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**Dr. Mahender Singh**  
Joint Director Sports  
Department Chandigarh,  
India

**Chander Pal Moriya**  
Physical Education Teacher,  
JNV, MOGA, Punjab, India

## Motor fitness variables among women and men: Comparative study

**Dr. Mahender Singh and Chander Pal Moriya**

### Abstract

The main purpose of the study was to compare the Motor fitness variables among men and women kho kho players. The subjects were 100 male and 100 female of Panjab University inter college level Kho-Kho players between 18 to 25 years of age. These students were studying in various affiliated colleges and various departments of Punjab University, Chandigarh. Motor fitness variables of study were Agility, Balance, Coordination, Power and Reaction time were measure by the tests AAHPERD agility test, Flamingo balance test, Alternate hand wall toss test, Sergeant jump test and Reaction time ruler test respectively. The data were analysed by the t test. The result shows that the men have more balance, coordination and power as compare to women whereas the women have more agility, and reaction time then men.

**Keywords:** motor fitness, Agility, Balance, Coordination, Power and Reaction time

### 1. Introduction

The player's must be aware of the different types of fitness to develop an effective training program that centre on weak or important areas. Motor fitness or motor physical fitness, refers to how the player's can perform at owns and sport and games, and involving the skills of agility, coordination, balance, power, and reaction time. So these five components of motor fitness are required to compete at high levels competitions, which is why the concept is seen as an essential part of any Sports person's training program. Motor fitness, also use the term motor ability, refers to individual performance as influence by the speed, agility, power, co-ordination and balance. The improvement of these abilities is very accommodating and essential in sports training and different kinds of training are required to achieve these motor abilities.

The research scholar went through the literature available regarding the contribution of different motor fitness components to the playing ability in Kho-Kho players. However after going through it was found that insufficient scientific work has been done in this filed. Keeping this in the mind and after consultation with experts, finally research scholar have under taken the present study to predict the playing ability of male and female Kho-Kho players of inter college level through motor fitness variable. In the game of kho-kho lots of fitness, motor fitness and skills are required to perform.

The game of kho-kho is stand on the natural principal of physical development. It is extremely enjoyable thrilling game, speed is heart of the game and to play four innings with same speed the players need a large amount endurance and stamina to controlled sprint, dodging, diving are the skill throughout the game. The defender perform such skill in the game like swift, zigzag running, circle running, faking stopping, twisting upper body, bending etc. produce great psycho neuromuscular co-ordination especially at abdominal and spinal region. In the fast tempo of the game, perceptual motor skill must be needed through assessment and applied in the field. The kho-kho stress great skillful execution in chasing, running, faking, diving, pole dive, attacking, covering. Must be needed in kho- kho players. Extra it needs quickness, reflection, intelligence according to game situation and perfect eye sight. The repetitive movements continue kho-kho, zig-zag running. Sudden fast movement, sudden slow movement, footwork may cause to injury. In kho-kho development of back, abdomen, neck muscles, leg strength for running and chasing etc. should be developed by the coach and different training method must be used for development of the kho-kho players.

**Correspondence**  
**Dr. Mahender Singh**  
Joint Director Sports  
Department Chandigarh,  
India

In the game every players want to perform their best in the filled in chasing and running skills. Some following motor fitness variables are required in kho kho players.

The kho- kho players performance depends high level of motor finest factor like speed, endurance, agility, power, flexibility, balance, reaction time, neuromuscular co-ordination, explosive strength, speed of movement and match practices are the principal qualities which should go with the kho-kho players. The Coach and game expert must be looked-for to develop these abilities in the kho-kho players through implement the various training methods. Now a day's more development noticed in this game if they are physical fitness, skill development, team work and standard of individual player all is improving day by day.

**2. Procedure and Methodology**

The objective of the present study was to compare the selected Motor fitness variables in emn and women kho kho players. The subjects were 100 men and women of Panjab University inter college level Kho-Kho players between 18to 25 years of age. These students were Punjab University, Chandigarh. All the players used as subject had participated in the Panjab University inter college Kho-Kho championship for men during the year of 2011-2012. The t test was used to compare the men and women data.

**3. Results and Discussion**

**Comparison of Men and Women of Kho-Kho Players With Regard To Selected Motor Fitness Variables**

**Table 1** - Explain that the mean value of men were found to be 11.35 with standard deviation of 2.42 whereas mean value of women were recorded 12.96 with standard deviation of 2.58 with regard to variable agility.

| Variable      | Condition | Mean  | SD   |
|---------------|-----------|-------|------|
| Agility       | Men       | 11.35 | 2.42 |
|               | Women     | 12.96 | 2.58 |
| Balance       | Men       | 7.5   | 2.40 |
|               | Women     | 5.15  | 2.15 |
| Co-ordination | Men       | 13.41 | 2.04 |
|               | Women     | 8.42  | 2.53 |
| Power         | Men       | 46.54 | 5.94 |
|               | Women     | 35.76 | 6.05 |
| Reaction time | Men       | 26.29 | 6.52 |
|               | Women     | 29.86 | 6.59 |

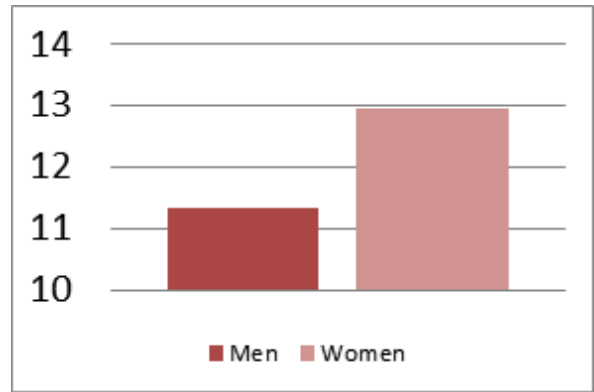
On the variable balance, men and women revealed the mean score of 7.5 and standard deviation 2.40 for men whereas the same score of 5.15 and standard deviation 2.15 for women.

In case of co-ordination the mean score, standard deviation of men were 13.41, 2.04 and in case of co-ordination the mean score, standard deviation of women were 8.42, 2.53.

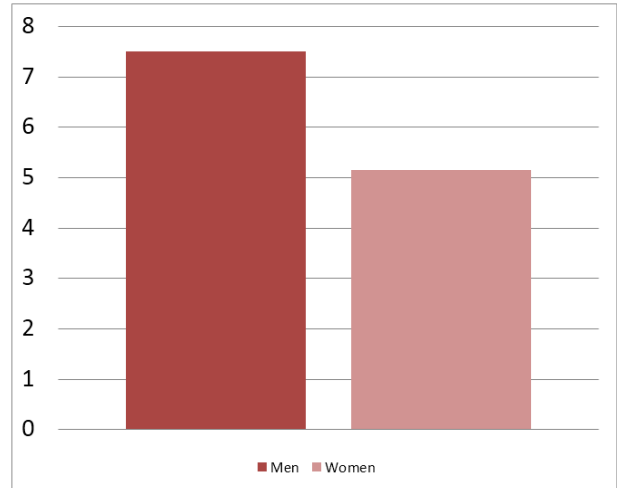
On the variable power, men and women revealed the mean score of 46.54 and standard deviation 5.94 for men whereas the same score of 35.76 and standard deviation 6.05 for women.

In case of reaction time the mean score, standard deviation of men were 26.29, 6.52 and in case of reaction time the mean score, standard deviation of women were 29.86, 6.59.

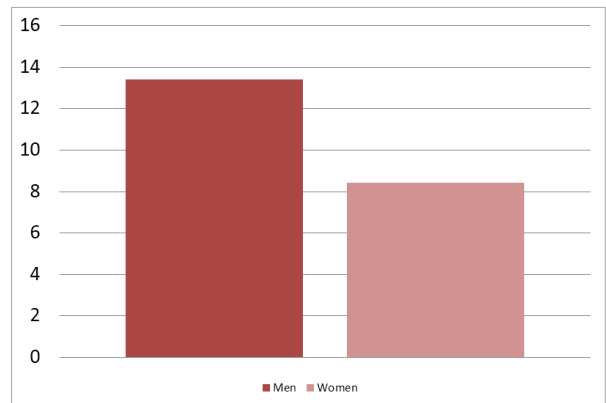
The mean score of men and women of the kho kho players on selected motor fitness variables are depicted graphically in figure 1-5.



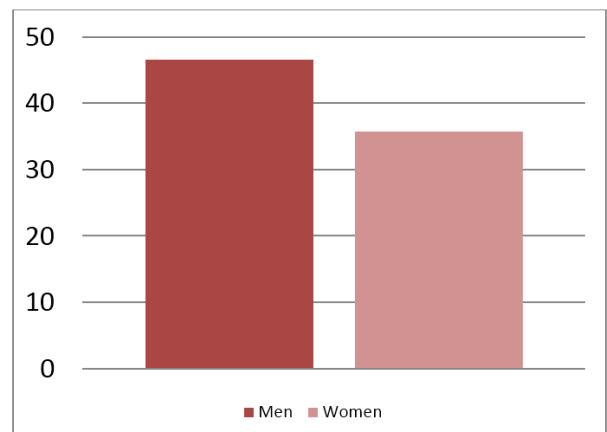
**Fig 1: Agility**



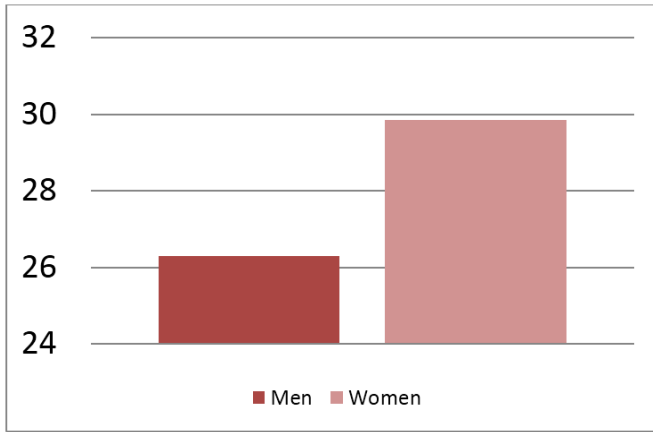
**Fig 2: balance**



**Fig 3: Co-ordination**



**Fig 4:- power**



**Fig 5:** Reaction time

#### 4. Conclusion

The result shows that the men have more balance, coordination and power as compare to women whereas the women have more agility, and reaction time then men.

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