A COMPARATIVE STUDY OF SELECTED PHYSICAL VARIABLES AMONG UNIVERSITY AND NON-UNIVERSITY PARTICIPANTS IN CRICKET

Abhishek Singh and Ravi Sharma
Assistant Professor and M. P. Ed Scholar
LNIPE, Gwalior (M.P.)

Abstract

The aim of the study was to compare the selected physical variables between university and non-university participants in cricket. For the purpose of the study, 21 participants (11 inter-university and 10 non-universities) of age 18-24 years were selected from cricket match practice group of Lakshmibai National Institute of Physical Education, Gwalior (M.P). The parameters examined speed, abdominal strength, agility, flexibility. The statistical analysis of the result and comparison of the two groups showed a statistically significant difference in speed, abdominal strength and agility. There were difference in the flexibility, but the differences were not statistically significant. The results suggest that either years of specific physical conditioning and training or the selection of individuals for the inter-university team who possess more desirable characteristics as a consequence of genetic endowment, plays a significant role in the preparation of inter-university team.

Keywords: Speed, Abdominal Strength, Agility and Flexibility

Introduction

Cricket is a most popular game in the world at present. Cricket is gaining in popularity , and growing numbers of peoples are turning to a game which   seemed in decline a decade ago, and like most sports skills in it, can be increased through careful study and watching top players in action. Cricket is probably the most complex and subtle team game among all the games. There are mainly three department I n cricket namely , (a) batting.(b) bowling and (c) fielding, and all are of equal significance and importance . as a result various physical components used in cricket like speed, strength, agility, flexibility etc.

Therefore, the study was undertaken to compare the selected physical variables between inter-university and non-university participants in the cricket.

Methodology

Twenty one male participants (11 university and 10 non-university) were purposively selected from Lakshmibai National Institute of Physical Education, Gwalior (M.P.), India. The age of the subjects was between 18 to 24 yrs. The subjects were approximately undergone through a similar kind of schedule off the ground in terms of diet, lifestyle, studies, daily activities like sleeping hours etc. All tests were administered on each player individually with the help of

standard scientific instruments. All the subjects were tested for following physical variables namely speed with the help of 50-mt dash in seconds, strength (abdominal) with the help of sit-ups in maximum number in one minute, Agility with the help of 4X10mt shuttle run in seconds, Flexibility with the help of sit & reach in inches.

Administration of Tests

Speed: Speed was measured with the help of 50 m dash. It is advised that the two subjects run at same time. Both start from a same standing position. The commands, "are you ready?" and "go!" are given. At the command to go, the starter drops his arm so that the timer at the finish line can start the timing the subjects run as fast as possible across the finish line.

Abdominal Strength: Abdominal strength was measured with the help of sit-ups from a supine position, the performer interlaces the fingers behind the neck and flex the knees and sliding the heel as close to the seat as possible. The Performer will perform maximum number of sit –ups in 1 minute.

Agility: Agility was measured with the help of 4x10 shuttle run the performer stands behind the starting line and "GO" runs to the blocks, picks up one, one returns to the starting line, and places the block behind the line; the student then repeat the process with the second block time recorded in seconds.

Flexibility: Flexibility was measured with the help of sit and reach box. The tester with the help of flexomeasure case is face down. The student sit down the near edge of the flexomeasure box back beyond the zero the student's knees in a locked position. As student prepare to stretch. With heel not more than 5 inches apart student slowly stretches forward while pushing flexomeasure of both hands. The reading is taken at the near edge of the flexomeasure case.

Statistical Technique

To compare the selected physical variables between university and non-university participants the independent 't-test' was applied.

Results

Finding pertaining to the descriptive Statistics of the players from selected groups on the selected physical variables has been presented in table 1.

The student's-t test was employed by the researcher for the comparison of means of selected group's as depicted in Table.

TABLE-1
COMPARATIVE ANALYSIS OF PHYSICAL VARIABLES AMONG UNIVERSITY AND NON-UNIVERSITY PLAYERS

Variables	Levels	Mean Value	MD	df	Sig.
Speed	UP	6.6927	-2.357	19	0.029
	NUP	7.1640			
Abdominal Strength	UP	35.0000	3.803	19	0.001
	NUP	30.0000			
Agility	UP	9.4218	- 4.188	19	0.000
	NUP	10.0050			
Flexibility	UP	10.0050	.591	19	0.562
	NUP	12.1991			

*Significant at 0.05 level of significance; $t_{.05}$ (19) = 2.0930

Above table reveals that there was a significant difference between university and non-university participants in relation to speed, agility and abdominal strength as calculated value was greater than tabulated value while insignificant in case of flexibility, as calculated value was lesser than that of tabulated value, at .05 level of significant with 19 degree of freedom. Graphical represent of about table is made in figure no 1.
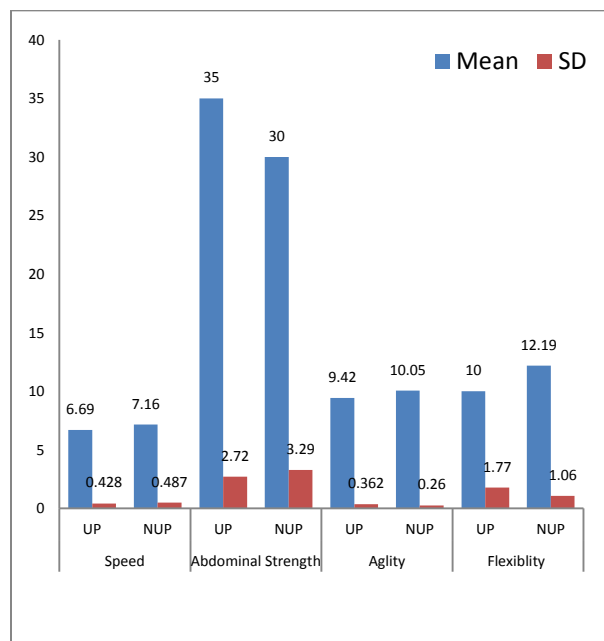

Fig. no. 1: Mean and Standard Deviation of various variables of University and Non University participants.

Discussion and Conclusion

There were significant differences between university and non-university players in speed, abdominal strength and flexibility. This results might be due to the one of the reason that university players were doing regular practice and training to participate in the inter-university competition that's why their performance in speed and strength variables have been enhanced. Speed and strength are such components which develop fast and reduce fast. Whereas there is no significant difference in flexibility because these are basically endurance and flexibility components which requires lots of time to develop and lots of time to detoriate. Non university players were regularly participating in physical activity for fun, enjoyment and to maintain basic skill level that's why their basic endurance and flexibility is maintained.

References

Kumar, Raj (2010). "Comparative Study of Physical Fitness Components of Rural and Urban Female Students of Punjabi University, Patiala Anthropologist, 12(1): 17-21

Louis (1971). Laurance E. Morehouse August T. Miller, Physiology or Exercise: The C.V. Mosby Company, P. 5.

Singer (1972). "Physical Education an Inter- disciplinary Approach (New York : The Mcmillan.)

Johnson, Nelson (1986). "Practical for Measurements For Evaluation in physical Education (New York : Macmillan Publishing Company, (London: Collier Macmillan Publishers. pp 259-288.

Kumar, (2012). "Comparative Study on Trends of Psycho, Physical and Physiological Variables of School and College Level Taekwondo Players," International Journal of Research in Social Sciences and Humanities vol. no. 1, issue no. iv, April–June.

Shephard (1994). "Physical activity, fitness and health: The model and key concepts Inc.