



ISSN: 2456-4419

Impact Factor: (RJIF): 5.18

Yoga 2024; 9(2): 156-158

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Received: 04-08-2024

Accepted: 23-08-2024

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## Assessing personality trait among medalist and non-medalist male sprinters

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**DOI:** <https://doi.org/10.22271/yogic.2024.v9.i2c.1630>

### Abstract

The objective of this study was to investigate potential differences in personality traits among male track and field sprinters who had achieved medals and those who had not. A total of twenty male sprinters, all national-level caliber, were included in the study, with ages ranging from 20 to 30 years. These participants were carefully selected from various locations known for their National Level Track and Field participation. To conduct the assessment of personality traits, the researchers utilized the Big Five Inventory Questionnaire, focusing specifically on two variables: Extroversion and Agreeableness. This instrument is widely recognized for its ability to capture the broad dimensions of personality, making it suitable for this study's purposes. Following data collection, the researchers employed descriptive statistics, such as mean and standard deviation, to summarize the personality trait scores within each group of sprinters. Additionally, a comparative statistical analysis using the study employed a t-test with a significance threshold of 0.05 to ascertain the presence of significant differences between the groups. Despite careful selection of participants and rigorous analytical approach, results of the t-test did not yield statistically significant differences in the personality traits between medalist and non-medalist sprinters. This finding suggests that, at least within the parameters measured by the Big Five Inventory Questionnaire, personality traits may not play a significant role in distinguishing between successful and less successful male track and field sprinters at the national level.

**Keywords:** Big five inventory questionnaire, extroversion, agreeableness, descriptive statistics, level of significance, independent t-test

### Introduction

Personality is typically understood as the organized combination of an individual's character, intellect, and physique, which shapes their behavior and actions in different situations. Each individual has consistent core personality components, but it's also important to consider the dynamic aspects of their behavior that allow for unique adjustments to their environment. In essence, personality is determined by the interaction between an individual's core traits and their peripheral behavior. To develop one's personality, it is important to enhance and groom both the outer and inner self, including boosting confidence, improving communication skills, expanding knowledge, developing hobbies or skills, and overall exuding positivity, liveliness, and peace. While psychologists have attempted to categorize people into different personality types in the past, they have largely given up on this approach and instead focus on personality traits. Certainly! The Big Five framework, derived from statistical analyses of personality traits, provides a comprehensive yet broad understanding of individual differences. By categorizing traits into five main factors (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience), it offers a structured approach to studying personality. However, it's important to recognize that each of these factors encompasses a range of specific traits, and the correlations between them are probabilistic rather than absolute. While the Big Five is a valuable tool, researchers should be aware of its limitations and the need for finer distinctions in certain contexts. For example, while talkativeness and assertiveness are both associated with Extraversion, they are not necessarily linked, highlighting the complexity of personality. To delve deeper into specific dimensions, researchers may opt for longer inventories like the NEO PI-R or supplement shorter ones with

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additional scales. Moreover, it's crucial to acknowledge that personality traits are just one aspect of an individual's psychological makeup. Motivations, emotions, attitudes, abilities, and social roles also play significant roles in shaping personality, highlighting the importance of considering a broader range of factors in personality research.

The Big Five model is a widely accepted framework for understanding personality, encompassing five core traits that shape human behavior and characteristics. One of these key traits is Extraversion, which describes the degree to which individuals are outgoing, social, and energized by interactions with others. Extroverts tend to thrive in social settings, enjoying the company of others and often seeking out new experiences and stimulation in the external world. In contrast, introverts may prefer quieter, more reflective activities and draw their energy from internal sources rather than social interactions. Another important trait in the Big Five model is Agreeableness, which reflects a person's tendency to prioritize harmony, cooperation, and empathy in their interactions with others. Individuals high in agreeableness are often described as warm, friendly, and compassionate. They tend to be considerate of others' feelings and perspectives, and may go out of their way to help or support those around them. This trait plays a significant role in fostering positive relationships and social connections. Switching gears to the realm of athletics, sprinting is a dynamic and explosive form of running that is characterized by short bursts of intense effort over relatively brief distances. It is utilized in a wide range of sports and competitions, serving as a means to quickly reach a target, evade opponents, or chase down a goal.

The physiology of sprinting is fascinating, with human biology dictating that maximum speed can only be sustained for a limited duration, typically around 30–35 seconds, before energy stores in the muscles become depleted. Historically, sprinting has deep roots, dating back to ancient times and featuring prominently in events such as the Ancient Olympic Games. Today, it remains a cornerstone of athletic

competition, with sprinting events featured in prestigious competitions like the Summer Olympics and World Championships. Races such as the 100 meters, 200 meters, and 400 meters showcase the raw speed and power of athletes as they strive to push their bodies to the limit in pursuit of victory.

**Methodology**

**Choice of subjects**

In order to achieve the goal of this investigation, a total of twenty (N=20) national level male sprinters age ranges from 20–30 years was purposively selected from different places. The selected subject was further divided in 2 groups namely medalist and non-medalist.

**Selection of variables**

The "Big Five Inventory Questionnaire" was utilized to choose the evaluation criteria, which comprised of a 20-item inventory designed to assess an individual's personality traits across the five key dimensions of personality i.e., agreeableness & extroversion. This questionnaire has been widely used in professional research settings to evaluate a subject's personality traits on both a theoretical and practical level.

**Statistical technique used**

Descriptive statistics, specifically the mean and standard deviation, were employed to provide an overview of the data. To compare the selected personality traits between the two groups, an individual sample t-test was conducted using the SPSS 20 data analysis software at a significance level of 0.05.

**Results**

The data was obtained by questionnaire method by Big Five Personality.

(Extroversion and Agreeableness only) and then analyzed by using individual

**Table 1:** Descriptive statistics of personality trait i.e. (Extroversion)

Athletes	Mean	SD	Average difference	Standard error difference	T value	2- sided P value
Medalist	36.1	4.45	2.80	2.09	1.337	.198
Non-Medalist	33.3	4.90			1.337	.198

The t-statistic value of 1.337 obtained from Table-1 does not provide sufficient evidence to reject the null hypothesis, as the corresponding p-value for .198 above the usual significance threshold of .05. Since there is no substantial difference, we

are unable to reject the null hypothesis in extroversion amid male sprinters who are medalists and those who are non-medalist in track and field events.

**Table 2:** Descriptive statistics of personality trait i.e. (Agreeableness)

Athletes	Mean	SD	Average difference	Standard error difference	T value	2- sided P value
Medalist	36.3	4.96	1.40	2.19	.637	.532
Non-Medalist	34.90	4.86			.637	.532

Based on Table-2, the calculated t-statistic is 0.637, with a corresponding p-value for 0.532, which surpasses the usual significance threshold of 0.05. Consequently, We are unable to rule out the null hypothesis, suggesting that there is no discernible difference in agreeableness between male track and field medalists and non-medalists.

difference, was not rejected based on the t-values and p-values obtained from the analysis. Therefore, it can be concluded that personality traits did not differ significantly between the two groups of sprinters.

**Discussion of Findings**

Based on the findings, it seems that there was no significant difference in personality traits, specifically extroversion and agreeableness, between male medalist and non-medalist track and field sprinters. The null hypothesis, which suggested no

**Conclusions**

The study's findings, which showed no discernible change in judgments extroversion and agreeableness amid medalist and non-medalist male track and field sprinters, highlight the need for more investigation into the true value of both groups. This study could serve as a foundation for evaluating existing housing initiatives and directing the creation of new ones.

However, performing such study may be difficult due to the ethical implications of creating control groups with various degrees of resources. While resource deprivation may have a negative influence on volunteers, it may also improve the accuracy of subsequent investigations. Balancing ethical issues with the requirement for reliable data is critical in such activities.

### References

1. Behrman RM. Personality differences between non-swimmers and swimmers. *Res. Q. Am Assoc Health Phys Educ Recreat.* 1967;38(2):163-171.
2. Flanagan L. A study of some personality traits of different physical activity groups. *Res Q. Am Assoc Health Phys Educ Recreat.* 1951;22(3):312-323.
3. Gondola JC, Wughalter E. The personality characteristics of internationally ranked female tennis players as measured by the Cattell 16 PF. *Percept Mot Skills.* 1991;73(3):987-992.
4. Kahneman D, Knetsch JL, Thaler RH. Anomalies: The endowment effect, loss aversion, and status quo bias. *J Econ Perspect.* 1991;5(1):193-206.
5. Kaneko N, Kuo HH, Boucau J, Farmer JR, Allard-Chamard H, Mahajan VS, *et al.* Loss of Bcl-6-expressing T follicular helper cells and germinal centers in COVID-19. *Cell.* 2020;183(1):143-157.
6. Staff T, Gobet F, Parton A. Investigating the period of practice needed to acquire expertise in Great Britain 2012 track and field Olympic athletes.
7. William JM, Hoepner BJ, Moody DL, Ogilvie BC. Personality traits of champion level female fencers. *Res Q. Am Assoc Health Phys Educ Recreat.* 1970;41(3):446-453.