

MENTAL TOUGHNESS IN HANDBALL PERFORMANCE: A KEY TO SUCCESS

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ABSTRACT

The present study was aimed to identify the mental toughness in Handball Performance. To obtain data, the investigator had selected Twenty Four (N=24) male and female inter-college level handball players of R.K. Arya College, Nawanshahr, Punjab were selected for this study. The subjects were purposively assigned into two groups: Male Handball Players ($n_1=12$) and Female Handball Players ($n_2=12$). To measure the level of Mental Toughness among subjects, Mental Toughness Scale constructed by Goldberg (1998) was administered. To determine the significant differences of Mental Toughness in male and female handball players unpaired t-test was employed for data analyses. To test the hypothesis, the level of significance was set at 0.05. In a nutshell it can be said that from the findings that insignificant differences were found between male and female handball players on the variable mental toughness and its sub-variables: Reboundability, Ability to Handle Pressure, Concentration, Confidence, and Motivation and Overall Mental toughness.

KEYWORDS: Mental Toughness, Handball Performance.

INTRODUCTION:

Each psychological variable has 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 flow state are utmost pre-requisite of individual and team athletes. 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. It is further 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. Gould et al. (2002) examine the psychological characteristics of Olympic champions identified that mental toughness as a significant contributor to sports performance enhancement. Williams (1998)

denoted that mental toughness might be more important in determining the final outcome of a sporting event than factors such as speed and ability. Jones et al. (2002) identified twelve mental toughness characteristics. Stratton (2004) further developed the list of characteristics, adding eight. Creasy (2005) consolidated the characteristics found by Jones et al. (2002) and Stratton (2004). More recently, Jones et al. (2007) found that 30 characteristics were necessary to adequately describe the construct. Although improved scientific rigor has advanced our understanding of mental toughness, studies have produced variations in its characteristics. Moreover, variations have been found with respect to wording used to describe the characteristics. Also, differences in the ratings of the perceived importance of characteristics have been discovered. The variations in characteristics could be due to the context specific nature of mental skills (Jones, 2007). While considering the paramount importance of psychological variables with regard to sports the investigators focused to analyze the major role of mental toughness in Handball Performance.

METHOD AND PROCEDURE:

SAMPLE

To obtain data, the investigator had selected Twenty Four (N=24) male and female inter-college level handball players of R.K. Arya College, Nawanshahr, Punjab were selected for this study. The subjects were purposively assigned into two groups: Male Handball Players ($n_1=12$) and Female Handball Players ($n_2=12$).

INSTRUMENT

To measure the level of Mental Toughness among subjects, Mental Toughness Scale constructed by Goldberg (1998) was administered.

STATISTICAL TECHNIQUE EMPLOYED

To determine the significant differences of Mental Toughness in male and female handball players unpaired t-test was employed for data analyses. To test the hypothesis, the level of significance was set at 0.05.

Table-1: Significant differences in the Mean scores of male and female handball players on the variable mental toughness.

Variables	Male Handball Players =12		Female Handball Players =12		<i>t-value</i> <i>Sig.</i>	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>		
Reboundability	3.43	1.11	3.58	1.06	1.15	0.21
Ability to Handle Pressure	3.60	0.98	3.75	0.94	1.21	0.159
Concentration	3.56	1.13	3.85	1.11	0.48	0.93
Confidence	4.25	0.98	3.91	0.99	1.59	0.19
Motivation	4.51	1.06	3.28	1.01	3.89	0.12
Overall Mental toughness	19.73	1.96	18.68	2.30	3.85	0.15

Reboundability

A glance at table-1 shows the results of male and female handball players with regard to the variable mental toughness. The descriptive statistics shows the Mean and SD values of male Handball Players on the sub-variable Reboundability as 3.43 and 1.11 respectively. However, female Handball Players had Mean and SD values as 3.58 and 1.06 respectively. The 't'-value 1.15 as shown in the table above was found statistically insignificant ($P > 0.05$). It has been observed from the above results that female Handball Players have demonstrated significantly better on Reboundability than the male Handball Players.

Ability to Handle Pressure

The descriptive statistics shows the Mean and SD values of male Handball Players on the sub-variable Ability to Handle Pressure as 3.60 and 0.98 respectively. However, female Handball Players had Mean and SD values as 3.75 and 0.94 respectively. The 't'-value 1.21 as shown in the table above was found statistically insignificant ($P > 0.05$). It has been observed from the above results that female Handball Players have demonstrated significantly better on Ability to Handle Pressure than the male Handball Players.

Concentration

The descriptive statistics shows the Mean and SD values of male Handball Players on the sub-variable Concentration as 3.56 and 1.13 respectively. However, female Handball Players had Mean and SD values as 3.85 and 1.11 respectively. The 't'-value 0.48 as shown in the table above was found statistically insignificant ($P>0.05$). It has been observed from the above results that female Handball Players have demonstrated significantly better on Concentration than the male Handball Players.

Confidence

The descriptive statistics shows the Mean and SD values of male Handball Players on the sub-variable Confidence as 4.25 and 0.98 respectively. However, female Handball Players had Mean and SD values as 3.91 and 0.99 respectively. The 't'-value 1.59 as shown in the table above was found statistically insignificant ($P>0.05$). It has been observed from the above results that female Handball Players have demonstrated significantly better on Confidence than the male Handball Players.

Motivation

The descriptive statistics shows the Mean and SD values of male Handball Players on the sub-variable Motivation as 4.51 and 1.06 respectively. However, female Handball Players had Mean and SD values as 3.28 and 1.01 respectively. The 't'-value 3.89 as shown in the table above was found statistically insignificant ($P>0.05$). It has been observed from the above results that male Handball Players have demonstrated significantly better on Motivation than the female Handball Players.

Overall Mental Toughness

The descriptive statistics shows the Mean and SD values of male Handball Players on the sub-variable Overall Mental Toughness as 19.73 and 1.96 respectively. However, female Handball Players had Mean and SD values as 18.68 and 2.30 respectively. The 't'-value 3.85 as shown in the table above was found statistically insignificant ($P>0.05$). It has been observed from the above results that male Handball Players have demonstrated significantly better on Motivation than the female Handball Players.

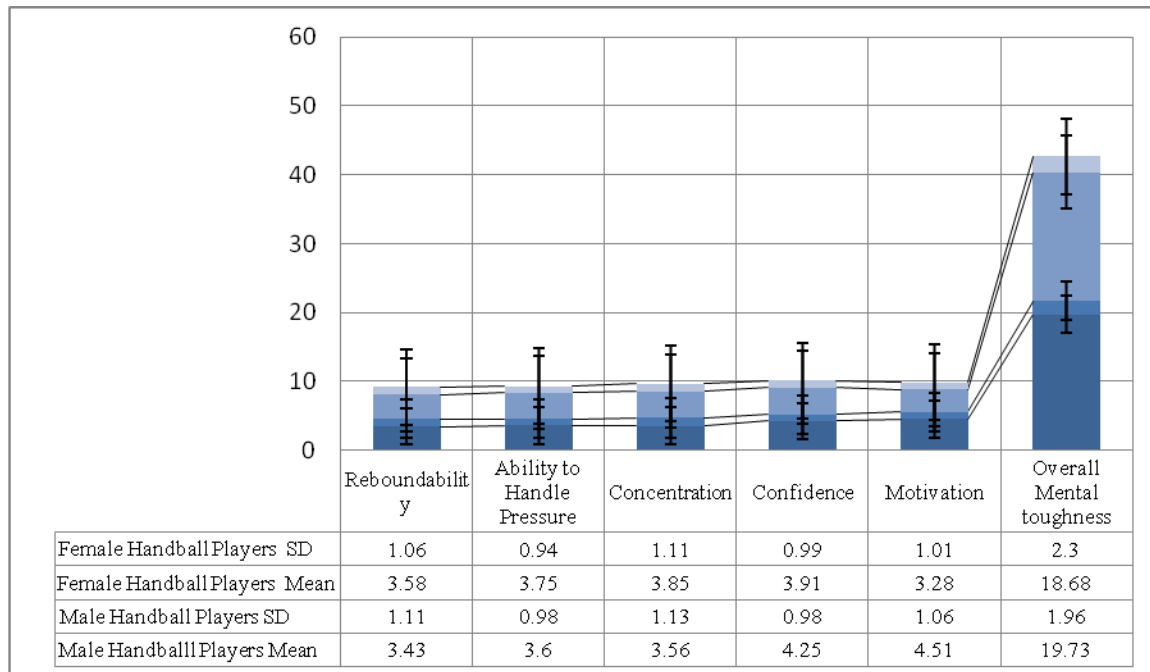


Figure-1: Mean & SD scores of male and female handball players on the variable mental toughness.

CONCLUSION:

In a nutshell it can be said that from the findings that insignificant differences were found between male and female handball players on the variable mental toughness and its sub-variables: Reboundability, Ability to Handle Pressure, Concentration, Confidence, and Motivation and Overall Mental toughness.

References

- Anizu, M., Kumaraswamy, N., Singh, R., & Rusli, M. (2003). Mental Toughness Profile as One of Predictor of Injuries among Malaysian Professional Football Players. *Journal of Applied Sport Psychology*, 6, 128-138
- Bull, S. J., Shambrook, C. J., James, W., & Brooks, J. K. (2005). Towards an Understanding of Mental Toughness in Elite English Cricketers. *Journal of Applied Sport Psychology*, 17(3), 209-227.

- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological Characteristics and their Development in Olympic Champions. *Journal of Applied Sport Psychology*, 14(3), 172-204.
- Williams, R. M. (1988). The U.S. Open Character Test: Good Strokes Help. But the Most Individualistic of Sports is ultimately a Mental Game. *Psychology Today*, 22(9), 60-62.
- Stratton, R. (2004). Ripkin on Perseverance. *Coaching Youth Sports*. [https:// courseware.vt.edu/users/ rstratto/CYS /Feature Nov04 .html](https://courseware.vt.edu/users/rstratto/CYS/FeatureNov04.html)
- Jones, G., Hanton, S., & Connaughton, D. (2002). What is This Thing Called Mental Toughness? An Investigation of Elite Sport Performers. *Journal of Applied Sport Psychology*, 14(3), 205-218.
- Creasy, J. W. (2005). *An Analysis of the Components of Mental Toughness in Sport*. A Dissertation Submitted to the Graduate Faculty of Virginia Polytechnic Institute & State University. Unpublished Thesis.