



ISSN: 2456-0057  
IJPNPE 2016; 1(2): 104-106  
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www.journalofsports.com  
Received: 26-05-2016  
Accepted: 30-06-2016

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## Relationship among fitness component between male and female boxers of SAI center Haryana

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### Abstract

The purpose of the study was to find out the correlation among male and female boxers of SAI centers Haryana. A total of 40 boxers (20 male boxers) and (20 female boxers). Their ages are ranged between 14 to 17 years. To measure the speed (50 mt. dash test), arm and shoulder strength (pull-up strength), abdominal strength (sit-up test), reaction test (nelson hand reaction test), Coordination (alternative hand eye coordination test) and balance (strick stock stand test) was used to measure these physical fitness components. To determine the statistically significant relationship between male and female boxers of SAI centers in Haryana were established by computing coefficient of correlation. For testing the hypothesis, the level of significance was set at 0.05 level.

**Keywords:** Muscular strength, Abdominal strength, Coordination, Male, Boxers

### Introduction

It is a hard fact that physically fit people are in a better position to bear the rigorous and abnormal stress and strain, than those who are less physically fit. Fleishman used the term 'physical fitness' to mean functional capacity of individual to perform certain kind of task requiring muscular activity. Physical fitness is a multifaceted continuum extending from birth to death, affected by physical activity. A person who does not enjoy healthful living is a burden not only on himself but also on his nation and on the human society as well. Where a person who has a good health is assets and without health one cannot enjoy the blessing of nature and human life.

### Objective of the study

1. To find out the relationship among speed with muscular strength, abdominal strength, agility, reaction test, coordination and balance between male and female boxers of SAI centers in Haryana.
2. To find out the relationship among agility with muscular strength, abdominal strength, speed, agility, reaction test, coordination and balance between male and female boxers of SAI centers in Haryana.

### Methodology

A total of 40 boxers 20 (male) and 50 (female). Their ages are ranged between 14 to 17 years. To measure the speed (50 mt. dash test), arm and shoulder strength (pull-up strength), abdominal strength (sit-up test), reaction test (nelson hand reaction test), coordination (alternative hand eye coordination test) and balance (strick stock stand test) was used to measure these physical fitness components. To determine the statistically significant relationship between male and female boxers of SAI centers in Haryana. Male and Female boxers were established by computing coefficient of correlation. For testing the hypothesis, the level of significance was set at 0.05 level.

### Result and Interpretation

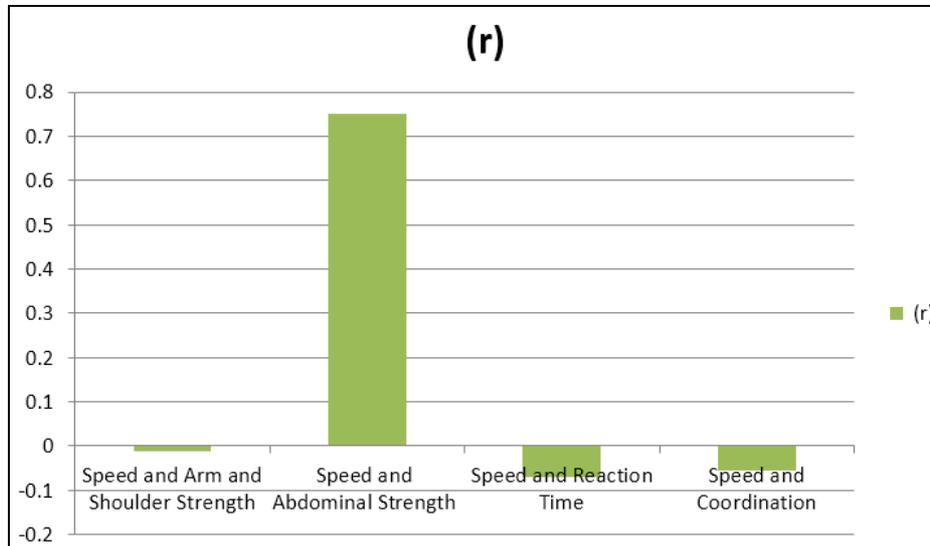
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**Table 1:** Relationship between speed and other component of fitness of male and female boxers of SAI centres in Haryana

| S. No. | Components Correlated               | (r)   |
|--------|-------------------------------------|-------|
| 1.     | Speed and Arm and Shoulder Strength | -.012 |
| 2.     | Speed and Abdominal Strength        | .75   |
| 3.     | Speed and Reaction Time             | -.070 |
| 4.     | Speed and Coordination              | -.055 |
| 5.     | Speed and Balance                   | .135* |

\*Significant at 0 .05 level

It may be observed from table that speed was significantly related to physical fitness component of balance (.135) of the Haryana and Delhi male boxers. Whereas other components of physical fitness arm and shoulder strength  $r=-.012$ , abdominal strength ( $r=.70$ ), reaction time ( $r=-.070$ ), coordination ( $r=-.055$ ), did not show any statistically significant coefficients of correlation with arm and shoulder strength of male and female boxers of SAI centres in Haryana



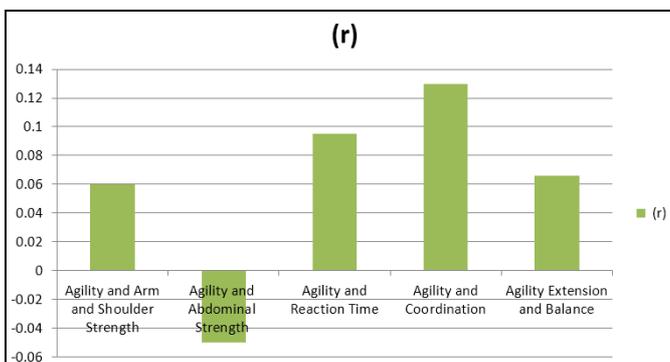
**Fig 1:** Graphical representation of correlation between speed and other component of fitness of male and female boxers of SAI centres in Haryana

**Table 2:** Relationship between agility and other component of fitness of male and female boxers of SAI centres in Haryana

| S. No. | Components Correlated                 | (r)   |
|--------|---------------------------------------|-------|
| 1.     | Agility and Arm and Shoulder Strength | .060  |
| 2.     | Agility and Abdominal Strength        | -.050 |
| 7.     | Agility and Reaction Time             | .095  |
| 8.     | Agility and Coordination              | .130* |
| 9.     | Agility Extension and Balance         | .066  |

\*Significant at 0.05 level

It may be observed from table 13 that agility was significantly related to physical fitness component of coordination ( $r=.130$ ) of the Haryana and Delhi male boxers. Whereas other components of physical fitness arm and shoulder strength ( $r=-.060$ ), abdominal strength ( $r=-.050$ ), reaction time ( $r=.095$ ), coordination ( $r=-.130$ ) and balance ( $r=-.066$ ) did not show any statistically significant coefficients of correlation with agility of male and female boxers of SAI centres in Haryana.



**Fig 2:** Graphical representation of correlation between agility and other component of fitness of male and female boxers of SAI centres in Haryana

**Conclusion of the study**

1. Agility was significantly related to physical fitness component of coordination Whereas other components of physical fitness arm and shoulder strength, abdominal strength, reaction time, coordination and balance did not show any statistically significant coefficients of correlation with agility male and female boxers of SAI centres in Haryana.
2. Speed was significantly related to physical fitness component of balance Whereas other components of physical fitness arm and shoulder strength, abdominal strength, reaction time and coordination did not show any statistically significant coefficients of correlation with arm and shoulder strength of male and female boxers of SAI centres in Haryana.

**Bibliography**

1. Motor fitness variables of agility, flexibility, reaction time, strength and explosive power (SBJ), showed significant relationship with smash skill of boys badminton players.
2. Insignificant correlation was observed between smash skill and speed, balance, explosive power (VJ) of boy’s badminton players.
3. Motor fitness variables of speed, agility, explosive power (VJ, SBJ), showed significant relationship with smash skill of girl’s badminton players.
4. The Motor fitness variables of strength, balance, flexibility, reaction time for girl’s badminton players did not showed any significant relationship with smash skill of girl’s badminton players.

### References

1. Barrow HM, McGee R. The practical approach to Measurement in Physical Education. Philadelphia: Lea and Febiger. 1979, 113.
2. Chi SC. The study of a specific badminton physical fitness test on badminton singles players. Journal of physical education and sports. 1996; 6(2):63-81.
3. Chang WJ. The relationship between basic motor ability and effects of skill learning in elementary School beginning badminton players, 2007. [http://140.133.6.46/ETD-db/ETD-search/view\\_etd?URN=etd-0521107-132753](http://140.133.6.46/ETD-db/ETD-search/view_etd?URN=etd-0521107-132753).
4. Johnson BL, Nelson JK. Practical measurements for evaluation in physical education. 4<sup>th</sup> edition. Minneapolis: Burgess, 1979.
5. Tergerson RL. The relationship of selected measures of wrist strength, vision and general motor ability to badminton playing ability. Completed Research in Health Physical Education and Recreation. 1965, 7(77).
6. Whetnall P, Morris R. An introduction to badminton. Video Sports for all in association with Astral Sports and Leisure. Badminton association of England, 1981.