



## Personality traits of medalist and non-medalist swimmers. A comparative study

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### Introduction

Sports have become an important part of this nation's culture as well as of other culture. Sports are generally played as a form of a contest between two competitive sides that could be a team or individual. Sports can cause swing in emotion, varying from passion to disappointment. It can produce an emotional environment that, at times, causes us to wobble and lose our composure. So, if we are not quite mentally prepared, our physical qualities will probably also decline.

### Personality

Personality is difficult to define due to its complex nature; however one definition in the literature is 'the characterization of individual differences'. It's a well-known fact, and often cliché that 'everyone is different', but it is true. The fact that everyone is different is extremely important when it comes to sport and coaching. As a coach it is essential that you understand the personality of your athlete in order to optimize the transmission of your message and their subsequent performance; as an athlete it is important you understand the significance of personality and its potential effect on performance.

Personality is a summation of many attributes combining of physical and psychological characteristics. Since personality is the product of heredity and environment, the people from same environment will have some common characteristics which will reflect in their personality to a great extent. Earlier, Morgan (1988) had concluded that success in sports performance is dependent in partly on selected psychological states and traits. Many researchers (Kane, 1990; Vanek, 2000; Cratty et al, 2000) have proved that certain personality traits are dominant and are special characteristics of certain specific sports activities.

There has been discussion among coaches and research investigators about the relationship between personality traits of athletes and athletic performance. Considerable emphasis has been placed on the identification of the personality traits that were thought to relate significantly to athletic achievement. The selection of athletes such as those of national or international status, permitted statements to be made about the personality of the outstanding athlete. The most common used theory in the literature currently is The Five Factor Model of Personality (FFM) used by many in their writing. The FFM, according to the APA Dictionary of Psychology, includes extraversion, neuroticism, conscientiousness, agreeableness, and openness to experience as the factors which effect personality. Extraversion relates to interpersonal relations, neuroticism relates to the likelihood the individual may suffer from emotional instability with conscientiousness the factor which deals with goal-related behavior. Finally agreeableness concerns their focus on co-operation and openness to experience is self-explanatory.

Roccas *et al.* (2002) claim that the traits of the FFM can interact, which supports the notion that no one trait is independent from another and it is the interaction of the traits which results in the person's personality. The degree to which an athlete presents one of the traits outlined in FFM can determine their sporting performance. Allen *et al.* (2013) suggest, for example, that those competing at International level are likely to display lower neuroticism and higher levels of conscientiousness.

The purpose of this study was to compare the personality traits among medalist and non-medalist women swimmers

## Materials and methods Selection of

### subjects

For the purpose of the study, five medalist female swimmers and five non medalist female swimmers were chosen as subjects for this study. The subjects were players of SPM Mukherjee swimming pool in Delhi. The age of the subjects ranged from 18-25 years.

### Selection of variables

According to the feasibility, criteria and availability of instruments, equipments and relevance of present study Big Five Inventory questionnaire developed by John *et al* in 2008.

### Criterion measures

**Personality:** Personality was assessed using the Big Five Inventory (BFI) questionnaire. This 44-item self-report measure assesses five personality dimensions of extraversion, neuroticism, openness, agreeableness, and conscientiousness. Participants were required to indicate, on a 5- point Likert scale (disagree strongly, disagree a little, neither agree nor disagree, agree a little, agree strongly), whether the statement was true of them.

### Big Five Personality Inventory

Big Five Personality was used to investigate psychological profile of athletes. The BFI developed by John *et al.*, 2008 having 44 items that measure 5 sub factors of personality i.e.

1. Openness- Openness includes traits like being insightful and imaginative and having a wide variety of interests.
2. Conscientiousness- includes the traits of high level of self –discipline.
3. Extraversion - Extraversion includes the traits of energetic, talkative, and assertive.
4. Agreeableness- Traits include being kind, affectionate, and sympathetic.
5. Neuroticism- People that score high on neuroticism often experience emotional instability and negative emotions. Traits include being moody and tense.

### Administration of the questionnaire and collection of data

The questionnaire was administered to all the medalists and non-medalists women swimmers. Before administering the questionnaire, all the required information regarding the questionnaire was given to the subjects. The researcher cleared the doubts of the subjects. The subjects filled the questionnaire by themselves. The responses of the subjects were kept confidential and were used only for the purpose of the study.

### Statistical Procedure

Descriptive statistics such as mean, standard deviation and comparative statistics independent T test was used at 0.05 level of significance with the help of SPSS 23 version.

## Analysis of data

**Table 1:** Descriptive statistics of medalists and non- medalist women swimmers in big five personality.

Variables	Groups	N	Mean	Std. Deviation	Std. Error Mean
Extroversion	Medalists	15	29.47	2.13	.55
	Non-medalists	15	30.13	1.40	.36
Agreeableness	Medalists	15	40.27	2.03	.55
	Non-medalists	15	39.67	1.04	.27
Conscientiousness	Medalists	15	34.93	1.63	.42
	Non-medalists	15	32.00	0.43	.32
Neurotism	Medalists	15	20.93	1.71	.44
	Non-medalists	15	23.20	1.15	.30
Openness	Medalists	15	34.00	.93	.24
	Non-medalists	15	30.53	1.12	.29

Table 1 shows the mean and standard deviation of big five personality inventory (BFI) with sub scales i.e., extroversion, agreeableness, conscientiousness, neuroticism and openness are  $29.47 \pm 2.13$ ,  $30.13 \pm 1.40$ ,  $40.27 \pm 2.03$ ,  $39.67 \pm 1.04$ ,  $34.93 \pm 1.63$ ,  $32.00 \pm 0.43$ ,  $20.93 \pm 1.71$ ,  $23.20 \pm 1.15$ ,  $34.00 \pm 0.93$ ,  $30.53 \pm 1.12$  respectively among women medalists and non-medalists swimmers.

**Table 2:** Levene's test for equality of variances among groups

Variables	F-value	p-value
Extroversion	1.13	0.30
Agreeableness	1.72	0.20
Conscientiousness	0.12	0.73
Neurotism	3.03	0.09
Openness	0.54	0.47

To test the equality of variances Levene's test was used. In table 2, F- value of extroversion, agreeableness, neuroticism and openness are 1.13, 1.72, 0.12, 3.03, and 0.54 which are insignificant as the p value are 0.30, 0.20, 0.73, 0.09, 0.47 which are more than 0.05.

**Table 3:** Independent T test for the data on all sub-scales of big five personality inventory

Variables	M.D	S.E of M.D	t-value	p-value
Extroversion	0.24	1.66	-0.04	0.32
Agreeableness	3.00	1.31	1.10	0.65
Conscientiousness	2.20	3.30	0.67	0.42
Neurotism	-2.47	0.54	0.29	0.53
Openness	3.87	0.38	10.38	0.45

It can be seen from table 3 that the value of t-statistics are -0.04, 1.10, 0.67, 0.29, 10.38 These t values are insignificant as their p values are 0.32, 0.65, 0.42, 0.53 and 0.45 which is more than .05. Thus, the null hypotheses of equality of population means of the two groups are accepted. On the basis of the results, it may be concluded that there is insignificant difference in personality traits of medalists and non-medalists

women swimmers.

## Discussion of findings

Personality factors are relevant determinants of psychological well-being with reference to sport activity generally (Yeung & Hemsley, 1997). Given that personality traits have been observed with reference to well-being, and swimming can contribute to well-being, it might be supposed that the evidence of some personality traits might characterize people practicing swimming, as we have posited, and that this can be relevant and also account for well-being in swimming practice.

The researcher was inquisitive to know whether these levels of achievement differ on the basis of their personality traits. It was observed that there are no significant differences in any variables of big five personality inventory. It was observed that there are no significant differences in any variables of big five personality inventory between medalists and non-medalists this is in consonance of study carried out by (Verma JP 2011). These results could be due to the smaller sample size. This study may be further investigated on large sample size and more psychological variables to assess their psychological traits. The study can further be conducted on male swimmers.

## Conclusion

The researcher observed that no significant difference was found in any of the variables of big five personality inventory among medalists and non-medalists female swimmers when both the groups were compared. Thus the null hypothesis is accepted at 0.05 level of significance

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