a time of 22.12 and the lowest dribbling score with a time of 33.27, with a mean of 28.501, pre-test data mode 27.99 and standard deviation 2.33. The highest post-test dribble scores with a time of 20.30 and the lowest dribble with a time of 29.10 with a mean of 25.538, the mode of the post-test data is 24.696 and a standard deviation of 2.07, so the mean before and after the test increases by 2.963.

Table 3. List of Hypothesis Tests

Hasil	N	M	Σd	Σxd	Σxd^2
<i>Pretest</i>	30	28,501			
			71	0,2	10,452
<i>Posttest</i>	30	25,538			4

Based on the hypothesis testing table, it can be seen that the results of the pretest data of the experimental group with a mean of 28.501 and the posttest data of the experimental group with a mean of 25.538, and it is also known that Σd is 71, Σxd is 0.2, and ΣXd^2 is 10.4524. The data from the statistical calculations gave the "t test" results of 23.6, while the T-table is 1.70, obtained from the T distribution table with dk $(30-2) = 28$ and a 95% confidence level ($\alpha = 0.05$), indicated in the table. Hypothesis testing criteria accept H_a if $t\text{-count} > t\text{-table}(1-\alpha)$ and reject H_0 if $t\text{-count} < t\text{-table}(1-\alpha)$ because $t\text{-count} (23.6) > t\text{-table} (1.70)$ there is a significant difference between pretest and posttest, so the hypothesis H_0 is rejected and the hypothesis H_a is accepted. H_a 's statement is: "Learning speed and balance affect soccer dribbling results in extracurricular activities in SD Negeri 78 Palembang".

The main purpose and goal of training is to help athletes improve their skills and performance as much as possible. To achieve this, athletes must pay attention to four

aspects of training and train them carefully, namely physical training, technical training, tactical training and mental training (Syafuruddin, 2013). The process of physical fitness training, carried out carefully, repeatedly with increasing training loads, allows a person's physical fitness to become more skillful, strong and movement efficient. Extracurricular activities in the school must provide different training needs and whatever students are interested in physical activities, this activity can be used as a forum for students who have an interest in participating in these activities (Hartati & Kusnanik, 2017). In order to achieve success in sports, practice is necessary. Exercises must be very correct, programmed and continuous (Purba, 2017). Bompa in Iyakrus (2011) states that training is a systematic sports activity that takes place over a long period of time. It is improved gradually and individually, with the aim of forming physiological and psychological functions to meet the demands of the task... Exercise is a form of effort to improve the functional quality of the body organs and psyche of the perpetrator (Hartati, et al., 2019).

The training plan must be prepared with a training program that will guide its implementation. Understanding the principles of training will support efforts to improve the quality of training, as well as prevent injuries to athletes during training (Wiranto, 2013). Speed and balance exercises can be used to improve out-of-school soccer dribbling for Palembang 78 elementary school students based on pre-test and post-test data generated.

This can be seen from speed and balance training using zig-zag running speed training and standing balance using one leg (static balance) towards an increase in soccer dribbling, from the post-test an increase was observed after treatment, an increase in soccer dribbling from the pre-test and post-test. The balance exercise performed in this study was a single leg balance exercise. Chan (2012) argues that exercise is a type of activity that is carried out in a systematic and structured manner with the aim of improving the functionality of the body. Balance is the ability of the body to maintain its position during various movements. The balance is divided into two groups namely static balance and dynamic balance. Static balance is the body's ability to maintain balance in a fixed position (when standing on one leg, standing on a balance board). With a training program for 6 weeks with 18 sessions (exercises) and 1 pre-test and 1 post-test session. In this study, the research population consisted of all the students of SMA Negeri Satu Tanjung Batu with a total of 30. According to Arikunto (2010), the population is the entire research subject.

The results of the experimental group's pretest data showed that the highest number of soccer dribbles was 22.12 and the lowest was 33.27, with a mean of 28.501, a mode of 27.99, and a standard deviation of 2.33 and a slope of 0.21. The data after testing shows that the highest number of soccer dribbles is 20.30 and the lowest is 29.10, with a mean of 25.538, a mode of 24.696, and a standard deviation of 2.07 with a slope of 0.40. Data from statistical calculations, "t test" results obtained 23.6, while t-table is

1.70, obtained from T distribution table with dk $(30-2) = 28$ and 95% confidence level ($\alpha = 0.05$), indicated in the table. Hypothesis testing criteria accept H_a if $t\text{-count} > t\text{-table}(1-\alpha)$ and reject H_0 if $t\text{-count} < t\text{-table}(1-\alpha)$ because $t\text{-count} (23.6) > t\text{-table} (1.70)$ there is a significant difference between pre-test and post-test, therefore, hypothesis H_0 is rejected and hypothesis H_a is accepted, namely "there is an effect of speed and balance training on soccer dribbling results in extracurricular activities in SD Negeri 78 Palembang".

D. Conclusion

Speed and balance exercises performed for 6 weeks with 3 sessions in one week have the effect of increasing soccer dribbling scores in extracurricular activities in SD Negeri 78 Palembang. Through the normality test of the data and the hypothesis with the t-test statistic based on the statistical calculation results obtained by this study, it can be concluded that speed and balance exercises can be used as a type of exercise to improve soccer dribbling performance.

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References

- Afrilliyana, A., Pramono, H., & Soenyoto, T. (2018). The Effects of Exercise and Agility on Dribble (Skills) of Basketball Extracurricular Participants in SMPN 10 Bengkulu. *Journal of Physical Education and Sports JPES Unnes*, 7(1), 83-87.
- Arikunto, S. (2006). *Research Procedure: A Practical Approach*. Jakarta: Rineka Cipta.
- Arikunto, S. (2010). *Research procedures Practical approach*. Jakarta: Rineka Cipta.
- Budianto. (2012). Correlation between speed and agility in playing soccer skills of 14-15-year-old students in Baturetno Bantul Soccer School. Yogyakarta: UNY.
- Chan, F. (2012). Strength Training (exercises for strength). *Syifa Smart Journal*, 1:1-7.
- Hartati., Destriana. & Junior, M. (2019). Dot Drill One Foot Exercise on the Agility of Crescent Kicks in Pencak Silat Extracurricular. *Journal Altius*, 8(1): 52-60
- Iyakrus. (2011). *Takraw Game*. Palembang: University of Sriwijaya.
- Hartati, H. & Kusnanik, N. W. (2017). Physical and physiological profile of the student in Indonesia. *Sports Science*, 10(1), 96-99.
- Luxbacher, J. A (2011). *Football*. Jakarta: Raja Grafindo
- Purba, PH (2017). Correlation between Flexibility and Agility vs. Punch Speed Mawashi Geri Chudan in Karateka at Wadokai Dojo University. *Achievement Diary*, 1(1): 11-16.

- Rohman, A., & Soegiyanto, H. (2013). The Influence of Age and Balance Training on Gross Motor Ability of Lower Class Intellectually Impaired Children Able to Learn in Special Schools. *Journal of Physical Education and Sports*, 2(1).
- Sugiyono. (2011). *Quantitative Qualitative Research Methods and Research and Development*. Bandung: Alfabeta.
- Supriadi, A. (2015). The Relationship between Eye-Foot Coordination and Dribbling Skills in Football Games. *Jurnal Ilmu Keolahragaan*, 14(1), 1-14.
- Syafruddin. (2013). *Sports Coaching Science, Theory and Its Application in Sports Development*. Padang: UNP Press.
- Wiranto, G. (2013). *Physiology and Sport*. Yogyakarta: Graha Ilmu