

## EFFECT OF SAQ TRAINING ON SELECTED PHYSICAL FITNESS VARIABLE ON BASKETBALL PLAYERS

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Basketball is very fascinating modern game with fast and excitement action. Successful performance in basketball requires the physical fitness and precise skill to accomplish desired result. This study aimed to find out the effect of 6 week SAQ training on physical fitness variables of basketball players. For this purpose the researcher selected 20 male basketball players, age ranges between 21-25 years. Samples were selected at Punjabi university Patiala (Punjab). Random sampling technique was applied to select the sample. Physical fitness variables i.e. speed, agility and explosive strength were selected for this study. The SAQ training administered for 6 weeks by the investigator himself. At the start of the programme data was collected on the selected physical fitness variables on basketball players as the pre-test data and at the end of 6 weeks the post-test data was collected for the analysis purpose. During data collection period, the subjects were not allowed to participate in any training and competition. As the training session an advance, the intensity of load was increased by increasing repetition, duration and difficulty level of exercise. The Statistical Package for the Social Sciences (SPSS) version 21 was used for all analyses. The differences in the mean of each group (Pre Group & Post Group) for selected variable were tested for the significance of difference by applying paired samples t-test. For testing the hypotheses, the level of significance was set at 0.05. The results showed that there is a statistically significant ( $P > .05$ ) difference found between all the physical fitness variables i.e. speed, agility and explosive strength. The result proved that after 6 weeks of SAQ training on basketball players improve the rate of speed, agility and explosive strength.

**Keywords:** SAQ, Speed, Agility and Explosive Strength.

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## Introduction

Sport has an exceptional ability to attract, prepare and inspire by its tendency. It is about incorporation and citizenship. It represents human qualities, for example, regard for the opponent, acceptance of binding rules, teamwork and fairness, which are all standards which are likewise contained in the Charter of the United Nations, 1945. The study of sports preparing has its own systemized group of information and thus is a science in itself. Sports are typically represented by a bunch of rules or customs, which guarantee fair competition and allow consistent adjudication of the winner. Winning not set in stone by actual job occasions, for example, scoring objectives or crossing a line first or by the assurance of judges who are scoring components of the wearing presentation, including objective or subjective measures such as technical performance or artistic impression.

Dr James Naismith, the designer of the sport of Basketball expressed (1914) that the primary standard on which the game was based was that it ought to request of, and foster in, the player the most elevated kind of physical and athletic turn of events. To take special care of the body's need for strength in all planes of movement, the fitness expert ought to coordinate developments at different paces and body positions into their athlete's training plan. This can be made conceivable with S.A.Q training, as well as changing activity determination and procedures. While improving and refining a player's basketball skills significant for upgrading the nature of play, it is the improvement of the player's athletic skills that permits him to raise his play to a more elevated level. Athletic skills incorporate factors, for example, speed, power, endurance, agility, coordination, balance and reaction time. Further developing these athletic skills is basic to the all out improvement of the athlete. The level at which basketball skills are performed is straight forwardly connected with the level of the athlete's total conditioning.

Speed, agility, quickness (S.A.Q) started in the USA and was created during the 1980s and made famous by different coaches working in American football. From that point forward, the program has been refined for use in different games. Agility is the ability to keep up with or control body position while rapidly taking a different path during a progression of developments.

Agility training is believed to be a re-implementation of engine programming through neuromuscular conditioning and neural adaptation of muscle spindles, golgi-tendon organs, and joint proprioceptors. Agility, acceleration, change of direction, deceleration, and sprinting are viewed as basic specialized abilities and the principal components of training. The ability to sprint and to take a different direction while sprinting are determinants of performance in field sports, as proven by time and motion analysis. Competition is so intense at all levels that neither coach or player can afford to ignore using scientific training techniques that can give them an advantage over, or at the very least, keep them on level with, their competitors. As the perfection of the skillfull performance depends on the range of development of the special physical abilities to perform such requirements. The player's ability to gain physical abilities is frequently used to judge skillful performance. Presently, sports has become extraordinarily competitive. It's not just the participation or follow that drives an individual to win. Sports are impacted through different parts like games preparing, physiology, psychology, sociology, biomechanics and medical specialty and so on. The mentors, coaches, trainers, educational personnel's, doctors and physiotherapists are doing everything they possibly can for brighten up the job of the players of the various nations at International Level. Athletes of the numerous nations are trying difficult to awards for their countries inside the International contests.

Speed, agility and quickness training can cover the total range of training intensity, from low to high intensity. Each individual will come into a training program at an alternate level; subsequently training intensities should concur with the individual's abilities. Low intensity speed, agility and quickness drills can be utilized by everybody for various applications. No critical preparation is expected to take part at this degree of speed, agility and quickness training. Higher intensity drills require a critical degree of preparation. A basic way to deal with safe support and expanded viability is to begin simultaneous strength preparing program while beginning speed, agility and quickness training.

## Subjects and Methods

The SAQ training administered for 6 weeks by the investigator himself. At the start of the programme, data was collected on the selected physical fitness variables on basketball players as the pre-test data and at the end of 6 weeks the post-test data was collected for the analysis purpose. During data collection period, the subjects were not allowed to participate in any training and competition. As the training session an advance, the intensity of load was increased by increasing repetition, duration and difficulty level of exercise.

Variables:

Physical Fitness Variables:

- 01. Speed
- 02. Agility
- 03. Explosive strength

**Results**

This is an exploratory study that has employed methods of data collection and analysis quantitatively. The differences in the mean of each group for selected variable were tested for the significance of difference by paired sample 't' test.

For each of the chosen variable, the result pertaining to paired sample 't' test among Basketball Players on the Physical fitness variables (i.e., Speed, Agility and Explosive Strength) are presented in the following table:

Table-1 Comparison of Mean differences between Pre-Test and Post-Test of SAQ training group results of Basketball Players with regards to Physical Fitness Variables.

*Enclosed as Annexure 01*

Table-1 Shows that the SAQ training group difference with regard to Speed between 7.75 & 7.55 for pre and post whereas the SD is .50 & .49. In the case of Agility mean and SD for pre-test values are 15.87 & 12.46 and for post-test .80 & 1.19 respectively. The mean value of Explosive strength for pre-test is 1.96 and for post-test are 2.50. The SD values are .10 and .35 of explosive strength. The t-value was found to be statistically significant as the value obtained of Speed of 3.53\*, 19.34\* for Agility and -7.85\* is for Explosive Strength. So it depicts that there is significant difference found between pre and post-test of Speed, Agility and Explosive Strength.

Figure-1 Graphical Representation of Mean Scores (Pre -Test & Post Test) of Basketball Players with regards to Physical Fitness Variables.

*Enclosed as Annexure 02*

**Discussion & Conclusions**

The findings showed that there is a statistically significant (P > .05) difference was found between pre and post-test values of all the physical fitness variables (i.e. Speed, Agility and Explosive strength). The result proved that after 6 weeks of SAQ training basketball improve the rate of speed, agility and explosive strength.

**Annexure**

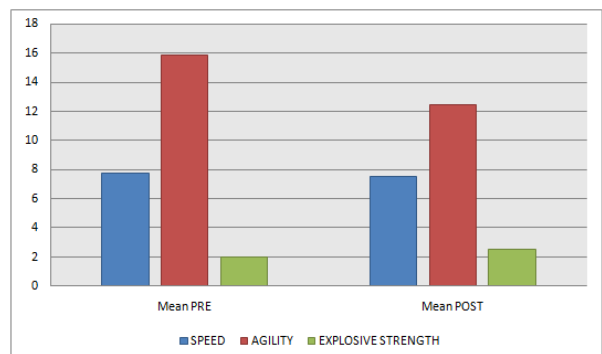
Annexure 01

*Table-1 Comparison of Mean differences between Pre-Test and Post-Test of SAQ training group results of Basketball Players with regards to Physical Fitness Variables.*

Variables	Group	N	Mean	Standard Deviation	Mean Diff	Std. Error Mean	't'
Speed	PreTest	20	7.75	.50	.19	.06	3.53
	PostTest	20	7.55	.49			
Agility	PreTest	20	15.87	.80	3.41	.17	19.34
	PostTest	20	12.46	1.19			
ExplosiveStrength	PreTest	20	1.96	.10	-.54	.07	-7.85
	PostTest	20	2.50	.35			

*Annexure 02*

Figure-1 Graphical Representation of Mean Scores (Pre -Test & Post Test) of Basketball Players with regards to Physical Fitness Variables.



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