

Inquest of Mental Toughness between Pugilists and Wrestlers

Amarpreet Singh

Assistant Professor & Head, Department of Physical Education, Punjabi University, Patiala, India

Abstract

The investigation was focused to assess Mental Toughness status among Pugilists and Wrestlers of Punjabi University, Patiala. For this study forty male players were selected in which 20 were Pugilists and 20 were Wrestlers. For the aim of this study only those players were selected who had participated at Inter-College level organised by Punjabi University, Patiala. Moreover, this study was delimited to Mental Toughness Variable only. Mental Toughness Inventory developed by Dr. Allan Goldberg (1998) was used to collect the data. Inventory was further divided into five domains, i.e. Reboundability, Ability to Handle Pressure, Concentration, Confidence and Motivation. Furthermore to compare the mentioned two groups, 't-test' was applied and level of significance was set at 0.05. After the analysis of data, the result shows that statistically there exist significant differences between male Pugilists and Wrestlers of Punjabi University Patiala for their Reboundability, Ability to Handle Pressure, Concentration, Confidence, and Motivation Domains of Mental Toughness Parameter.

Keywords: Mental Toughness, Reboundability, Ability to Handle Pressure, Concentration, Confidence, Motivation, Pugilists, Wrestlers.

INTRODUCTION:

Contending and participating in sports events are often associated with various domains and spheres, like coaching, training, physiological, mechanical and psychological domains. The concept of psychology and especially mental toughness has recently received excessive deal of consideration from sports psychologists and trainers who seek to understand individual psychological factors and their effects on sports performance (**Bull, Shambrook, James & Brooks 2005; Gucciardi, Gordon & Dimmock, 2008**). The evolving awareness base for achieving winning motor performance is thought to be multidimensional, consisting of cognitive, emotional, and behavioural components and a key psychological construct (**Bull et. al., 2005; Clough, Earle, & Sewell, 2002; Crust & Clough, 2005; Jones et al., 2007**).

The psychological factors involved in athletic performance have long been of interest to athletes, coaches, sports psychologists, exercise scientists, and everyone involved in sports. Psychological traits that affect high level performance should be identified, determined and acknowledged. Although each psychological variable has a unique contribution to athletic performance, some variables are dominant and some are match-specific.

Based on the available literature on mental performance, mental toughness it is believed to be one of the most imperative psychological feature of athletes. The literature clearly shows that mental strength is essential for peak athletic

performance. **Gould et.al. (2002)**. Mental toughness is an important psychological property of athletic performance. Unfortunately, while many people recognize the importance of mental strength, few fully understand it. "Coaches and athletes often talk about mental toughness, but it is rarely clearly defined" (**Gould et.al. (2002)**), Coaches and athletes use the term routinely without a clear understanding of what it means to be partly or mentally strong. Mental toughness is a measure of an individual's resilience and self-confidence, which can predict success in sports, education, and the workplace (**Lin Ying et al., 2017**). Mental toughness is often used in conversation to refer to positive qualities that help an athlete deal with difficult circumstances. Coaches loosely use the term mental toughness to describe the mental state of players who maintain their perceived tough athleticism to succeed (**Moran, 2012**). Mental toughness can generate and increase confident energy in critical situations. Mental toughness has become an area of increasing interest in sports psychology. The term refers to the psychological characteristics that are essential for an athlete to achieve their best and peak performance. (**Loehr, 1986**).

Gucciardi et al. (2008) found evidence that mental toughness can explain how physically gifted athletes become better athletes. **Bull et al. (2005)** found based on research that differences in mental toughness can survive for every individual, every sport, every situation, and every sport. However, mentally strong athletes approach competition with a positive attitude and emotional control. **Tutko and Richards (1971-72)** and **Tapp (1991)** identified mental toughness as one of several personality traits associated with high athletic achievement and success.

The mind then is the source of our success or failure. According to **Clough et al. (2002)** mentally strong people have high levels of self-confidence and an unshakable belief that they are in control of their own destiny. Mentally strong people are competitive in many situations and have lower levels of anxiety than others. Moreover, it is relatively immune to competition and adversity. Elite athletes and coaches have argued that successful athletes are not always the most physically talented, but rather the most mentally tough. Acc. to (**Connaughton & Hanton, 2009**) It is widely accepted that mental toughness is important for achieving excellence in sports. However, mentally tough athletes approach competition with a positive attitude and controlled emotions.

Bull et.al. (2005) suggested that the characteristics of mental toughness in the global sense may differ from how mental toughness is understood in specific sports. It's also possible that certain sports have different elements of mental toughness. According to **Gucciardi et al. (2008)** mental strength includes collective beliefs (including attitudes, values, behaviours, and emotions) that help to overcome obstacles to success. **Clough et al. (2002)** showed that mentally tough people tend to be gregarious and outgoing; because they are able to remain calm and relaxed; when they are competitive in many situations and have lower levels of anxiety than others, and they have high self-confidence and an unwavering belief that they can control their own destiny, so that competition or adversity can remain relatively unaffected. **Loehr.et.al. (1982)** explained that mentally tough athletes respond in different ways that allow them to feel relaxed, calm and energized because they have learned to develop two skills;

First, we can increase the flow of positive energy in crisis and difficulties, and second, we can think in a certain way so that they have the right attitude to problems, pressures, mistakes and competition. Additionally, mental toughness has been described as both a personality trait and a state of mind. Suggested that the world's greatest athletes demonstrate mental toughness every time they perform consistently, responding to problems, pressures, mistakes and competition with the right attitude. At least 50% success of the coaches and trainers are due to psychological factors that reflect mental toughness. Another characteristic that is often used to explain why certain people have become the best in the world in their sports is mental toughness.

Cattell (1957) proposed that mental toughness manifests as realistic, confident, cynical behaviour and represents a tough, practical, mature, masculine, and realistic temperamental dimension. Mental toughness is necessary for success and the ability to withstand competitive pressure is a cornerstone of mental toughness (**Goldberg, 1992**). Low mental toughness affects dealing with challenges and negatively affects a person's self-image as an effective master of adversity, those who are not mentally tough respond more erratically, leading to ineffective coping, helplessness, stress and depression (**Pankey, 1993**).

STATEMENT OF THE PROBLEM:

For this above mention investigation the statement of the problem is 'Inquest of Mental Toughness between Pugilists and Wrestlers'.

OBJECTIVE OF THE STUDY:

- i. To observe the Mental Toughness Variable between Pugilists and Wrestlers of Punjabi University Patiala.

HYPOTHESIS:

- i. It was hypothesized that there would be significant difference between Pugilists and Wrestlers for their Mental Toughness variable.

DELIMITATIONS:

- i. This study was delimited to Pugilists and Wrestlers of Punjabi University Patiala only.
- ii. The investigation was further delimited to those players who had represented their institutes/ colleges for Inter-college championship organized by Punjabi University Patiala.
- iii. This study was delimited to 18 to 25 years of age group only.
- iv. This study was delimited to 40 male players, i.e. 20 male pugilists and 20 male wrestlers.
- v. This study was delimited to Mental Toughness Variable only.

METHODOLOGY:

SELECTION OF THE SUBJECTS: To conduct this study 40 players in which 20 Pugilists and 20 Wrestlers were taken. The entire sample was selected from the institutes of Punjabi University, Patiala. The age ranged from 18 to 25 years were selected. All subjects were selected by applying random sampling technique.

.NO	GROUP	NO. OF SAMPLE
i.	PULIGISTS	20
ii.	WRESTLERS	20

SELECTION OF THE VARIABLE: This study was delimited to Mental Toughness Variable only, which had five domains, these domains were:

- i. Reboundability
- ii. Ability to Handle Pressure
- iii. Concentration
- iv. Confidence
- v. Motivation

TOOLS USED:

To measure the Mental Toughness domains between male Pugilists and Wrestlers of Punjabi University Patiala, Mental Toughness Inventory developed by Dr. Allan Goldberg (1998) was used. The test consisted of 30 Statements of the Athlete's Mental Toughness, which the athlete answered with an 'X' in the 'true' or 'false' column. These were used to analyse the player's reactions to different situations and assess the domains of Mental Toughness.

STATISTICALLY ANALYSIS OF DATA:

To analysis the Mental Toughness Parameter and its Domains of Male Pugilists and Wrestlers of Punjabi University Patiala descriptive statistics i.e. Mean and Standard deviation was used, whereas to compare these two groups Inferential statistics 't'-test was employed. The level of significance was set at 0.05.

ANALYSIS AND RESULTS OF THE STUDY:**i. MENTAL TOUGHNESS:****Table No. 1**

Analysis of Male Pugilists and Wrestlers of Punjabi University Patiala for their Mental Toughness

Group	Mean	S.D	't'-Value
Pugilists	23.25	1.21	6.1454
Wrestlers	21.05	1.05	

Level of Significance at 0.05

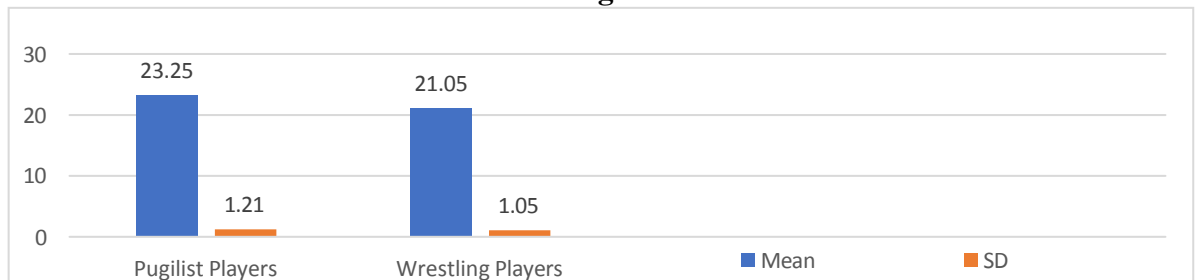
df = 38

Tabulated 't'-Value at 0.05 (1.684)

Table & Figure No. 1 portrays the Mean and S.D of male Pugilists and Wrestlers of Punjabi University Patiala for their Mental Toughness Parameter. The Mean and S.D of male pugilists and wrestlers of Punjabi University Patiala were 23.25 ± 1.21 and 21.05 ± 1.05 respectively. The calculated 't'-value was 6.1454 and the tabulated 't'-value was 1.684 at 0.05 level of significance. The calculated 't'-value was more than the tabulated 't'-value. Hence, it defines that there was significant difference between male pugilists and wrestlers of Punjabi University Patiala for their Mental Toughness Parameter.

Figure No.1

Analysis of Male Pugilists and Wrestlers of Punjabi University Patiala for their Mental Toughness



a. REBOUNDABILITY

Table No. 2

Analysis of Male Pugilists and Wrestlers of Punjabi University Patiala for their Reboundability

Group	Mean	SD	't'-Value
Pugilists	4.35	0.49	2.5083
Wrestlers	3.85	0.75	

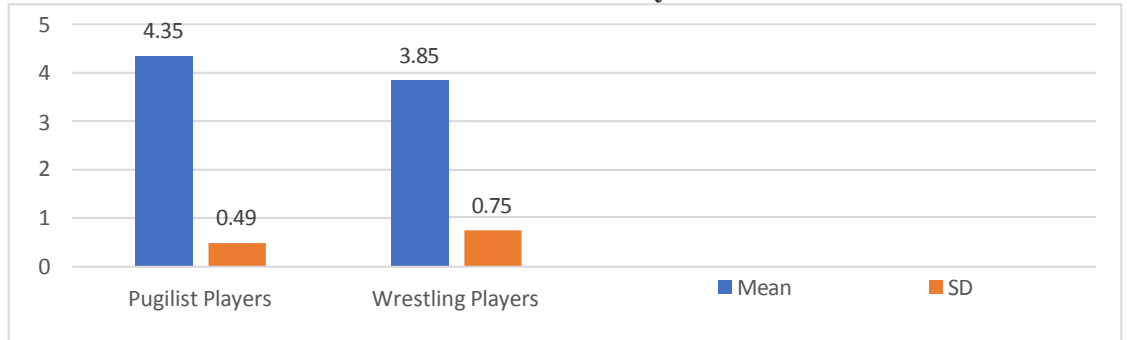
Level of significance at 0.05

df = 38

Tabulated 't'-Value at 0.05 (1.684)

Table & Figure No. 2 elucidates the Mean and S.D of Male Pugilists and Wrestlers of Punjabi University Patiala for their Reboundability Domain of Mental Toughness Parameter. The Mean and S.D of Male Pugilists and Wrestlers of Punjabi University Patiala was 4.35 ± 0.49 and 3.85 ± 0.75 respectively. The calculated 't'-value was 2.5083 and the tabulated 't'-value was 1.684 at 0.05 level of significance. The calculated 't'-value was more than the tabulated 't'- value. Therefore, it shows that significant difference was found between Male Pugilists and Wrestlers of Punjabi University Patiala for their Reboundability.

Figure No.2
Analysis of Male Pugilists and Wrestlers of Punjabi University Patiala for their Reboundability



b. ABILITY TO HANDLE PRESSURE

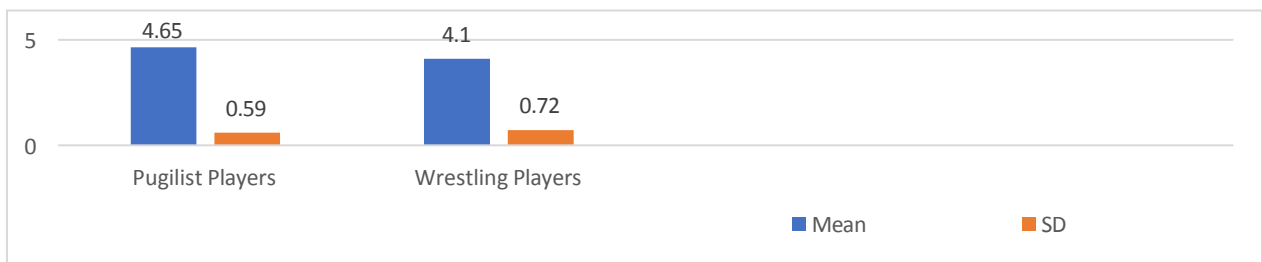
Table No.3
Analysis of Male Pugilists and Wrestlers of Punjabi University Patiala for Ability to Handle Pressure

Group	Mean	SD	't' Value
Pugilist Players	4.65	0.59	2.6515
Wrestling Players	4.10	0.72	

Level of Significance at 0.05 df = 38 Tabulated 't' Value at 0.05 (1.684)

Table & Figure No.3 depicts the Mean and S.D of Male Pugilists and Wrestlers of Punjabi University Patiala for their Ability to Handle Pressure Domain of Mental Toughness Parameter. The Mean and S.D of Male Pugilists and Wrestlers of Punjabi University Patiala was 4.65 ± 0.59 and 4.10 ± 0.72 respectively. The calculated 't'-value was 2.6515 and the tabulated 't'-value was 1.684 at 0.05 level of significance. The calculated 't'-value was greater than the tabulated 't'-value (1.684). Therefore, it confirms that there was significant difference between Male Pugilists and Wrestlers of Punjabi University Patiala for their Ability to Handle Pressure.

Figure No. 3
Analysis of Male Pugilists and Wrestlers of Punjabi University Patiala for their Ability to Handle Pressure



c. CONCENTRATION

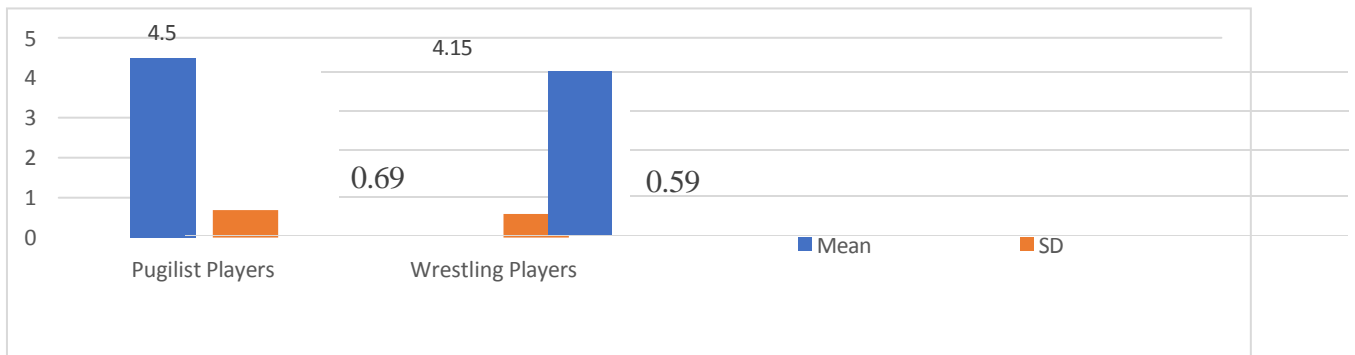
Table No.4
Analysis of Male Pugilists and Wrestlers of Punjabi University
Patiala for their Concentration

Group	Mean	S.D	't' Value
Pugilist Players	4.50	0.69	1.7302
Wrestling Players	4.15	0.59	

Level of Significance at 0.05 df = 38 Tabulated 't'-Value at 0.05 (1.684)

Table & Figure No.4 depicts the Mean and S.D of Male Pugilists and Wrestlers of Punjabi University Patiala for their Concentration Domain of Mental Toughness. The Mean and SD of Male Pugilists and Wrestlers of Punjabi University Patiala were 4.50 ± 0.69 and 4.15 ± 0.59 respectively. The calculated 't'-value was 1.7302 and the tabulated 't'-value was 1.684 at 0.05 level of significance. The calculated 't'-value was more than tabulated 't'-value. Thus, it shows that there exists significant difference between male Pugilists and Wrestlers of Punjabi University Patiala for their Concentration.

Figure No.4
Analysis of Male Pugilists and Wrestlers of Punjabi University
Patiala for their Concentration



d. CONFIDENCE

Table No. 5
Analysis between male Pugilists and Wrestlers of Punjabi University for
their Confidence

Group	Mean	S.D	't'-Value
BOXERS	4.70	0.57	2.0809
Wrestling Players	4.35	0.49	

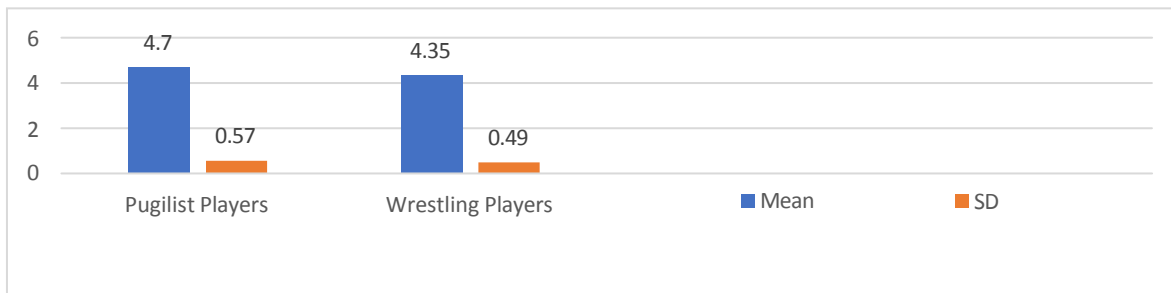
Level of significance at 0.05 df = 38 Tabulated 't' Value at 0.05 (1.684)

Table & Figure No.4.5 describes the Mean and S.D of Male Pugilists and Wrestlers of Punjabi University Patiala for their Confidence Domain of Mental Toughness

Parameter. The Mean and S.D of Male Pugilists and Wrestlers of Punjabi University Patiala was 4.70 ± 0.57 and 4.35 ± 0.49 respectively. The calculated 't'-value was 2.0809 and the tabulated 't'-value was 1.684 at 0.05 level of significance. The calculated 't'-value was more than the tabulated 't'-value. Therefore, it proves that there was significant difference between Male Pugilists and Wrestlers of Punjabi University Patiala for their Confidence Domain of Mental Toughness Parameter.

Figure No.5

Analysis between Male Pugilists and Wrestlers of Punjabi University Patiala for their Confidence



e. MOTIVATION

Table No. 6

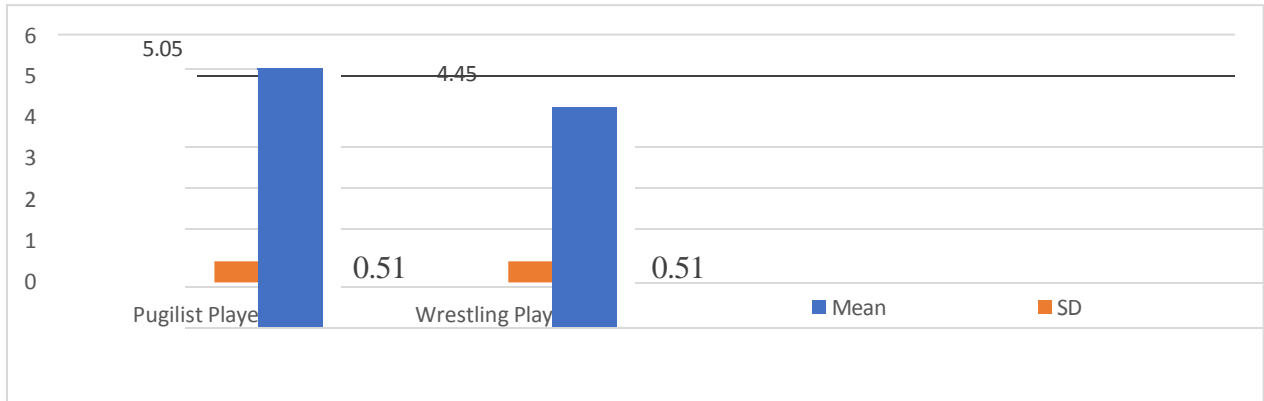
Analysis between Male Pugilists and Wrestlers of Punjabi University Patiala for their Motivation

Group	Mean	SD	't'-Value
Pugilists	5.05	0.51	3.7173
Wrestlers	4.45	0.51	

Level of significance at 0.05 df = 38 Tabulated 't'-Value at 0.05 (1.684)

Table & Figure No.6 represents the Mean and S.D of Male Pugilists and Wrestlers of Punjabi University Patiala for their Motivation. The Mean and S.D of Male Pugilists and Wrestlers of Punjabi University Patiala was 5.05 ± 0.51 and 4.45 ± 0.51 respectively. The calculated 't'-value was 3.7173 and the tabulated 't'-value was 1.684 at 0.05 level of significance. The calculated 't'-value was more than tabulated 't'-value. Thus, it demonstrates that there was significant difference between Male Pugilists and Wrestlers of Punjabi University Patiala for their Motivation.

Figure No. 6
Analysis of Male Pugilists and Wrestlers of Punjabi University
Patiala for their Motivation



DISCUSSION OF FINDINGS:

After the analysis of data, the result shows that statistically there exist significant differences between male Pugilists and Wrestlers of Punjabi University Patiala for their Reboundability, Ability to Handle Pressure, Concentration, Confidence, and Motivation domains of Mental Toughness Parameter. Significant difference was observed between male Pugilists and Wrestlers of Punjabi University Patiala with regard to their overall Mental Toughness. The findings of this study is also supported by **Tarsem Singh (2019)** who compared the mental toughness of inter-college and inter-university level male athletes. The study conducted by **Ramesh Chand Yadav (2014)** also found significant differences between National Volleyball and Kabaddi female players of Uttar Pradesh for their Mental Toughness Variable. Furthermore, the investigation carried by **Himanshu Hooda, Dinesh Kumar Kaushik, Deepak Hooda and Dr. Manju Chahal (2018)** where they compared the mental toughness ability of university level rowing players, and their results showed significant differences, which also supported the results of this study.

REFERENCES:

- Bull SJ, Shambrook CJ, James W, Brooks J. (2005).** Towards an understanding of mental toughness in elite Cricketers. *Journal of Applied Sport Psychology*.
- Clough PJ, Earle K, Sewell D. (2002).** Mental toughness: The Concept and its Measurement. In: Cockerill I Editor, *Solution in Sports Psychology*. London: Thomson. P. 32-43.
- Gould D, Dieffenbach K, Moffett A. (2002).** Psychological Characteristics and Their Development in Olympic Champions. *Journal of Applied Psychology*. 14(3):172-204

Goldby J, Sheard M. (2003). A Cognitive-Behavioral Analysis of Mental Toughness in National Rugby League Football Teams. *Percept Mot Skills*, 96:455-62.

Goldby J, Sheard M. (2004). Mental Toughness and Hardiness at Different levels of Rugby league. *Personality Individ Differ*. 37:933-42.

Gucciardi DF, Gordon S, Dimmock JA. (2008). Towards an understanding of mental toughness in Australian football. *Journal of Applied Sports Psychology*.

Kaun G, Roy J. (2007). Goal Profiles, Mental Toughness and its influence on performance on Performance outcomes Among Wushu athletes. *Journal Sports Science Medicine*. 6:28-33.

Loehr, J. E. (1986). *Mental Toughness Training for Sports: Achieving Athletic Excellence*.

Lexington, MA: Stephen Green Press.

Lin Y, Mutz J, Clough Peter J, Papageorgiou Kostas A (2017). Mental Toughness and Individual Differences in Learning, Educational and Work Performance, Psychological Well-being, and Personality: A Systematic Review. *Frontiers in Psychology*. Volume 8: Article 1345.P.1-15.

Moran, A. P. (2012). *Sport and exercise psychology: A critical introduction (2nd ed.)*.

Routledge/Taylor & Francis Group.

Middleton SC, Marsh WH, Martin AJ, Richards GE, Savis J, Parry C (2008). Discovering Mental Toughness: A Qualitative study of Mental Toughness in Elite Athletes. Available at: www.sectiononewrestling.com/discovering_mental_toughness. (8.8.08)

Newland A, Newton M, Finch L, Colin RH, Leslise P. (2012). Moderating variables in relationship between mental toughness and performance in basketball. *Journal of sport and health science* xx 1-9.

Dr. Tarsem Singh (2019). Comparative Study of Mental Toughness between Inter College and Inter University Male Athletes. *International Journal of Yogic, Human Movement and Sports Sciences*; 4(1): 1410-1412.

Himanshu Hooda, Dinesh Kumar Kaushik, Deepak Hooda, Dr. Manju Chahal (2018). A Comparative Study of Mental Toughness of University level Rowing Players. *International Journal of Yogic, Human Movement and Sports Sciences*; 3(1):839-842.

Ramesh Chand Yadav (2014). Comparative Study of Mental Toughness between National Female Volleyball and Kabaddi Players. *Journal of Education and Practice*; Vol:5 (14) :66-68.