ISSN: 2349 - 4891

International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access e-journal)

Influence of Game-Specific Training Programme on Selected Physical Fitness Components among Kabaddi Players

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Received 26th October 2014, Accepted 26th December 2014

Abstract

The purpose of this study was to find out the influence of game-specific training programme on selected physical fitness components among Kabaddi players. To achieve this purpose of the study thirty men Kabaddi players from Annamalai university, Chidambaram, were selected and their age ranged between 20 and 25 years. The selected players were participated in intercollegiate competition. The subjects were randomly selected. The data were collected on selected physical fitness components namely speed and strength among the Kabaddi players were statistically analysed by using analysis of covariance (ANCOVA). All statistical analysis was done with the help of statistical packages for social sciences (SPSS) 15th version. The game-specific training group achieved significant improvement on all the physical variables namely speed, strength and endurance.

Keywords: Speed, Strength, Kabaddi.

Introduction

Kabaddi is primarily an Indian game, not much is known about the origin of this game. There is, however, concrete evidence, that the game is 4,000 year old. It is a team sport, which requires both skill & power, and combines the characteristics of wrestling and rugby. It was originally meant to develop self-defense, in addition to responses to attack and reflexes of counter attack by individuals and by groups or teams. It is a rather simple and inexpensive game, and neither requires a massive playing area, nor any expensive equipment. This explains the popularity of the game in rural India. Kabaddi is played all over Asia with minor variations. Kabaddi is known by various names viz. Chedugudu or Hu-Tu-Tu in southern parts of India, Hadudu (Men) and Chu - Kit-Kit (women) in eastern India, and Kabaddi in northern India. The sport is also popular in Nepal, Bangladesh, Sri Lanka, Japan and Pakistan.

In Kabaddi, two teams compete with each other for higher scores, by touching or capturing the players of the opponent team. Each team consists of 12 players, of which seven are on court at a time, and five in reserve. The two teams fight for higher scores, alternating defense and offense the game consists of two 20-minute halves, with a break of five minutes for change of sides. The Kabaddi playing area is 13m x 10m, divided by a line into two halves. The raider's aim is to touch any or all players on the opposing side, and return to his court in one breathe. The person, whom the raider touches, will then be out. The aim of the opposing team will be to hold the raider, and stop him from returning to his own court, until he takes another breath. If the raider cannot return to his court in the same breath while chanting 'Kabaddi', he will be declared out. Each team alternates in sending a player into the opponents' court. If a player goes out of the boundary line during the course of the play, or if any part of his body touches the ground outside the boundary, he will be out, except during a struggle.

Today, there is a growing emphasis on looking good, feeling good and living longer. Increasingly, scientific evidence tells us that one of the keys to achieving these ideals is fitness and exercise. But if you spend your days at a sedentary job and pass your evenings as a "couch potato," it may require some determination and commitment to make regular activity a part of your daily routine. Exercise is not just for Olympic hopefuls or supermodels. In fact, you're never too unfit, too young or too old to get started. Regardless of your age, gender or role in life, you can benefit from regular physical activity. If you're committed, exercise in combination with a sensible diet can help provide an overall sense of well-being and can even help prevent chronic illness, disability and premature death.

Methodology

The purpose of this study was to find out the influence of game-specific training programme on selected physical fitness components among Kabaddi players. To achieve this purpose of the study thirty men Kabaddi players from Annamalai university,

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Chidambaram, were selected and their age ranged between 20 and 25 years. The selected players were participated in intercollegiate competition. The subjects were randomly selected. The data were collected on selected physical fitness components namely speed and strength among the Kabaddi players were statistically analysed by using analysis of covariance (ANCOVA). All statistical analysis was done with the help of statistical packages for social sciences (SPSS) 15th version.

Table I. Computation of mean and analysis of covariance of speed of experimental and control groups

Test	Control (sec)	Experimental (sec)	Sum of variance	Sum of squares	df	Mean square	F
Pre test mean	7.80	8.21	BG	1.24	1	1.24	1.38
			WG	25.08	28	0.89	
Post test mean	7.86	7.72	BG	0.14	1	0.14	0.28
			WG	14.34	28	0.51	
Adjusted post mean	7.99	7.59	BG	1.14	1	1.14	7.54*
			WG	4.09	27	0.15	

* Significant at 0.05 level
Table value for df 1 and 28 was 4.20
Table value for df 1 and 27 was 4.21

The above table indicates the adjusted mean value of speed of control and experimental groups were 7.99 and 7.59 respectively. The obtained F-ratio of 7.54 for adjusted mean was greater than the table value 4.21 for the degrees of freedom 1 and 27 required for significance at 0.05 level of confidence. The result of the study indicates that there was a significant difference among experimental and control groups on speed. The above table also indicates that both pre and post test means of control and experimental groups do not differ significantly. The pre, post and adjusted mean values of speed of both control and experimental groups are graphically represented in the Figure-I.

Figure I. Bar diagram showing the mean values of pre-test, post-test and adjusted post means of control and experimental groups on speed

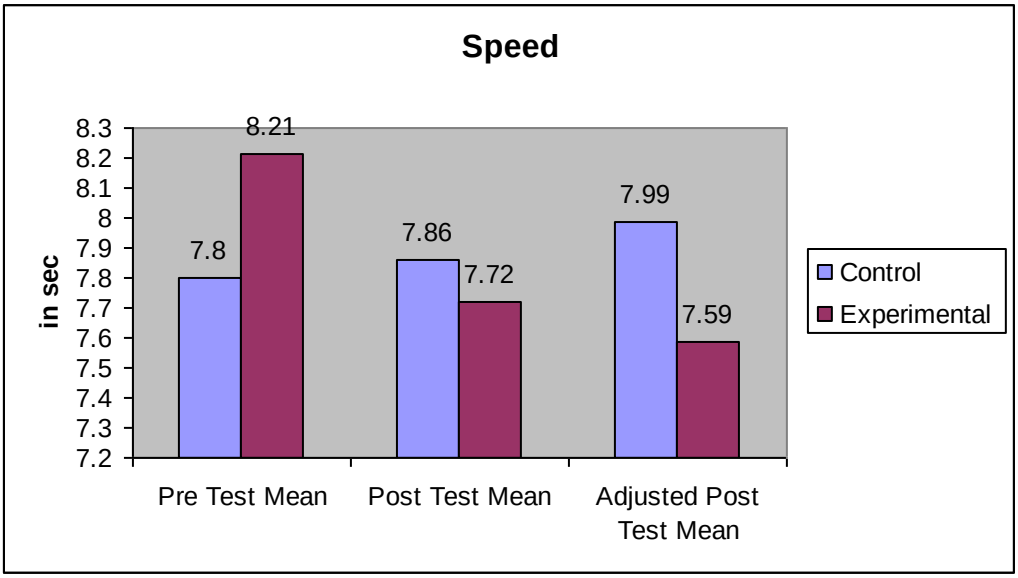


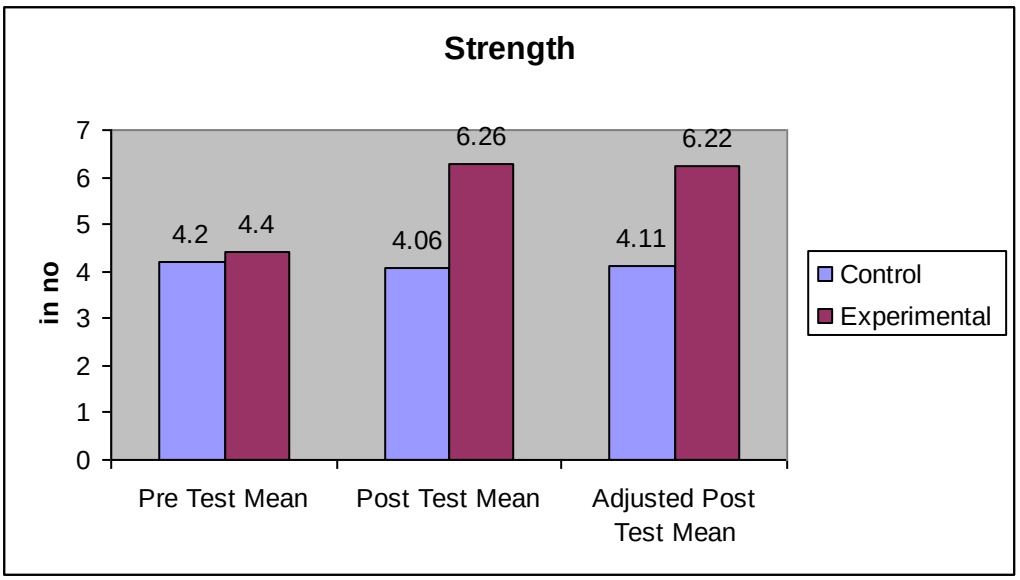
Table II. Computation of mean and analysis of covariance of strength of experimental and control groups

Test	Control (nos)	Experimental (nos)	Sum of variance	Sum of squares	df	Mean square	F
Pre test mean	4.20	4.40	BG	0.30	1	0.30	0.60
			WG	14.00	28	0.50	
Post test mean	4.06	6.26	BG	36.30	1	36.30	73.29*
			WG	13.86	28	0.49	
Adjusted post mean	4.11	6.22	BG	32.73	1	32.73	79.47*
			WG	11.12	27	0.41	

* Significant at 0.05 level
Table value for df 1 and 28 was 4.20
Table value for df 1 and 27 was 4.21

The above table indicates the adjusted mean value of strength of control and experimental groups were 4.11 and 6.22 respectively. The obtained F-ratio of 79.47 for adjusted mean was higher than the table value 4.21 for degrees of freedom 1 and 27 required for significance at 0.05 level of confidence. The result of the study indicates that there was a significant difference among experimental and control groups on strength. The table also reveals that pre test mean of control and experimental group do not differ significantly, however the post test mean of above said groups differ significantly. The pre, post and adjusted mean values of strength of both control and experimental groups are graphically represented in the Figure-II.

Figure II. Bar diagram showing the mean values of pre-test, post-test and adjusted post mean of control and experimental groups on strength



Conclusion

The game-specific training group achieved significant improvement on all the physical variables namely speed, strength and endurance.

References

1. Chandler, T.J., et.al., (1995). *Exercise Training for Tennis*, Clinin Sports Medicine, 14 (1).
2. Dey, S, K., Khanna, G, L. & Batra, M. (1993). Morphological and Physiological Studies on Indian National Kabaddi Players. Br J Sports Med;*27:237-242*.
3. Di Salvo, V., and Pigozzi, F., (1998). Physical training of football players based on their positional rules in the team. Effects on performance-related factors. *Journal of Sports Medicine and Physical Fitness*, 38, pp. 294-297.
4. Fagan, C. D., et.al., (2000). Strength training only Effects the Training Exercise. *Journal of Strength and Conditioning Research*, 24.
5. Fagan, C.D., et.al., (2000). Strength Training only Effects the Training Exercises, *Journal of Strength and Conditioning Research*, 14.
6. Gabbett, T,J., Carius, J. & Mulvey, M. (2008). Does improved decision-making ability reduce the physiological demands of game-based activities in field sport athletes. *J Strength Cond Res.* 22(6):2027-35.
7. Gabbett, T., Kelly, J. & Pezet, T. (2007). Relationship between physical fitness and playing ability in rugby league players. *J Strength Cond Res.*21(4):1126-33.