

THE EFFECT OF AGILITY TRAINING ON DRIBBLING SKILLS USING THE INSIDE OF THE FOOT AT SSB BARONA U10-14 YEARS

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ABSTRACT

The ability to dribble using the inside of the foot among players of SSB Barona U11-14 is still suboptimal, and there is a lack of variation in the training that could enhance sprinting performance. To address this issue, agility training could be implemented. This study aims to examine the effect of agility training on dribbling skills with the inside of the foot in SSB Barona U10-14 players. The research employs a quantitative approach with an experimental method and a one-group pretest-post-test design, involving 16 training sessions. The study population consists of all 32 players from SSB Barona U10-14. The sampling technique used is total sampling, meaning all 32 players were included in the study sample. Data collection was carried out using a dribbling test developed by Subagyo Irianto et al. (2010), which has a validity of 0.779 and reliability of 0.559. Data analysis involved calculating the mean, standard deviation, and performing a t-test for differences in mean scores. The results indicate that agility training significantly influences dribbling skills with the inside of the foot in SSB Barona U10-14. This is supported by the calculated t-value of 7.98, which exceeds the t-table value of 1.69 at a significance level of $\alpha = 0.05$ (df = 30).

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INTRODUCTION

Sport is a physical activity carried out in a planned and continuous manner to improve physical fitness, maintain health, and develop a person's motor and mental abilities. In practice, sport does not only function as a means of recreation or an activity to fill leisure time but also becomes an important part of character development and the improvement of the quality of human resources. A training process conducted systematically serves as the main foundation for producing individuals who are fit, skilled, and able to compete in various fields of life, including in the competitive realm of achievement sport (Akbar & Argantos, 2019).

In achievement sport, athlete development is carried out through structured, integrated, and continuous stages (Sarwita et al., 2021). Each stage of the development process is designed by referring to sport principles and is supported by scientific knowledge and modern sport technology. One of the achievement sports that has experienced significant development in Indonesia is football (Saputra & Is, 2021). The high enthusiasm of the community for football places this sport in a strategic position in the development of young athletes. In almost every region, football schools, amateur clubs, and early-age competitions have emerged as platforms for the development of the younger generation.

Football is a team game involving two teams, each consisting of eleven players. Each team aims to score as many goals as possible while maintaining its defensive area (Muhammad et al., 2020). To perform optimally in a match, a player must master four main aspects: physical, technical, tactical, and mental. These four aspects are interconnected and cannot be separated from one another. A player who has good technical and tactical abilities will not be able to apply them optimally if their physical condition is weak. Conversely, excellent physical condition without adequate basic technique makes it difficult for a player to contribute effectively in building attacks or maintaining ball possession. Strong competitive mentality can also be disrupted if physical condition easily leads to fatigue or if the mastered techniques are unstable (Is et al., 2023).

One of the basic technical skill components that has a strong influence in football is the ability to dribble the ball. Dribbling is a technique that allows a player to maintain possession while moving to create space, beat opponents, or initiate attacks. In modern football, dribbling is not only understood as the ability to move the ball forward, but also as the ability to control the ball in various pressure situations while maintaining balance, speed, and movement accuracy (Bramantha & Setiawan, 2022). Mastery of dribbling becomes the foundation for players to perform attacking combinations and more complex game strategies.

Among the various types of dribbling techniques, dribbling using the inside of the foot is a very important technique to be mastered by players in the development age. This technique makes a major contribution to ball control and movement stability, especially when players must change direction quickly or protect the ball from opponent pressure. However, mastering this technique requires structured and repeated practice, because

players must be able to coordinate foot movement, body position, and speed simultaneously (Is et al., 2023).

The development of football in Aceh Province, especially in Banda Aceh City, shows a fairly significant increase. The emergence of various football schools indicates that the interest and participation of children and adolescents in this sport are increasing. Barona Football School (SSB Barona) is one of the youth player development platforms that has been active since its establishment in 2011. This football school has a training program conducted three times a week and is guided by experienced coaches. The development program covers basic technical skills, physical condition, tactical understanding, as well as the formation of discipline and sportsmanship.

Although the training program has been conducted regularly, observations made during training sessions and matches in the U11-14 age group show that the ability to dribble using the inside of the foot is still not optimal. Several players were seen losing ball control when moving at high speed, especially when facing direct pressure from opponents. Direction changes were also not effective, causing the ball to often separate from the foot. In addition, players' agility in dribbling is still limited, making it difficult for them to maintain the rhythm of play when required to perform movement variations or combine several techniques in match situations.

These conditions indicate the need for a more focused training program to develop players' dribbling ability. One form of training that is relevant for improving dribbling skills is agility training. Agility is the body's ability to move quickly, change direction suddenly, and maintain balance while in motion. In football, agility is a very important physical component because it determines the speed at which players execute techniques, including when dribbling the ball among opposing players.

Agility training can be carried out through various forms of exercises, one of which is zig-zag course training. The zig-zag movement pattern requires players to continuously change direction while maintaining speed and body stability. When this exercise is combined with ball control, players become accustomed to performing dribbling in situations that demand quick movement and the ability to adapt to direction changes. Therefore, agility training using a zig-zag course pattern is considered an effective method to improve dribbling ability, especially dribbling using the inside of the foot (Jamaludin, 2017).

Based on the above explanation, it can be seen that the ability to dribble using the inside of the foot among SSB Barona players aged 10-14 years still needs improvement

through an appropriate training program. Therefore, this study aims to empirically examine the effect of agility training on dribbling skills using the inside of the foot among players in the development age. The results of this study are expected to contribute to the development of more targeted training methods in early-age football coaching and to serve as a reference for coaches in designing effective training programs to improve players' basic technical skills.

Agility is the ability to move quickly and accurately with effective and efficient changes of direction in a short time without losing balance, control, and movement speed. In the context of football, agility becomes an important component for dealing with dynamic situations in the game, such as avoiding opponents while dribbling the ball and adjusting body position when controlling the ball (Arifin & Warni, 2019).

Dribbling is the ability to control the ball with the feet while moving on the field. The technique of dribbling using the inside of the foot allows for smoother, more precise, and more effective ball control during movement. This skill requires good motor coordination and the ability to combine speed, balance, and agility (Arifin & Warni, 2019).

Research shows that agility training has a significant effect on improving dribbling skills in young football players. Proper agility training can enhance players' ability to change direction and movement speed, which are important factors in ball control and avoiding opponents while dribbling. Agility training applied specifically through models such as semicircle or concentric circle patterns is effective in improving dribbling skills.

The age of 10–14 years is an important phase in the development of basic abilities of football players, especially agility and dribbling skills. At this stage, directed physical training has been proven to significantly improve movement performance. Therefore, the application of anaerobic training and agility methods such as shuttle runs, zig-zag runs, and plyometric jumps becomes an effective strategy to enhance the agility of early-age players.

RESEARCH METHODS

This study uses a quantitative approach, because all analyzed data are presented in numerical form and processed using statistical techniques. In quantitative research, researchers seek to test hypotheses through objective measurement of variables. (Sugiono, 2018) It is stated that quantitative research is based on the philosophy of positivism, utilizes certain samples or populations, uses standardized instruments in data collection, and applies statistical analysis in testing the formulated hypotheses. Therefore, the

quantitative approach is chosen because it is able to provide an empirical description of the changes that occur after the treatment is given.

The research method used is the experimental method, because this study aims to determine the effect of a treatment on changes that occur in the research subjects. Experimental research is a research procedure designed to assess the effect of a particular treatment on other variables under controlled conditions. (Sugiono, 2018). Through the experimental method, researchers can ensure that changes occurring in the dependent variable are the result of the given treatment, not other factors.

The research design applied is a one-group pretest-post-test design. This design involves one group that is given an initial test (pretest) to determine baseline ability before the treatment is applied, followed by the same group receiving the treatment, and then a final test (post-test) is conducted to observe the changes that occur. This design allows researchers to compare conditions before and after the treatment, so the results obtained are more accurate (Sugiono, 2018). With the presence of pretests and post-tests, researchers can identify the level of improvement that occurs as a direct impact of the treatment given. The population in this study consists of all SSB Barona players in the U10-14 age group, with a total of 32 players. This study uses a total sampling technique, which is a sampling technique in which all members of the population are used as the sample. Sugiyono (2017: 85) It is explained that total sampling is used when the population size is relatively small so that it can be studied as a whole. Therefore, the sample in this study includes all 32 players of SSB Barona in the U10-14 age group.

Data collection techniques are used to obtain relevant and accurate data. Sugiyono (2017: 224) It is explained that data collection techniques are the most important step in research, because the quality of the data obtained will determine the quality of the research results.

This study uses a dribbling skill test, namely a test developed by (Rusmanto et al., 2020). This instrument has a validity value of 0.779 and a reliability value of 0.559, therefore it is appropriate for use in this study. Data analysis is conducted to test the hypothesis and determine the effect of the treatment. The analysis uses inferential statistics with a significance level of 95% ($\alpha = 0.05$).

RESULTS AND DISCUSSION

The results of a series of field studies conducted on the effect of agility training on dribbling skills using the inside of the foot at SSB Barona U10-14 Years produced research

data in the form of initial test (pretest) data on dribbling skills using the inside of the foot before the sample was given the treatment, namely agility training, and final test (post-test) data after the sample received the treatment. The tests were administered to determine the effect between the two variables. These data were tabulated into tables, and the results are as follows:

Table 1. Results of the Measurement of Dribbling Skills Using the Inside of the Foot at SSB Barona U10-14 Years

No	Name	Dribbling Skills Using the Inside of the Foot	
		Initial Test (Pretest)	Final Test (Post-test)
1	ARF	19,07	16,21
2	BRS	18,05	15,02
3	CHN	14,87	11,02
4	DWP	14,28	12,45
5	ERL	19,50	16,32
6	FZN	23,82	18,74
7	GRT	16,47	12,84
8	HKN	16,73	13,02
9	IZA	16,50	12,23
10	JRD	18,78	14,54
11	KRM	12,21	10,85
12	LDN	16,60	12,87
13	MRF	14,06	11,54
14	NRY	13,93	9,15
15	OVL	18,30	15,23
16	PRN	18,04	14,24
17	QAS	17,69	14,66
18	RDN	21,09	17,23
19	SLM	23,75	18,33
20	TRF	20,14	16,57
21	UMR	19,65	15,45
22	VDN	17,22	12,67
23	WSN	19,11	14,42
24	XAR	12,08	9,84
25	YLG	14,32	10,30
26	ZMN	18,77	16,75
27	AQN	19,20	15,16
28	BLM	20,03	15,02
29	CRD	21,13	18,09
30	DNM	21,30	18,29
31	ESH	16,24	13,22
32	FKH	19,03	16,89
Total		571,96	459,16

Based on the measurement results in Table 4.1 above, it can be seen that the total score of dribbling skills using the inside of the foot in the initial test (pretest) is 571.96, while in the final test (post-test) it is 459.16 at SSB Barona U10-14 Years.

Calculation of the Mean Score

Based on the results of the dribbling skill test using the inside of the foot at SSB Barona U10–14 Years, it can be found that the initial test (pretest) data for dribbling skills using the inside of the foot is 17.87. Subsequently, the sample was given the treatment, namely agility training. After the sample received the treatment, a final test (post-test) was then conducted overall.

Based on the results of the final test (post-test) of dribbling skills using the inside of the foot at SSB Barona U10–14 Years, it can be seen that the post-test data of dribbling skills using the inside of the foot after being given the treatment, namely agility training, has a mean score of 14.34.

Next, to determine the standard deviation based on the results of the initial test (pretest) and final test (post-test) scores of dribbling skills using the inside of the foot as shown in Table 4.2 below, the standard deviation can be determined as follows:

Table 2. Results of the Multiplication of Initial Test (Pretest) and Final Test (Post-test) Scores of Dribbling Skills Using the Inside of the Foot at SSB Barona U10–14 Years.

No	Name	Initial Test (Pretest) X	Final Test (Post-test) Y	X ²	Y ²	X.Y
1	ARF	19,07	16,21	363,66	262,76	309,12
2	BRS	18,05	15,02	325,80	225,60	271,11
3	CHN	14,87	11,02	221,12	121,44	163,87
4	DWP	14,28	12,45	203,92	155,00	177,79
5	ERL	19,50	16,32	380,25	266,34	318,24
6	FZN	23,82	18,74	567,39	351,19	446,39
7	GRT	16,47	12,84	271,26	164,87	211,47
8	HKN	16,73	13,02	279,89	169,52	217,82
9	IZA	16,50	12,23	272,25	149,57	201,80
10	JRD	18,78	14,54	352,69	211,41	273,06
11	KRM	12,21	10,85	149,08	117,72	132,48
12	LDN	16,60	12,87	275,56	165,64	213,64
13	MRF	14,06	11,54	197,68	133,17	162,25
14	NRV	13,93	9,15	194,04	83,72	127,46
15	OVL	18,30	15,23	334,89	231,95	278,71
16	PRN	18,04	14,24	325,44	202,78	256,89
17	QAS	17,69	14,66	312,94	214,92	259,34
18	RDN	21,09	17,23	444,79	296,87	363,38
19	SLM	23,75	18,33	564,06	335,99	435,34
20	TRF	20,14	16,57	405,62	274,56	333,72
21	UMR	19,65	15,45	386,12	238,70	303,59
22	VDN	17,22	12,67	296,53	160,53	218,18
23	WSN	19,11	14,42	365,19	207,94	275,57
24	XAR	12,08	9,84	145,93	96,83	118,87
25	YLG	14,32	10,30	205,06	106,09	147,50
26	ZMN	18,77	16,75	352,31	280,56	314,40
27	AQN	19,20	15,16	368,64	229,83	291,07
28	BLM	20,03	15,02	401,20	225,60	300,85
29	CRD	21,13	18,09	446,48	327,25	382,24

No	Name	Initial Test (Pretest) X	Final Test (Post-test) Y	X ²	Y ²	X.Y
30	DNM	21,30	18,29	453,69	334,52	389,58
31	ESH	16,24	13,22	263,74	174,77	214,69
32	FKH	19,03	16,89	362,14	285,27	321,42
	Total	571,96	459,16	10489,38	6802,92	8431,82

From the standard deviation calculation, the standard deviation value of the initial test (pretest) of dribbling skills using the inside of the foot at SSB Barona U10-14 Years is 2.93. From the standard deviation calculation of the final test (post-test) of dribbling skills using the inside of the foot at SSB Barona U10-14 Years, the value is 2.63.

Based on the results of the analysis, the value of the mean difference test of agility training on dribbling skills using the inside of the foot at SSB Barona U10-14 Years is 7.98. After obtaining the results of the mean calculation, standard deviation calculation, and mean difference test, the next step is hypothesis testing. Hypothesis testing is conducted by comparing the calculated t value with the t table value. If the calculated t value is equal to or greater than the t table value, the null hypothesis (H₀) is rejected, indicating a significant difference. If the calculated t value is smaller than the t table value, the null hypothesis (H₀) is accepted, indicating that there is no significant difference.

Based on the calculations above, the calculated t value is 7.98, and the t table value with degrees of freedom 32 - 2 (df = 30) at a significance level of $\alpha = 0.05$ is 1.69. This means that $t_{\text{calculated}} = 7.98 > t_{\text{table}} = 1.69$. Therefore, it can be stated that the hypothesis proposed by the author, namely "There is an effect of agility training on dribbling skills using the inside of the foot at SSB Barona U10-14," is accepted. This indicates that the agility training treatment applied by the author at SSB Barona U10-14 can improve dribbling skills using the inside of the foot. Thus, the agility training applied by the author can be used in the training process with the aim of improving dribbling skills using the inside of the foot in football.

The research results show that the applied agility training provides a positive contribution to improving dribbling skills using the inside of the foot at SSB Barona U10-14. Systematic and well-programmed agility training is able to enhance movement coordination, reaction speed, and body control while carrying the ball. This greatly influences the quality of dribbling technique using the inside of the foot, because players are required to move quickly, be agile, and maintain ball control in various game situations. With increased agility, players can more easily perform maneuvers such as sudden changes in direction and speed without losing control of the ball.

Research Discussion

Football is a game played by two teams, each consisting of 11 players, with the objective of scoring goals against the opponent's goal while defending their own goal. The game uses a spherical ball made of leather or rubber, and players may use all parts of the body except the hands and arms. Only the goalkeeper is allowed to use the hands, and only within the penalty area. Football involves various basic movements such as locomotor, non-locomotor, and manipulative movements that form complex movement patterns. The team that scores more goals is considered the winner.

To achieve achievement in football, a player must have a combination of several important aspects, including physical, technical, and mental aspects. In line with this, Perdana (2024: 8) states that physical, technical, tactical, and mental aspects play a very important role in achieving maximum performance. These four aspects are complementary foundations in building optimal performance on the field. To produce optimal performance, mastery of basic techniques becomes one of the most important aspects.

Basic football techniques are fundamental movements that must be mastered by every player. Understanding and mastering these basic techniques enable players to contribute optimally in the game. According to Sugiyanto (2023: 25), basic techniques are essential for effective performance. Furthermore, Indarto (2019: 13–15) explains that there are several basic football techniques that must be mastered by players, including passing (the technique of passing the ball), control (the technique of stopping the ball), dribbling (the technique of carrying the ball), shooting (the technique of kicking or striking the ball forcefully toward the opponent's goal), heading (the technique of heading the ball), intercepting (the technique of winning the ball), sliding tackle (the technique of sweeping the ball), throw-in (the technique of throwing the ball into play), goalkeeping (the technique of catching the ball), and juggling (the technique of keeping the ball in the air to train ball control).

One of the most crucial techniques that players must master in football is dribbling (Perdana et al., 2025: 116). Dribbling is a football technique used to control the ball while moving on the field. Players dribble the ball by repeatedly kicking it, directing it toward the desired direction while maintaining control to prevent it from being taken by opponents. This technique requires balance, coordination, agility, and the skill to dribble the ball quickly and efficiently. Dribbling is used to get past opponents, create space, or organize team attacks.

One method that can be used to improve dribbling skills with the inside of the foot is agility training, which focuses on developing speed, balance, and body coordination. Agility training is very important because it allows players to move faster, change direction smoothly, and maintain ball control when facing opponents. One form of agility training that can be applied is the zig-zag drill, where players run through a series of cones or obstacles arranged sequentially on the field. This exercise not only trains body agility but also helps players maintain good ball control even when moving quickly or changing direction suddenly..

Based on the calculation of the mean scores of dribbling skills using the inside of the foot, there was an improvement from the initial test (pretest) with a mean score of 17.87 before the treatment, namely agility training conducted over 16 sessions, to the final test (post-test), which increased to 14.34. This improvement occurred because agility training enhances movement coordination, reaction speed, and body control while dribbling the ball. Through routine training conducted over 16 sessions, players became more agile in changing direction, maintaining balance, and controlling the ball more effectively. This directly impacts the improvement of dribbling skills, particularly using the inside of the foot.

The hypothesis test analysis yielded a calculated t value of 7.98, while the t table value with degrees of freedom $32 - 2$ ($df = 30$) at a significance level of $\alpha = 0.05$ is 1.69. This means that $t_{\text{calculated}} = 7.98 > t_{\text{table}} = 1.69$. Therefore, it can be stated that the hypothesis proposed by the author, namely "There is an effect of agility training on dribbling skills using the inside of the foot at SSB Barona U10-14," is accepted. This indicates that the agility training applied by the author at SSB Barona U10-14 can improve dribbling skills using the inside of the foot. Thus, the agility training implemented by the author can be used in the training process with the aim of enhancing dribbling skills using the inside of the foot in football.

CONCLUSION AND RECOMMENDATION

Based on the research results obtained through data processing and analysis from the study entitled "*The Effect of Agility Training on Dribbling Skills Using the Inside of the Foot at SSB Barona U10-14*", the following conclusion can be drawn: "There is an effect of agility training on dribbling skills using the inside of the foot at SSB Barona U10-14." This is supported by the calculation of the t value for the effect of agility training on dribbling skills using the inside of the foot, which is 7.98, while the t table value with degrees of

freedom $32 - 2$ ($df = 30$) at a significance level of $\alpha = 0.05$ is 1.69. This indicates that $t_{\text{calculated}} = 7.98 > t_{\text{table}} = 1.69$.

Recommendation

Based on the conclusions above, several recommendations can be made as follows:

For Athletes

Athletes are expected to regularly carry out agility training as part of their training program. This training is important for improving dribbling skills using the inside of the foot, as well as enhancing coordination and movement speed. In addition, athletes also need to maintain overall physical fitness to sustain their best performance during matches.

For Coaches

Coaches are expected to consistently and systematically incorporate agility training into the team's training program. Exercise variations that focus on developing coordination, agility, and speed are highly recommended to maximize athletes' dribbling abilities. Coaches also need to conduct regular evaluations to monitor progress and adjust training methods according to the needs of the athletes.

For SSB Barona

It is expected that SSB Barona provides adequate facilities and equipment for agility training and organizes training for coaches to enable them to apply these exercises effectively. In addition, SSB Barona should arrange a balanced training schedule covering technical, physical, tactical, and mental aspects to support the comprehensive development of athletes.

For Future Researchers

The results of this study can be used as a reference, and it is recommended that future research include additional variables beyond those used in this study. This will allow for a broader identification of factors that can improve dribbling skills using the inside of the foot in football.

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