



Sports and Psychological Skills: A Gender-Specific Comparative Study of Individual and Team Sports

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Abstract

The purpose of the present paper is to understand the importance of applying psychological skills to India's national level players in different sports. A detailed survey was conducted among 150 each male and female players, among whom 180 and 120 were representing different individual and team events, respectively. The psychological variables of anxiety management, concentration, confidence, mental preparation, motivation and team emphasis were assessed using the Psychological Skills Inventory for Sports (PSIS) developed by Mahoney et al. in 1987. To decide the significance of differences between players of individual and team events, the 't' test was used concerning the above variables. The results prove that significant differences exist in concentration and team emphasis.

Keywords: Anxiety Management, Concentration, Confidence, Mental Preparation, Motivation, Team-emphasis, Gender, Psychological skills

Introduction:

A player's psychological condition is a crucial factor in determining their athletic performance (Kruger, 2010). Hence understanding one's behaviour will help to explain, predict and also to address his mental conditions at a particular time (Andrew, Grobbelaar, & Potgieter, 2007). The Discovery of this positive and vibrant relationship between psychological skills and elite performance of players in the last century's initial decades invited exclusive attention of sports authorities of sports-giants since the Cold War period. That led to exclusive research, examinations, and application of such skills in players' training (Thelwell, Weston, Greenlees, & Hutchings, 2008). But such a trend was either absent or very poor in developing countries like India. Even after providing exclusive facilities for the physical and physiological growth of selected players, the country hardly had any gains in the international arena. But, it is unfortunate that India still not paying any required attention to address this lacune.

Background of the Study:

Even though investigations were done to identify superior psychological skills for players according to nature of and position in the sport, age, gender and physical conditions of the player, all such attempts to determine the ideal athletic personality is still going on. But attaining a general minimum degree or level of psychological skills will distinguish elite players from the ordinary. There were several attempts to measure the psychological skill levels of players. Among them, the Profile of Mood States measured tension, depression, anger, fatigue, confusion and vigour (McNair, Lon, & Droppleman, 1971). Sports Competition Anxiety Test about anxiety (Martens, 1977). Group Environment Questionnaire is a general measure of cohesiveness in sports teams (Brawley, Canon, & Widmeyer, 1987), and the Competitive Sport Anxiety Inventory (Martens, Vealey, & Burton, 1990) measures competitive state anxiety. Sports Anxiety Scale measured multidimensional trait anxiety and individual differences in athletes' cognitive and somatic anxiety (Smith, Smoll, & Schutz, 1990). Psychological Skills Inventory assessed achievement motivation, goal setting, anxiety control, maintaining confidence, concentration and mental rehearsal (Wheaton, 1998). The Athletic Coping Skill Inventory measured coping with adversity, peaking under pressure, goal setting and

mental preparation, concentration, freedom from worry, confidence and achievement motivation, and coachability (Smith, Schutz, Smoll, & Ptacek, 1995). But most of the later studies used the expanded versions of the Psychological Skills Inventory for Sports developed by Mahoney and others (Mahoney, Gabriel, & Perkins, 1987).

Statement of the Problem:

Except for a few, most of the sports require in-depth physical and physiological practices. If not, it will affect his or her psychological state of mind. In team sports, one's weakness will affect the entire team's performance. But identifying the psychological skills in a player requires time and planning. The selection of a suitable method to assess psychological skills poses another challenge. In this paper, the researcher is trying to know the sports-specific psychological skills of diverse Indian players in different individual and team sports using PSIS to assess and compare their sport-specific differences.

Objective, Research Questions and Hypothesis:

This paper aims to evaluate the event-based differences in sports-specific psychological skills of national level players of India using the PSIS variables in the context of the above arguments. The research questions are,

1. What is the level of selected psychological skills among players in the team and individual events of India?
2. Whether there are any differences in the level of psychological skills between players in India's team and individual events?

The present study hypothesised that there would be a significant difference between players of India's individual and team events in their psychological skills, namely anxiety management, concentration, confidence, mental preparation, motivation, and team emphasis.

Literature Review:

Since the 1970s, developed countries focused on psychological skills in training as their potential to ensure players' maximum performance is more and more realized. On the other end, as elite athletes' physical abilities are becoming less distinguishable, the margin of victory is narrowing in the elite tournaments (Wang, 2010). So, several in-depth and comparative studies on psychological studies were published simultaneously. Gradually, the application of psychological skills in sports became very ordinary in sports superpowers.

There were studies on elite athletes' psychological characteristics (Durand-Bush & Salmela, 2002; Gould, Guinan, Greenleaf, Medbery, & Petersen, 1999; Mahoney et al., 1987). But those studies on the impact of psychological skills in boosting sporting performance (Weinberg & Gould, 2007; Harmison, 2006) were more specific. Among them, some were investigating the impact of specific psychological skills in enhancing performance (Elemiri & Aly, 2014; Crespo & Reid, 2007) and others are about the results created by a group of such skills (McCann, 2008). Similarly, how such skills impacted both teams (Thelwell & Maynard, 2003) and individual athletes (Thelwell & Greenlees, 2001) were conducted. There were studies about the relevance of psychological skills about various factors like age, gender (White, 1993), sport type (Young & Knight, 2014) and others (Geczi, Bogнар, Toth, Sipos, & Fugedi, 2008).

Research Methodology:

The researcher interviewed thirty male and female national level sportspersons who belong to track and field, swimming, weightlifting, hockey and volleyball. Hence 180 of them belonged to individual and 120 to team events. Both genders had 150 each subject. The survey was conducted at different national camps in different cities. Their age ranged from nineteen to thirty-one. The interview was voluntary. There is more or less an all India representation ensured in the data. The data was collected through the administration of the Psychological Skills Inventory for Sports (PSIS), developed by Mahoney et al. (Mahoney et al., 1987), which assesses anxiety management (AX), concentration (CC), confidence (CF), mental preparation (MP), motivation (MV) and team emphasis (TM). To calculate whether the difference in players' psychological skills between the team and individual events is significant or not, the 't' ratio was used. Only active athletes were selected for data collection. They all had some idea of psychological skills even though never exposed to any special training in it. The researcher ensured maximum convenience of respondents, hence even used regional language and English to communicate better. Utmost care was taken to reduce any possibilities of errors in the process.

Statistical Analysis and Findings:

The researcher calculated the mean and standard deviation scores of PSIS of 180 individual and 120 team event national players of India to determine the level of psychological skills. The 't' ratio was calculated to find out whether the difference in the level of psychological skills between these two categories of players are significant or not. The following table shows the mean of selected variables with standard deviation and 't' value.

Table 1: Mean, Standard Deviation, and 't' value of PSIS of One Fifty male and female National Level Players in Individual and Team Events

	Male (N = 150)					Female (N = 150)				
	Individual (N = 90)		Team (N = 60)		't' ratio	Individual (N = 90)		Team (N = 60)		't' ratio
	Mean	SD	Mean	SD		Mean	SD	Mean	SD	
AX	51.41	10.85	52.96	8.96	0.92	50.94	9.50	52.43	14.56	0.76
CC	56.50	14.05	49.86	10.80	3.10*	50.28	16.67	55.63	14.15	2.04*
CF	64.14	13.97	62.40	10.79	0.82	61.41	13.35	61.20	12.32	0.10
MP	47.02	10.27	45.60	10.41	0.83	41.90	10.75	42.25	10.84	0.19
MV	67.45	8.82	67.26	9.75	0.12	69.94	7.33	67.40	9.85	1.81
TM	65.17	10.99	75.46	8.98	6.03*	62.14	11.28	69.96	9.83	4.37*
Significant at 0.05 level; t 0.05 (148) = 1.97										

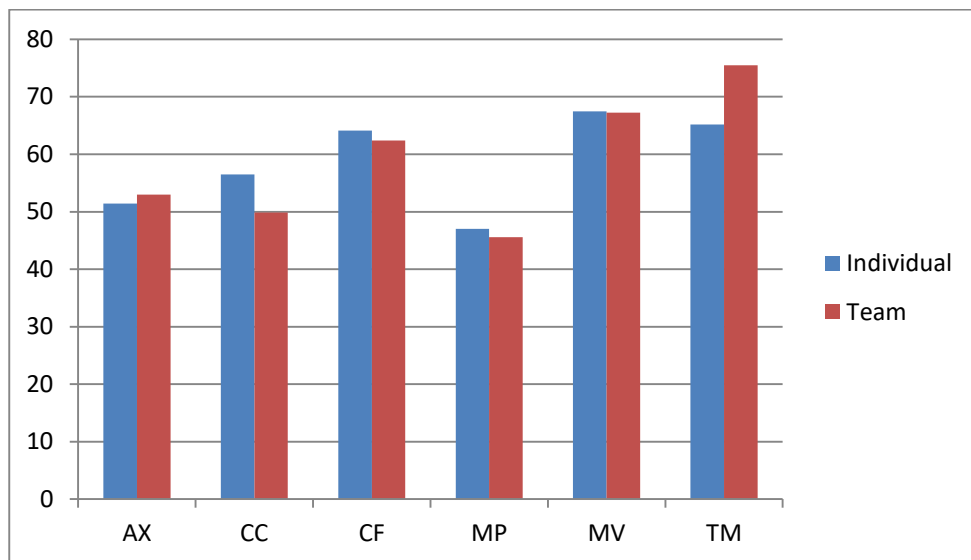
Source: Calculated figures

In general, all variables of psychological skills have a poor mean score even though the researcher does not attempt to compare it with any other internationally or nationally accepted scale. In categories, concentration and team emphasis had a significant difference between individual and team players. In the table, team players have higher mean scores of anxiety management and team emphasis. In all other variables, individual players are better than team players. But in the female category, except in confidence and motivation, team players scored better mean values than individual players.

It is important to note that the standard deviation of mean scores is comparatively high for females than males. In individual male players, the standard deviation from mean scores is around ten per cent. Even though it was less than ten per cent in motivation, the average of all variables is around eleven per cent. In team male players, this difference is more than nine per cent. In females, the individual and team players have an average standard deviation of 11.46 and 11.92, respectively, from the mean scores. This shows the differences in the psychological capacity among Indian players in general. But this difference among team players reflects the lack of professionalism in the selection and training process.

Even though not an objective of the paper, the male players scored comparatively better mean values than female in most of the entries. Maybe females are performing better than earlier, and the gap is narrowing gradually. The figures are reflecting the comparative neglect of sportswomen in India. The above table is graphically illustrated below. The mean scores of the players of the team and individual sports in given psychological skills of anxiety management, concentration, confidence, mental preparation, motivation and team emphasis are given in the vertical axis, whereas the variables are given in the horizontal axis. Diagram-1 represents the male players.

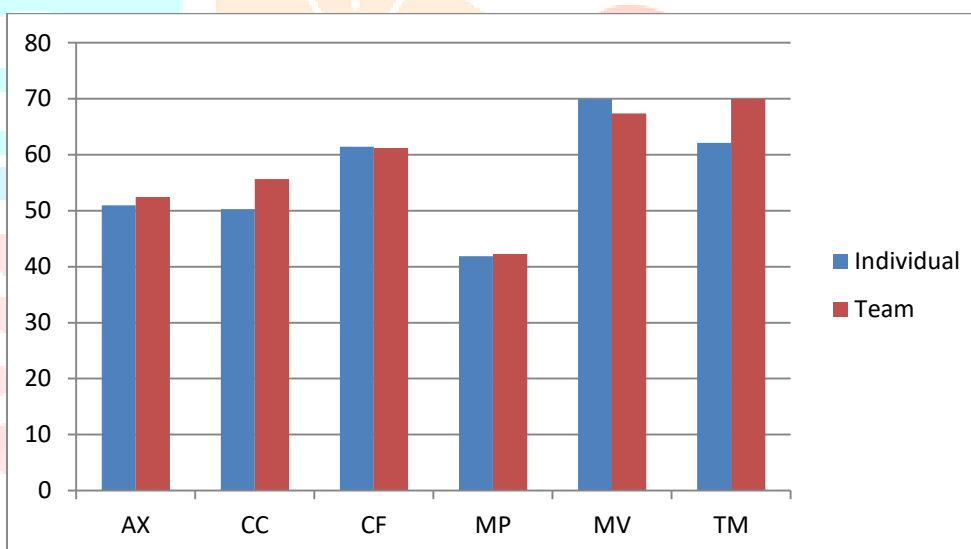
Diagram 1: Bar Diagram of Male Mean Scores of National Level Players in Individual and Team Events on PSIS



Source: Calculated from collected data

The following diagram-2 represents the female players.

Diagram 2: Bar Diagram of Female Mean Scores of National Level Players in Individual and Team Events on PSIS



Source: Calculated from collected data

Discussion of Hypothesis:

The findings show no significant differences between individual and team male and female players in anxiety management, confidence, mental preparation and motivation. But there is a significant difference between them in concentration and team emphasis. So the hypothesis stated that there would be a significant difference between players of India's individual and team events in their psychological skills is accepted in the case of concentration and team emphasis for both male and female. Even though the scores of the given variables are less than expected, a judgment on such scores is hardly possible because they are not compared with any national or international performance scale. According to the findings, females perform almost equal to males in several categories, reflecting their consistent and continuous progress in sports.

The male players perform comparatively better when participating in individual than team events, whereas females are just the opposite. As a general case, it can be due to society's social conditions where males are encouraged to perform alone, but the female collectively participates in outdoor events. The findings in the male category agree with Cox and Liu that players of individual sports had a higher level of mental preparation, but it is the opposite in the case of females (Cox, Liu, & Qiu, 1996). The higher level of motivation for players in individual events than team events, for both male and female supports the findings of (Kajbafnezhad, Ahadi, Heidarie, Askari, & Enayati, 2011).

Conclusion:

Competent training in psychological skills is essential for making a player prepared in elite competitions at present. The player needs systematic practice to make him psychologically fit to address any kind of anxiety, fear and negative thoughts during competitions. As elite sportspersons are almost equal in their physical and physiological factors, it is necessary to emphasize other categories such as psychological skills to realise players' maximum potential. As this study exposes the limitations of Indian players in this area, related administrative bodies and coaches should emphasise their mental fitness and psychological conditioning.

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