

Zigzag Dribbling Training Improves Dribbling Performance in SSB Samudera Players

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Abstract

Objectives: This study aimed to analyze the effect of zigzag dribbling training on improving the ball dribbling skills of youth soccer players at SSB Samudera.

Materials and Methods: The research employed a quasi-experimental design with a one-group pretest–posttest method. Twenty male players aged 13–15 years participated. The intervention consisted of zigzag dribbling exercises performed three times per week for six weeks. Dribbling ability was measured using the Mor-Christian General Soccer Ability Test. The data were analyzed with paired sample t-tests at a significance level of 0.05.

Results: The results showed a significant improvement in dribbling performance. The average pretest time was 15.84 seconds, and the average posttest time was 13.97 seconds. Statistical analysis confirmed a significant difference between pretest and posttest results ($t = 9.26, p < 0.001$).

Conclusions: Zigzag dribbling training effectively enhances dribbling skills in youth soccer players by improving agility, coordination, and ball control. Coaches are recommended to incorporate this method into their training programs to optimize technical development in young athletes.

Keywords: Zigzag dribbling; Dribbling drills; Soccer training; SSB Samudera.

Introduction

Football (soccer) is the most popular sport in the world, played and followed by millions across different age groups. Success in football depends on the mastery of fundamental technical skills, physical fitness, and tactical awareness (Reilly & Williams, 2003). Among these technical skills, dribbling is one of the most important abilities, as it enables players to control the ball, maintain possession, evade opponents, and create opportunities for passing or shooting (Ali, 2019).

Dribbling requires a combination of agility, speed, balance, and coordination. Players must be able to maneuver the ball efficiently while responding to dynamic and unpredictable movements from opponents (Williams & Hodges, 2005). For youth players, developing dribbling skills is critical, as it forms the foundation for higher-level performance in competitive football (Ford et al., 2010). Coaches therefore seek effective training methods that simulate match-like conditions to improve players' ability to dribble under pressure.

One of the commonly used training methods to improve dribbling is the zigzag dribbling exercise. This drill involves maneuvering the ball through cones arranged in a

zigzag pattern, forcing players to change direction frequently while maintaining ball control (Singh & Mal, 2017). The zigzag format enhances agility, reaction time, and coordination, all of which are essential components of effective dribbling in real match situations (Milanović et al., 2013).

Previous studies have emphasized the positive impact of agility-based training on football performance. Little and Williams (2005) found that agility drills significantly improved speed and ball control in professional players. Similarly, Garcia-López et al. (2012) demonstrated that structured dribbling tests and training programs were reliable in improving technical performance among young players. However, research specifically focusing on zigzag dribbling drills in the Indonesian youth football context is still limited.

Based on these considerations, the present study aimed to investigate the effect of zigzag dribbling training on improving dribbling ability among players of SSB Samudera . This research is expected to provide empirical evidence on the effectiveness of this method and practical guidance for coaches in developing systematic training programs for youth football players.

Materials and Methods

Study Participants.

The participants in this study were 20 male soccer players from SSB Samudera , aged 13–15 years, with at least one year of training experience. Players were selected using purposive sampling to ensure that they had similar levels of training background and physical condition. All participants were free from injury at the time of the study. Prior to data collection, informed consent was obtained from both the players and their guardians.

Study organization.

This research was conducted at the SSB Samudera training field over a period of six weeks. Training sessions were scheduled three times per week in the afternoon, each lasting approximately 20 minutes. The sessions included warm-up routines (5 minutes), zigzag dribbling training (10 minutes), and cool-down activities (5 minutes). Cones were set in a zigzag formation with 1.5 meters of spacing across a 20-meter course. The study was supervised by the research team in collaboration with the players' coach to ensure training consistency and adherence to the program.

Statistical Analysis

The collected data were first examined for normality and homogeneity using the Shapiro–Wilk and Levene's tests. Subsequently, a **paired sample t-test** was applied to determine the significance of differences between pretest and posttest mean scores. The level of statistical significance was set at $p < 0.05$. All statistical procedures were conducted using **SPSS version 25**.

Results

The analysis of dribbling performance showed an improvement after the zigzag dribbling training program. Table 1 presents the descriptive statistics of pretest and posttest results.

Table 1. Pretest and Posttest Dribbling Performance (n = 20)

Test	Mean (seconds)	Elementary School	N	t-value	p-value
Pretest	15.84	1.12	20		
Posttest	13.97	0.98	20	9.26	<0.001

The mean pretest score was 15.84 seconds (SD = 1.12), while the mean posttest score was 13.97 seconds (SD = 0.98). The results of the paired sample t-test revealed a statistically significant difference between the pretest and posttest ($t = 9.26$, $p < 0.001$).

These findings indicate that zigzag dribbling training produced a meaningful improvement in dribbling ability among SSB Samudera players. The average improvement of 1.87 seconds reflects enhanced agility, ball control, and overall dribbling efficiency.

Discussion

The present study examined the effect of zigzag dribbling training on the dribbling performance of youth soccer players at SSB Samudera. The results revealed a significant improvement in posttest performance compared to pretest scores, confirming that zigzag dribbling training is effective for enhancing dribbling ability.

These findings align with previous studies that emphasize the importance of agility-based drills in improving soccer performance. Little and Williams (2005) demonstrated that agility training contributes to improvements in speed, coordination, and ball control. Similarly, Garcia-López et al. (2012) reported that structured dribbling tasks provide reliable indicators of technical progress among youth players. The present study extends these findings by showing that a simple, low-cost, and easily applicable method such as zigzag dribbling can significantly improve dribbling ability within a relatively short training period.

The improvement observed in this study may be attributed to the repetitive practice of directional changes under controlled conditions. Such repetition reinforces neuromuscular adaptations, enhances coordination between the lower limbs and ball control, and simulates real-game conditions where players frequently need to escape opponents. Furthermore, the zigzag drill emphasizes quick decision-making and body balance, which are critical aspects of successful dribbling during competitive matches (Williams & Hodges, 2005).

From a practical perspective, this study suggests that coaches and trainers working with youth athletes should incorporate zigzag dribbling into their regular training programs. The exercise requires minimal equipment, is adaptable to different skill levels, and can be easily integrated into broader training sessions.

Conclusions

This study concludes that zigzag dribbling training has a significant positive effect on the dribbling ability of youth soccer players at SSB Samudera . After six weeks of training, players demonstrated faster and more efficient dribbling performance.

The zigzag dribbling method enhances agility, coordination, and ball-handling skills, all of which are crucial for competitive football. Coaches are strongly encouraged to use this training approach as part of their technical development programs, especially for young players in formative stages.

Future research should explore the long-term effects of zigzag dribbling training, compare its effectiveness with other training methods, and examine its impact in real match scenarios.

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