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A CROSS SECTIONAL ANALYSIS OF MENTAL TOUGHNESS AND WILL TO WIN AMONG ELITE FOOTBALL PLAYERS

Dr. Jaspal Singh¹, Gaurav Dureja², Sukhbir Singh³

¹Head, Department of Physical Education and Sports, Lyallpur Khalsa College, Jalandhar, (Punjab) INDIA

²Assistant Professor, Department of Physical Education (TE&L), Post Graduate Government College, Sector-11, Chandigarh (U.T.) INDIA

³Research Scholar, Department of Physical Education (T), Guru Nanak Dev University, Amritsar (Punjab) INDIA

Corresponding author:

Gaurav Dureja, M.Phil.

Assistant Professor,

Department of Physical Education (TE&L),

Post Graduate Government College,

Sector-11, Chandigarh (U.T.) INDIA

E-mail: g_dureja83@yahoo.com

Contact: +91-9876142317

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ABSTRACT

SINGH, J.; DUREJA, G.; SINGH, S. A cross sectional analysis of mental toughness and will to win among elite football players. *Brazilian Journal of Biomotricity*. v. 6, n. 4, p. 285-296, 2012. Physically and mentally football is known as tough game and famous for very stiff competitions. The psychology of each individual player in such stiff competition played a significant role to perform at top level. While considering the paramount importance of psychological variables the present study was carried out to analyse the role of mental toughness and will to win among foreigner professionals, Indian professional and Indian non-professional football players. A total eighty six (N=86) male subjects, Out of which fifteen (N=15) foreigner professionals, thirty four (N=34) Indian professional and thirty seven (N=37) Indian non-professional football players were randomly selected for the collection of data. The age of the subjects was ranged between 20 to 34 years with the mean age of 27.60. Mental toughness was measured with mental toughness questionnaire and Will to win was measured with will to win questionnaire. ANOVA was applied to find out the difference in mean scores among foreigner professionals, Indian professional and non-professional football players. Where 'F' values found significant in ANOVA, then Scheffe post-hoc test was applied to see the mean difference between three groups through SPSS. The level of significance was set at 0.05. The results revealed that foreigner professionals are significantly better as compare to Indian professional and Indian non-professional football players with regard to Mental Toughness. However, the will to win among foreigner



professionals, Indian professional and non-professional football players were also found significant in favour of foreign players.

Keywords: Mental toughness, will to win, professional, non-professional.

INTRODUCTION

Football is the most popular game in the world. Physically and mentally football is known as tough game and famous for very stiff competitions. The sports competitions are always stressful and players must have the knowledge to deal with pre game nerves. A slight difference among physical fitness components, specific skills of game, strategy of match and psychological approach of players can be match winning/losing factors. BABIAN (1990), MEDVEDEV and KHAN (1991) stated that major competition of these days is characterized by tough fight between opponents of almost equal caliber. The difference in performance of the winner and those who do not get any place constitute fractions of second or some cms. Now-a-days psychology of players considered among the very important factors. The training of sports psychology programmes is key to success (KUREGER, 1984; LOEHR, 1982, 86). Sports psychologists will give you psychological tests to see what your weak and strong areas and they also guide to work on them. Each psychological variable have its unique contribution towards sports performance but some of the variables are preferably and specifically suitable for few games. The psychological parameters such as personality traits, anxiety, self esteem and mental toughness are among the factors that can be considered to determine psychological predictors (ANIZU et al., 2003). The mental toughness and will to win are utmost pre-requisite of football game. Bull et al., (2005) observed on the basis of research that there is also the potential for difference in mental toughness from one sports and event to the other. BELL (1983) e CRATTY (1984) illustrated that mental aspects affect the athlete's performance in competition. It is only when the mind gets tense then the body gets tense. The mind then is the source of our success or failure. Mental toughness is a quality of players to cope up better than your opponents and unshakeable pre service conviction towards same goal despite pressure and adversity. JONES et al., (2002) defines that "cope better than your opponents with the many demands (competition, training, and lifestyle) that sports places on a performer. Specifically be more consistent and better than your opponents in remaining determined, focussed, confident, and in control under pressure." The psychological characteristics of Olympic champions identified that mental toughness as a significant contributor to sports performance enhancement (GOULD et al., 2002). Will to win is the extent to which a person desires to reach some standard of excellence or defeat of opponent. The athletes high in will to win mainly compete to first position and may have something of win at all cost attitude. WHITE (1959) found that will to win is also related with competitive and by acknowledging this, an athlete is able to put in his best and complete the activity successfully. DAINO (1985) defined as "the intensity of desire to defeat an opponent or to exceed some performance standard in given sports." Will to win is an important parameter which makes great competitors. It has been observed in some competitions that players who although lacked physical fitness ended up winning the match, all due to their determination to win. A correct attitude towards winning always helps in achieving high performance in sports. This ability to work to one's full potential is directly related to an individual's Will to Win. Low will to win indicates that competitors are careless about winning.

On other hand professionalism have the prominent place in today's competitive sports. In sports, professionalism is known as the practice of using professional players in sports (CROWTHER et al., 1997). As per European football system, Indian football is also striding towards professionalism. I-league is the main professional competition which successfully conducted by All India Football Federation from decade and half. In professionalism the current performance of players considered for next year contract and monetary benefits. That's why professionalism is very demanding and players always put their extra efforts to perform best and win the game, because winning the game and competition is the ultimate aim of players, coaches, supporters, managers and authorities. But a Win-At-All-Costs attitude is inconsistent with goals and aspirations (COX, 2002). Indian players are getting in lakhs (yearly from 5 to 30 lakh approx.) as per their game standard. In our country most of the foreigner football players get handsome contract as



compare to Indian professional football players. Because they are comparatively superior and played key role in winning the game and competitions. Now this is question for us that what are the reason behind their superiority? Are they better in physical skills (general e specific) or psychologically sound and superior as compare to Indian players? According to recent findings the psychology of each individual player in such stiff competition played a significant role to perform at top level (BABIAN, 1990; COX, 2002; KUREGER, 1984; LOEHR, 1982). While considering the paramount importance of psychological variables with regard to football game the investigators focussed to analyse the role of mental toughness and will to win among foreigner professionals, Indian professional and non-professional football players.

Objectives of the study

- To assess the significant difference among foreigner professionals, Indian professional and non-professional football players on the variable of mental toughness and its sub variables.
- To assess the significant difference among foreigner professionals, Indian professional and non-professional football players on the variable of will to win.

Hypotheses of the study

- (H_0) There will be no significant difference among foreigner professionals, Indian professional and non-professional football players on the variable of mental toughness and its sub variables.
- (H_0) There will be no significant difference among foreigner professionals, Indian professional and non-professional football players on the variable of will to win.

MATERIAL AND METHODS

Sample

Total eighty six (N=86) male subjects were selected through purposive random sampling from professional clubs those who played I-league (National Football League) i.e. J.C.T Football Club, (Phagwara), Air India Football Club (Mumbai), Mohan Bagan football club (Kolkata) and Churchill Brothers Football club (Goa) and non-professional clubs of Border Security Force and Punjab Police, (Jalandhar). Out of which fifteen (N=15) foreigner (Brazil, Senegal, China, Australia and Nigeria) professional football players playing with Indian professional football clubs, thirty four (N=34) Indian professional football players playing with Indian professional football clubs and thirty seven (N=37) Indian non-professional football players from Punjab Police and Border Security Force were selected for the collection of data. The players who signed yearly in professional clubs on contract basis as per their performance and participated in I-league are considered professional players. Those who joined the departmental teams (Border Security Force and Punjab Police) on permanent basis and they get monthly salaries for playing the game and did not participated in I-league are considered as non-professional football players. The age of the subjects was ranged between 20 to 34 years with the mean age of 27.60.

METHODOLOGY

Mental toughness was measured by applying mental toughness questionnaire developed by Goldberg (1998). Mental toughness questionnaire consists of 30 items measuring the mental toughness in five areas, i.e. rebound ability, ability to handle pressure, concentration, confidence and motivation. There was only yes/no answers option in this questionnaire and subjects have to tick only one option. Will to win level was measured by applying will to win questionnaire prepared by Kumar and Shukla (1988). Will to win questionnaire consists of 14 items which measure the will to win and only yes/no option for answers. Around 120 questionnaires were distributed among the professional and non-professional football teams but we received only 86 completed questionnaires from them and while collecting, it checked that no response was left. There was no



time limit for the completions of the questionnaires but the subjects were instructed not to take too much time over any questions.

STATISTICAL ANALYSIS

One way Analysis of Variance (ANOVA) was applied to find out the difference in mean scores among foreigner professionals, Indian professional and non-professional football players. Where 'F' value found significant in ANOVA then Scheffe post-hoc test was applied to see the mean difference between mean scores of each three groups through Statistical Package for Social Science (SPSS) version 20.0. The level of significance was set at 0.05.

RESULTS

The results of mental toughness and will to win of foreigner professional football players, Indian professional and Indian non-professional football players are presented in tables and interpretations are given accordingly.

Table 1 - Anova and post-hoc test among foreigner professionals, Indian professional and non-professional football players with regard to Rebound ability.

ANOVA						
Groups		Sum of Squares	df	Mean Square	F-value	Sig.
Between Groups		16.649	2	8.324	7.52*	.001*
Within Groups		91.781	83	1.106		
Total		108.430	85			
Scheffe Post Hoc						
X	Y	Mean Difference (X-Y)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Foreigner Professional (Mean=4.00)	Indian Professional	.970	.325	.015*	.158	1.78
Indian Professional (Mean=3.02)	Indian Non-Professional	.272	.249	.554	.350	.895
Indian Non-Professional (Mean=2.75)	Foreigner Professional	1.243	.321	.001*	2.04	.440

(*) Significant at .05, table value F (2, 83) =3.09

Table-1 shows that the calculated f-value 7.52 is higher than tabulated value and found significant. The Scheffe post-hoc test reveals that foreigner professionals are significantly better than Indian professional and non-professional football players. Whereas Indian professionals did not differ significantly from Indian non-professional football players.

Table 2 - Anova and post-hoc test among foreigner professionals, Indian professional and Indian non-professional football players with regard to Ability to Handle Pressure

ANOVA						
Groups		Sum of Squares	df	Mean Square	F	Sig.
Between Groups		14.233	2	7.116	6.06*	.003*
Within Groups		97.407	83	1.174		
Total		111.640	85			
Scheffe Post Hoc						
X	Y	Mean Difference (X-Y)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Foreigner Professional (Mean=4.46)	Indian Professional	.496	.335	.341	.340	1.33
Indian Professional (Mean=3.97)	Indian Non-Professional	.592	.257	.077	.049	1.23
Indian Non-Professional (Mean=3.97)	Foreigner professional	1.088	.331	.006*	1.91	.261

(*) Significant at .05, table value F (2, 83) =3.09

Table-2 shows that the calculated f-value 6.06 is higher than tabulated value and found significant. The Scheffe post-hoc test reveals that foreigner professional football players are significantly better than Indian non-professional football players. Whereas foreigner professionals and Indian professionals; Indian Professional and non-professional football players did not differ significantly.

Table 3 - Anova among foreigner professionals, Indian professional and Indian non-professional football players with regard to Concentration

Groups	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.386	2	4.193	2.30	.106
Within Groups	151.068	83	1.820		
Total	159.453	85			

(*) Significant at .05, table value F (2, 83) =3.09

Table-3 shows that the calculated f-value 2.30 is lower than tabulated value and found non-significant among foreigner professionals, Indian professional and Indian non-professional football players.

Table 4 - Anova and post-hoc test among foreigner professionals, Indian professional and Indian non-professional football players with regard to Confidence

ANOVA						
Groups		Sum of Squares	df	Mean Square	F	Sig.
Between Groups		23.375	2	11.688	10.72*	.000
Within Groups		90.450	83	1.090		
Total		113.826	85			
Scheffe Post Hoc						
X	Y	Mean Difference (X-Y)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Foreigner Professional (Mean=4.66)	Indian Professional	.990	.323	.012*	.183	1.79
Indian Professional (Mean=3.67)	Indian Non-Professional	.487	.248	.152	.130	1.10
Indian Non-Professional (Mean=3.18)	Foreigner Professional	1.477	.319	.000*	2.27	.681

(*) Significant at .05, table value F (2, 83) =3.09

Table-4 shows that the calculated f-value 10.72 is higher than tabulated value and found significant. The Scheffe post-hoc test reveals that foreigner professionals are significantly better than Indian professional and Indian non-professional football players. Whereas Indian professional and Indian non-professional did not differ significantly.

Table 5 - Anova among foreigner professionals, Indian professional and Indian non-professional football players with regard to Motivation

Groups		Sum of Squares	Df	Mean Square	F	Sig.
Between Groups		11.581	2	5.791	4.23*	.018
Within Groups		113.442	83	1.367		
Total		125.023	85			
Scheffe Post Hoc						
X	Y	Mean Difference (X-Y)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Foreigner Professional (Mean=4.93)	Indian Professional	.75686	.36238	.119	.1464	1.6601
Indian Professional (Mean=4.18)	Indian Non-Professional	.28458	.27774	.594	.4077	.9769
Indian Non-Professional (Mean=3.89)	Foreigner Professional	1.04144	.35785	.018*	1.9334	.1495

(*)Significant at .05, table value F (2, 83) =3.09

Table-5 shows that the calculated f-value 4.23 is higher than tabulated value and found significant. The Scheffe post-hoc test reveals that foreigner professionals are significantly better than Indian non-professional football players. Whereas foreigner professionals and Indian professional; Indian Professional and non-professional football players did not differ significantly.

Table 6 - Anova and post-hoc test among foreigner professionals, Indian professional and Indian non-professional football players with regard to Mental Toughness (Total)

ANOVA						
Groups		Sum of Squares	df	Mean Square	F	Sig.
Between Groups		360.283	2	180.142	19.29*	.000
Within Groups		774.740	83	9.334		
Total		1135.023	85			
Scheffe Post Hoc						
X	Y	Mean Difference (X-Y)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Foreigner Professional (Mean=22.26)	Indian Professional	4.00196	.94700	.000*	1.6415	6.3625
Indian Professional (Mean=18.26)	Indian Non-Professional	1.80525	.72582	.051*	.0039	3.6144
Indian Non-Professional (Mean=16.45)	Foreigner Professional	5.80721	.93518	.000*	8.1382	3.4762

(*) Significant at .05, table value F (2, 83) =3.09

Table-6 shows that the calculated f-value 19.29 is higher than tabulated value and found significant. The Scheffe post-hoc test reveals that foreigner professionals are significantly better than Indian professional football players and Indian non-professional football players. On other hand Indian professional are also significantly better than non-professional football players.

TABLE 7 - Anova and post-hoc test among foreigner professionals, Indian professional and Indian non-professional football players with regard to Will to Win

One Way Analysis of Variance (ANOVA)					
Groups	Sum of Squares	Df	Mean Square	F-value	Sig.
Between Groups	156.783	2	78.392	41.32*	.000
Within Groups	157.449	83	1.897		
Total	314.233	85			



Scheffe Post Hoc						
X	Y	Mean Difference (X-Y)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Foreigner Professional (Mean=10.80)	Indian Professional	.623	.426	.349	.440	1.68
Indian Professional (Mean=10.17)	Indian Non-Professional	2.500	.327	.000*	1.68	3.31
Indian Non-Professional (Mean=7.67)	Foreigner Professional	3.124	.421	.000*	4.17	2.07

(*)Significant at .05, table value F (2, 83) =3.09

Table-7 shows that the calculated f-value 41.32 is higher than tabulated value and found highly significant. The Scheffe post-hoc test reveals that foreigner professionals and Indian professionals are significantly better than non-professional football players. Whereas foreigner professionals and Indian professional football players did not differ significantly on will to win.

DISCUSSION

The present study was focus to analyse and find out the difference among foreigner professionals, Indian professional and Indian non-professional football players with regard to mental toughness and will to win. The results of table-1 shows that foreigner professionals are significantly better as compare to Indian professional and Indian non-professional football players. These findings indicated that foreigner players are having better rebound ability as compare to their counter partners. The results of table-2 shows that foreigner professionals are significantly better as compare to Indian non-professional football players on handle to pressure. These findings indicated that foreigner players are having better ability to handle the pressure as compare to non-professional football players. GOLDBERG (1992 e 1998) described that ability to bounce back from setbacks and handle competitive pressures helps to improve the sports performance. CONNAUGHTON et al., (2008) pointed out that mentally tough performer behaved under the extreme pressure of high level competition and possessing total commitment to goal achievement. The results of table-3 shows that there is non-significant difference found as concern to the sub variable concentration among three groups. The results indicated that concentration did not play much role in this context or they all may be enough good in concentration. The results of table-4 shows that foreigner professionals are significantly better as compare to Indian professional and Indian non-professional football players on confidence. Confidence attributes the belief that one can perform well and be successful (LOEHR, 1986). KUAN and ROY (2007) also found that medallist displayed a better self-confidence than the non-medallist. These findings indicated that foreigner players are having better confidence as compare to their counter partners which may be the reason of their better performance. The results of table-5 shows that there is significant difference found in favour of foreigner professionals as compare to Indian Non-Professionals on sub variable motivation among three groups. Motivation attributes the energy and willingness to preserve (LOEHR, 1986). CONNAUGHTON et al., (2008) and MOHAMMAD et al., (2009) stated



that motivation level helps them to achieve their best and also affect their mental toughness. The null hypothesis (H_0) in relation to sub variables i.e. rebound ability, handle to pressure, confidence and motivation of mental toughness is not accepted and in case of concentration it is accepted.

The results of table-6 shows that foreigner professionals are significantly better on mental toughness as compare to Indian professional and Indian non-professional football players. Indian professionals are also found significantly better as compare to Indian non-professionals. These findings indicated that foreigner players are having better mental toughness (total) as compare to their counter partners. The results of study clearly indicated that foreigner professionals and Indian professionals are better in most of the variables as compare to Indian non-professional football players. Football is very tough and body contact game. Those who are playing in professional set up they have to perform better for their better future. MOHAMMAD et al., (2009) found that Malaysian professional football players are at excellent level in mental toughness. GOULD et al., (1987) indicated that coaches felt the importance of being mentally tough in achieving success in sports. THELWELL et al., (2005) identified its attributes from single sport perspective of professional soccer players closely resemble the attributes that mental toughness investigated in those individuals who have achieved the ultimate outcome in their sport. RATHORE et al., (2009) also concluded that game players are more mentally tough as compare to individual game players. But, here professionalism is a main factor which showed the quality players are more attracted towards professionalism or another hand professionalism put pressure on players to becoming a more mentally tough. Mental toughness determine the success of an athlete and seen as an important element help them to become a champion Gould et al., (1987). Many researchers agreed that successful and champion athletes always remain mentally tough (ALDERMAN, 1974; PANKEY, 1993; SHEARD, 2009; TAP, 1991). Mental Toughness is a trainable variable and many specific training programmes have been designed to develop mental toughness in performers. It is believed that mental toughness is not inherited gift but learning variable which acquired through hard work, understanding and practice (JONES, 1982; LOEHR, 1995; TAPP, 1991). The results of present study with regard to mental toughness are supported by above mentioned renowned psychologist of world. So special attention for mental toughness training have to be given by the sports coaches and managers. Table-7 shows that foreigner professionals are significantly better than Indian professional and non-professional football players on will to win. As well as Indian professional are also significantly better than Indian non-professional football players. Foreigner professionals and Indian professionals did not vary on will to win. But it indicated that competitive sports are not to only participate but victory is the ultimate aim of players and authorities. DAINO (1985) found that tennis players had significantly higher will to win than non-sports group. GHUMAN and DHILLON (2000) also, concluded that measure of will to win of team players securing first three positions in the tournament showed higher scores than the team players who participated in the tournament but failed to achieve the position. Many researchers such as KANG et al., 1990; PEZER and BROWN 1980; SIDHU and SINGH 2006; found similar results among high achievers and low achievers on will to win. The null hypothesis (H_0) with regard to mental toughness (total) and will to win is rejected. Finally the findings of present study strongly supported by result of above quoted studies that Mental Toughness and Will to win are most important variables which required special attention for further improvement in game.

PRACTICAL APPLICATION

The study will be beneficial to understand the mental toughness and will to win of foreigner professionals, Indian professional and Indian non-professional football players. The sports psychologists and coaches working with these areas will be benefited from the findings of the present research and they can include the mental toughness and will to win variables in their training schedule from development stages.



CONCLUSION

As per the results of study it is concluded that foreigner professionals are significantly better than Indian professional and Indian non-professional football players with regard to mental toughness and will to win. Whereas Indian professional are also significantly better than non-professional football players with relation to will to win. So the psychological variables like mental toughness and will to win are equally significant and Special classes for the preparation of Mental Toughness and Will to win are to be introduced from development stages for football players.

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