Explosive Strength of High School Kabaddi and Kho-Kho Players

Vishal Kumar Gupta Research Scholar, Swami Ramanand TeerthMarathwada University, Nanded(MS)

Abstract

The purpose of the study was to determine the explosive strength between Kabaddi and Kho-Kho Players., 15 Kabaddi and 15 Kho-Kho from Devaria (UP) India were selected as a subjects for the study. The data was analysed with the help of statistical procedure in which arithmetic mean, standard deviation and t - test were employed. Significant difference in the agility (t= p < .05) was found between Kabaddi and Kho-Kho Players, Kabaddi Players was found to be greater explosive strength as compared to Kho-Kho Playrs.

Introduction

Kho-Kho and Kabaddi are the most popular sports in Uttar Pradesh and both are Indian games . The Study of jumping ability of sports participants is one of the most popular areas in sports training and coaching research It is well known fact that players, of one game differ from the players of other games in their skill and strength . The game of Kabaddi and Kho-Kho are simple in nature, easy to organise, less expensive. Hence they reach to common men. Both games can be played in a small area and practically less equipment is required. Kabaddi is most aggressive and heavy contact game, but Kho-Kho is a semi contact game. Both games differ from each other in their nature, skill, techniques and strategies etc. strength on several factors associated with sports performance and the benefits of achieving greater strength is strongly associated with improved force-time characteristics that contribute to an athlete's overall performance. Much research supports the notion that greater strength can enhance the ability to perform general sport skills such as jumping, sprinting, and change of direction .

Materials And Methods

 $15\,$ High school Kabaddi and $15\,$ high school Kho-Kho Players from Devaria (UP) $\,$ selected for the study $\,$.

The data analysed with the help of statistical procedure in which mean, standard deviation, t test were used to compare the data. Explosive strength was measure through Vertical Jump, This test measures the power of legs in jumping vertically and can be applied to children of both sexes aged nine years and above. A Black board of 4.5 feet x 2 feet painted with green and red lines ,one inch apart and one feet apart respectively (The board is fixed firmly to a wall, preferably 6 a weighing scale (optional). In case, the blackboard is not available, a smooth and plain wall may be painted black for use in this test. In the beginning a demonstration of the vertical jump, is given to a group of five to ten subject is asked to stand erect facing the board . His dominant hand's fingertips are marked with chalk powder and the subject is asked to raise the marked fingertips to a maximum height on the blackboard without lifting the heels so as to mark his maximum reach point. The fingertips are rechalked. With the chalked hand side towards the wall, a vertical jump is to be performed by the subject to make another mark at the maximal height of the jump. The subject is not allowed to run or hop. However, the subject is properly instructed to take a good jump by bending the knees and swinging the arms. The subject may be given three to five trials at his will and the best performance is considered. The maximum distance between the reaching height and the jumping height provides the score the test. However, to get the power in foot-pound units, the above distance is multiplied by the subject's body weight. But majority of the testers routinely use directly the distance jumped irrespective of body weight as the score of the test. **Results**

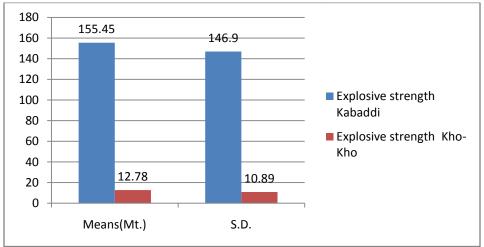
Table 1Shows Statistical Comparison Of Explosive Strength BetweenKabaddi And Kho-Kho Players

Components	Players	Means(Mt.)	S.D.	t-value
Explosive strength	Kabaddi	155.45	12.78	P<.05
	Kho-Kho	146.90	10.89	

* Significant at 0.05 level.

With regard to Explosive strength of Kabaddi and Kho-Kho collegiate Students, mean values of 155.45 and 146.90 respectively were observed (Table-1).and the standard deviations of kabaddi players was 12.78 and Kho-Kho Players was 10.89 respectively.

Figure : Mean And Standard Deviation Of Explosive Strength Between Kabaddi And Kho-Kho Players



The findings of the study revealed that kabaddi players was found to have got explosive strength as compare to Kho-Kho players. Sport coaches may have difficulty bridging the gap between the application of strength, power and conditioning developed with strength training and conditioning to sport performance. Some people in sport may believe that jumping is primarily determined by genetics and is therefore difficult to improve or enhance to any significant level. Sport coaches often become enamored with an athlete that possesses natural physical attributes (physical size, strength, vertical & horizontal power, ideal body composition) that are generally associated with a successful performance in sport .n sports requiring explosive movements such as sprinting, quick changes of direction, jumping, throwing, etc, it is essential for an athlete to be capable of generating a large amount of force in a very short period of time.

References

1. Arthur, M. & Bailey, B. Agility Drills (Chapter 7). Complete Conditioning for Football. Pg. 191-237. Human Kinetics: Champaign, IL, 1998.

2. Bompa TO. 1999 Periodization Training for Sports. Champaign, IL: Human Kinetics

- 3. Cissik, J. & Barnes M. Agility (Chapter 5). Sport Speed And Agility. Coaches Choice. Monterey CA, 2004
- 4. Costello, F. &Kreis, E.J. Introduction to Agility (Chapter 1). Sports Agility. Pg. 2-3. Taylor Sports Publishing: Nashville, TN, 1993
- 5. Dick, F.W. Sports Training Principles, 5th ed. London: A&C Black. 2007
- 6. Drabik, J. Children and Sports Training. Island Pond, VT: Stadion 1996
- 7. Graham, J. In L.E. Brown & V.A. Ferrigno (Editors), Training for Speed, Agility & Quickness, 2nd Edition. Champaign IL: Human Kinetics Publishers, 2005
- 8. Hoff J, Gran A, Helgerud J. Maximal strength training improves aerobic endurance performance. Scand J Med Sci Sports. 2002 Oct;12(5):288-95
- 9. Johnston RE, TJ Quinn, Kertzer R and Vroman NB. Strength training in female distance runners: impact on running economy. J. Strength Cond. Res. 11: 224-229, 1997.
- 10.Moss BM, Refsnes PE, Abildgaard A, Nicolaysen K, Jensen J. Effects of maximal effort strength training with different loads on dynamic strength, cross-sectional area, load-power and load-velocity relationships. Eur J ApplPhysiolOccup Physiol. 1997;75(3):193-9.