



# Investigation of Personality Characteristics of National Level Male and Female Gymnasts

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## To cite this article:

Rajkumar Sharma, Devarshi Kumar Chaubey. Investigation of Personality Characteristics of National Level Male and Female Gymnasts. *International Journal of Sports Science and Physical Education*. Vol. 1, No. 1, 2016, pp. 1-5. doi: 10.11648/j.ijsspe.20160101.11

**Received:** March 19, 2016; **Accepted:** March 28, 2016; **Published:** June 7, 2016

**Abstract:** The purpose of the study was to assess and investigate the personality characteristics of national level male and female gymnasts. One hundred national level males (N=60) and females (N=40) gymnasts were randomly selected during the Junior national gymnastics championships to serve as the subjects for this study. The mean age and SD of male and female gymnasts of national levels were  $19.90 \pm 1.53$  and  $18.56 \pm 2.71$  respectively. Eysenck's Personality Questionnaire-R (E.P.Q.-R) prepared by Eysenck and. Eysenck was selected to measure the four dimensions of personality of national level Gymnasts of India. In order to find out the significant difference between male and female gymnasts at national level on personality factors, mean, SD and t-ratio were computed, level of significant was set at .05 level. The results of study revealed that male gymnasts of national level were found more extroverted, less psychotic and neurotic in nature than their female counter parts. They had expressed similarity in their psychoticism, neuroticism and social desirability dimensions of personality and significant difference in their extraversion personality factor.

**Keywords:** Male, Female, Gymnasts, Personality Factors, National Level, Junior

## 1. Introduction

The participation in Sports contributes to assembling up self confidence, enhance intellectual level, temperament development and outgoing tendency or sociableness intrinsically proficiency ends up in increased success in sports activities that is very valued in one's cluster. Human life may be a advanced of physical, intellectual, emotional and social development patterns sports and physical activities are integral components of those patterns. Folks contend in sports as a result of the chance provided to judge their ability in interacting with one's setting. Competition provides folks of all levels of ability. with the chance to search out there enforcements engaging to them and gain sure measures of self- analysis [1].

In the fashionable age of knowledge base, man is creating speedy progress altogether walks of life together with that of sports and games. The progress in sports and games is also attributed to the scientific investigations for the higher performance of sportsmen and sportswomen, improved scientific and specific coaching strategies and conjointly to

the higher understanding of the human organism [2]

The temperament was typically been acknowledged 'as a crucial part of physical activity. Some investigators are of the opinion that there are some temperament traits that are directly accountable for success and failure of a sport person. Kroll and Carlson explicit that there was direct relation between temperament traits and level of performance.

The temperament make-up of a private plays a significant role in his achievements in each field of life. "Human temperament refers to the distinctive expression of the characteristics of a private and it should be studied within the social context during which it develops. it's not Associate in Nursing isolated development, become independent from the setting. though it's usually perceived in such the simplest way.

Personality is expressed through the advanced and dependent relationship fashioned between a private and setting [3].

Success in athletics looks to be dependent partially on psychological standing and traits. the employment of Associate in Nursing athlete's temperament profile, in concern with

information of their past expertise, coach's rating, anatomic and physiological characteristics so one will enhance the accuracy of prediction during a variety of sports [4].

For the healthy development of the jock significantly for peak performance, a constructive relationship between the jock and coach is crucial. The coach ought to value the temperament of the jock and train effectively on those factors that directly influence the performance [5].

A dimension of temperament characterized by tendencies to interact in thought and inhibit impulses, at one extreme (Introversion), and tendencies to be extremely sociable and self-expressive, at the opposite (Extroversion) [6]. temperament has been fashioned by the expertise of the individual and is functioning as a full [7]. All Port explicit that “temperament is that which allows a prediction of what an individual can kill given scenario and it conjointly involved with all behavior of things each over and over the skin [8]. Kine explicit that “Personality of a private is that that modify United States of America to predict what he can kill a given situation” [9].

Personality are often influenced by some factors like setting (family, sports, community, school, nature of sports, etc.), heredity and gender. and individual. Temperament is that the product of setting and role of sport and temperament traits in psychological heredity and childhood expertise is separated. The structure of the temperament is one among the most factors, that have an effect on behaviour pattern of somebody's “[10], [11], [12]”.

Behzadi [13] showed that there's a major distinction between individual and team athletes in sociableness, responsibility, and folie which team athletes have higher levels of sociableness and responsibility and individual athletes have higher folie, whereas no important distinction was determined between the 2teams in alternative parts

Studies on temperament information gain a growing weight within the up to date psychological science. The scientific discipline of temperament traits created important advances in recent years. The gymnast's temperament qualities and therefore the analysis of their influence on sport performances unconcealed the manifestation of temperament factors and their influence on sport performances “[14], [15]”.

The purpose of the study was to study and investigate the personality characteristics of national level male and female gymnasts.

## 2. Methodology

### 2.1. Selection of Subjects

One hundred national level male and female gymnasts were randomly selected during the Junior national gymnastic championships to serve as the subjects for this study. The sample consisted of 100 National level gymnasts (males=60, females=40). The mean age and SD of male and female gymnasts of national levels were  $19.90 \pm 1.53$  and  $18.56 \pm 2.71$  respectively.

### 2.2. Selection of Variables

Keeping in view, the importance of the selected psychological variables on Indian Gymnasts, feasibility of collection of data legitimate time and cost involved in this study, the Personality Factors as dependent psychological variables had been selected.

### 2.3. Description of Questionnaires

Eysenck's Personality Questionnaire-R (E.P.Q.-R) prepared by Eysenck and. Eysenck [16] was selected to measure the four dimensions of personality of national level Gymnasts of India. The Eysenck's Personality Questionnaire-R (E. P. Q.-R) is a valid and reliable instrument. The Questionnaire consists of 90 items to measure the personality traits of the players and 90 items representing three dimensions of personality i.e. Extraversion (21), Psychoticism (25), Neuroticism (23) and Social Desirability (21) on which there was no right or wrong answer in the responses. The responses are given in the form of Yes/ No. The scoring of the completed questionnaire was done according to the method mentioned in the Manual of E.P.Q-R (Personality Questionnaire with the help of scoring key. The Questionnaire had test-retest reliability 0.83 for Psychoticism, 0.90 for. Extraversion, 0.89 for Neuroticism, and 0.86 for Social Desirability in case of males. In case of female Questionnaire had had test-retest reliability 0.71 Psychoticism, 0.87 for Extraversion, 0.80 for Neuroticism, and 0.86 for Social Desirability. The overall test-retest reliability with age and sex were .78 for Psychoticism, .89 for. Extraversion, .86 for Neuroticism and .84 Social Desirability.

### 2.4. Statistical Analysis

To assess the personality characteristics of male and female Gymnasts at National level, Means and Standard Deviations were computed. In order to find out the significant difference between male and female gymnasts at national level on personality factors, t-ratio was computed. To check t- Ratio, level of significant was set at .05 level.

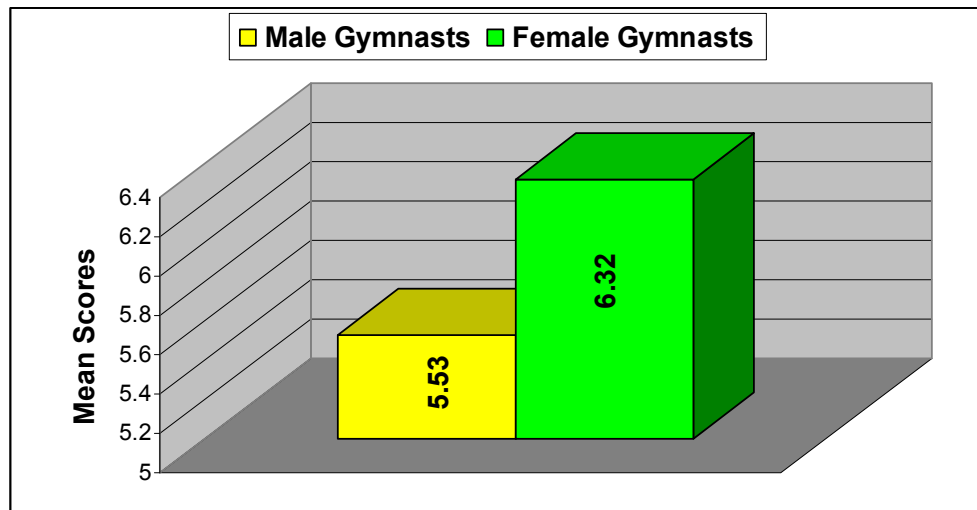
## 3. Results and Discussion

In order to find out the significant difference between male and female gymnasts at national level on personality factors, means and standard deviations and t-ratio were computed and data pertaining to this have been presented in table 1 to 2.

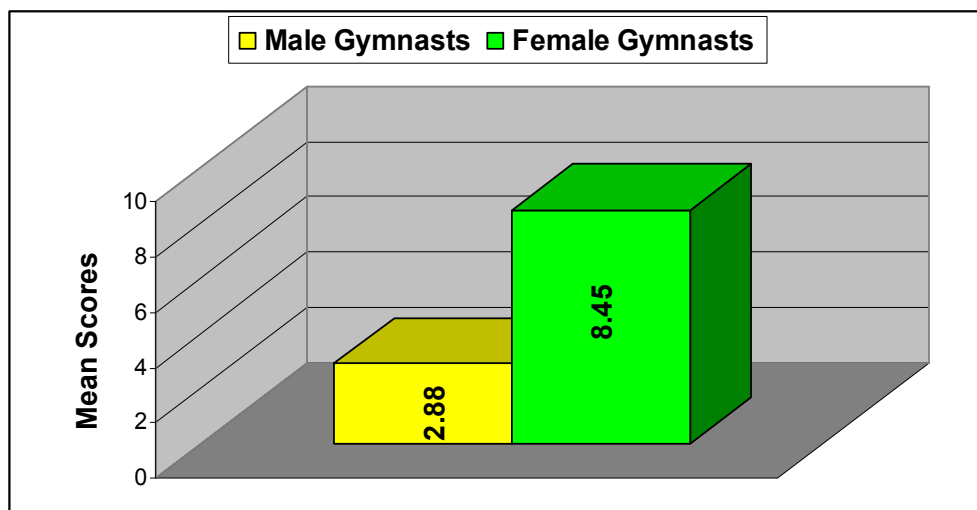
**Table 1.** Descriptive statistics of four personality factors of male and female gymnasts of different levels.

S. No.	Variable	Male		Female	
		M	SD	M	SD
1.	Psychoticism	5.53	2.77	6.32	2.33
2.	Extraversion	2.88	2.47	8.45	3.54
3.	Neuroticism	8.40	3.44	10.85	2.56
4.	Social Desirability	7.98	2.89	8.00	2.41

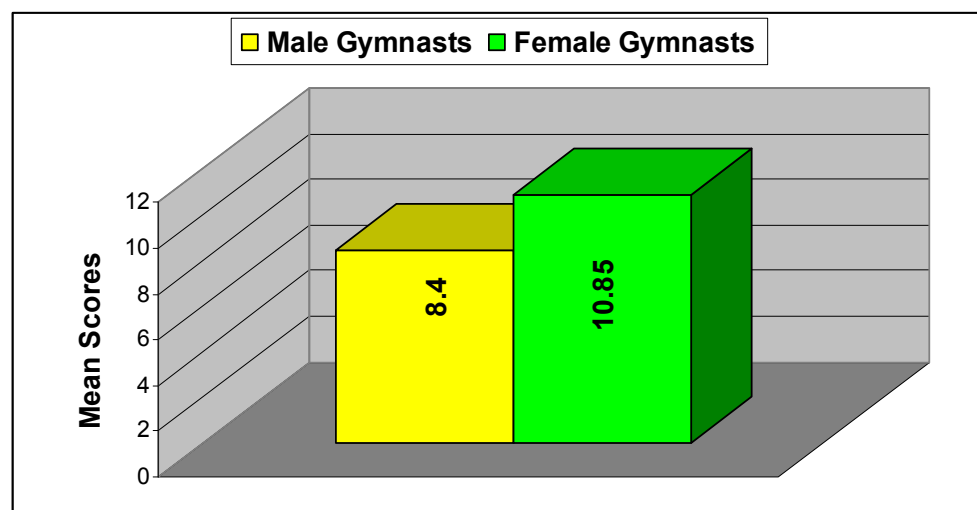
The mean scores on four personality factors of male and female gymnasts at different levels of their participation have been depicted in figure 1 to 4.



*Fig. 1. Mean Scores of Psychoticism Personality Factor for National level Male and Female Gymnasts.*



*Fig. 2. Mean Scores of Extraversion Personality Factor for National level Male and Female Gymnasts.*



*Fig. 3. Mean Scores of Neuroticism Personality Factor for National level Male and Female Gymnasts.*

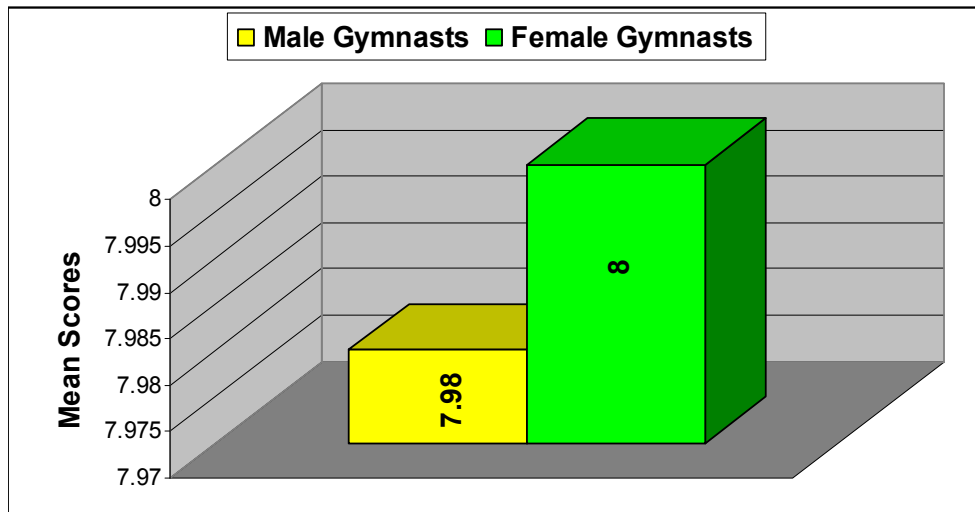


Fig. 4. Mean Scores of Social Desirability Personality Factor for National level Male and Female Gymnasts.

Table 2. Significance of differences between mean scores of national male and female gymnasts on four personality factors.

S. NO.	Variables	Sex	Mean	MD	$\sigma$ DM	t-ratio
1.	Psychoticism	Male	5.53	0.82	0.36	1.54
		Female	6.35		0.37	
2.	Extraversion	Male	12.88	1.86	0.32	4.27*
		Female	11.04		0.24	
3.	Neuroticism	Male	8.40	0.11	0.44	0.21
		Female	8.50		0.26	
4.	Social Desirability	Male	7.98	0.31	0.37	0.79
		Female	7.67		0.19	

\*Significant at .05 level  $t_{.05(98)} = 1.98$

It is evident from table 2, that there were statistically significant difference between male and female gymnasts of National level in their extraversion personality factor, as the obtained t-value of 4.27 was higher than the required  $t_{.05(98)} = 1.98$ . They did not differ in their three personality factors i.e. psychoticism, neuroticism and social desirability, as the obtained t-values of 1.54, 0.21, and 0.79 respectively were less than the required  $t_{.05(98)} = 1.98$  to be significant.

## 4. Discussion

The temperament of athletes in numerous sports is one among the problems that have invariably been of interest of behavioural soul. participation in individual or athletics activities an illustration of temperament of athletes United Nations agency participate in team sports completely different from specific sports amendment the temperament characteristics? To assess the four temperament characteristics i.e. Psychoticism, extraversion, neuroticism and Social Desirability of national level male and feminine gymnasts, means that and commonplace deviations were computed. so as to seek out of the numerous distinction between male and feminine gymnasts at their completely different levels of participation, t-ratios were computed. to visualize t- quantitative relation, level of significance was set at .05 level.

The statistical analysis of knowledge indicated that the national level male gymnasts were less psychotic, less neurotic and a lot of extroverted than national level feminine gymnasts. to ascertain whether or not male and feminine gymnasts at national level have variations in their four temperament dimensions. it had been found that national male and feminine gymnasts made vital distinction in extroverted temperament solely. This variation could also be attributed to the attainable variations in behaviour pattern, power and emotional adaptation of male and feminine gymnasts at national level. However, the vital distinction was not found between national level male and feminine gymnasts on 3 dimensions of temperament i.e. psychoticism, neuroticism and social desirability.

National level male and feminine gymnasts would take issue in their four temperament dimensions is part accepted, as there was no vital distinction between national level male and feminine gymnasts on 3 dimensions of temperament. However the numerous distinction was discovered in extraversion dimension of temperament.

## 5. Conclusions

1. Male gymnasts of national level were more extroverted, less psychotic and neurotic in nature than their female counterparts.
2. National level male and female gymnasts expressed similarity in their psychoticism, neuroticism and social desirability dimensions of personality.
3. National level male and female gymnasts had insignificant difference in their extraversion personality factor.

### 5.1. Future Direction for Research

It is recommended that Indian coaches may modify their coaching program according to four personality factors. A study may be conducted to find out the differences in male and female Indian gymnasts in relation to their age, year of participation, and leadership behaviour etc.

## 5.2. Significance

The findings of the present study will provide help to the coaches, Sports trainers, sports administrators and physical education teachers in their professional works. The study would be of great help for the assessment of various psychological characteristics of players and in turn may educate them about personality traits which are vital phenomenon in the present sports.

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