

The Effect of Slalom Dribble and Ball Feeling Training on the Dribbling Ability of U-15 Players at SSB Perkasa Putra in Nganjuk Regency

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Abstract

This study aims to determine the effect of slalom dribbling and ball control training on the dribbling ability of U-15 soccer players at SSB Perkasa Putra, Nganjuk Regency. This study uses a quantitative pre-experimental approach with a pretest-posttest design. Participants consisted of 14 U-15 players selected using saturated sampling and divided into two treatment groups: Group A received slalom dribbling training, and Group B received ball control training. The training program was carried out for five weeks, three sessions per week, with 14 training sessions. Dribbling ability was measured using the Bobby Charlton dribbling test, and data were analyzed through the Shapiro-Wilk normality test, Levene's homogeneity test, and a paired sample t-test at a significance level of 0.05. The results showed that slalom dribbling training significantly improved dribbling ability, as indicated by the paired t-test value of $t = 4.155$ and $\text{Sig.} = 0.006$. Ball sensitivity training also significantly improved dribbling ability, with $t = 5.689$ and $\text{Sig.} = 0.001$. The average performance time decreased from 45.8414 to 42.1486 seconds in the slalom dribbling group and from 44.5757 to 39.9057 seconds in the ball sensitivity group. These findings indicate that both training methods are effective, with ball sensitivity showing greater improvement in dribbling performance.

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1. INTRODUCTION

Football is one of the most popular sports in Indonesia and has become an important part of physical education, sports training, and athlete development. Sport plays a vital role in maintaining physical fitness, improving health, and developing performance, especially when supported by systematic training and ongoing coaching (Susanto & Lismadiana, 2016). Football is a team sport that requires teamwork, physical ability, technical mastery, tactical understanding, and mental readiness to achieve optimal performance (Muhajir, 2016; Harsono, 2015). In Indonesia, football continues to develop through various training programs, including football schools or Sekolah Sepak Bola (SSB), which serve as a place for young players to develop basic football skills from an early age (Kismono & Dewi, 2021; Mulhadi et al., 2020).

The development of young soccer players requires appropriate training methods because soccer performance is influenced by physical condition, technical skills, tactics, and mentality (Soniawan et al., 2021). One of the basic techniques that soccer players must master is dribbling. Dribbling is the ability to control and move the ball using the feet while maintaining balance, speed,

and direction during play (Luxbacher, 2014). This technique is crucial because it allows players to pass opponents, maintain possession, create attacking opportunities, and move into open space (Mahfud et al., 2020). Players with good dribbling skills tend to be more confident in controlling the ball under pressure and are better able to support the team's performance during matches.

Dribbling ability depends not only on speed, but also on coordination, agility, touch accuracy, and ball control. Therefore, coaches need to provide training models that are relevant to the characteristics of dribbling movements in real game situations. One training method that can be used is slalom dribbling. Slalom dribbling is a form of dribbling practice that is done by moving the ball in a zigzag pattern through cones or obstacles. This exercise aims to train players' agility, coordination, close-range ball control, and the ability to change direction quickly while maintaining ball possession (Azi Faiz Ridlo, 2019; Irfandi & Rahmat, 2017). Slalom dribbling training is considered beneficial because soccer players often need to avoid opponents, pass through tight spaces, and change direction quickly during matches (Fajriyal, Syarif et al., 2023).

In addition to slalom dribbling, ball sensitivity training is also important in improving dribbling skills. Ball sensitivity is a basic soccer training method that emphasizes players' sensitivity and familiarity with the ball through repeated contact with various parts of the feet and body (Kadir, 2012, as cited in Wijaya, 2015). Ball sensitivity training helps players develop better ball control, touch, and mastery so they can control the ball's movement more effectively in various situations (Febrian, 2021). Previous research also shows that ball sensitivity training can improve players' dribbling skills because it trains the sense of touch, direction, and control when interacting with the ball (Faozi et al., 2022; Zaenul Ansori et al., 2023).

Several previous studies have discussed the effectiveness of dribbling training in soccer. Research on slalom dribbling training shows that zigzagging through obstacles can improve dribbling skills because it trains players to control the ball while changing direction (Saputra, Saputra, & Subhanadri, 2020). Meanwhile, research conducted by Herwansyah and Sugiharto (2020) found that ball feel training has a significant effect on students' dribbling skills. These findings suggest that both slalom dribbling training and ball feel training are relevant to developing dribbling skills in soccer. However, research specifically testing these two training methods on U-15 players at SSB Perkasa Putra, Nganjuk Regency, is still limited. Therefore, this study provides novelty by focusing on young soccer players in a soccer school environment and examining the effects of slalom dribbling training and ball feel training on their dribbling skills.

Based on observations at SSB Perkasa Putra, several issues were found in the dribbling abilities of U-15 players. Some players still had difficulty controlling the ball while dribbling; the ball often moved too far from their feet, players were less effective in changing direction, and the ball was easily stolen by opponents. These issues indicate that players need more structured and specific technical training to improve their dribbling performance. Slalom dribbling and ball feeling training are considered appropriate because both exercises are directly related to agility, coordination, ball control, and mastery of dribbling movements (Okilanda, 2017; Faozi et al., 2022).

Based on the background and previous studies, this study is based on the hypothesis that slalom dribbling training and ball control training have a significant effect on the dribbling ability of U-15 soccer players. The purpose of this study is to analyze the effect of slalom dribbling training on the dribbling ability of U-15 players at SSB Perkasa Putra, to analyze the effect of ball control training

on dribbling ability, and to identify the extent to which this training method can improve players' dribbling ability. The results of this study are expected to provide practical contributions for coaches in designing effective technical training programs for young soccer players.

2. METHOD

This study employed a quantitative pre-experimental method with a pretest-posttest design. This design was used to compare the players' dribbling abilities before and after the training treatment. Quantitative research was chosen because it measures performance using numerical data and analyzes the results statistically (Candra Susanto et al., 2024; Risnita et al., 2024). It should be noted that this pre-experimental design does not include a control group that receives no treatment; therefore, the improvement observed in both groups cannot be fully isolated from other influences such as maturation, regular team practice, or the novelty effect of participating in a structured training program. The absence of a control group is acknowledged as a methodological limitation of this study.

This research was conducted at SSB Perkasa Putra, Nganjuk Regency, in 2026. The population consisted of U-15 soccer players at SSB Perkasa Putra, and the sample was determined using saturated sampling. The final sample consisted of 14 players who met the research criteria. Participants were divided into two treatment groups: Group A received slalom dribbling training and Group B received ball sensitivity training. Each group consisted of seven players.

This therapy was conducted over five weeks, with a frequency of three training sessions per week for a total of 14 sessions. The slalom dribbling group practiced dribbling the ball through cones in a zigzag pattern, varying the distance, number of cones, and speed of movement. The ball control group practiced through exercises such as juggling, inside touches, sole touches, ball shifts, V-turns, and other repetitive touch activities designed to improve ball sensitivity and control.

The instrument used to measure dribbling ability was the Bobby Charlton dribbling test. In this test, players dribble the ball through a predetermined obstacle course, and performance scores are recorded in seconds using a stopwatch. Lower time scores indicate better dribbling performance. This instrument was used in both pretests and posttests to determine changes after treatment.

Data were analyzed using descriptive statistics, the Shapiro-Wilk normality test, Levene's homogeneity test, and the paired sample t-test. The significance level was set at 0.05. The paired sample t-test was used to determine whether there was a significant difference between the pretest and posttest scores in each group (Soeprajogo & Ratnaningsih, 2016; Novita Sari Maria et al., 2025).

Pre-test → Treatment (Slalom Dribble / Ball Feeling) → Post-test → Statistical Analysis

Figure 1. Research flow.

3. RESULTS AND DISCUSSION

The results and discussion section presents the research findings through descriptive statistics, prerequisite assumption testing, hypothesis testing, and scientific interpretation. The main objective of this study was to determine whether slalom dribbling and ball control training significantly influenced the dribbling ability of U-15 soccer players at SSB Perkasa Putra, Nganjuk Regency. Since dribbling performance is measured in seconds, a lower time score indicates better dribbling performance. Therefore, a decrease in the average posttest score indicates an increase in the players' ability to complete the dribbling test more quickly and effectively.

Table 1. Descriptive statistics of dribbling performance

Group	Measurement	N	Minimum	Maximum	Means	Standard Deviation
A - Slalom dribble	I swear	7	38,77	56,39	45.8414	6.98101
A - Slalom dribble	Post-test	7	36.00	53.06	42.1486	6.64812
Feeling B - Ball	I swear	7	36.14	54.00	44.5757	5.82156
Feeling B - Ball	Post-test	7	33,87	48,61	39.9057	5.19594

Based on Table 1, both treatment groups showed improvement after the training program. In Group A, which received slalom dribbling training, the average score decreased from 45.8414 seconds in the pretest to 42.1486 seconds in the posttest. This means the players improved by 3.6928 seconds after receiving slalom dribbling training. Meanwhile, Group B, which received ball sensitivity training, showed a decrease in the average score from 44.5757 seconds to 39.9057 seconds. This indicates an increase of 4.6700 seconds. These results indicate that both training models improve players' dribbling performance, but descriptively, the ball sensitivity group showed a greater improvement than the slalom dribbling group.

The decrease in average time in both groups indicates that the training program improved players' ability to control and move the ball more efficiently. In soccer, dribbling involves not only running speed but also the ability to maintain good ball control, adjust body position, change direction, and coordinate footwork with the ball's movement. Therefore, the improvements demonstrated by both groups reflect the development of technical components that support dribbling performance.

Table 2. Results of normality and homogeneity tests

Hand	Data	Signatur e.	Results
Shapiro-Wilk Normality	Final Test of Group A	0,132	Normal
Shapiro-Wilk Normality	Group A Pre-test	0,081	Normal
Shapiro-Wilk Normality	Posttest Group B	0,953	Normal
Shapiro-Wilk Normality	Pre-test Group B	0,711	Normal
Levene's homogeneity	Based on average	0,693	Homogeneous

Table 2 shows that all Shapiro-Wilk normality test values are greater than 0.05. This means that the pretest and posttest data in both groups are normally distributed. The homogeneity test using Levene's Test also obtained a significance value of 0.693, which is greater than 0.05. Therefore, the data variance is homogeneous. This result indicates that the data meet the prerequisite assumptions for parametric statistical testing. This thesis also states that all data in Group A and Group B are normally distributed, and the Levene's Test result of 0.693 indicates homogeneous variance.

Table 3. Results of paired sample t-test

Group	Comparison	number t	Sig. (2 echoes)	Interpretation
A - Slalom dribble	Pre-test and Final Test	4.155	0,006	Important
Feeling B - Ball	Pre-test and Final Test	5.689	0,001	Important

Table 3 shows the results of the paired sample t-test. The slalom dribbling group obtained a t-value of 4.155 with a significance value of 0.006. Since 0.006 is less than 0.05, there is a significant difference between the pretest and posttest scores after the slalom dribbling treatment. This means that slalom dribbling training has a significant effect on improving the dribbling ability of U-15 players at SSB Perkasa Putra. The ball feeling group obtained a t-value of 5.689 with a significance value of 0.001. Since 0.001 is less than 0.05, ball feeling training also has a significant effect on improving the dribbling ability of players. This finding is consistent with the results of the hypothesis

testing in the thesis, which found a significant difference between the pretest and posttest scores in both groups.

The significant effect of slalom dribbling training can be explained by the characteristics of the training movements. In slalom dribbling training, players must dribble the ball through cones in a zigzag pattern while maintaining good balance, direction, and ball control. This training requires players to repeatedly coordinate footwork, body movement, and ball movement. Repetition of this movement pattern helps players become more accustomed to controlling the ball when changing direction. As a result, players can improve their ability to keep the ball close to their feet and complete dribbling movements more efficiently. These findings align with those of Syukur et al. (2022), who stated that dribbling training models are beneficial for developing basic dribbling techniques in soccer, and Oleo et al. (2022), who found that zigzag-based training can improve soccer players' dribbling abilities.

Slalom dribbling drills also provide training situations that mimic real-life match conditions. During matches, players rarely dribble in a straight line. They often need to avoid opponents, navigate tight spaces, and change direction quickly. Therefore, slalom dribbling drills are relevant because they train players to respond to the movement demands common in a soccer match. The improvements in Group A demonstrate that structured, cone-based dribbling drills can develop agility, coordination, and directional control, which are essential components of dribbling performance.

The significant impact of ball sensitivity training can be explained through the principles of repeated ball touches and ball control. Ball sensitivity training requires players to make repeated touches using different parts of the foot, such as inside-foot touches, sole touches, ball shifts, V-turns, V-cuts, and juggling. These exercises help players improve their ball sensitivity, movement rhythm, and confidence in ball control. Players with good ball sensitivity can control the ball more naturally and do not need to constantly look at the ball while dribbling. This allows players to focus more on the direction of movement, the position of the opponent, and the game situation.

The results of this study support previous findings that ball control and ball sensitivity training can improve technical soccer skills. Danuarta et al. (2025) found that ball control training was effective in improving dribbling skills among U-15 players. Similarly, Hermawan (2018) explained that repeated ball touch training can improve basic soccer movement skills. In this study, the ball sensitivity group showed significant improvement because the training directly targeted touch and control qualities, which are crucial in dribbling. Better touch qualities allow players to keep the ball closer to their feet, reduce technical errors, and complete dribbling movements more quickly.

When the two treatments were compared descriptively, ball touch training resulted in a greater average improvement in dribbling time than slalom dribbling training. The ball touch group improved by 4.6700 seconds, while the slalom dribbling group improved by 3.6928 seconds. This difference suggests that, for the players in this study, repeated ball touch and ball touch training may have made a stronger contribution to dribbling performance. However, this comparison is descriptive in nature because the analysis used in this study focused on paired-sample t-tests within each group. Therefore, ball touch can be described as producing greater descriptive improvement, but further comparative testing is needed to determine whether the difference between the two training methods is statistically significant. An independent sample t-test, or an analysis of covariance (ANCOVA) controlling for pretest scores, would be an appropriate statistical approach to directly compare the

posttest performance of the two groups and to confirm whether the observed descriptive difference between slalom dribbling and ball sensitivity training reflects a statistically significant effect rather than incidental variation between groups.

Scientifically, the greater descriptive improvement in the ball sensitivity training group may be related to the early technical needs of young players. U-15 players are still at a stage where basic ball control and touch quality are crucial for technical development. If players have better ball sensitivity, they can control the ball more effectively during movement. This may explain why ball sensitivity training resulted in a greater reduction in dribbling time. Meanwhile, slalom dribbling training remains important because it develops agility, change of direction, and control when moving around obstacles. Thus, both exercises improve dribbling ability but emphasize different technical components. From a motor learning perspective, the greater improvement in the ball sensitivity group may also be explained by the higher frequency of ball-foot contact inherent in ball feeling exercises, such as juggling, inside touches, sole touches, and V-turns, which provide players with more repetitions of tactile and proprioceptive feedback per session than the direction-change-focused slalom drills. Because the Bobby Charlton dribbling test itself emphasizes close, continuous ball control rather than pure agility or speed, the training content of ball feeling exercises may correspond more directly to the demands of the measurement instrument, which could partly account for its comparatively larger effect. Nevertheless, this explanation remains an interpretation based on descriptive comparison and should be verified through further studies that isolate touch frequency as a controlled independent variable.

Overall, the findings of this study indicate that slalom dribbling and ball sense training are both effective in improving dribbling ability. Slalom dribbling primarily improves agility, coordination, and the ability to change direction while controlling the ball. Ball sense training primarily improves touch quality, ball sense, and ball control. These two forms of training complement each other and can be combined in a soccer training program for young players. Coaches can use slalom dribbling to develop movement efficiency and directional control, while ball sense training can be used to strengthen ball control and technical confidence. Therefore, the findings of this study answer the research hypothesis that slalom dribbling and ball sense training have a significant effect on the dribbling ability of U-15 soccer players at SSB Perkasa Putra.

4. CONCLUSION

Based on the findings of this study, it can be concluded that slalom dribbling and ball control training have a significant influence on improving the dribbling ability of U-15 soccer players at SSB Perkasa Putra, Nganjuk Regency. The first finding shows that slalom dribbling training contributes to improving players' ability to control the ball while changing direction quickly, passing obstacles, and maintaining ball control during dribbling movements. This indicates that slalom dribbling training is beneficial for developing good agility, coordination, and ball control, which are important components in soccer dribbling skills.

The second finding showed that ball feel training also had a significant impact on players' dribbling ability. This training helped players improve their sensitivity and touch to the ball, enabling them to control, direct, and defend the ball more effectively in various game situations. Through

repeated ball feel training, players became more familiar with the ball's movement and were able to dribble with greater control and confidence.

A comparison of the two training methods showed that ball sensitivity training provided greater improvement than slalom dribbling training. This can be seen from the average improvement scores, where ball sensitivity training produced a greater difference than slalom dribbling training. Therefore, the research hypothesis was accepted, namely that slalom dribbling and ball sensitivity training have a positive influence on improving dribbling ability in U-15 soccer players.

In conclusion, both training methods can be used as effective alternatives in soccer technical training programs, especially for young players. Coaches are advised to implement slalom dribbling drills to improve agility and directional movement, while ball possession drills can be emphasized to improve touch, control, and ball control. The combination of these two exercises is expected to support the development of better dribbling skills and improve the technical performance of young soccer players in real-life match situations. For future research, it is recommended to use a larger sample size, involve players from more than one football school to improve the generalizability of the findings, and apply a true or quasi-experimental design that includes a control group with random assignment. Further studies could also apply inferential statistical tests, such as an independent sample t-test or ANCOVA, to directly and statistically compare the effectiveness of slalom dribbling and ball sensitivity training.

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