



COMPARATIVE STUDY ON SPEED AND AGILITY BETWEEN INDIGENOUS AND NON-INDIGENOUS GAME PLAYERS IN BIRBHUM

Himlu Chowdhury¹; Dr. Ashok Kr. Goon²

Research scholar DPESS visva- bharati¹; Professor DPESS Visva-bharati²

ABSTRACT

Background: There are a considerable number of published studies related to the kinanthropometric and physiological variables but there is little data on the motor performance of soccer players in Bolpur region according to playing level.

Purpose of the study: The purpose of the present study was to compare the speed and agility between indigenous and non-indigenous game players in birbhum.

Method and Design: For the purpose of these study forty (40) male players was selected, twenty (20) from the indigenous sport kho-kho and twenty (20) from by non-indigenous sport football who represent different competition at subdivision, district & state level have been selected randomly. Their age ranged between 14 to 16 years. The study was conducted only on the male players. For the present study the chosen variables were speed and agility and for the collection of the data the following tests were used: 20 meter sprint for measured the speed and arrowhead agility test for measured the agility. To determine the differences, if any, the independent t-test was calculated. The data was processed by means of the MS Excel Data Analysis tool pack.

Result & Discussion: That insignificant difference exists between the group when compared with speed ($p=0.25$), agility ($p=1.67$), the finding of the present study was that significant differences were absent between the two groups i.e. indigenous and non-indigenous players.

Conclusion: The study suggested that there are significant differences were absent between the two groups i.e. indigenous and non-indigenous players.

Key Words: Speed, Agility, Indigenous and Non-indigenous players.

INTRODUCTION

Kho-Kho is an unique indigenous game. It is a game of chase as well as attack and defense, a game of skill and rhythm and fits with rich cultural heritage of India. Like all Indian games, it is simple, inexpensive and enjoyable. It does, however, demands physical fitness including endurance, speed and agility. Dodging, feinting and bursts of controlled speed make this game exciting and fun.

Soccer ranks as one of the most popular traditional sports in India. soccer is an extremely complicated and tactical sport. Playing football requires various skills and abilities, including endurance, agility, speed, and a technical and tactical understanding of the game. All of these aspects will be taught and improved during training sessions, but playing football also entails a substantial risk of injury. Thus, an optimal training session should also include exercises to reduce the risk of injury.

The term motor fitness was developed to describe a broad concept than physical fitness. This extensive term means the ability to perform basic motor skills efficiently and effectively. Motor fitness is an important component for an athlete in order to obtain optimal performance in sports. The level of motor abilities components is of prime importance for learning of various activities and perfection of different skills. Traditionally motor abilities have been viewed as a combination of factors that are basic to all moments. All the factors of motor ability are chiefly concerned with the ability of the player and his capacity of action. The level of motor ability is the prime importance for learning various general activities and perfection of different skills in various sports and physical activities.

There are a considerable number of published studies related to the kinanthropometric (Hencken and White, 2006) and physiological variables (Kalapotharakos et al., 2006),

There is little data on the speed and agility between indigenous and non-indigenous game players of Bolpur region according to playing level.

PURPOSE OF THE STUDY

The purpose of the present study was to compare the speed and agility between indigenous and non-indigenous game players in birbhum.

METHODOLOGY

Selection of Subject:

For the purpose of these study forty (40) male players was selected, twenty (20) from the indigenous sport kho-kho and twenty (20) from by non-indigenous sport football who represent different competition at subdivision, district & state level have been selected randomly. Their age ranged between 14 to 16 years. The study was conducted only on the male players.

Variables:

For the present study the chosen variables were speed and agility and for the collection of the data the following tests were used: 20 meter sprint for measured the speed and arrowhead agility test for measured the agility.

Data analysis:

The data analyzed and compared with the help of statistical procedure in which Mean, Standard Deviation (SD), and t-test used to compare the data. The level of significance was set at $p < 0.05$ level of confidence.

Findings and Results:

Result of speed and agility of the indigenous and non-indigenous game players according to the study Variables are shown in tables 1.

Table: 1

The Mean, SD and Significant Difference of Motor Performance variables of the Indigenous game and Non-indigenous game players

Variable	Inigenous Game(kho-ko)	Non-Indigenous Game(football)	't'
Speed	7.26±0.50	7.10±0.60	0.25
Agility	14.07±0.68	13.44±1.07	1.67

***Significant at 0.05 levels**

It appears from the table-1 that the computed t-value (0.25 & 1.67) in relation to speed and agility respectively was less than the tabulated p value, at 0.05 levels. The results of the study indicated that there was no significant difference between indigenous and non-indigenous game players compared to their speed and agility.

Discussion:

However, the finding of the present study was that significant differences were absent between the two groups i.e. indigenous and non-indigenous players.

The finding in the present study reveals that lack-off differences occurred between players in the indigenous and non-indigenous players. Moreover, the lack-off in proper training that the players in the indigenous and non-indigenous players undertake may also contribute to the results obtained. On the other hand the trainers and coaches may share and implement similar kind of training regimes, resulting in similar training outcomes being achieved in this age group of players.

Conclusion:

Within the limitation of the study it may be concluded that none of the motor performance variables has exhibited significant differences between the indigenous game and non-indigenous game. Future research needs to examine methods for increasing motor performance levels among this population group.

Indigenous games of India are cost effective, feasible and easy to play and may have excellent application in school physical education programs. Indigenous games like Kho- Kho can be an excellent means to develop our motor performance like speed and agility.

References:

1. Clarke, H. E. Application of measurement to health and physical education, Englewood Cliffs, NJ: Prentice-Hall. 1959
 2. le Gall, F., Carling, C., Williams, M. & Reilly, T. (2010). Anthropometric and fitness characteristics of international, professional and amateur male graduate soccer players from an elite youth academy. *Journal of Science and Medicine in Sport*, 13, 90-95.
 3. Kannan, Shilpa (2011) "BBC News — Messi boost as Indian football challenges cricket". Bbc.co.uk. Retrieved 2014-02-15.
 4. Wilson, Bill (2012) "BBC News — Football looks to score in India". Bbc.co.uk. Retrieved 2014-02-15.
 5. Mark russell & edward tooley, 2011 "anthropometric and performance characteristics of young male soccer players competing in the uk" *Serb J Sports Sci* 5(4): 155-162
 6. Cooper, S. M., Baker, J. S., Tong, R. J., Roberts, E. & Hanford, M. (2005). The repeatability and criterion related validity of the 20 m multistage fitness test as a predictor of maximal oxygen uptake in active young men. *British Journal of Sports Medicine*
 7. Cronin, J. B. & Hansen, K. T. (2005). Strength and power predictors of sports speed. *Journal of Strength and Conditioning Research*, 19, 349-357.
- Duncan, M. J., Lyons, M. & Nevill, A. M. (2008). Evaluation of peak power prediction equations in male basketball players. *Journal of Strength and Conditioning Research*, 22, 1379-1381.