



Mental Toughness: Exploring Applications for High Performance in Football

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Abstract

Football is body contact and long duration playing game which needs mentally strong and tough players to win matches and championships. Due to paramount importance of mental toughness in sports and particular in football that present paper focussed to compare the mental toughness between medallist and non-medallist football players and find out the best group among medallist football players of schools, colleges and clubs. The data of three hundred (N=300) football players was collected from Schools, Colleges and Clubs. One hundred (N=100) football players each from schools, Colleges and clubs were randomly selected as subjects for this study. Mental toughness was checked by Dr. Alan Goldberg (2004) Mental Toughness Questionnaire. The means and standard deviations are calculated through SPSS. Test of significance (t-test) was applied to check the significant difference between medallist and non-medallist football players. The significance level was checked at 0.05 levels. The findings of this research paper showed that medallist football players have significantly better on mental toughness as t-value 4.23 of school, 6.11 of college and 7.20 of club level football players found in favour of medallist players.

Keywords: - mental toughness, high performance, football, medallist.



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INTRODUCTION

Recently sports training and coaching are much related with psychological variables. After the emergence of sports psychology as distinct scientific discipline, many attempts have been made to help coaches and athletes in their pursuits in a number of ways like assessing various psychological demands, providing psychological techniques, identifying problems and using various psychological intervention programmes for enhancing sports performance (Cox,

2002; Weinberg & Gould, 2011). A rapidly growing area of interest in sports psychology in relation to football is mental toughness. Mental toughness is a quality of players to cope up better than opponents and unshakeable pre service conviction towards same goal despite pressure and adversity. Jones et al. (2002) defined that, “cope better than your opponents with the many demands (competition, training, and lifestyle) that sports places on a performers for better than opponents, determined, focused, confident and more consistent to control under pressure situations”. Mental toughness is being able to reach your ideal competitive state. This is the personal state of being that allows an individual to perform with his greatest potential. It is a state of being where an individual feels most energized, most confident and most strong. Williams (1998) denoted that mental toughness might be more important in determining the final outcome of a sporting event than other factors. Sport psychologists and coaches have attempted to design training programmes to develop mental toughness. This construct has recently focused of serious research thus its foundations are in a state of evolution refinement. Without a thorough understanding or the construct, programmes for developing mental toughness could be ambiguous and misleading. In these days rigorous scientific inquiry has lead to a more complete understanding of mental toughness (Bull, et al., 2005; Connaughton, et al., 2010; Creasy, 2005 & Thelwell, et. al 2005). Sport psychologists, coaches, sports commentators, sports managers, and athletes acknowledge the importance of mental toughness in sporting performance (Goldberg, 1998; Hodge, 1994 & Tunney, 1987). In early work, Loehr (1982 & 1986) emphasized that athletes and coaches felt that at least fifty percent of success is due to psychological factors. Gould et al. (1987) emphasized that coaches feel mental toughness is important in achieving success. Despite widespread agreement on the importance and benefits of mental toughness and calls to identify psychological attributes that create champions, high quality research into mental toughness is limited. Mental toughness needed in endurance sports to be able to handle the incredibly high volumes of training, regularly pushing the body to its limits. The contrasting examples, which are by no means a definitive list, further reinforce the conceptual ambiguities that are bound to exist when trying to establish all encompassing definitions of mental toughness in sport. These examples from the authors observations of elite sport, also pose the question whether there are always equivalent expressions of mental toughness in every sport and whether the truly mentally tough performer is equally skilled at being able to perform. Football is body contact and long duration playing game which needs mentally strong and tough players to win matches and championships. Due to paramount importance of mental toughness in sports

and particular in football that present paper focussed to compare the mental toughness between medallist and non-medallist football players and find out the best group among medallist football players of schools, colleges and clubs.

METHODOLOGY

SELECTION OF SUBJECTS: The data of three hundred (N=300) football players was collected from Schools, Colleges and Clubs. One hundred (N=100) football players each from schools, Colleges and clubs were randomly selected as subjects for this study. Those who secured first three positions in state school (U-19) Championship, Inter College Championships of Panjab University, Chandigarh; Punjabi University, Patiala; Guru Nanak Dev University, Amritsar and Punjab State Super League Championship were considered as medallist players. Those who did not secure any position from said championships and only participated were considered as non-medallist football players.

TOOLS: Mental Toughness was checked by Dr. Alan Goldberg (2004) Mental Toughness Questionnaire.

STATISTICAL TECHNIQUES: The data of three hundred (N=300) male football players was analyzed by descriptive statistics. The means and standard deviations are calculated through SPSS. Test of significance (t-test) was applied to check the significant difference between medallist and non-medallist football players. Further, Analysis of variance was applied to find out the difference between school, college and club level medallist football players. Where results found significant that Least Significant Difference (L.S.D.) post-hoc test was applied to see the better group among school, college and club level medallist football players. Significance level was checked at 0.05 levels.

RESULTS AND DISCUSSION

The results of mental toughness with regard to medallist and non-medallist football players of schools, colleges and club are presented in tables and figures.

Table – 1: mean, S.D. and t-value of mental toughness of school level medallist and non-medallist football players

| Level | Subjects | Performance Groups | Mean | SD | MD | T-value | P-value |
|--------|----------|--------------------|-------|------|------|---------|---------|
| School | N=50 | Medallist | 17.24 | 3.74 | 2.86 | 4.23* | 0.00 |
| | N=50 | Non-Medallist | 14.38 | 2.96 | | | |

*Significant at 0.05 level, table value 1.98 (df.=98)

It can be seen from table-1 that significant difference was found with regard to mental toughness between medallist and non-medallist school level football players as the P-value (Sig.) 0.00 was found smaller than 0.05 level of significance ($p < 0.05$).

Figure-1: Graphical Representation of Mental Toughness of Medallist and Non-Medallist School Football Players

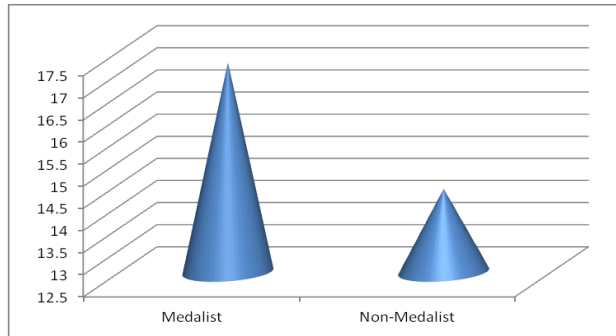


Table – 2: mean, S. D. and t-value of mental toughness of college level medallist and non-medallist football players

| Level | Subjects | Performance Groups | Mean | SD | MD | T-value | P-value |
|---------|----------|--------------------|-------|------|------|---------|---------|
| College | N=50 | Medallist | 18.70 | 3.16 | 4.24 | 6.11* | 0.00 |
| | N=50 | Non-Medallist | 14.46 | 3.75 | | | |

*Significant at 0.05 level, table value 1.98 (df.=98)

It can be seen from table-2 that significant difference was found with regard to mental toughness between medallist and non-medallist college level football players as the P-value (Sig.) 0.00 was found smaller than 0.05 level of significance ($p < 0.05$).

Figure-2: Graphical Representation of Mental Toughness of Medallist and Non-Medallist College Football Players

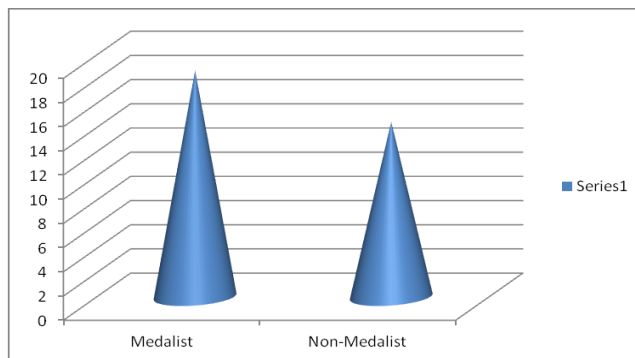


Table –3: mean, S.D. and t-value of mental toughness of club level medallist and non-medallist football players

| Level | Subjects | Performance Groups | Mean | SD | MD | T-value | P-value |
|-------|----------|--------------------|-------|------|------|---------|---------|
| Club | N=50 | Medallist | 20.42 | 3.10 | 4.80 | 7.20* | 0.00 |
| | N=50 | Non-Medallist | 15.26 | 3.55 | | | |

*Significant at 0.05 level, table value 1.98 (df.=98)

It can be seen from table-3 that significant difference was found with regard mental toughness between medallist and non-medallist club level football players as the P-value (Sig.) 0.00 was found smaller than 0.05 level of significance ($p < 0.05$).

Figure-3: Graphical Representation of Mental Toughness of Medallist and Non-Medallist Club Football Players

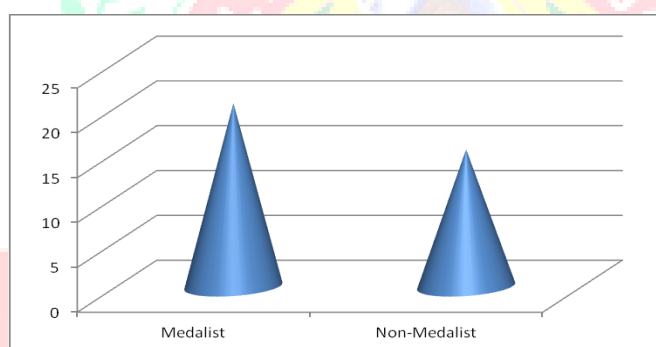


Table – 4: analysis of variance of mental toughness among school, college and club level medallist football players

| Groups | Sum of Squares | Df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|--------|-------|
| Between Groups | 253.373 | 2 | 126.687 | 11.329 | 0.000 |
| Within Groups | 1643.800 | 147 | 11.182 | | |
| Total | 1897.173 | 149 | | | |

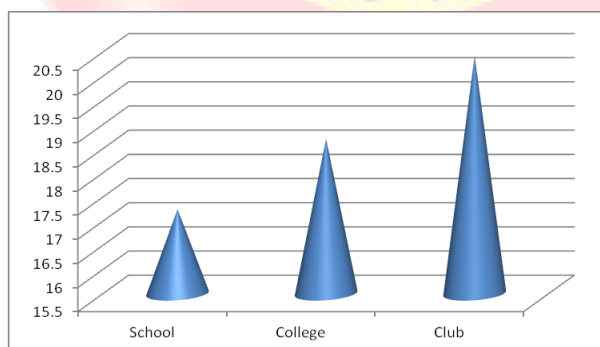
It can be seen from table-4 that significant difference was found with regard to the parameter of Mental Toughness among school, college and club level Medallist football players as the P-value (Sig.) 0.000 was found smaller than 0.05 level of significance ($p < 0.05$).

Table – 5: analysis of least significant difference (lsd) post-hoc test among school, college and club level medallist football players with regard to mental toughness

| Levels | | Mean Difference | Std. Error | Sig. |
|-------------------------|-------------------------|-----------------|------------|-------|
| School (Mean 17.24) | College (Mean 18.70) | 1.46000* | 0.66880 | 0.031 |
| College (Mean 18.70) | Club (Mean 20.42) | 1.72000* | 0.66880 | 0.011 |
| Club (Mean 20.42) | School (Mean 17.24) | 3.18000* | 0.66880 | 0.000 |

It has been observed from the table-5 that mean difference between school and college level football players was found 1.46. The P-value (Sig.) 0.031 showed that College level football players had demonstrated significant mental toughness than their counterpart school level football players. The mean difference between college and club level football players was found 1.72. The P-value (Sig.) 0.011 revealed that club level Medallist football players had exhibited significantly better on mental toughness than their counterpart college level football players. The mean difference between club and school level football players was found. 3.18. The P-value (Sig.) 0.000 showed that club level football players had demonstrated significant mental toughness than their counterpart school level football players.

Figure – 4: graphical representation of mean scores of mental toughness of school, college and club level medallist football players



DISCUSSION

The findings of this research paper showed that Medallist football players have significantly better on mental toughness as t-value 4.23 of school, 6.11 of college and 7.20 of club level football players found in favour of Medallist football players. These results indicated that mental toughness may be one of the major reasons to win the medal in football game. Football is power and body contact games which need mental toughness to win and defeat the opponent team. The studies conducted by researchers with regard to mental toughness

showed that game players and high performers had more mental toughness as compare to their counter parts (Rathore et al., 2009; Kaun & Roy, 2007). Norris (1999) has also emphasized the importance of mental toughness in developing champion athletes. Mohammad et al. (2009) Concluded that Malaysian professional football players had significantly better mental toughness as compare to low performer football players. Kimberly & Rank, (2003) concluded that gender based variations exist in mental toughness, therefore, they offer that important insights for developing programmes which address the needs of athletes in relation to mental toughness. The results of their study also indicated that mental toughness found significant in favour of Medallist players. Further findings of Medallist football players revealed that increasing trends exist in mean scores of school to college and college to club level football players. The results also found that senior players are significantly mentally tough as compare to their counter partners school and college level football players. Mental toughness is a trainable variable and many specific training programmes have been designed to develop mental toughness among players. It is believed that mental toughness is not inherited gift but learning variable which acquired through hard work, understanding and practice (Jones, 2002 & Loehr, 1982). 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 has to be given by the sports coaches and managers in their daily training schedule of football players at different levels of performance.

CONCLUSION

As per findings of this study it is concluded that mental toughness is one of the important variable in sports psychology which helps to produce champion's players in football. Therefore, there is need to given due importance to mental toughness in daily training programmes of football players to produce the champion in tournaments and leagues.

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