

Relationship between Speed and Leg Muscle Strength with the Long Jump Squat Style Results in Class VIII Students at SMP Negeri 1 Penuguan

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Abstract: The purpose of this study was to determine the relationship between speed and leg muscle strength with the long jump squat style in class VIII students at SMP Negeri 16 Palembang. The method used is multiple correlation. Test variables x_1 (speed), x_2 (leg muscular strength), and Y (outcome of long jump squat style) are used in research data gathering methodologies. Hypothesis testing findings demonstrate a link between leg speed and muscular strength and the results of the squat style long jump in class VIII students at SMP Negeri 1 Selat Penuguan. According to the testing hypothesis, there is a link between speed and the results of long jump squat style. Second, there is a link between leg muscular strength and the outcomes of the squat-style long jump. Third, with the long jump squat method, there is a link between speed and leg muscular strength. The F-test results are then computed, and F table, this study concludes that H_a is accepted when $F_{count} (7.815) > F_{table} (2.87)$. This suggests that there is a link between speed and leg muscular strength and the outcomes of the squat style long jump in SMP Negeri 1 Selat Penuguan class VIII students.

Keywords: Leg Muscle Strength, Long Jump Style Results, Speed

A. Introduction

Athletics is a competitive sport played at school. Physical education teachers are always accountable for attempts to prepare athletes to participate in challenging training/extracurricular activities. The long jump is a straightforward sports discipline. (Sartono, 2018).

The long jump is a movement that involves traveling from one location to another by putting one leg up in front as far as possible (Taufan et al., 2018). Jump High, which is included in one area of Athletics. Jump for number. Jump Far is the outcome of horizontal velocity generated by prefixing with style and resulting vertically from kicking leg strength. The outcome of the second style determines the parabolic motion of the point center of gravity (Kurniawan et al., 2021).

Far is Wrong for a Branch Sport Jump One of the simplest sports in Junior High School nowadays. For that performance, it is expected to grow a long jump athlete to obtain National level results. According to Ghazali et al., (2022) there is a need for various methods to promote the development branch sport long jump and create seeds long jump athlete fresh for maintaining performance. A solid physical condition is required for long jump performance (Ghazali et al., 2022).

Physique in good condition Strength, particularly leg muscular strength, is required in the long jump squat technique, as is the ability to do continuous movement in the least amount of time. Every player must grasp the tactics used in displays games (Salahuddin, 2018).

Speed is defined as a person's ability to complete continuous movements in the lowest amount of time (Rohmansyah & Suharjana, 2015). Meanwhile, leg muscular strength refers to the capacity of the leg muscles to withstand a weight in a single try (Al-Amien, 2019).

The truth on the ground is that physical activities, particularly the long jump, are popular at SMP Negeri 1 Selat Penuguan since it is the easiest sport. The difficulty is that the long jump is less appealing to many groups, including class VIII students at SMP Negeri 1 Selat Penuguan, due to physical condition variables, particularly low leg muscle strength and student speed, whereas the long jump needs great strength and speed.

We are interested in examining the "Relationship between Speed and Leg Muscle Strength with the Long Jump Squat Style Results in Class VIII Students at SMP Negeri 1 Penuguan" based on the description and background provided above.

B. Methods

This study used a quantitative strategy with various correlations. Wesli (2021) defines population studies as full subject research. The population under investigation Students in class VIII at SMP Negeri 1 Selat Penuguan. In terms of demographic study, the student son has a total of 150 pupils. The withdrawal sample was taken using the basic random sampling procedure. Simple random sampling entails taking a sample at random. A sample is collected in such a way that each unit of study or unit element from the population has an equal chance of being picked as a sample by lottery (shaken like a social gathering) so that the research sample is acquired class VIII (Sihabudin, et al., 2017). As a sample, 36 people were used. Data collecting technique "is most steps strategic in research, because the main objective from study is get data" (Ahmadi, 2017).

B. Results and Discussion

The test findings demonstrate that there is a link between leg muscular strength and the outcomes of the squat style long jump in class VIII students at SMP Negeri 1 Selat Penuguan (H_a : approved, H_o : refused with r count $(0,932) > r$ table (0.334)). According to the findings of the hypothesis testing, there is a relationship between speed and leg muscle strength and the results of the squat style long jump in class VIII students at SMP Negeri 1 Selat Penuguan (H_a is accepted and H_o is rejected with $R.Y.X1,X2, = 0,587$ r table $= 0.334$). According to the findings of the F-count and F-table tests, H_a is accepted where F -count $(8,697) > F$ -table (2.87) . This suggests that there is a link between speed and leg muscular strength and the outcomes of the squat style long jump in SMP Negeri 1 Selat Penuguan class VIII students.

The authors performed research on speed and leg muscular strength using the findings of a squat style long jump in class VIII students at SMP Negeri 1 Selat Penuguan in this study. The purpose of this study is to see if there is any difference in speed (speed) and leg muscle strength with the results of the squat style long jump in class VIII students at SMP Negeri 1 Selat Penuguan.

Hypothesis testing revealed a link between speed and leg muscular strength and the outcomes of the squat style long jump in class VIII students at SMP Negeri 1 Selat Penuguan. According to the criteria for evaluating the first hypothesis, there is a link between speed and the outcomes of the squat style long jump in SMP Negeri 1 Selat Penuguan class VIII students (H_a accepted and H_o rejected with r count $(0,417) > r$ table (0.334)). Second, among class VIII students at SMP Negeri 1 Selat Penuguan, there is a link between leg muscular strength and the outcomes of the squat style long jump (H_a : accepted and H_o : refused with r count $(0,932) > r$ table (0.334)). Third, there is a link between speed and leg muscular strength and the outcomes of the squat style long jump in SMP Negeri 1 Selat Penuguan class VIII students (H_a accepted and H_o refused with $R.Y.X1,X2, = 0,587$ r table $= 0.334$).

Furthermore, based on the F-count and F-table test findings, this study may infer that where H_a is accepted, F -count $(7,815) > F$ -table (2.87) . This suggests that there is a link between speed and leg muscular strength and the outcomes of the squat style long jump in SMP Negeri 1 Selat Penuguan class VIII students.

C. Conclusion

Based on the research data analysis, it can be concluded that there is a relationship between speed and the results of the squat style long jump in class VIII students at SMP Negeri 1 Selat Penuguan (H_a is accepted and H_o is rejected with r count $(0,417) > r$ table (0.334)).

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