



The Effect Of Ball Feeling Training On Football Dribbling Skills

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ABSTRACT

This research is motivated by the suboptimal dribbling skills of SSB Semanga' United U-12 players in Sambas Regency. This study aims to determine the effect of ball feeling training on football dribbling skills in SSB Semanga' United U-12 players in Sambas Regency. The method used is an experimental study with a one-group pretest-posttest design. Players belonging to the U-12 age group were used as research subjects, totaling 20 people through a total sampling technique. Treatment in the form of ball feeling training was given in a structured and continuous manner in 12 meetings with a scheduled training frequency every week. The instrument used in data collection was a football dribbling skills test carried out before and after the treatment. Data analysis was carried out through a prerequisite test and continued with a paired sample t-test to determine the difference in results before and after treatment. The results showed that the average pretest value was 23.57 seconds and the average posttest value was 21.59 seconds, resulting in an increase of 1.98 seconds. The statistical analysis results showed a significant difference (p) of $0.001 < 0.05$ between initial and final abilities after treatment. Thus, it can be concluded that ball feeling training significantly influenced the improvement of football dribbling skills in SSB Semanga' United U-12 players in Sambas Regency.

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- Conception and design of the study;
- Acquisition of data;
- Analysis and interpretation of data;
- Manuscript preparation;
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INTRODUCTION

Football is one of the most popular sports in the world. It has undergone many changes and developments, from its simple and primitive form to the modern game that is widely loved and enjoyed by many people, from children, adults, and even women (Rahman & Padli, 2020). Football is played by two teams, each consisting of 11 players, led by a referee, two assistant referees, and one reserve referee. Matches are played on standard pitches, with intense player contact that demands excellent technical skills (Irfan et al., 2020). In line with the dynamics of modern play, demands on individual player abilities have also increased. With the complexity of the game, which demands speed, precision, and adaptability to various match situations, every player needs to master basic technical skills as a foundation for their performance. Of the various techniques that must be mastered, dribbling is an essential component because it



plays a direct role in maintaining ball possession, creating attacking space, and overcoming opponent pressure. To understand the crucial role of this technique more deeply, a comprehensive explanation of the concept of dribbling is necessary.

Umar (2019) states that "dribbling is the process of moving the ball from one place to another on the field using the feet, always under control." Dribbling has advantages in the form of the ability to maintain possession, pass opponents individually, open up attacking space, and create scoring opportunities. However, it also has disadvantages, such as the risk of losing the ball if done excessively or without proper control, slowing the tempo of the game, and reducing the effectiveness of teamwork. Therefore, mastering the technique alone is insufficient, as effective dribbling requires good ball control in various situations. Before a player can apply dribbling techniques consistently and efficiently, a foundational skill is needed in the form of ball sensitivity, which is demonstrated through ball feel exercises, a form of initial training that emphasizes complete ball control. Ball feel is the most fundamental technique in football that every football player must master. The goal of ball feel exercises is to develop the "feel" for the ball, thus making it easier for players to control it.

Football Schools (SSB) act as institutions that provide an organized training structure, allowing ball mastery, the foundation of football technique, to be transferred, refined, and developed through a methodological and sustainable training approach. According to Sari et al., (2021), football schools (SSB) are the most appropriate forum for early-age football development, with schools currently flooded with students. This is a positive phenomenon considering the role of football schools as the root of national football achievement development, capable of supplying players to clubs in need. The role and responsibility of SSBs play a significant role in the development of Indonesian football achievements in the future. It is in these schools that many talented football players are discovered. This role is carried out in the context of early-age development, including at SSB Semanga' United. Strengthening these four aspects is a fundamental foundation in supporting optimal player performance and achievement. Football Schools (SSB) play a role in systematically guiding and directing player technical development. SSB Semanga' United U-12 is a training institution in Sambas Regency that focuses on developing young athletes. However, not all players have mastered basic techniques optimally. However, in practice, not all players are able to master basic techniques to their full potential.

The phenomenon that occurred at SSB Semanga' United U-12 when competing against the SSB Porkal team, some players still looked stiff when dribbling, their movements were easy to read, and they tended to choose passing rather than dribbling. The coach also emphasized that mastery of basic techniques, especially dribbling, still needs to be improved. Based on the background description, the researcher deemed it necessary to conduct a study entitled "The Effect of Ball Feeling Training on Football Dribbling Skills at SSB Semanga United U-12 Sambas Regency."

METHODS

This research methodology is quantitative research using an experimental approach. In education, experimental research is a research activity aimed at assessing the effect of

an educational treatment on student behavior or testing a hypothesis about the effect of that treatment compared to other treatments (Ade Andre Payadnya & Trisna Jayantika, 2018). The research method considered to have the highest degree of certainty is experimental research. In experimental research, conditions are specifically set by the researcher, treatment is carried out on the subjects, the effects of the treatment are measured carefully, regularly, and continuously, and external factors that may influence them are controlled. This method reveals the relationship between two or more variables or seeks the effect of one variable on another. In this research, the researcher proposes one or more hypotheses stating the nature of the expected relationship between the variables. The experiment itself is planned and implemented by the researcher to collect the data needed to test the hypothesis (Hikmawati, 2020). Based on the opinions above, it can be concluded that the experimental method in education aims to test the effect of an action or treatment on student behavior and to determine the cause-and-effect relationship between variables. This method requires careful control and measurement so that the results are valid and can accurately explain the causal relationship between the variables studied. In this study, the population will be all 20 students of SSB Semanga United U-12 in Sambas Regency. The sampling technique used was total sampling. The research used a pre-experimental, one-group pretest-posttest design. A pre-experimental design measures the results of a pretest and posttest without using a comparison group (Chodori, 2023). The treatment given for 12 meetings was ball feeling training with a pre-test and post-test using dribbling. The normality data for dribbling are as follows:

Table 1.
 Norma tes dribbling

Category	Time	Value
Very Good	<18.99 seconds	85
Good	19.00-21.00 seconds	80
Average	21.01-23.00 seconds	75
Poor	23.01-25.00 seconds	70
Very Poor	>25.01 seconds	65

RESULTS AND DISCUSSION

Result

This research was conducted at Semanga' United High School from November 10 to December 10, 2025. The sample consisted of 20 U-12 students at Semanga' United High School. The purpose of this study was to determine the effect of ball feel training on football dribbling skills in Semanga' United High School U-12 students. This study used an experimental research method. The effect was evident in the comparison of the average changes in the pretest and posttest. The results were then analyzed using SPSS 30 for Windows. The data obtained showed an average pretest score of 23.57 and a posttest score of 21.59, representing an increase of 8.40%. This study includes descriptions of normality tests, homogeneity tests, and hypothesis testing. Data descriptions facilitate the interpretation of the data. This chapter presents pretest and posttest data on the effect of ball feel training on football dribbling skills in Semanga' United High School U-12 students.

The presentation of pretest and posttest data is based on the results of measurements taken before participants received treatment and after participating in the training program. The pretest was used to describe participants' initial abilities, while the posttest aimed to determine changes in abilities after the training program was implemented. The results of the initial and final measurements for SSB Semanga' United U-12 students are shown in the following table.

Table 1.
 Descriptive data values

Results	N	Value (Seconds)		Mean	Standard Deviation
		Lowest	Highest		
Pretest Score	20	19.37	28.63	2.23312	2,23312
Posttest Score	20	18.46	24.76	1.62698	1,62698

Based on the table, it is known that the number of participants who took the pretest and posttest was 20 people each. In the pretest, the lowest score obtained by participants was 19.37 and the highest score was 28.63, with an average score of 23.57 and a standard deviation of 2.23312. Meanwhile, in the posttest, the lowest score was 18.46 and the highest score was 24.76, with an average score of 21.59 and a standard deviation of 1.62698. The pretest and posttest results data for SSB Semanga' United U-12 students can be displayed in graphical form as follows:

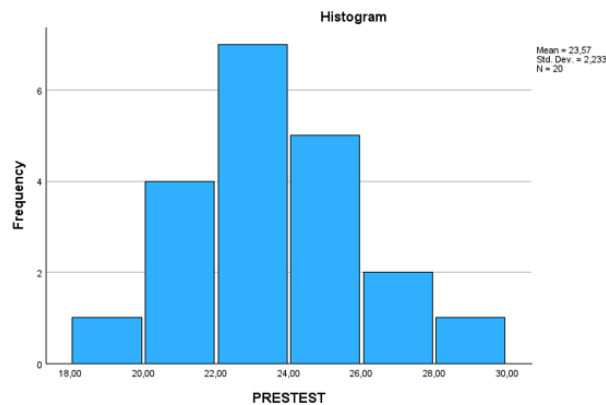


Figure 1.
 Pretest results

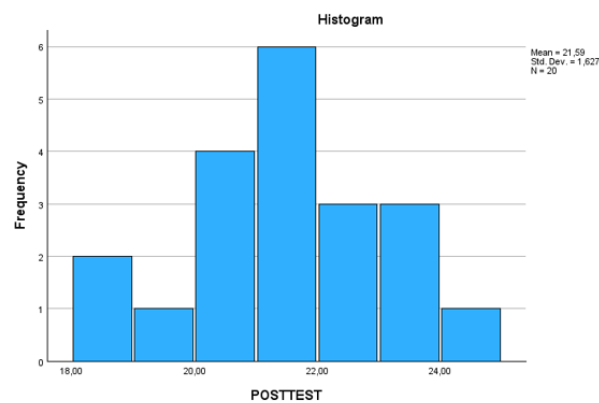


Figure 2.
 Posttest results

The graph shows that the average dribbling ability score during the pretest still showed a lower initial ability, while the posttest showed improved results. This change in average scores reflects an increase in dribbling skills after students participated in the ball feeling training program. Therefore, it can be stated that the training program contributed an 8.40% increase in the dribbling ability of SSB Semanga' United U-12 students.

Table 2.
Results of the normality

	Signifikansi	Keterangan
Pretest	0,990 > 0,05	Berdistribusi Normal
Posttest	0,987 > 0,05	Berdistribusi Normal

Based on the results of the normality test, the pretest obtained a significance value of 0.990, which is greater than the 0.05 level of significance. Therefore, the pretest data were declared normally distributed. Meanwhile, the posttest normality test results showed a significance value of 0.987, which is also greater than 0.05. This indicates that the posttest data were also normally distributed.

Table 2.
Results of the paired sample t-test

	Mean Paired Diff	Sig. (2-Tailed)	Keterangan
Nilai Pretest-Posttest	1,98000	0,001 < 0,05	Ho Ditolak

Based on the results of the paired sample t-test, the mean paired difference value was 1.98000, indicating a significant difference between the pretest and posttest scores. The significance value (Sig. 2-tailed) was 0.001, which is lower than the 0.05 level of significance (0.001 < 0.05). Therefore, H_0 (the null hypothesis) is rejected and H_1 is accepted, indicating a significant difference between the pretest and posttest results after the training program. This indicates that the training program significantly impacted the abilities of SSB Semanga' United U-12 students.

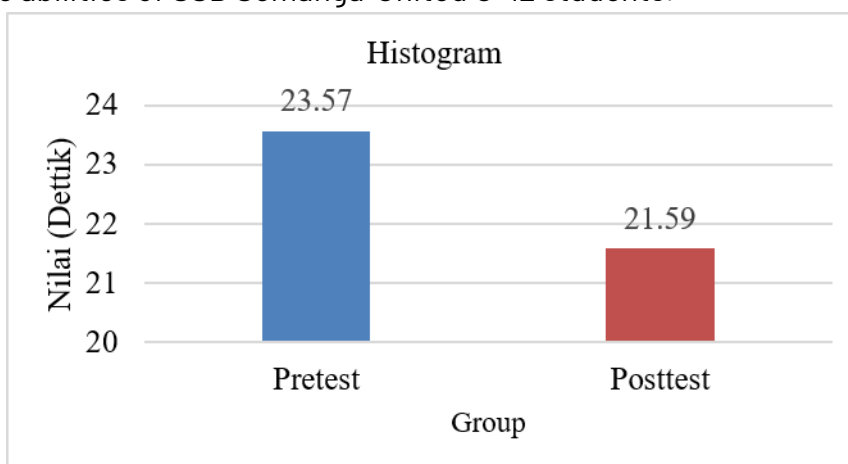


Figure 1.
Pretest and posttest results after the training program

To find out how big the average decrease is after treatment, the following formula will be used.

$$\begin{aligned}
 \text{Big increase} &= \frac{\text{pretest score} - \text{posttest score}}{\text{pretest score}} \times 100\% \\
 \text{Big increase} &= \frac{23,5725 - 21,5925}{23,5725} \times 100\% \\
 \text{Big increase} &= \frac{1,98}{23,5725} \times 100\% \\
 \text{Big increase} &= 8,40 \%
 \end{aligned}$$

Based on the calculation of the percentage increase, a value of 8.40% was obtained from the comparison between the average pretest and posttest scores. This percentage indicates that there was an increase in ability after being given the training treatment. However, the increase that occurred was relatively not too large. This is because the difference between the average pretest score of 23.5725 and the average posttest score of 21.5925 was only 1.98, so that when compared to the initial score (pretest), it resulted in a percentage increase of 8.40%. Thus, it can be said that the training provided was able to provide an impact on improving ability, although the increase was still in the low category.

Discussion

In this study, the instrument used was a football dribbling skills test. Two measurements were taken: a pretest before participants received ball feel training, and a posttest after participants participated in the ball feel training program for 12 sessions.

The study was conducted over four weeks, with training sessions occurring three times per week. This study aimed to determine the effect of ball feel training on football dribbling skills in SSB Semanga' United U-12 students. The analysis showed that ball feel training resulted in an 8.40% increase in dribbling ability. This demonstrates that ball feel training is effective in improving students' dribbling skills. These results align with the opinion of (Febrian & Bakti, 2021), who stated that ball feel is a form of personal training performed by players with their feet to control, handle, and direct their feelings toward the ball.

Conceptually, dribbling is a complex skill involving locomotor coordination, object control, and body stability in dynamic game situations. Technical skill performance in football is known to be related to a combination of physical and technical abilities that support effective actions during a match (Castro-Santos & Filgueira-Vizoso, 2020). Furthermore, the development of young football players is influenced by technical characteristics and motor skills, which play a role in supporting progress in playing performance (Forsman et al., 2016). Therefore, ball feel training that emphasizes repetitive contact with the ball with various parts of the foot can help strengthen neuromuscular coordination and improve technical control according to the demands of the game. Based on the results of the difference test between pretest and posttest scores, a significance value of $0.001 < 0.05$ was obtained, with a mean paired difference of 1.980. This value indicates a difference between the average pretest and posttest results, thus rejecting the null hypothesis (H_0) and accepting the alternative hypothesis (H_1). Thus, it can be concluded that after 12 sessions of treatment, there was a significant difference between students'

dribbling abilities in the pretest and posttest. These results align with the opinion of Bompa & Buzzichelli (2019) who stated that technical training carried out in a programmed, repetitive, and continuous manner will provide significant motor adaptations to specific movement skills, including dribbling skills in football.

This motor adaptation occurs due to the strengthening of neuromuscular coordination between the central nervous system and the muscles involved in foot movement. The more frequently ball contact patterns are practiced, the more efficient the nerve impulses that regulate muscle contractions become, resulting in faster, smoother, and error-free movements (Granacher et al., 2016). Improved dribbling skills acquired through ball feel training can also be explained through motor learning theory. Schmidt & Lee (2025) state that the motor learning process occurs through cognitive, associative, and automatic stages, where repeated practice strengthens neuromuscular coordination patterns, resulting in more efficient and controlled movements. In the context of this study, the ball feel training, systematically administered over 12 sessions, enabled students to develop more stable ball touch control, thereby improving dribbling ability in terms of both speed and accuracy.

Furthermore, from a kinesthetic perspective, ball feel training increases kinesthetic sensitivity to foot and ball position through nervous system adaptations that improve postural control and motor coordination (Paillard, 2017). This increased tactile sensitivity enables players to maintain an ideal ball distance while moving, thereby reducing the likelihood of losing the ball when dribbling in dynamic situations (Gidu et al., 2022). Correspondingly, basic technique training for young players needs to be designed systematically and in accordance with the player's developmental stage. Clemente & Sarmiento (2020) explain that structured training for young football players can improve the quality of technical actions such as ball control and dribbling through directed repetition and controlled game situations. This shows that in the U-12 age group, providing appropriate training will significantly stimulate the development of coordination, agility, and ball control skills. Thus, the application of ball feel training in this study is relevant to the principles of youth technical training based on repetition and the development of game-specific skills.

Around the age of 12, children experience a sensitive period of motor development, where coordination and motor learning skills develop optimally (Lesinski et al., 2016). At this stage, the neuromuscular system exhibits a high adaptive capacity to training stimuli. Therefore, consistent ball-feel training can accelerate the formation and automation of dribbling movement patterns before they are applied in more complex game contexts. Furthermore, mastery of basic techniques such as ball control and dribbling in young players requires training through an approach that is appropriate to the child's developmental characteristics. The implementation of ball mastery training significantly improved dribbling skills in football students aged 11-12 at SSB Putra Debes Bali. This training, which focuses on individual ball mastery, forces players to repeat the same technical actions in various movement patterns, thereby facilitating neuromuscular adaptation to ball contact and improving foot-ball coordination, a key

element in dribbling (Suprpto et al., 2023). The results of this study indicate that ball mastery/ball-feel-based technical training aligns with an effective technical learning approach for young players. Thus, implementing varied and structured ball-feeling training for SSB Semanga' United U-12 students not only improves the technical aspects of dribbling but also supports the development of a comprehensive understanding of the game. Modric et al., (2019) explain that technical performance in football matches, including dribbling skills, is carried out at high game intensity, thus demanding movement coordination, ball control, and the ability to maintain stability while running.

In accordance with the research hypothesis stating the influence of ball feeling training on football dribbling skills, the results of data processing prove that ball feeling training has a significant effect on improving dribbling skills in SSB Semanga' United U-12 students. Therefore, to optimize training results, training programs can be developed through a variety of methods and forms of training to make them more interesting and effective in improving football playing skills. Ball feeling training plays an important role in improving ball control, foot coordination with the ball, and touch sensitivity, which are the main components in dribbling skills. Therefore, to optimize training results, training programs can be developed through a variety of methods and forms of training to make them more interesting and effective in improving football playing skills (Sarmiento et al., 2018).

CONCLUSION

Based on the research results that have been obtained, it can be concluded that ball feeling training has a significant influence on football dribbling skills in SSB Semanga' United U-12 students.

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