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EFFECT OF CIRCUIT TRAINING ON AGILITY OF WOMEN KABBADI PLAYERS OF HARYANA

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Abstract-

In the present study, an attempt has been made to effect of circuit training on Agility component of women kabaddi players. The study was carried out on 100 female Kabaddi players in the age group of 18-25 years, from Inter College and University of Haryana. The subjects were collected from different coaching camps and various training centers from Haryana. The data was collected by use of AAHPER Youth Fitness Test. The data was analyzed and compared with the help of statistical procedures in which arithmetic mean, standard deviation (S.D.), ANOVA were employed. Post-test agility performance of women kabaddi players was significant improve from Pre-test agility performance of women kabaddi players.

Keywords- Agility, Circuit training, Women Kabaddi players.

Introduction

Kabaddi is one of the most popular teams based sports. Successful game of Kabaddi needs ability of the players to generate good speed, agility and tremendous power during the play of game. Skills like dribbling, shooting and passing are of utmost importance for a player at any level of play. These can be taken into account by the researchers to plan specific circuit training for the Kabaddi players. The specific circuit training is designed based on the requirements of the movements during the play of game for players.

Kabaddi is synonymous with the energetic and athletic pride that India possesses when it comes to sports. It is in fact the perfect game for those who love thrill and a constant adrenalin rush while sweating it out on the field. With its roots in the Indian tradition, Kabaddi has been around for centuries and is one of the most popular sports played across Indian terrains. Kabaddi is a contact sport which requires two teams to compete in a match. The game has its origin in ancient Indian history as it was first conceptualized in South India.

Motor Fitness refers to the ability of an athlete to perform successfully at their sport (Davis, 2000). Identify the most important fitness components for success in specific sport or event and then design sport/event specific conditioning and training programs that will enhance the fitness components and energy systems of the players or athletes.

In previous years, fitness was commonly defined as the capacity to carry out the day's activities without undue fatigue. However, as automation increased leisure time, changes in lifestyles following the industrial revolution rendered this definition insufficient. These days, physical fitness is considered a measure of the body's ability to function efficiently and effectively in



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work and leisure activities, to be healthy, to resist hypo kinetic diseases, and to meet emergency situations.

Method

The experimental method was adopted for the study. The investigator defined the population for the study as 100 Haryana State Women inter college and university Kabaddi players in Haryana state. The investigator has to obtain a sample which would represent the population in all relevant aspects. The methodology used in this research involves the choice of a specified group of subjects, selection of variables, administering of standard tests, using of the relevant tools, obtaining predetermined information in the certain chosen factors and subjecting them for a statistical analysis.

Sample Size

100 subjects were selected for training from Inter College and University Women Kabaddi Players of Haryana.

The date of birth of each subject were recorded from the college record.

Training Plan

Six weeks training programme were developed.

Analysis of the data

Agility-

The pre and post test data collected from the experimental and control groups on agility were statistically analysed by ANCOVA and the results are presented in table-3.

Table 1:

Analysis of covariance of specific circuit training and control groups on agility

(The required table value for significance at 0.05 level of confidence with degrees of freedom 1 and 98 is 4.30 and degree of freedom 1 and 97 is 4.32.)

*Significant at 0.05 level of confidence

	Specific Circuit	Control	SoV	Sum of Squares	Df	Mean	'F' ratio
	Training	Group				squares	
Pre-test	17.8	17.52	В	0.63	1	0.63	1.62
Mean							
SD	0.6	0.6	W	8.59	98	0.39	
Post-test	16.8	17.38	В	1.45	1	1.45	9.89*
Mean							
SD	0.4	0.3	W	3.22	98	0.14	
Adjusted	16.8	17.4	В	1.56	1	1.56	10.55*
Post-test							
Mean			W	3.11	97	0.14	



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Table 1 shows that the pre test mean and standard deviation on agility of specific circuit training and control groups were 17.85 ± 0.64 and 17.52 ± 0.60 respectively. The obtained 'F' ratio value of 1.62 for pre test means on agility of specific circuit training and control groups were less than the required table value of 4.30 for the degrees of freedom 1 and 98 at 0.05 level of confidence. It reveals that there was statistically insignificant difference between the experimental and control groups which implied that the random assignment of the subjects for the two groups was quite appropriate.

The post test mean and standard deviation on agility of specific circuit training and control groups were 16.89 ± 0.44 and 17.38 ± 0.30 respectively. The obtained 'F' ratio value of 9.89 for post test means on agility of specific circuit training and control groups were higher than the required table value of 4.30 for the degrees of freedom 1 and 98 at 0.05 level of confidence.

The adjusted post test means on agility of specific circuit training and control groups were 16.87 and 17.40 respectively. The obtained 'F' ratio value of 10.55 for adjusted post test means on agility of specific circuit training and control groups were higher than the required table value of 4.32 for the degrees of freedom 1 and 97 at 0.05 level of confidence. It was observed from this finding that significant differences exist between the adjusted post test means of experimental and control groups on agility. And it was due to the specific circuit training that the agility of the subjects has been significantly increased.

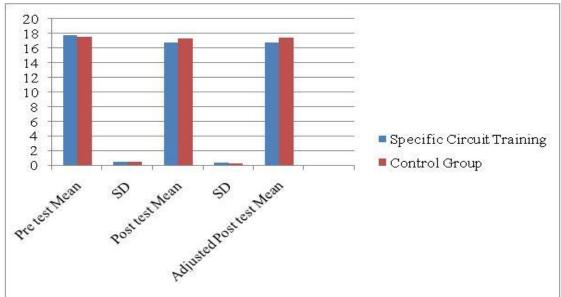


Figure 1:

Pre-test, post-test and adjusted post-test means'differences of specific circuit training and control groups on agility

Conclusion

In the present study It was observed from this finding that significant differences exist between the adjusted post test means of experimental and control groups on agility. And it was due to the specific circuit training that the agility of the subjects has been significantly increased.



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References

- Adeniji, B. A., 2007. Comparative Effects of Circuit Training Program on Speed and Power of Preand Post- Menarcheal Girls. Physical and Health Education Department, Federal College of Education, Osiele, Abeokuta, Ogun State, Nigeria, Journal of Sport Behavior, 5: 35-42. American College of Sports Medicine 2003. ACSM fitness book. Champaign, IL: Human Kinetics 321p.
- Annesi, J. J., Westcott, W. L., Faigenbaum, A. D., & Unruh, J. L. (2005). Effects of a 12-week physical activity protocol delivered by YMCA after-school counselors (Youth Fit for Life) on fitness and self-efficacy changes in 5–12-year-old boys and girls. Research quarterly for exercise and sport, 76(4), 468-476.
- Ary. (1972). Introduction to Research in Education. New York: Holt Rinehart and Winstom, 56.
- Bale, P. (1991). Anthropometric, body composition and performance variables of young elite female basketball players. Journal of Sports Medicine and Physical Fitness, 31(2), 173–177.
- Bandyopadhyay, A. (2007). Anthropometry and body composition in soccer and volleyball players in West Bengal, India. Journal of Physiological Anthropology, 26(4), 501–505. https://doi.org/10.2114/jpa2.26.501
- Bawa, G. S., & Debnath, K. (1997). Morphological characteristics and physical abilities of Indian junior male gymnastics in relation to their competition performance. SAI Scientific [Journal], SAI NSNIS Patiala, Publication 20 (3), 17–24.
- Bell, W., & Rhodes, G. (1975). The Morphological characteristics of the association football player. British Journal of Sports Medicine, 9(4), 196–200. https://doi.org/10.1136/bjsm.9.4.196
- Bharadwaj, H. Zachariah, Singh, T., Krishna, I(P)., Pramanik, S., Kapoor, S.N., Gupta, S., Sen, J. (1990) Body composition and body segment volume proportion of Indian athletes. Ind. J. Sports Sci. Phys. Edu., 2: 119.
- Bhatnagar, D. P. (1980). Some morphological measures in athletes, volleyball and kabbadi players of rural area of Madhya Pradesh. Journal of Sports Medicine and Physical Fitness, 20(1), 109–102.
- S Sachan, A., Rina, D., & Janu, N. (2015). The effect of anulomaviloma pranayama and kapalbhati on resting pulse rate and stress of school going children in jaipur. *American Research Thoughts*, 1, 12.
- Verma, A., Sachan, A., Verma, M. K., Sharma, P., & Raju, D. (2022). An analysis of six weeks training of suryanamaskar (sun salutation) on flexibility of healthy children. *International Journal of Early Childhood*, 1, 2295-2299.