

Analysis Of Mental Toughness Among Artistic And Rhythmic Gymnast Female Players Of University Level

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The purpose of the study was to analysis mental toughness variable between Artistic and Rhythmic Female Gymnasts. To conduct this study, total 40 female subjects (20 artistic and 20 rhythmic gymnasts) in the age group from 18-25 years were taken. This study was conducted only on the female gymnasts who had participated in All India Inter University Gymnastics Championship. All subjects were taken by purposive sampling technique. The subjects were informed about the purpose and objective of the study and all the Subjects voluntary participated in this study. The level of significance was set at 0.05. The finding shows that no significant differences exist between these two groups for their mental toughness parameter.

Keywords: Mental Toughness, Confidence, Constancy, Control. Artistic and Rhythmic Gymnastics.

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INTRODUCTION:

Mental toughness is closely related to contests and makes differences both winning and losing. Top athlete believe that the psychological factors play an important role as physical attributes and learned skills for the achievement. During the competitions mental toughness appears to carry great psychological significance, when the momentum starts to shift in one direction to another. Athletes remain completely focused based on the different level of situation during the training and competitions. The situational factors are more important for every individual or team athlete **(Williams, 1998)**. In artistic events (performed on an apparatus), men compete in floor, pommel horse, rings, vault, parallel bars and horizontal bars. Female gymnasts compete on the vault, uneven bars, balance beam and floor. Gymnastics is highly skilled sports in which performance of the gymnast evaluated on the basis of technique and difficulty of the skill. the competition includes all-round events and team events, also scored over each Apparatus. Rhythmic gymnastics (performed with an apparatus) is strictly a women’s competition. The gymnasts, accompanied by music, perform on a 13m-squared floor area (approximately 140ft squared) with rope, hoop, ball, clubs and ribbon. In the individual event they perform different routines with four of the four apparatus.

OBJECTIVE OF THE STUDY:

Objective of the study was to compare the mental toughness among artistic and rhythmic gymnastics female players of university level.

HYPOTHESIS OF THE STUDY:

On the basis of own view and understanding of the problem, it was hypothesized that, there would be significant difference in mental toughness parameter between Artistic and Rhythmic All India inter university level female gymnasts.

DELIMITATIONS OF SUBJECTS:

01. The study was delimited to Artistic and Rhythmic Gymnastics female players only.
02. The Study was delimited to the subjects from 18-25 Years only.
 - The study was delimited to All India Inter university female gymnasts, further delimited to 40 gymnasts only (20 artistic and 20 rhythmic female gymnasts).

SELECTION OF SUBJECTS:

For the present study total 40 female Gymnasts of All India Inter university level were selected on the basis of purposive sampling technique, in which 20 players were from Artistic and 20 Rhythmic female Gymnasts from All Indian Inter university level and their age 18-25 & above (senior category) will be selected as subjects.

SELECTION OF VARIABLES:

For the purpose of this investigation Mental Toughness variable was taken to compare Artistic and Rhythmic female Gymnasts. Furthermore, Mental Toughness was divided into 3 domains such as-

01. Confidence
02. Constancy
 - Control

TOOLS USED FOR THE STUDY:

For the present study Sports Mental Toughness Questionnaire Sheard et al (2009) was taken. It consists of 14 items that is Confidence, Constancy and Control. The number of statement in this present questionnaire which falls in the confidence, were the statement numbers 1 ,5, 6, 11, 13 and 14. for the Constancy, the statement numbers were 3, 8, 10 and 12. For the Control variable the statement numbers were 2, 4, 7 and 9 respectively.

STATISTICAL ANALYSIS OF DATA:

For the purpose of this investigation Mean, Standard Deviation, and t-test unpaired was employed with the help of Microsoft Excel.

ANALYSIS OF RESULTS:

Table No.1

The Mean, Standard deviation and t-test of Artistic and Rhythmic Female Gymnasts on Mental Toughness.

Groups	Mean	Standard Deviation	t-test
Artistic Gymnastics	34.5	2.98	0.43
Rhythmic gymnastics	35	4.19	

Level of significance at 0.05

Tabulated t value at 0.05 (1.697) df=38

Table and figure no.1 depicts the Mean and SD of Artistic Gymnastics and Rhythmic

Gymnastics for their Mental Toughness. The Mean and SD of Artistic female gymnasts was 34.5 ± 2.98 and the Mean and SD of Rhythmic female Gymnasts was 35 ± 4.19 respectively. The calculated t-value was 0.43 and the tabulated t-value at 0.05 level of significance was 1.697. Therefore, it shows that there exists no-significant difference between the mentioned two groups.

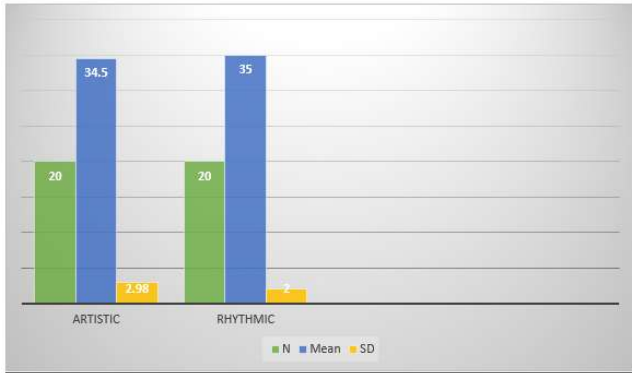


Figure No.1

Table No. 2

Analysis between Artistic Gymnastics and Rhythmic Gymnastics on confidence parameter.

Groups	Mean	Standard Deviation	t-test
Artistic Gymnastics	15.05	1.76	0,0713
Rhythmic Gymnastics	15.10	2.59	

Level of significance at 0,05 Tabulated t value at 0.05 (1.697) df=38

Table and figure no.2 depicts the Mean and SD of Artistic and Rhythmic female Gymnasts for their confidence level. The Mean and SD of Artistic female Gymnasts was 15.05 ± 1.76 and the Mean and SD of Rhythmic female Gymnasts was 15.10 ± 2.59 respectively. The calculated t-value was 0,0713 and the tabulated t-value at 0.05 level of significance was 1.697. Therefore, it shows that there exists no-significant difference between the mentioned two groups.

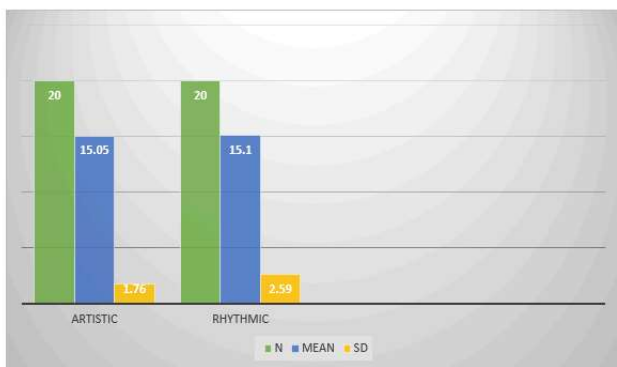


Figure No. 2

Table No. 3

Analysis between Artistic Gymnastics and Rhythmic Gymnastics on constancy parameter.

Groups	Mean	Standard	t-test
Artistic Gymnastics	9.65	1.42	0,4677
Rhythmic Gymnastics	9.45	1.28	

Level of significance at 0.05 df=38
Tabulated t value at 0.05

Table and figure no.3 depicts the Mean and SD of Artistic and Rhythmic female Gymnasts for their Constancy level. The Mean and SD of Artistic female Gymnasts was 9.65 ± 1.42 and the Mean and SD of Rhythmic female Gymnasts was 9.45 ± 1.28 respectively. The calculated t-value was 0.4677 and the tabulated t-value at 0.05 level of significance was 1.697. Therefore, it shows that there exists no-significant difference between the mentioned two groups.

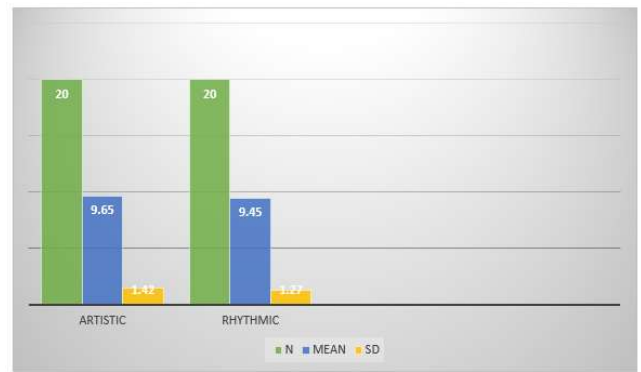


Figure No. 3

Table No. 4

Analysis between Artistic Gymnastics and Rhythmic Gymnastics on Control parameter.

Groups	Mean	Standard	t-test
Artistic Gymnastics	10	2.05	0,61188
Rhythmic Gymnastics	10.4	2.03	

Level of significance at 0.05

Tabulated t value at 0.05 (1.697) df= 38

Table and figure no.4 depicts the Mean and SD of Artistic and Rhythmic female Gymnasts for their Control level. The Mean and SD of Artistic female Gymnasts was 10 ± 2.05 and the Mean and SD of Rhythmic female Gymnasts was 10.4 ± 2.03 respectively. The calculated t-value was 0.61188 and the tabulated t-value at 0.05 level of significance

Was 1.697. Therefore, it shows that there exists no-significant difference between the mentioned two groups.

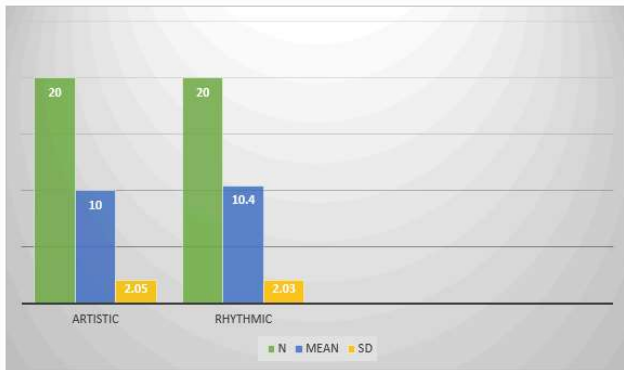


Figure No. 4

RESULT:

Results of this present study shows that there no significant differences between Artistic and Rhythmic female Gymnasts of All India Inter University level for their Mental Toughness variables. The results show that the psychological parameter of mental toughness that are confidence, constancy and control have no significant differences between Artistic and Rhythmic female Gymnasts of All India Inter University level. The result of this study are also supported by the Pandey Gayatri (2016), M Lakshman Kumar (2013).

CONCLUSION:

It was concluded that statistically there exist no significance difference between Artistic Gymnastics and Rhythmic Gymnastics female players of University level on their Confidence, Constancy and Control. Thus, the data were collected as per the design of the study given in the manual and the procedure was opted as per the guideline of the manual which was further subjected to statistical analysis.

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