# An Examination Of Anxiety In Indian Athletes Playing Individual And Team Games Comparatively

# Dr. Man Singh

Associate Professor, Indira Gandhi Institute of Physical Education and Sports Sciences, University of Delhi.

This study investigates the comparative levels of anxiety among Indian athletes engaged in individual and team sports. Utilizing the Hamilton Anxiety Rating Scale (HAM-A-2), the research examines both somatic and psychic anxiety symptoms across 120 athletes (60 from each category). Descriptive statistics and independent sample t-tests revealed that while anxiety symptoms were prevalent, there was no statistically significant difference between the two groups. The findings suggest that individual variations in anxiety surpass sport-type distinctions, calling for personalized intervention strategies.

### INTRODUCTION

Anxiety is a multifaceted psychological state involving emotional, cognitive, and physiological dimensions. It is often triggered by anticipated threats or uncertain outcomes. While anxiety may serve as a functional response in moderate doses, excessive anxiety can hinder daily activities and athletic performance. According to Clark and Donovan (1994), anxiety manifests as apprehension, tension, and unease stemming from perceived threats. They emphasized the need to consider physiological and cognitive elements in defining and diagnosing anxiety. Albert et al. (2011) extended this by indicating that persistent and disproportionate anxiety levels can lead to clinical conditions requiring intervention.

In competitive sports, anxiety plays a pivotal role in influencing performance outcomes. Vaccarino, Evans, and Sills (2008) noted that anxiety and stress are particularly pronounced in athletes who face immense performance pressures. The HAM-A, a standardized clinical tool developed by Hamilton in 1959, categorizes anxiety symptoms into psychic (mental agitation) and somatic (physical complaints) domains (McDowell, 2006). The tool enables a nuanced understanding of anxiety, especially in performance-intensive settings like sports.

Further, research in sport psychology distinguishes between state and trait anxiety, with the former being situational and transient, and the latter being a stable personality disposition (Spielberger, 1983). Morris et al. emphasized that cognitive anxiety tends to impair performance more consistently than somatic anxiety, especially in complex cognitive tasks. The Yerkes-Dodson Law supports this by suggesting that performance is optimal at moderate

levels of arousal, but declines when arousal exceeds a certain threshold (Yerkes & Dodson, 1908).

### **OBJECTIVES OF THE STUDY**

- 1. To assess the psychological (psychic) and physical (somatic) components of anxiety in athletes.
- 2. To compare the levels of anxiety between athletes participating in individual and team sports.

### HYPOTHESES OF THE STUDY

H1: The psychological anxiety of athletes participating in individual and team sports would differ significantly.

H2: The somatic anxiety of athletes participating in individual and team sports will differ significantly.

H0: Individual and team sports will not significantly differ in terms of test-retest reliability.

#### METHODOLOGY

# Sample:

120 athletes (60 from individual sports and 60 from team sports), aged 17 years and above, participated in the study. The sample included both male and female collegiate-level players.

#### **Tool Used:**

The 14 items on the Hamilton Anxiety Rating Scale (HAM-A 2) were scored on a 5-point Likert scale (0–4). The scale assesses physical (items 7–13) and psychological (items 1-6, 14) disorders. Severe anxiety is indicated by a score above 24, moderate anxiety is indicated by a score between 15 and 23, and light anxiety is indicated by a score below 14.

### **Procedure:**

Participants were administered the HAM-A 2 in either English or Hindi. Data were analyzed using IBM SPSS 27 for descriptive statistics and independent samples t-tests.

#### Significance of the Study

The study provides valuable insights into the psychological profiles of Indian athletes, distinguishing between individual and team sport participants. It helps in developing targeted intervention strategies, enhancing performance, and promoting mental well-being. Furthermore, it informs future research on the psychodynamics of athletic performance.

#### **Results**

#### **Table 1: Descriptive Statistics**

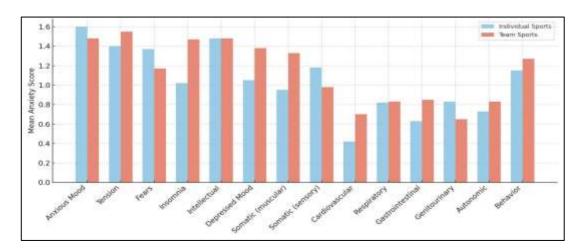
Variable	Group	N	Mean	Std.	Total	Total Std.
				Deviation	Mean	Dev.

Anxious Mood	Individual Sports	60	1.6	1.06	1.54	1.05
	Team	60	1.48	1.05		
Tension	Sports Individual	60	1.4	1.05	1.48	1.06
	Team	60	1.55	1.09		
Fears	Sports Individual	60	1.37	1.01	1.27	1.07
	Team	60	1.17	1.12		
Insomnia	Sports Individual	60	1.02	1.41	1.24	1.34
	Sports Team Sports	60	1.47	1.24		
Intellectual	Individual Sports	60	1.48	1.33	1.48	1.21
Difficulties	Team Sports	60	1.48	1.08		
Depressed	Individual Sports	60	1.05	1.1	1.22	1.12
Mood	Team Sports	60	1.38	1.14		
Somatic	Individual Sports	60	0.95	1.05	1.14	1.13
(muscular)	Team Sports	60	1.33	1.17		
Somatic	Individual Sports	60	1.18	1.3	1.08	1.19
(sensory)	Team Sports	60	0.98	1.07		
Cardiovasc ular	Individual Sports	60	0.42	0.79	0.56	0.92
Symptoms	Team Sports	60	0.7	1.03		
Respirator y Symptoms	Individual Sports	60	0.82	1.14	0.83	1.11
	Team Sports	60	0.83	1.08		
Gastrointes tinal	Individual Sports	60	0.63	0.99	0.74	1.08
Symptoms	Team Sports	60	0.85	1.16	0.77	1.00

Genitourin ary Symptoms	Individual Sports	60	0.83	1.17	0.75	1.1
	Team Sports	60	0.65	1.02		
Autonomic Symptoms	Individual Sports	60	0.73	0.92	0.78	1.06
	Team Sports	60	0.83	1.2		
Behavior at Interview	Individual Sports	60	1.15	1.25	- 1.21	1.2
	Team Sports	60	1.27	1.16		

**Table 2: Independent Sample t Test** 

Variable	Mean Difference	Std. Error	t	df	p-value (2- tailed)
Anxious Mood	0.117	0.193	0.606	118	0.546
Tension	-0.15	0.194	-0.773	118	0.441
Fears	0.2	0.195	1.027	118	0.307
Insomnia	-0.45	0.242	-1.857	118	0.066
Intellectual Difficulties	0.0	0.222	0.0	118	1.0
Depressed Mood	-0.333	0.204	-1.636	118	0.105
Somatic (muscular)	-0.383	0.203	-1.886	118	0.062
Somatic (sensory)	0.2	0.217	0.924	118	0.358
Cardiovascul ar Symptoms	-0.283	0.167	-1.693	118	0.093
Respiratory Symptoms	-0.017	0.203	-0.082	118	0.935
Gastrointesti nal Symptoms	-0.217	0.197	-1.099	118	0.274
Genitourinar y Symptoms	0.183	0.2	0.915	118	0.362
Autonomic Symptoms	-0.1	0.195	-0.514	118	0.608
Behavior at Interview	-0.117	0.22	-0.53	118	0.597



# **Discussion of the Findings**

### **Descriptive Findings:**

High mean scores were observed for anxious mood (1.54), intellectual difficulties (1.48), and tension (1.48), suggesting a dominance of psychic anxiety across both athlete groups. Somatic symptoms such as gastrointestinal and cardiovascular issues were comparatively less reported.

# **Inferential Findings:**

None of the 14 HAM-A measures showed statistically significant differences between individual and team athletes, according to independent sample t-tests (p > 0.05). Muscle tension and sleeplessness came close to being significant (p = 0.06), but they fell short. These results imply that anxiousness is common in both groups and is not substantially different depending on the sport.

This is in line with research by Hallit et al. (2020) and Kummer et al. (2010), who pointed out that tailored interventions are preferable to group-based ones. The consequences of persistent anxiety in sports, such as burnout and withdrawal, were also highlighted by Raedeke and Smith (2001), highlighting the necessity of specialized coping strategies.

#### Conclusion

Although anxiety symptoms are common among Indian sportsmen, the study finds no discernible difference in anxiety levels between participants in individual and team sports. Anxiety's psychological components, such tension and cognitive distress, are more noticeable than its physical manifestations. Instead of uniform programs based on sport type, these data support tailored mental health interventions.

## References

- 1. Albert, U., et al. (2011). Clinimetric properties of anxiety scales in PD patients.
- 2. Clark, D. B., & Donovan, J. E. (1994). Adolescent anxiety: Reliability of HAM-A.
- 3. Hallit, S., et al. (2020). Validation of HAM-A and STAI in Arabic.
- 4. Hamilton, M. (1959). The assessment of anxiety states by rating.

- 5. Kummer, A., Cardoso, F., & Teixeira, A. L. (2010). Anxiety in Parkinson's disease.
- 6. McDowell, I. (2006). Measuring Health: Rating Scales and Questionnaires.
- 7. Morris, L., Davis, D., & Hutchings, C. (1981). Anxiety and task performance.
- 8. Raedeke, T. D., & Smith, A. L. (2001). Athlete burnout measure.
- 9. Spielberger, C. D. (1983). State-Trait Anxiety Inventory.
- 10. Vaccarino, A. L., et al. (2008). Anxiety in depressive disorders.
- 11. Yerkes, R. M., & Dodson, J. D. (1908). Strength of stimulus and habit-formation.