# EFFECT OF SPEED, AGILITY, AND QUICKNESS (SAQ) TRAINING ON SPEED OF PAKISTANI KABADDI PLAYERS

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## Abstract

SAQ training is an effective training program for improving the physical aspects of kabaddi players. This research aims to investigate the effect of SAQ training on the speed and weight of Pakistani kabaddi players." This study highlights the effects/ impact of 12 weeks of SAQ training on physical abilities like speed and weight among the male elite kabaddi players. Experimental research methods were used. The data was collected using experimental pre/post-intervention for 12 weeks. Twenty-20 male kabaddi players from Punjab Kabaddi Association Pakistan were selected for the study with an age range from 22 to 27 years. The selected participants were randomly assigned into two equal groups (control group & experimental group) of 10 participants from each group. Group I underwent SAQ training/experimental, and Group II acted as a control group without any training program. The 20m dash test was used to measure the speed of the participant. The results show significant improvements in agility values pre and post-intervention in the experimental group, the pre-speed value was (M 3.431 =, SD = .188353) to post-speed (M = 2.868, SD = .123720; t (10) = 8.802, p =.000 < significant level = 0.05) and weight of the EG group (M = 77.800, SD = 7.612855) to post-weight (M = 73.200, SD = 6.338594; t (10) = 8.493, p =.000 < significant level = 0.05). The overall results show significant improvement in speed and weight. Based on the results, there is a significant effect of 12 weeks of SAQ training on the speed and weight of Pakistani kabaddi players. Moreover, the SAQ training program has an effective and positive impact on developing the speed, agility, and quickness skill performance of male kabaddi players. It is recommended that the Pakistan Kabaddi Association provide maximum chances to the kabaddi players and apply the SAQ training program regularly to improve the selected parameters like speed and weight.

**Keywords:** SAQ; Training; Speed; Kabbadi Players.

## Introduction

The process of getting someone ready for any activity or event is called training. In sports, the phrase "sports training" is typically used by researchers to refer to the process of getting athletes ready for the best possible degree of fitness (Kumar, 2017). Training is the process of getting someone ready for a task or an occasion. Researchers typically refer to the process of getting athletes ready for the maximum degree of fitness in sports as "sports training." (Issurin, 2013). However currently sports training is not just a term, but it is a very important aspect that affects every individual who takes up physical activity or sports either for health and fitness or for competition at different levels. The term S.A.Q is created by combining the first letters of the abbreviations Speed, Agility, and Quickness. When one hears the word speed, one typically thinks of running events, although speed also affects numerous body parts and shifts from one area to the next (Kumar, 2018). Speed is a fundamental technical requirement for sporting performance in Kabaddi since it gives movement, speed, and coordination (Nithin et al., 2020). Quickness, agility, and speed are combined in the SAQ training method. The optimum biomechanical movement structures are used for all exercises, saving time and energy. Even though it is well known that kabaddi players seldom achieve their maximum speed when playing, a player's total success is more dependent on their early beginning and acceleration phases (Suresh & Kavithashri, 2021). Training in speed, agility, and quickness (S.A.Q.) is often used in sports like basketball, soccer, and football, as well as tennis, which need rapid movements and quick reflexes. Training to increase an athlete's speed, agility, and quickness—skills that are essential for success in a wide variety of sports—is the primary objective of the S.A.Q. program (Kusnanik et al., 2019). One of the primary goals of the S.A.Q. training program is to increase a player's speed by developing their capacity for swift acceleration and deceleration, a skill that is essential in kabaddi (Saumya, 2023). Moreover, training in S.A.Q. may assist players improve their speed and agility, which is essential for avoiding being caught by their opponents and evading being caught by defenders.

Kabaddi is a sport played at a high tempo, participants need to be able to respond rapidly to changing circumstances (Diswar et al., 2016). Training in S.A.Q. helps players develop rapid response speeds, which may be

very beneficial in the sport of Kabaddi (Anita et al., 2020). Kabaddi is a sport played at a high tempo, participants need to be able to respond rapidly to changing circumstances (Diswar et al., 2016). Training in S.A.Q. helps players develop rapid response speeds, which may be very beneficial in the sport of Kabaddi (Anita et al., 2020). Power and strength are essential components in the production of speed. Every time players take a step, the muscles in their legs go into full-on overdrive. Workouts like squats will train all of the muscles in the legs, from the quadriceps all the way down to the hamstrings. Squatting, jumping, and particularly sprinting are activities that need the leg muscles to cooperate with one another in order to produce a strong muscular contraction (Maleki & Abdollahi, 2021).

Players in Kabaddi need to be nimble enough to swiftly close the distance between themselves and their opponents, take them down, and prevent them from escaping or scoring points. In order to stop their opponents from scoring points, players need to be able to rapidly get into defensive positions (Mills, 2005). This requires a high level of speed. In order to keep their performance at a high level for the whole game of Kabaddi, players need to have both speed and endurance. When an athlete is strong, a greater percentage of the muscle fibers in his or her body will contract in tandem with each step, creating a stronger drive to go forward. It is possible for an athlete to improve their speed, vertical jump, and the accuracy with which they change directions if they create more force with each step. Learning how to run effectively should always come first in any program designed to increase running speed (Bompa & Buzzichelli, 2021).

**Methods & Materials**

The purpose of this study is to investigate how the speed of elite kabaddi players is affected by SAQ training. After receiving an ethical endorsement from the Punjab Kabaddi Association Pakistan male kabaddi players of Punjab age range 22-27 who were playing kabaddi from Punjab Kabaddi Association were selected for current research. Ethical approval was taken from the respective Kabaddi Association and Kabaddi players. The researchers used experimental, randomized control trials and pre/post-intervention. In this instance, the researchers chose 20 male elite Kabaddi players based on inclusion and exclusion criteria. The participants were split up into two groups: the experimental group and the control group. The experimental group was composed of 10 participants (EG, N=10) given the prescribed exercise protocol to for 12 weeks, whereas the control group (CG, N = 10) received no

exercise. The 20m dash test was used to measure the speed of both groups CG & EG.

Table 1. SAQ Training Protocol For 12 Weeks.

| Speed | Agility | Quickness |
|---|---|---|

One of the crucial aspects of the intervention was a six-minute warm-up before the training and a six-minute cool-down after the training.

**Data Analysis**

The International Business Machines Corporation IBM Statistical Product and Service Solutions (SPSS) version 26 was used to analyze the data using inferential statistical techniques (paired sample t-test and independent sample t-test).

**Results**

Table 2. Paired sample T-test showing the difference between Pre and Post-test Speed of (Experimental and Control Groups)

| Variable | Groups | Pre-test results (Mean ± SD) | Post-test results (Mean ± SD) | Pre and post-test results (Mean ± SD) difference | t | Sig. (2-tailed) |
|---|---|---|---|---|---|---|
| Speed | Control | 3.583±.236599 | 3.473±.267085 | 0.11±0.0304 | 1.400 | .800 |
| | Experimental | 3.431±.188353 | 2.868±.123720 | 0.563±.0.0646 | 8.802 | .000 |

*Significance level = 0.05, SD=Standard Deviation*

Table 2 demonstrates the male kabaddi players of CG Pre- and Post-intervention characteristics such as speed. There was no significant variance found in speed values pre- and post-intervention in the control group, the pre-speed value was recorded (M = 3.583, SD = .236599) to post-speed (M = 3.473, SD = .267085; $t_{(10)} = 1.400$, p =.800 > significant level = 0.05). It means that there is no significant difference regarding the pre and post-test agility of Pakistani kabaddi players of the control group. Also, paired samples t-test showed the speed characteristics of Male kabaddi players of EG Pre & Post-intervention.

There was a significant variance (decreasing in timing = Improvements in speed) found in speed values pre and post-intervention in the experimental group, the pre-speed value was recorded (M = 3.431, SD = .188353) to post-speed (M = 2.868, SD = .123720; $t_{(10)} = 8.802$, p =.000 < significant level = 0.05). The outcomes show that there is a significant difference in improvement regarding the pre and post-test Speed of Pakistani kabaddi players of the experimental group. Therefore, SAQ training is effective training for enhancing the speed of kabaddi players.

Table 3. Paired sample T-test showing the difference between Pre and Post-test weight of the Experimental and Control Groups)

| Variable | Groups | Pre-test results (Mean ± SD) | Post-test results (Mean ± SD) | Pre and post-test results (Mean ± SD) difference | t | Sig. (2-tailed) |
|---|---|---|---|---|---|---|
| Weight | Control | 77.700±8.407008 | 77.100±7.894440 | 0.6±0.512568 | 1.616 | .140 |
| | Experimental | 77.800±7.612855 | 73.200±6.338594 | 4.6±1.274261 | 8.493 | .000 |

*Significant level = 0.05, SD=Standard Deviation*

Table 3 demonstrates the male kabaddi players of CG Pre- and Post-intervention characteristics such as weight. There was no significant variance in weight values pre- and post-intervention in the control group, the pre-weight value was (M = 77.700, SD = 8.407008) to post-weight (M = 77.100, SD = 7.894440; $t_{(10)} = 1.616$, p =.140 > significant level = 0.05). It means that there is no significant difference regarding the pre and post-test of the weight of Pakistani kabaddi players in the control group.

Also, paired samples t-test showed the weight characteristics of Male kabaddi players of EG Pre and Post-intervention. There was a significant variance found in weight values pre- and post-intervention in the experimental group, the pre-weight value was (M = 77.800, SD = 7.612855) to post-weight (M = 73.200, SD = 6.338594; $t_{(10)} = 8.493$, p =.000 < significant level = 0.05). The outcomes show that a significant difference in improvement was found regarding the pre and post-test weight of Pakistani kabaddi players of the experimental group. Therefore, SAQ training is effective for the weight management of kabaddi players.

## Discussion

The purpose of this study was to find out the "effects of SAQ training on speed and weight of Pakistani kabaddi players." SAQ training is an effective training program for improving selected sports performance measures in amateur kabaddi players. This study also contributed to highlight the effect/ impact of 12 weeks of SAQ training on physical ability like agility and weight among the male elite kabaddi players. The current study shows that no significant difference was found regarding pre and post-test speed and weight of Pakistani kabaddi players of the control group. Further the research also indicates that no significant variation was found in the status of agility and weight of Pakistani kabaddi players control and experimental group before intervention. During the pre- test the speed value of mean and SD of CG was (M = 3.583, SD =

.236599) and post-test the value of mean and SD was (M = 3.473, SD = .267085) and weight values of the participants was (M = 77.700, SD = 8.407008) to post-weight (M = 77.100, SD = 7.894440; $t_{(10)} = 1.616$, p =.140 > significant level = 0.05). These results indicate that no significant difference was found regarding the pre and post-test of speed and weight of Pakistani kabaddi players of the control group because (p > significant level = 0.05). The results of the present study show that a significant improvement was found in the status of the speed of Pakistani kabaddi players' experimental group after intervention (Moselhy, 2020; Al- Saadi, 2016). During the pre-test the speed value of mean and SD of EG was (M = 3.431, SD = .188353) and post-test the value of mean and SD was (M = 2.868, SD = .123720) and the weight of the EG was (M = 77.800, SD = 7.612855) to post-weight (M = 73.200, SD = 6.338594; $t_{(10)} = 8.493$, p =.000 < significant level = 0.05). These results indicate that is significant difference regarding the pre and post-test of speed and weight of Pakistani kabaddi players of the experimental group because (p =.000 < significant level = 0.05).

The result of this study shows an improvement in speed and weight which was significantly changed after post-training. Furthermore, the researcher found that there is a significant effect of 12 weeks Agility, Speed, and Quickness (SAQ) training program on the speed and weight post-intervention of Pakistani kabaddi players. Tamilselvan and Hassan (2022) reported that the speed performance of the kabaddi players improved after twelve weeks of SAQ and skill-based training. This study also contributed to highlighting the effect/ impact of 12 weeks of SAQ training upon physical abilities like speed and weight among the male elite kabaddi players age range 22-27. Moreover, Jovanovic et al (2011); Milanovic et al (2014), Azmi and Kusnanik (2018), and Mahmoud (2017) reported that the SAQ training program is an effective way to improve speed, agility, and quickness. Similalrly, Mohamed and Larion (2018) examined how SAQ training affected several physical characteristics and performance levels of kabaddi players.

Based on the above discussion, it could be clearly stated that SAQ training has a positive effect on the physical development of the players. Moreover, this study is specially designed to examine the kabaddi players' physical components of the 12 weeks of SAQ training. Hence, understanding has been advantageous in the current study.

**Conclusion**

The primary aim of this study was to ascertain the "Effect of SAQ training on the speed of Pakistani kabaddi players" SAQ training is an effective training program for improving selected sports performance measures in amateur kabaddi players. This study also contributed to highlighting the effects of twelve weeks of SAQ training on physical abilities like speed and weight among the male elite kabaddi players age range 22-27. Based on the results, the researcher found that there is a significant difference in improvement regarding the pre and post-test of speed and weight of Pakistani kabaddi players of the experimental group.

**Limitations**

The main limitation of this particular study is proper diet control for the subjects.

**Recommendations**

Considering the result of the present investigation, Trainers of the kabaddi game must be equipped with the conduct of the SAQ training protocol in order to develop the speed and lose the weight of the kabaddi players.

Different age groups such as 15-20 and above 30 years may be utilized with the same protocol to generalize the understanding.

The rest of the health-related components like strength, agility, and power could be examined in the SAQ training. Kabaddi Association needs to consider and incorporate SAQ training protocol to advance the physical components of the kabaddi players.

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