



STUDY ON SELECTED PSYCHOPHYSICAL FITNESS COMPONENTS OF TEAM & INDIVIDUAL SPORTS

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ABSTRACT

. The analysis of data using t-ratio indicated the variance existed between players of individual and team games in their psychophysical fitness components. players of individual games were better in Speed The purpose of the study was to compare the players of individual and team games on psychophysical fitness components. For this purpose, one hundred and twenty (Team game =60, Individual game=60) male players were selected from the IIT Gandhinagar Gujarat. The mean age and SD of the players of team game and individual game were 16.64 ± 1.45 and 17.72 ± 1.49 respectively. Players were tested fitness test items i.e. Shuttle Run, Standing broad jump, 50 yard dash and Comprehensive anxiety scale and found more in anxiety . Whereas, the team game's players were better in agility , no difference found in leg explosive power.

Key word – Psychophysical , T – ratio

1. INTRODUCAON

The fitness refers to the dynamic qualities that allow a person to satisfy his/her own needs, including but not limited to mental and emotional stability and organic health consistent with functional capacity. There are numerous fitness concepts such as nutritional fitness, which refers to the selection of foods according to their caloric and nutritive values, also proper eating habits. The health related physical fitness refers to the Physical fitness which is a combination of very Cardio-vascular endurance, muscle fitness (Strength and endurance) flexibility, and body composition. Physical fitness is a combination of muscular strength, endurance, speed, agility, indoor skills, flexibility and co-ordination. These have been growing realization of physical fitness enhancing human health and performance. The term physical fitness implies fitness of the body and mind and due to body and mind relationship, the new concept of physical fitness includes mental, emotional, social as well as physical aspect (Hebbellneck, 1984). Physical fitness has three basic components i.e. muscular endurance, muscular strength and circular-respiratory endurance, whereas motor fitness includes four additional components i.e. Muscular power, agility, flexibility and speed". The human values conquest in the field of sports holds a unique place. It is success, victory, triumph and domination of some over other team mates and friends because sports is comradeship and friendship (Clarke, 1971). Increasing the physical fitness level is the basic goal of all types of sport preparation. The importance of certain physical fitness abilities for success in a wrestling bout varies in wrestlers of various wrestling styles and age. The aim of this research was to identify the differences between the classical style ames and sports leads to several changes in muscles, increase in leg, grip and arm strength of women students. Singh, Ghosh & Ahuja (1985) observed the improvement in physical fitness components due to the effect of training, it was unusual during competitive period. Cicirko, Scott, Bennett and Hodson (2007) indicated statistical significance in

some tests. Research on the special and general physical fitness confirm interdependence rate and the influence on the level of football players.

The study relates to the importance of physical fitness components as one of the primary factors for better performance in sports/games. The attempt is made in this study of physical fitness among the team games and individual games players. A physical fit woman gives a good performance for long time in the competition. This study will be very useful to physical education teacher/coaches in the field of competitive performance. The relationship between anxiety and sport performance.

Many different explanations have been forwarded in the research literature that attempt to account for the relationship between anxiety and performance. One approach is that increases in competition anxiety, and particularly cognitive symptoms, always have a detrimental effect on performance. This is the underpinning premise for the reduction approach to managing stress. Other researchers have suggested that the relationship with performance should be determined at a more individual level and that athletes possess optimal levels or zones of anxiety within which their performance will be maximized. These assertions led to interventions being individually tailored where, at certain times, reduction would be called for if the performer was too anxious, but on other occasions the practitioner may consider increasing anxiety levels to perform an energizing function. A third perspective is based on the principle that high levels of anxiety may be interpreted in a positive way and actually benefits sport performance. This notion links closely to the underlying message within Thorpe's quote presented earlier, and is fundamental to the restructuring approach.

2. METHODOLOGY AND PROCEDURE

Selection of subject

One hundred and twenty (Team game =60, Individual game=60) male players were selected from the district during the year 2015. IIT Gandhinagar individual game players were from Athletics and Swimming. Team game players were from Football and Basketball players. The purposive random sampling method was used for the collection of data.

The following criterion variables were chosen namely speed, agility, leg explosive power and sports competition anxiety. Test item were used 50 m dash for speed, shuttle run for agility, standing broad jump for leg explosive power and Sinha's Comprehensive Anxiety Test (SCAT-SS) .The subject reliability is assured by assuring the player that their response would be kept confidential and they will be required to express themselves freely and frankly as per there instructions contained in a each questionnaire.

3. RESULTS AND DISCUSSION

In order to find out the significance of difference between players of team and individual games belong to IIT Gandhinagar, Means, Standard deviations, and t-ratios were computed for obtained data. To check the obtained t-ratio, the level of significance was set at .05 levels, 0.01 level data pertaining to this have been presented in table

TABLE -1

DESCRIPTIVE STATISTICS OF VARIOUS COMPONENTS OF PHYSICAL FITNESS OF TEAM AND INDIVIDUAL GAME

Psycholysical fitness variables	TEAMS		INDIVIDUAL	
	Mean	S D	Mean	S D
Speed	9.59	00.91	10.06	00.81
Agility	11.79	00.49	11.39	00.81
Leg explosive power	1.73	15.24	1.72	12.58
Anxiety	31.10	3.72	38.29	4.89

Graph -1

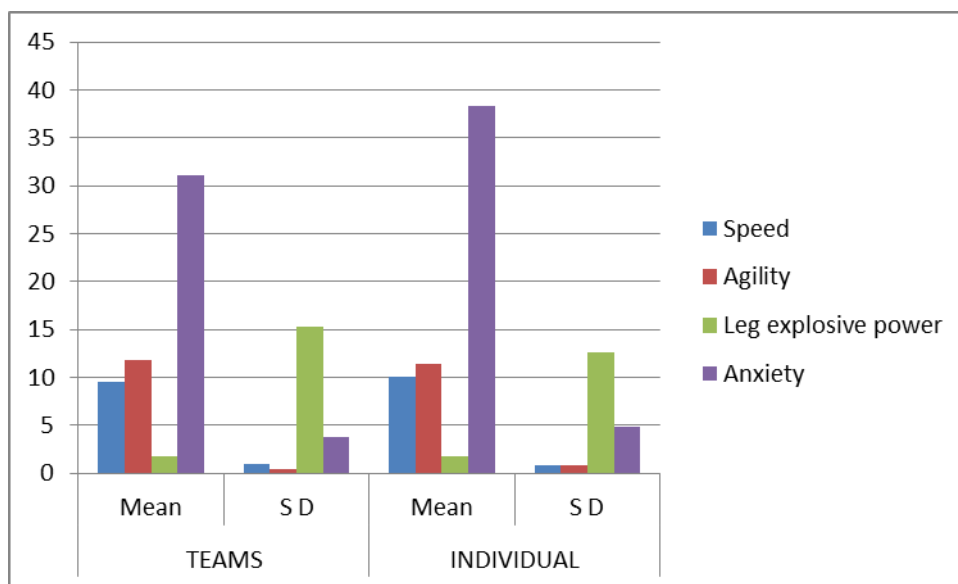
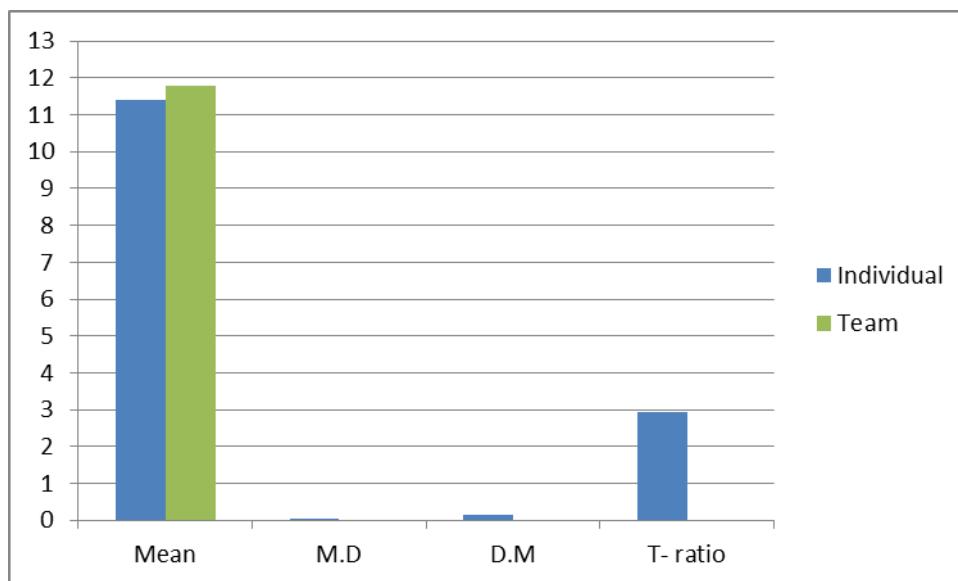


TABLE -2

SIGNIFICANCE OF DIFFERENCE BETWEEN MEAN SCORES OF AGILITY OF PLAYERS OF INDIVIDUAL AND TEAM GAMES

Game	Mean	M.D	D.M	T- ratio
Individual	11.39	0.04	0.14	2.93
Team	11.79			

Graph -2



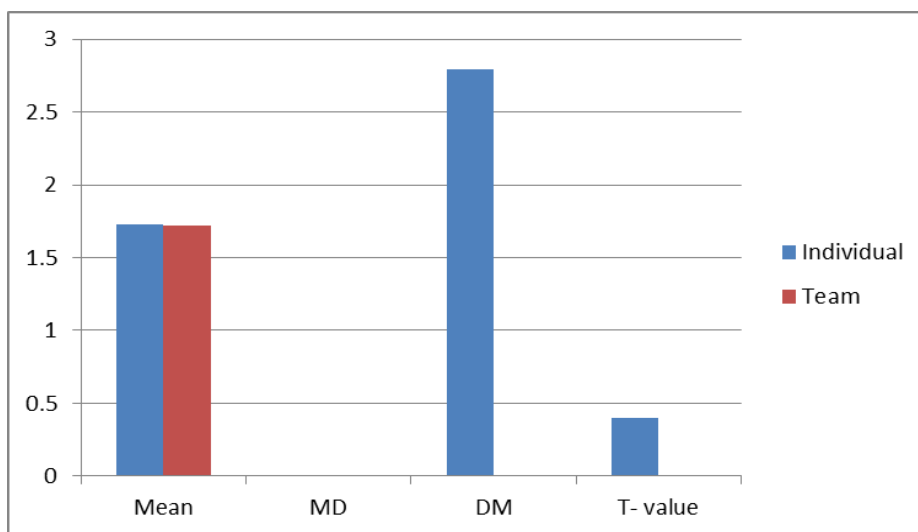
Insignificant level at 0.05, $t_{.05(98)} = 1.98$ that there statistically significant difference were found between the means of shuttle run (speed and agility) players of individual and team games, as the obtained t-value of 2.93 was higher than the required value of $t_{.05(98)}=1.98$.

TABLE -3

SIGNIFICANCE OF DIFFERENCE BETWEEN MEAN SCORES OF LEG EXPLOSIVE POWER OF INDIVIDUAL AND TEAM GAMES

Games	Mean	MD	DM	T- value
Individual	1.73	0.01	2.79	0.40
Team	1.72			

Graph -3

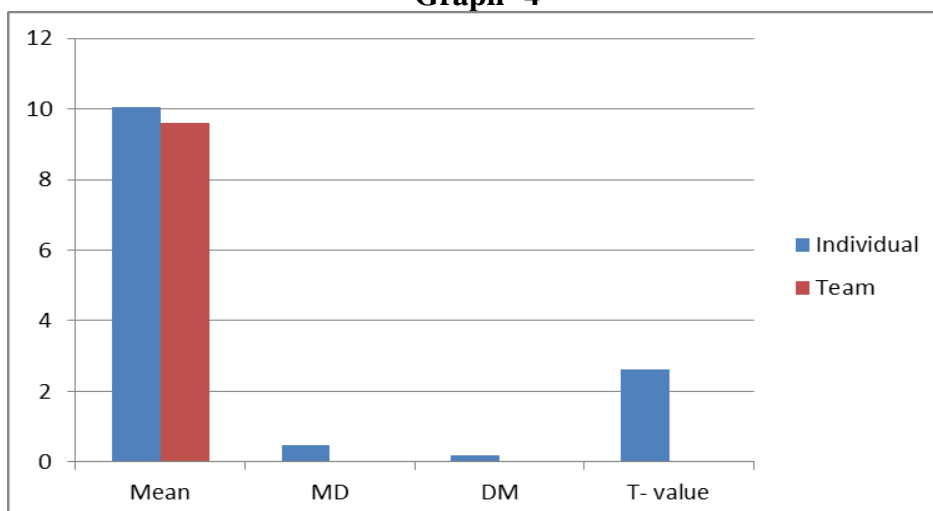


Insignificant level at 0.05, $t_{.05(98)} = 1.98$ I that there was no statistically significant difference between the means of standing Broad Jump (explosive strength of leg) players of individual and team games, as the obtained t-value of 0.40 was less than the required value of $t_{.05(98)}=1.98$.

TABLE – 4
SIGNIFICANCE OF DIFFERENCE BETWEEN MEAN SCORES ON SPEED OF PLAYERS OF INDIVIDUAL AND TEAM GAMES

Games	Mean	MD	DM	T- value
Individual	10.06	0.47	0.18	2.63
Team	9.59			

Graph -4



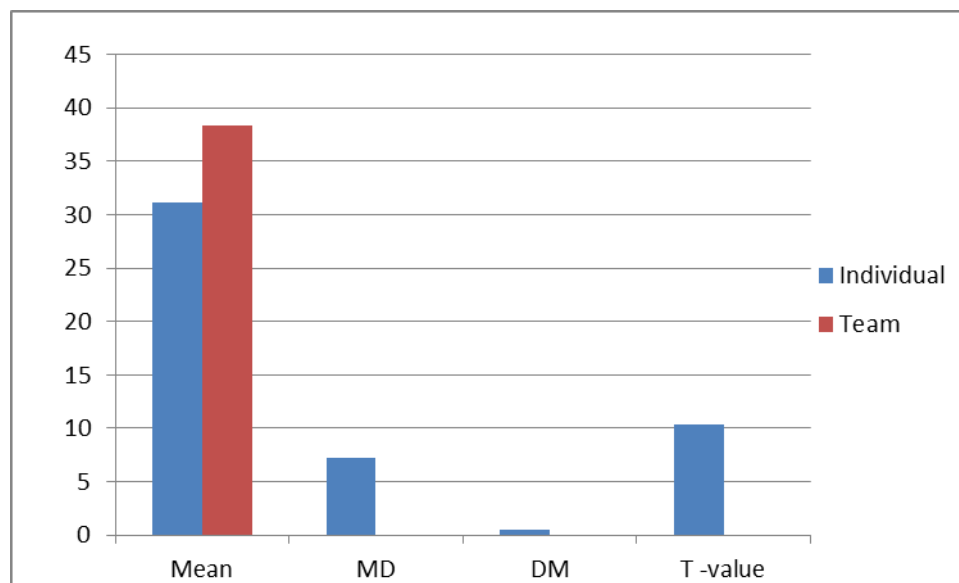
Insignificant level at 0.05, $t_{.05(98)} = 1.98$ there is statistically significant difference were found between the means of 50 yards (speed) players of individual and team games, as the obtained t-value of 2.63 was high than the required value of $t_{.05(98)}=1.98$.

TABLES – 5

SIGNIFICANCE OF DIFFERENCE BETWEEN MEAN SCORES ON ANXIETY OF PLAYERS OF INDIVIDUAL AND TEAM GAMES

Games	Mean	MD	DM	T -value
Individual	31.10	7.19	0.48	10.40
Team	38.29			

Graph -5



Mean of anxiety score of the individual game players is 38.29 and team game players is 31.10 The difference between the two mean is highly significant $t = 10.40$, $P < 0.01$.

4. CONCLUSION

Within the limitation of the present study, following conclusions were drawn:

1. Players of team games were found better in speed (50 yard), and then players of individual games.
2. Players of team game and individual game were found no difference in standing broad jump (leg explosive strength).
3. Individual game players were found better in agility and have significantly high anxiety than the team game players.

5. REFERENCE

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