

A Comparative Study of Sports Specific Personality Among Indoor and Outdoor Sportsperson

Vivekanand Hiremath^{1*}, Dr. B M Patil²

ABSTRACT

The present study has been designed to investigate the Sports Specific Personality among Sportspersons in relation to their Nature of Sports (Indoor and Outdoor). Total sample of 600 sportsperson (300 Indoor players and 300 Outdoor players) age range 18-25 years using the purposive sampling technique, equal data were collected based on the nature of sports indoor and outdoor from participants selected across eight districts of Karnataka State Sports Specific Personality Test constructed and standardized by Dr. Agya Jit Singh and Dr. H. S. Cheema was used as a tool to collect the data. Statistical analysis Mean, Standard Deviation (S.D) and 't' test were used. The findings result that a significant difference was observed between Indoor players and Outdoor players with their sports personality. Thus, we conclude that, the Indoor players have significant and lesser sports personality as compared outdoor players and Outdoor players exhibited significantly elevated levels of sociability, extroversion, self-concept, and mental toughness, reflecting enhanced interpersonal skills, psychological attributes, and resilience. Conversely, no statistically significant differences were identified between indoor and outdoor players with respect to dominance, conventionality, and emotional stability, indicating that these characteristics are similarly manifested across both cohorts. In summary, outdoor athletes presented a more pronounced sports personality profile in several critical domains relative to their indoor counterparts.

Keywords: *Sports Specific Personality, Sportsperson*

Personality plays a crucial role in athletic performance by influencing how athletes perceive, respond to, and manage diverse competitive and social contexts. Within the field of sports psychology, specific personality traits are frequently examined to evaluate their effects on both individual and team outcomes. Notable traits such as sociability, dominance, extraversion, conventionality, self-concept, mental toughness, and emotional stability are regarded as vital components for achieving athletic success and maintaining psychological resilience.

Sociability refers to the propensity to seek social interaction and cultivate relationships, which is particularly important in team sports for promoting communication, trust, and cohesion. Dominance denotes a tendency to lead, exert influence, and assert oneself, often

¹Research Scholar, Department of Physical Education and Sports, Karnatak University, Dharwad, Karnataka

²Research Guide, Department of Physical Education and Sports, Karnatak University, Dharwad, Karnataka

*Corresponding Author

Received: November 06, 2025; Revision Received: December 26, 2025; Accepted: December 31, 2025

A Comparative Study of Sports Specific Personality Among Indoor and Outdoor Sportsperson

linked to leadership capabilities and a competitive drive. Extraversion characterizes individuals with high energy levels, enthusiasm, and a preference for stimulation, attributes that can enhance motivation and adaptability in high-pressure situations.

Conventionality pertains to adherence to rules, norms, and structured behaviors, thereby fostering discipline and consistency in both training and competition. Self-concept, defined as athletes' perceptions and evaluations of themselves, significantly impacts confidence, goal-setting, and motivation. Mental toughness encompasses the capacity to sustain focus, cope with adversity, and persist through challenges, rendering it indispensable for elite athletic performance. Lastly, emotional stability involves the ability to regulate emotions and maintain composure under pressure, which aids in reducing anxiety and improving decision-making processes.

Collectively, these personality traits constitute a foundational framework for understanding athletic behavior and serve as predictors of performance outcomes, team dynamics, and psychological well-being within sports environments.

METHODOLOGY

Objective

1. To find out significant difference between Indoor players and Outdoor players with Sports personality.
2. To find out significant difference between Indoor players and Outdoor players with Sports personality and its Components.

Hypothesis

1. Null Hypothesis (H_0): There is no significant difference between Indoor players and Outdoor players with Sports personality.
2. Null Hypothesis (H_0): There is no significant difference between Indoor players and Outdoor players with scores of components of Sports personality i.e. Sociability, Dominance, Extroversion, Conventionality, Self-concept, Mental toughness, Emotional stability.

The test should be scored such as

Sports Specific Personality Test constructed and standardized by Dr. Agya Jit Singh and Dr. H. S. Cheema was used. The test consists of 100 items into seven dimensions Sociability, Dominance, Extroversion, Conventionality, Self-Concept, Mental Toughness, and Emotional Stability. Each item has four response options i.e., Always, Often, Sometimes and Never. These categories were given scores from 1 to 4, i.e., 1. for never, 2 for sometimes, 3 for often and 4 for always for all the positive items. The scoring procedure was reversed for the negative items, i.e., 1 for always, 2 for often, 3 for sometimes and 4 for never. Test re-test and split-half reliability of 0.86 and 0.90 respectively. Sub dimensions wise test re-test and split-half reliability for sociability, dominance, extraversion, self-concept, conventionality, mental toughness and emotional stability are 0.90 and 0.86, 0.84 and 0.76, 0.69 and 0.61, 0.93 and 0.81, 0.82 and 0.78, 0.87 and 0.90, 0.58 and 0.61 respectively. Age group 18 to 25 years

Statement Type	Always	Often	Sometimes	Never
Positive Items	4	3	2	1
Negative Items	1	2	3	4

Data Collection and Procedure

This study utilized a quantitative research design to investigate sports personality among athletes from Karnataka State. Data were gathered from eight districts within the state. Participants were aged between 18 and 25 years, and the selected assessments were suitable for this age group. The sample comprised undergraduate college students. Simple random sampling is used to sample selection. A total of 600 athletes took part, with 300 involved in indoor sports and 300 in outdoor sports. Data collection was conducted using a sports specific personality inventory (SSPT). To maintain balanced representation, an equal number of participants were chosen from each category. If a college had an insufficient number of athletes, additional participants were recruited from other colleges in the same city.

Statistical Analysis

To study the objectives of the present study the Mean and Standard Deviation (SD) for scores on different variables under study were calculated for the selected sample. Further independent t test was applied to find the difference between Indoor Sportsperson and Outdoor Sportsperson with Sports specific Personality and its components (i.e. Sociability, Dominance, Extroversion, Conventionality, Self-concept, Mental Toughness, Emotional stability) Statistical analyses were carried out using SPSS software, version 23.0. The level of statistical significance was fixed at 5% ($p < 0.05$).

ANALYSIS, RESULTS AND DISCUSSION

In this section, a comparative analysis has been carried out between outdoor and indoor players, assessing their sports personality and its components (namely, sociability, dominance, extroversion, conventionality, self-concept, mental toughness, and emotional stability).

1. Null Hypothesis (H_0): There is no significant difference between Indoor players and Outdoor players with Sports personality scores

To test the above null hypothesis, the independent t test was applied and the outcome of test is presented in the following table.

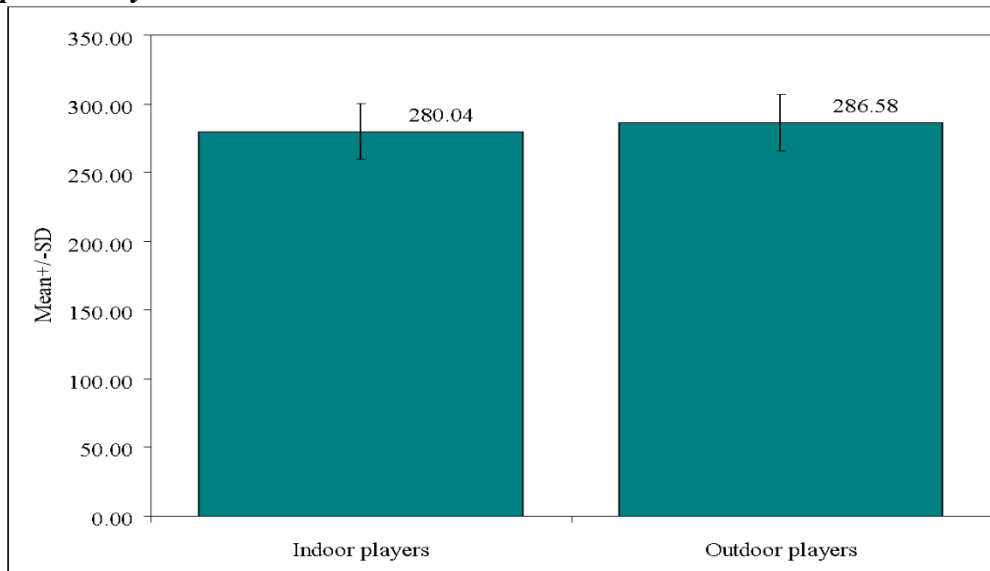
Table: I Summery of independent t test between Indoor players and Outdoor players with Sports personality scores

Groups	n	Mean	SD	SE	t -value	P-value & Signi.
Indoor players	300	280.04	20.11	1.16	3.9361	0.0001,S
Outdoor players	300	286.58	20.58	1.19		

From the results of the above table, it can be seen that, when the Indoor players and Outdoor players were compared with their sports personality scores, the table of t with 598 degrees of freedom at 5% level of significance is 1.9600, which is smaller than the calculated value of t i.e. 3.9361 ($p=0.0001$). Hence, the null hypothesis (H_0) is rejected and alternative hypothesis (H_1) is accepted. It means that, a significant difference was observed between Indoor players and Outdoor players with their sports personality. Thus, we conclude that, the Indoor players have significant and lesser sports personality (280.04 ± 20.11) as compared outdoor players (286.58 ± 20.58). The mean and SD of sports personality scores between Indoor players and Outdoor players is also presented in the following figure.

A Comparative Study of Sports Specific Personality Among Indoor and Outdoor Sportsperson

Figure: I Shows Comparison of Indoor players and Outdoor players with their sports personality scores



2. Null Hypothesis (H₀): There is no significant difference between Indoor players and Outdoor players with scores of components of Sports personality i.e. Sociability, Dominance, Extroversion, Conventionality, Self-concept, Mental toughness, Emotional stability.

To test the above null hypothesis, the independent t test was applied and the outcome of test is presented in the following table.

Table: II Summary of independent t test between Indoor players and Outdoor players with between Indoor players and Outdoor players with scores of components of Sports personality

Components	Groups	n	Mean	SD	SE	t value	P-value & Signi.
Sociability	Indoor players	300	44.16	4.77	0.28	3.5086	0.0005,S
	Outdoor players	300	45.52	4.75	0.27		
Dominance	Indoor players	300	41.57	4.51	0.260	1.3008	0.1938,NS
	Outdoor players	300	42.05	4.53	0.261		
Extroversion	Indoor players	300	36.00	3.88	0.22	2.2479	0.0249,S
	Outdoor players	300	36.73	4.03	0.23		
Conventionality	Indoor players	300	37.51	4.54	0.26	1.5267	0.1274,NS
	Outdoor players	300	38.06	4.34	0.25		
Self-concept	Indoor players	300	39.89	4.66	0.27	2.6420	0.0085,S
	Outdoor players	300	40.89	4.67	0.27		
Mental toughness	Indoor players	300	39.51	4.34	0.25	4.8287	0.0001,S
	Outdoor players	300	41.30	4.74	0.27		
Emotional stability	Indoor players	300	41.40	4.12	0.24	1.6585	0.0977,NS
	Outdoor players	300	42.01	4.95	0.29		

From the results of the above table, it can be seen that,

- When indoor and outdoor players were compared based on their sociability ratings, the table of t with 598 degrees of freedom at 5% level of significance was 1.9600, which is lower than the calculated value of t of 3.5086 (p=0.0005). Thus, the null hypothesis (H₀) is rejected, whereas the alternative hypothesis (H₁) is accepted. It

A Comparative Study of Sports Specific Personality Among Indoor and Outdoor Sportsperson

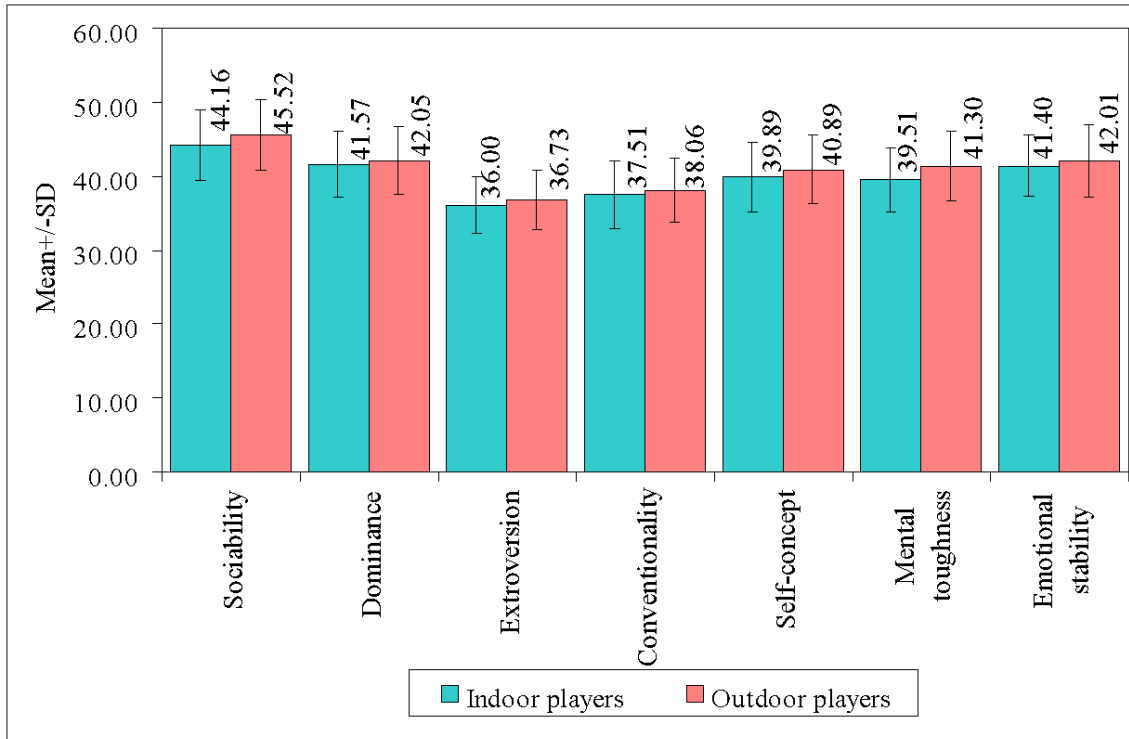
means that sociability scores differed significantly between indoor and outdoor players. We conclude that indoor players (44.16 ± 4.77) have significantly lower sociability scores than outdoor players (45.52 ± 4.75).

- In the comparison of dominance scores, which represent the second component of sports personality, between indoor and outdoor players, the critical t-value at the 5% significance level with 598 degrees of freedom is 1.9600. This critical value exceeds the observed t-value of 1.3008 ($p = 0.1938$). Accordingly, the null hypothesis (H_0) is retained, and the alternative hypothesis (H_1) is rejected. These results suggest that there is no statistically significant difference in dominance scores between indoor and outdoor players. Thus, it can be concluded that the dominance scores of indoor players (mean = 41.57, SD = 4.51) and outdoor players (mean = 42.05, SD = 4.53) are comparable.
- In the comparison of extroversion scores, the third component of sports personality, between indoor and outdoor players, the critical t-value at 598 degrees of freedom and a 5% significance level was determined to be 1.9600. This threshold is exceeded by the calculated t-value of 2.2479 ($p = 0.0249$). Consequently, the null hypothesis (H_0) is rejected in favor of the alternative hypothesis (H_1), indicating a statistically significant difference in extroversion scores between the two groups. Specifically, indoor players (mean = 36.00, SD = 3.88) exhibit significantly lower extroversion scores compared to their outdoor counterparts (mean = 36.73, SD = 4.03).
- In the comparison of Indoor and Outdoor athletes regarding the fourth dimension of sports personality, namely conventionality scores, the critical t-value at 598 degrees of freedom and a 5% significance threshold is 1.9600. This critical value exceeds the computed t-value of 1.5267 ($p = 0.1274$). Accordingly, the null hypothesis (H_0) is retained, and the alternative hypothesis (H_1) is rejected. These results suggest that no statistically significant difference exists between Indoor and Outdoor players with respect to conventionality scores. Thus, it can be concluded that Indoor players (mean = 37.51, SD = 4.54) and Outdoor players (mean = 38.06, SD = 4.34) exhibit comparable conventionality scores.
- In the comparison of indoor and outdoor players regarding the fifth dimension of sports personality, specifically self-concept scores, the critical t-value at 598 degrees of freedom and a 5% significance level is 1.9600. This threshold is exceeded by the calculated t-value of 2.6420 ($p = 0.0085$). Consequently, the null hypothesis (H_0) is rejected in favor of the alternative hypothesis (H_1), indicating a statistically significant difference in self-concept scores between the two groups. Notably, indoor players (mean = 39.89, SD = 4.66) exhibit significantly lower self-concept scores compared to their outdoor counterparts (mean = 40.89, SD = 4.67).
- In the comparison of indoor and outdoor Players regarding the sixth dimension of sports personality, specifically mental toughness scores, the critical t-value at 598 degrees of freedom and a 5% significance level was determined to be 1.9600. This critical value is exceeded by the calculated t-value of 2.6420 ($p = 0.0085$). Consequently, the null hypothesis (H_0) is rejected in favor of the alternative hypothesis (H_1), indicating a statistically significant difference in mental toughness scores between indoor and outdoor players. Notably, indoor players (mean = 39.51, SD = 4.34) exhibit significantly lower mental toughness scores compared to their outdoor Players (mean = 41.30, SD = 4.74).
- In the comparison of indoor and outdoor players regarding the seventh dimension of sports personality, specifically emotional stability scores, the critical t-value at 598 degrees of freedom and a 5% significance level was determined to be 1.9600. This critical value exceeds the computed t-value of 1.6585 ($p = 0.0977$). Accordingly, the

A Comparative Study of Sports Specific Personality Among Indoor and Outdoor Sportsperson

null hypothesis (H₀) is retained, and the alternative hypothesis (H₁) is rejected. These results suggest that there is no statistically significant difference in emotional stability scores between indoor and outdoor players. Thus, it can be concluded that the emotional stability scores of indoor players (mean = 41.40, SD = 4.12) and outdoor players (mean = 42.01, SD = 4.95) are comparable. The mean and SD of scores of components of Sports personality between Indoor players and Outdoor players is also presented in the following figure.

Figure: II Comparison between Indoor players and Outdoor players with between Indoor players and Outdoor players scores of components of Sports personality



CONCLUSION

1. A significant difference was observed between Indoor players and Outdoor players with their sports personality. Thus, we conclude that, the Indoor players have significant and lesser sports personality as compared outdoor players.
2. A comparative examination of the dimensions of sports personality between players participating in indoor and outdoor sports demonstrated notable disparities in specific traits. Outdoor players exhibited significantly elevated levels of sociability, extroversion, self-concept, and mental toughness, reflecting enhanced interpersonal skills, psychological attributes, and resilience. Conversely, no statistically significant differences were identified between indoor and outdoor players with respect to dominance, conventionality, and emotional stability, indicating that these characteristics are similarly manifested across both cohorts. In summary, outdoor athletes presented a more pronounced sports personality profile in several critical domains relative to their indoor counterparts.

REFERENCES

- Allen, M. S., Greenlees, I., & Jones, M. (2013). Personality in sport: A comprehensive review. *International Review of Sport and Exercise Psychology*, 6(1), 184–208. <https://doi.org/10.1080/1750984X.2013.769614>
- Clough, P. J., Earle, K., & Sewell, D. (2002). Mental toughness: The concept and its measurement. In I. Cockerill (Ed.), *Solutions in sport psychology* (pp. 32–43). Thomson.
- Cox, R. H. (2012). *Sport psychology: Concepts and applications* (7th ed.). McGraw-Hill.
- Eysenck, H. J., & Eysenck, M. W. (1985). *Personality and individual differences: A natural science approach*. Plenum Press.
- Gucciardi, D. F., Hanton, S., & Fleming, S. (2017). Are mental toughness and mental health contradictory concepts in elite sport? A narrative review of theory and evidence. *Journal of Science and Medicine in Sport*, 20(3), 307–311. <https://doi.org/10.1016/j.jsams.2016.08.006>
- Kaiseler, M., Polman, R., & Nicholls, A. (2012). Mental toughness, stress, stress appraisal, coping and coping effectiveness in sport. *Personality and Individual Differences*, 52(1), 122–127. <https://doi.org/10.1016/j.paid.2011.09.015>
- Laborde, S., Guillén, F., & Mosley, E. (2016). Positive personality-trait-like individual differences in athletes from individual-and team sports and in non-athletes. *Psychology of Sport and Exercise*, 26, 9–13. <https://doi.org/10.1016/j.psychsport.2016.05.009>
- Petlichkoff, L. M. (2004). Self-concept and sport participation. In M. R. Weiss (Ed.), *Developmental sport and exercise psychology: A lifespan perspective* (pp. 269–292). Fitness Information Technology.
- Singh, D., & Cheema, R. (2005). A comparative study of sports personology between sportspersons and non-sportspersons. *International Journal of Behavioural Sciences in Movement Studies*, 2(1), 12–18.
- Singh, A. J., & Cheema, H. S. (2010). Manual for Sports Specific Personality Test (SSPT). National Psychological Corporation, Agra, India.
- Vealey, R. S. (1986). Conceptualization of sport-confidence and competitive orientation: Preliminary investigation and instrument development. *Journal of Sport Psychology*, 8(3), 221–246. <https://doi.org/10.1123/jsp.8.3.221>
- Weinberg, R. S., & Gould, D. (2019). *Foundations of sport and exercise psychology* (8th ed.). Human Kinetics.

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Hiremath, V. & Patil, B.M. (2025). A Comparative Study of Sports Specific Personality Among Indoor and Outdoor Sportsperson. *International Journal of Indian Psychology*, 13(4), 3001-3007. DIP:18.01.273.20251304, DOI:10.25215/1304.273