

Mental Toughness and Emotional Maturity in Basketball Performance: Identifying Performance Indicators

Davinder Singh

Department of Physical Education, D.A.V. College, Amritsar, India

Tel: 91-98558-10848 E-mail: ds_rajput87@yahoo.in

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Abstract

The present study was aimed to indentify the mental toughness and emotional maturity among basketball players. For this purpose, sixty female basketball players of 20 to 25 years of age were selected. They were further divided into three groups; (i.e., $N_1=20$; District, $N_2=20$; State and $N_3=20$ National). To determine level of Mental Toughness among subjects, Mental Toughness, constructed by Goldberg et al. (1998) was administered. To determine level of Emotional Maturity among subjects, Emotional Maturity Scale constructed by Singh and Bhargava's (1988) was administered. One way Analysis of Variance (ANOVA) was employed to find out the intra-group differences. The findings show that no significant differences were found among female basketball players on the sub-variables of Mental Toughness. Conculdingly from the above findings that insignificant differences were present among female basketball players on the sub-variables of Emotional Maturity.

Keywords: Mental toughness, Emotional maturity, Basketball

1. Introduction

Sport psychology specialist work with athletes who hold extensively differing values and beliefs about their sporting and everyday life. Psychological variables are universally acknowledged as being foremost provider to generous success in sports J. Singh and S. Singh (2011). Therefore the athletic ability and physical fitness are understandable parts of that list, but another variable that commonly surfaces when these top mark athletes and programs are studied is mental toughness (Ness, 1977). Clough et al. (2002) explain that mentally strong individual have a high level of an unshakable faith and sense of self-belief which pedals the goals, then the particular individuals be able to comparatively unaltered by misfortune and

struggle. In team game sports psychological issues play a crucial role for enhancing performance and maximizing health benefits of athletes. So many Scientific studies evidence shows that mere participation in sports can prove to be psychological asset and also further helpful in lifelong activities regardless of whether the participation has been Competition oriented (Matsumoto & Konno, 2005). While considering the paramount importance of psychological variables with regard to combat sports the investigators focused to analyze the major role of mental toughness and emotional maturity in elite basketball performance.

2. Methods

2.1 Participants

For this purpose, sixty female basketball players of 20 to 25 years of age were selected. They were further divided into three groups; (i.e., $N_1=20$; District, $N_2=20$; State and $N_3=20$ National).

2.2 Tools

Sr.no	Tools	Authors	Year
1.	Mental Toughness	Goldberg	1998
2.	Emotional Maturity	Singh and Bhargava's	1988

3. Statistical Analysis

One Way Analysis of Variance (ANOVA) was employed to compare the three groups of basketball. For testing the hypotheses, the level of significance was set at 0.05.

4. Results

Table 1. Significant differences in the results among Female Basketball Players with regard to mental toughness on the sub-variable reboundability

Source Variation	of Sum Squares	of Degree Freedom	of Mean Square	F-value	P-value (Sig.)
Between Groups	1.233	2	.617	.485	.618
Within Groups	72.500	57	1.272		
Total	73.733	59			

*Significant at 0.05.

It can be seen from Table 1 that insignificant differences were found with regard to the sub-variable Reboundability among District, State and National female basketball players as the P-value (Sig.) .618 was found higher than the 0.05 level of significance ($p > 0.05$).

Table 2. Significant differences in the results among Female Basketball Players with regard to mental toughness on the sub-variable ability to handle pressure

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-value	P-value (Sig.)
Between Groups	.100	2	.050	.050	.952
Within Groups	57.500	57	1.009		
Total	57.600	59			

*Significant at 0.05.

It can be seen from Table 2 that insignificant differences were found with regard to the sub-variable Ability to Handle Pressure among District, State and National female basketball players as the P-value (Sig.) .952 was found higher than the 0.05 level of significance ($p > 0.05$).

Table 3. Significant differences in the results among female basketball players with regard to mental toughness on the sub-variable concentration

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-value	P-value (Sig.)
Between Groups	2.633	2	1.317	1.032	.363
Within Groups	72.700	57	1.275		
Total	75.333	59			

*Significant at 0.05.

It can be seen from Table 3 that insignificant differences were found with regard to the sub-variable Concentration among District, State and National female basketball players as the P-value (Sig.) .363 was found higher than the 0.05 level of significance ($p > 0.05$).

Table 4. Significant differences in the results among female basketball players with regard to mental toughness on the sub-variable confidence

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-value	P-value (Sig.)
Between Groups	1.900	2	.950	.985	.380
Within Groups	54.950	57	.964		
Total	56.850	59			

*Significant at 0.05.

It can be seen from Table 4 that insignificant differences were found with regard to the sub-variable Confidence among District, State and National female basketball players as the P-value (Sig.) .380 was found higher than the 0.05 level of significance ($p > 0.05$).

Table 5. Significant differences in the results among female basketball players with regard to mental toughness on the sub-variable motivation

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-value	P-value (Sig.)
Between Groups	4.133	2	2.067	1.874	.163
Within Groups	62.850	57	1.103		
Total	66.983	59			

*Significant at 0.05.

It can be seen from Table 5 that insignificant differences were found with regard to the sub-variable Motivation among District, State and National female basketball players as the P-value (Sig.) .163 was found higher than the 0.05 level of significance ($p > 0.05$).

Table 6. Significant differences in the results among female basketball players with regard to overall mental toughness

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-value	P-value (Sig.)
Between Groups	2.433	2	1.217	.306	.737
Within Groups	226.300	57	3.970		
Total	228.733	59			

*Significant at 0.05.

It can be seen from Table 6 that insignificant differences were found with regard to the variable Overall Mental Toughness among female basketball players District, State and National as the P-value (Sig.) .737 was found higher than the 0.05 level of significance ($p > 0.05$).

Table 7. Significant differences in the results among female basketball players with regard to emotional maturity on the sub-variable emotional instability

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-value	P-value (Sig.)
Between Groups	13.333	2	6.667	.224	.800
Within Groups	1696.600	57	29.765		
Total	1709.933	59			

*Significant at 0.05.

It can be seen from Table 7 that insignificant differences were found with regard to the sub-variable Emotional Unstability among District, State and National female basketball players as the P-value (Sig.) .800 was found higher than the 0.05 level of significance ($p > 0.05$).

Table 8. Significant differences in the results among female basketball players with regard to emotional maturity on the sub-variable emotional regression

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-value	P-value (Sig.)
Between Groups	163.333	2	81.667	3.623	.333
Within Groups	1284.850	57	22.541		
Total	1448.183	59			

*Significant at 0.05.

It can be seen from Table 8 that insignificant differences were found with regard to the sub-variable Emotional Regression among District, State and National female basketball players as the P-value (Sig.) .333 was found higher than the 0.05 level of significance ($p > 0.05$).

Table 9. Significant differences in the results among female basketball players with regard to emotional maturity on the sub-variable social maladjustment

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-value	P-value (Sig.)
Between Groups	30.000	2	15.000	.613	.545
Within Groups	1395.250	57	24.478		
Total	1425.250	59			

*Significant at 0.05.

It can be seen from Table 9 that insignificant differences were found with regard to the sub-variable Social Maladjustment among District, State and National female basketball players as the P-value (Sig.) .545 was found higher than the 0.05 level of significance ($p > 0.05$).

Table 10. Significant differences in the results among female basketball players with regard to emotional maturity on the sub-variable personality disintegration

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-value	P-value (Sig.)
Between Groups	10.800	2	5.400	.176	.839
Within Groups	1748.050	57	30.668		
Total	1758.850	59			

*Significant at 0.05.

It can be seen from Table 10 that insignificant differences were found with regard to the sub-variable Personality Disintegration among District, State and National female basketball players as the P-value (Sig.) .839 was found higher than the 0.05 level of significance ($p > 0.05$).

Table 11. Significant differences in the results among female basketball players with regard to emotional maturity on the sub-variable lack of independence

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-value	P-value (Sig.)
Between Groups	.533	2	.267	.016	.984
Within Groups	942.400	57	16.533		
Total	942.933	59			

*Significant at 0.05.

It can be seen from Table 11 that insignificant differences were found with regard to the sub-variable Lack of Independence among District, State and National female basketball players as the P-value (Sig.) .984 was found higher than the 0.05 level of significance ($p > 0.05$).

Table 12. Significant differences in the results among female basketball players with regard to emotional maturity

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-value	P-value (Sig.)
Between Groups	264.033	2	132.017	.307	.737
Within Groups	24546.900	57	430.647		
Total	24810.933	59			

*Significant at 0.05.

It can be seen from Table 12 that insignificant differences were found with regard to the variable Emotional Maturity among District, State and National female basketball players as the P-value (Sig.) .737 was found higher than the 0.05 level of significance ($p > 0.05$).

5. Practical Application

The study will be considerably helpful to comprehend the Mental Toughness and Emotional Maturity level existing among female basketball players. The sports psychologists and coaches working with these areas will drive benefit from the findings of the present research and they can integrate the Mental Toughness and Emotional Maturity variables in their training schedule from the very initial stages.

6. Conclusion

Summarizing from the above findings we can say that no significant differences were found among female basketball players on the sub-variables of Mental Toughness. Concludingly from the above findings that insignificant differences were present among female basketball players on the sub-variables of Emotional Maturity.

References

- Clough, P., Earle, K., & Sewell, D. (2002). *Solutions in Sport Psychology, Mental Toughness: The Concept and its Measurement*. In I. Cockerill (Ed.), 32-45.
- Connaughton, D., Wadey, R., Hanton, S., & Jones, G. (2008). The Development and Maintenance of Mental Toughness: Perceptions of Elite Performers. *Journal of Sports Sciences*, 26(1), 83-95. <http://dx.doi.org/10.1080/02640410701310958>
- Goldberg, A. S. (1998). *Sports Slump Busting: 10 Steps to Mental Toughness and Peak Performance*. Champaign, IL: Human Kinetics.
- Matsumoto, D., & Konno, J. (2005). The Relationship between Adolescents' Participation in Judo, Quality of Life, and Life Satisfaction. *Budogaku Kenkyu*, 38(1), 13-26.
- Ness, J. (1997). Are You Training your Mental Game or Just Thinking About it? *Technique*, 17, 9.
- Singh, J., & Singh, S. (2011). Status of Emotional Maturity among Under Graduate College Students: A Comparative Analysis. *Indian J. Sports Sci. Phys. Educ*, 21, 9-18.

Singh, Y., & Bhargava, M. (1980). Manual for Emotional Maturity Construct and Standardized Emotional Maturity Scale. National Psychological Corporation, 4/230, Kachari Gate, Agra, India.

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