



## **Shuttle Run Training On The Physical Performance Of Persik Kendal Football Players**

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### **Abstract**

Study this aiming for know influence shuttle run training against performance physique player Persik kendal football. Shuttle run is one of the form very important agility training in sport football, because involving movement fast, change direction, and speed reaction. The research method used is method experiment with pre-test and post-test design one group. Sample in study This is 20 players active Persik Kendal who follows the training program for 6 weeks with frequency 3 times per week. Instrument measurement covering test test 30 meter sprint speed, and power hold. The results of the data analysis show that there is improvement significant in aspects agility, speed and power stand after undergo the shuttle run program. With Thus, shuttle run practice is proven give influence positive to performance physique player Kendal Peach football.

**Keywords:** *Training, Shuttle Run, Performance Physique*

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## **INTRODUCTION**

Football is demanding sport various ability physical among them is speed, agility, and power stand. In the game football player often do a short sprint, stop suddenly, and turn or turn direction for chasing the ball or avoid opponent. Football is sport game demanding team various aspect performance physical, such as speed, agility, strength and power stand. A player football is demanded for capable do various movement complex in time short, such as sprinting, turning, dribbling the ball, and react fast to movement against and ball. Therefore that, coaching physique be one of component important in the training program team football. In an exercise program football, aspects physical is very important.

Physical exercise aiming for support performance techniques and tactics players on the field. One of the exercise frequent physical used is a shuttle run, because relevant with pattern frequent movement happen in games, such as change direction sudden, back and forth sprints, and

reactions fast to situation match. Therefore That's it, shuttle run practice becomes relevant because practice abilities the in a way direct.

Physical performance is ability body somebody in operate activity physique optimally, which involves various component condition physical like strength, speed, power endurance, agility, and coordination. In context sports, performance physique is base the main thing that determines quality and effectiveness movement athlete moment compete.

According to (Sugiono et al., 2023) performance physique is capacity physical possession athlete For do tasks sport with efficient, durable, and without fatigue excessive.

Physical Performance Components in Football is very complex and involves various aspect following speed (Speed) ability move in time short, especially during sprint. Very much needed For chasing the ball or do penetration (Sports et al., 2024 ). Agility ability body for change direction in a way fast and precise without lost balance. This is very important moment defending, dribbling, or move position. Endurance Ability body For endure to fatigue in term long time, good in aspect aerobics and anaerobic. Strength Muscle (Strength) is Important for physical duels, kicks, and maintain position. Power (Explosive Power) Muscle) Combination strength and speed, are very important for jump and shoot hard. Coordination Ability coordinate motion body to be effective and efficient moment play.

Reaction (Reaction Time) Ability respond with fast to game stimuli, such as movement against or ball. Physical Performance Measurement For evaluate change performance physical, used various instrument test such as the Illinois Agility Test for Sprint Test agility (30 m) for Beep Test speed for Power hold, Vertical Jump Test for Power Sit Up and Push Up Test Explosion for strength core and arm muscles.

The Relationship between Shuttle Run and Physical Performance Shuttle run training involves run fast back and forth accompanied by with change sharp direction. Activity this is very effective in increase Agility, because exercise This practice change direction in a way fast Speed, due to repeated sprints in distance short, Durability muscle and cardiovascular, because done in a way intensive and continuous.

With Thus, the shuttle run has contribution significant to improvement performance physique player football, especially in very relevant aspects with demands games.

Shuttle run training is exercise repetitive which requires athlete run back and forth in distance certain with speed height and change fast direction. This exercise trusted capable increase agility

and condition physique in a way overall, so that important for applied in a way systematic to athlete football.

The definition of Shuttle Run is type exercise or tests involving run back and forth in distance short with change direction in a way fast and repeatable. This exercise in a way general used for increase agility, speed, and power stand muscle (muscular endurance). In the world of sports, shuttle runs are very popular Because resemble movements fast in game like football, futsal, basketball and badminton parry.

According to (Soemardiawan & Wati, 2020) shuttle run is exercises that can increase ability body in do acceleration, deceleration, and change direction with fast and precise. The purpose of the Shuttle Run is to improve agility in do motion back and forth, Training reaction and coordination moment change direction in a way fast, Train Power stand anaerobic and capacity Work muscle, Increase performance related physical with game dynamic. Benefits of Shuttle Run in Soccer shuttle run is very important Because player must often do a short sprint to various direction, Chasing the ball or against in situation dynamic defend and attack in a way fast shuttle run practice consistent can increase mobility, reaction fast, and responsive body to situation tactical in the field. Research This done for prove influence shuttle run training against improvement performance physique player Persik Kendal football, which consists of from aspect agility, speed and power hold on. In the context of exercise physical, many approaches that can applied for increase performance player, one of them is shuttle run practice. Shuttle run is exercises that involve movement run back and forth in distance short with speed and change high direction. This exercise is very appropriate with characteristics motion in football, because can practice agility, speed, and power stand muscle (muscular endurance) simultaneously.

Persik Kendal football team as one of the active club compete at the level national naturally need a training program that is capable of support performance physique player optimally (Pamungkas. Based on observation early in the field, still there is a number of the player who shows limitations in sprint speed, slow moment move direction, and easy experience fatigue moment match enter minutes end. This is become indication that aspect performance physique Not yet fully reach ideal.

See importance role physique in support performance game, need done an effective, efficient and appropriate training program with need sport football (Azizi et. Shuttle run drills are scored as one of the solutions that can applied For answer problem However, the effectiveness of exercise This

in context coaching physique player Kendal Peach not yet Once investigated in a way scientific and systematic.

Based on description above, author interested For do study with Title " The Effect of Shuttle Run Training on Physical Performance " Player " Kendal Peach Football ", with hope results study This can give contribution positive to improvement quality coaching physique athlete football.

## **METHOD**

Study This use approach **quantitative** with method **experiment with** the research design used is One Group Pretest-Posttest Design, ie with do measurement before and after treatment on one same group.

### **Research Design**

This design depicted as following:



**Figure**

Information :

- O<sub>1</sub>: Pretest (measurement) beginning performance physique)
- X: Treatment (shuttle run training for 6 weeks)
- O<sub>2</sub>: Posttest (measurement) end performance physique)

Population All over player active team Kendal Peach football season competition year walk of 24 selected players use purposive sampling technique, namely players who are physique healthy and following the entire training program during study on going.

Variables Study that is Variables free (independent) with Shuttle Run Exercises while For Variables dependent, Physical performance (including agility, speed and power hold) Instrument Study For measure performance physique used Multistage Fitness Test Instrument Procedure Pre-test research was conducted before treatment for know condition beginning performance physique Players. Implementation Treatment Shuttle run exercises were carried out for 6 weeks, with

frequency 3 times per week. Every session in progress for  $\pm$  45 minutes, including warming up and cooling down. Post-test was conducted after 6 weeks for know change performance physical. Data Analysis Techniques the pre-test and post-test results will be analyzed using the paired sample t- test to see whether there is difference significant before and after practice. Data processing is carried out use help device soft SPSS 25 statistics and the level of significance used is  $\alpha = 0.05$ .

## RESULTS AND DISCUSSION

### Result

**Table 1 Analysis Results Statistics**

<i>Shuttle Run Test</i>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>
<i>Pretest</i>	24	16,255	0.8085	15.10	17.05
<i>Posttest</i>	24	11,910	0.5887	11.01	12.90

In accordance with table 1 above obtained results statistical analysis on *pretest shuttle run test* standard deviation 0.8085 minimum value 15.10 value maximum 17.05. While after do *treatment shuttle run test* on *posttest* obtained mark average 11,910 standard deviation 0.5887 minimum value 11.01 value maximum 12.90.

**Table 2 Normality Test**

<i>Shuttle Run Test</i>	<b>Statistics</b>	<b>N</b>	<b>Sig</b>	<b>Information</b>
<i>Pretest</i>	0.124	24	0.05	Normal
<i>Posttest</i>	0.141	24	0.05	Normal

The normality test shown in table 2 indicate that mark significance for *pretest shuttle run test* is  $0.124 > (0.05)$ , which shows that its value normally distributed. For *posttest* with value  $0.141 > (0.05)$  indicating significance that its value normally distributed, and the test correlation pearson done Because the data normally distributed.

**Table 3 T-Test Results**

<b>Posttest Data</b>	<b>Treatment</b>	<b>T Count</b>	<b>P&lt;0.5</b>	<b>Information</b>
<i>Shuttle Run Test</i>	Pretest Posttest	21,286	0,000	Significant

Table 3 above obtained the results show that value 21,286 with P value =  $0.000 < 0.05$  concluded that existence significant improvement between method exercise *shuttle run test* against performance physique player Kendal Peach football.

## **Discussion**

The results of the study showed that there was an increase in the physical performance of Persik Kendal soccer players after being given a shuttle run training program. This is evidenced by the significant difference between the pretest and posttest results in the player's speed, agility, and endurance tests.

Shuttle run training carried out regularly for 6 weeks has been shown to improve players' physical abilities, especially in terms of speed and agility. Shuttle run requires players to move quickly, change direction explosively, and control the body in short-distance back and forth movements, which is very appropriate for the needs of the game of soccer (Kurniawati, 2017).

This increase in physical performance is in line with the theory that shuttle run training is a form of agility and anaerobic training that is effective in building speed and the ability to change direction quickly (Nugroho et al., 2021). In addition, because it is carried out with high intensity and limited rest time, this training can also have a positive effect on muscle endurance and the cardiovascular system.

These findings are also supported by previous research. (Muhsin et al., 2021) showed that shuttle run training significantly increased the agility of adolescent futsal athletes. (Liu et al., 2024) stated that 8 weeks of shuttle run training significantly increased the sprint and reaction abilities of soccer players.

From these data, it can be concluded that shuttle run training directly contributes to improving functional physical performance in soccer games, such as short sprints, chasing the ball, outwitting opponents, and maintaining position.

However, it is important to note that the effectiveness of a training program is greatly influenced by several factors, such as training intensity, training duration, the initial physical condition of the players, and the discipline of the players in following the program. Therefore, the success of the shuttle run training program at Persik Kendal also reflects the consistency and motivation of the players in following the training.

## **CONCLUSION**

Based on results research and data analysis that has been done, can concluded that: Shuttle run practice provides significant influence to improvement performance physique player Persik Kendal football. This is seen from improvement results test speed, agility, and power stand after the training program implemented. Effective shuttle run training in develop component physique

main thing needed in game football, in particular speed in running, ability change direction in a way fast, and efficiency system breathing and circulation blood during activity intensive. With Thus, shuttle run practice can be done made into as method exercise alternative or complement in the training program physique player football, especially in the phase formation condition physique basic and specific.

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