



**ORIGINAL RESEARCH PAPER**

**Physical Education**

**CORRELATION BETWEEN DIFFERENT STRENGTH VARIABLES AND AGILITY OF MALE CRICKETERS**

**KEY WORDS:** Correlated study, Strength, Agility and Cricketers.

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**ABSTRACT**

In an era of mobiles and tablets, the major concern of parents is well being of their child. In today's fast, challenging and competitive world students are following a time table which is so rigrous that there is limited scope of physical activities. Since parents know about the important of physical and mental fitness, and the fact that they themselves have hardly any time to personally spend with their child, they get influenced by the coaching centers of different games and make their child join them. In the study we will analyse and know the physical fitness parameters(strength & agility) of male teenagers playing cricket in the age group 14-19 years of district kurukshetra (Haryana). We conducted three general motor abilities tests i.e. standing Broad Jump, zigzag run and soft ball throw. The result exhibited the correlated study of agility and different strength variables.

**INTRODUCTION:-**

The major concern of the parents today is health of their wards. Now a day's students are following a rigorous way of study so at most concerns of the parents are physical and mental wellbeing of their children. So parents get influence by the coaching center of different games and indulge their children in some or the other activities.

When it comes about sports in India, the game of bat and ball is most popular. Cricket undoubtedly is one of the most famous and most endorsed sports in India. Because of its charm and popularity, there are innumerable coaching academies that revolve around this sport. Cricket is very popular in youth especially in school going children now days. If we see our surroundings, we feel that every 3 children of five are much found off cricket. Many coaching and training classes around our society are established due to the interest of school going as well as college students for make them cricketer. But if we talking about the physical fitness we found that cricket can be useful to fulfill our desirable fitness. In cricket we used lot of running activities like bowling, fielding etc. and coordination activities like catching, bating etc which affect our physical fitness components. These activities are helpful for physical as well as mental growth of children. In the modern era our life style is too much mechanicalised. We see in our surroundings that children are used to play some gadget activities, either in the form of video game or surfing the internet. This affects the standard of physical and mental growth & development. At home parents have no time to develop their physical qualities.

**METHODOLOGY:-**

To achieve the aim of the study, we conducted three physical fitness tests, under the age group of 14 to 19 years male cricketers of kurukshetra. Data was collected only of those players who represented their team in District level. All the data was collected in the day time during school hours with the permission of their respected principals. We selected these tests from Barrow Motor Ability test battery. For analyzing the data we used Karl Pearsons Rank Order Method. Coefficient of correlation was used to find out the relationship between leg strength & shoulders strength, Leg strength & agility and shoulder strength & agility. For measuring the leg strength, shoulder strength and agility, we conducted standing broad jump, soft ball throw and zigzag run tests respectively.

**RESULTS AND DISCUSSIONS:-**

**TABLE -1 CORRELATION BETWEEN LEG STRENGTH VS SHOULDER STRENGTH AND AGILITY VARIABLES OF CRICKETERS**

Sr No	FIX VARIABLES	OTHER VARIABLES	CORRELATION COEFFICIENT	STATUS OF CORRELATION
1	LEG STRENGTH	SHOULDER STRENGTH	0.72	HIGH DEGREE
2	LEG STRENGTH	AGILITY	0.81	HIGH DEGREE

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Leg strength, shoulder strength and agility are dominating factors to excel in the competitive game since this game requires a lot of sprinting movements, catching movement's footwork, run up and explosive jumps.

Table 1 gives the coefficient of correlation of the leg strength variable with the shoulder strength and agility variables. The coefficient of correlation between leg strength and shoulder strength in 0.72 and between leg strength and agility is 0.81.

Leg strength and shoulder strength was significantly and high degree related to other variables. With the help of result we can say that in the game of cricket we required lot of leg strength with shoulder because various main skills (field and throw) of cricket are much concerned.

Leg strength and agility also high degree correlated as we seen in the result. Bolwing, quick catches and wicket keeping are the skills in which requires great strength of leg with the combination of agility. With the help of result we can affirm that in the game all the players are required to be in action. They must sprint, chase the leather and make a dive to stop the ball before it crosses the boundary line. For all this lot of leg strength is quintessential. Bowling and fielding are the skills which require great strength of shoulder in combination with agility as can be seen in table below.

**TABLE -2 CORRELATION BETWEEN SHOULDER STRENGTH AND AGILITY OF CRICKETERS**

Sr No	FIX VARIABLES	OTHER VARIABLES	CORRELATION COEFFICIENT	STATUS OF CORRELATION
1	SHOULDER STRENGTH	AGILITY	0.73	HIGH DEGREE

Table 2 gives the coefficient of correlation of shoulder strength variable with the agility variable. The coefficient of correlation between agility and shoulder is 0.73. The coefficient of correlation of agility and shoulder strength variables was significantly and high degree related to each other. As in cricket throwing the ball is also an essential part of game. If we have good leg strength than we can run fast and field fast in the field and on having considerable shoulder strength makes one throw quickly and accurately. Results show that agility and shoulder strength are dominating factors in various skill of cricket.

**CONCLUSION:-**

The present study showed that substantive amount of physical strength in shoulders, leg and agility are the key parameter for a player in cricket. And this is complemented by the results obtained from the study. Now these might just not be all the factors important from a player's perspective but it opens up plethora of options for research to completely comprehend the various physical aspects of the body that need focus to develop great players in an early stage from coach's perspective.

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