



A COMPARATIVE ANALYSIS OF MENTAL TOUGHNESS BETWEEN ATHLETIC AND NON ATHLETIC FEMALE STUDENTS OF COLLEGE

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ABSTRACT

The present study aimed to compare the level of mental toughness between athletic and non athletic female students enrolled in govt. model residential girls college Bijapur ,cg . Mental toughness, a psychological construct associated with resilience, perseverance, emotional stability, and goal-directed behavior, plays a vital role in academic and physical performance. The collection of data Mental Toughness Questionnaire prepared by Allen Goldberg was administered. The questionnaire was comprised of 60 statement based on handling pressure (20 questions), concentration (17 questions), mental rebounding (14 questions) and winning attitude (9 questions). Each statement has two possible responses i.e. true and false. For the analysis of data, collected by administering the questionnaire to all the subject's t- test was employed at 0.05 level of significant. Their age was ranged 18 to 25 year. Results indicated that athletic students exhibited significantly higher levels of mental toughness compared to non athletic students. The findings suggest that the physically demanding nature of sports and activity-based curricula may enhance psychological resilience. Implications for academic counseling, student support programs, and curriculum design are discussed.

Keywords: Mental toughness, athletic, non athletic ,female players ,college.

1. Introduction

Mental toughness is an important psychological trait that influences performance, adaptability, and resilience in both academic and sports environments. It characterizes a person's ability to stay focused, confident, and determined in the face of challenges, stress, and bad luck. Despite the fact that mental toughness has been studied in great detail in athletics, interest in its application to students in academic settings is still growing.

Although the idea is often connected with sports psychology, mental toughness is vital in educational settings because students struggle with personal concerns, social demands, and academic pressure.

Students who participate in athletic activities often compete, play organized sports, and receive rigorous physical training, all of which can boost psychological toughness and resilience. On the other side, rather than experiencing physical pressures, students who do not participate in athletic activities often encounter educational and intellectual challenges. By considering the differences in mental toughness between these two groups, institutions can develop targeted interventions to improve student performance and wellbeing.

2. Objectives of the Study

1. To assess the level of mental toughness among non athletic female students.
2. To assess the level of mental toughness among athletic female students.
3. To compare mental toughness scores between the two groups.

3. Hypotheses

H1: There is a significant difference in mental toughness between athletic and non athletic female students.

H0: There is no significant difference in mental toughness between the two groups.

4. Methodology

4.1 Research Design

A comparative descriptive research design was employed.

4.2 Sample

A sample of 80 female college students was selected using purposive sampling. The sample included:

- 40 female athletic students.
- 40 female non athletic students.

4.3 data collection

Allen Goldberg's Mental Toughness Questionnaire was used to gather data. There were 60 statements on managing pressure (20 questions), focus (17 questions), mental rebounding (14 questions), and winning attitude (9 questions) in the questionnaire. There are two possible answers to each statement: true and false.

4.4 Procedure

The t-test was used at the 0.05 level of significance for the data analysis, which was obtained by giving the questionnaire to every players

4.5 Statistical Analysis

Table 1 Significant Difference between the means of athletic and non athletic female students .

Group	N	Mean	Std. Deviation	Std. Error Mean
Non Athletic students	40	18.2000	1.47109	.23260
Athletics students	40	23.6750	1.11832	.17682

Table 2 independent t test analysis of the two groups athletic female students and non Athletic female Students.

5. Results and Discussion

To examine whether a statistically significant difference exists between the two groups ,an independent sample t test was done .descriptive statistics indicate that athletic female students (M=23.68,SD=1.12,n=40)achieved a descriptively higher average score than non athletic female students .(M=18.20,SD=1.47,n=40). The results of the t-test indicated a highly significant difference between the two groups, $t(78) = -18.74$, $p < .001$, 95% CI [-6.06, -4.89]. Group 2 (M = 23.68, SD = 1.12) achieved significantly higher scores than Group 1 (M = 18.20, SD = 1.47). The mean difference between the groups was -5.48 points."

The results indicate that athletic female students possess significantly higher levels of mental toughness compared to non athletic female students. These findings support theories suggesting that sports participation enhances psychological resilience. Regular physical training exposes students to stress, fatigue, competitive pressure, and controlled adversity, enabling them to develop coping strategies and emotional stability.

Non athletic female students , on the other hand, may experience different forms of stress—academic load, teaching practice anxiety, and performance expectations—yet these may not develop the same type of

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
score									
Equal variances assumed	.997	.321	-18.739	78	.000	-5.47500	.29218	-6.05668	-4.89332
Equal variances not assumed			-18.739	72.791	.000	-5.47500	.29218	-6.05734	-4.89266

mental toughness fostered through physical challenges.

college may consider integrating physical wellness programs, stress-management workshops, or resilience training into Education curricula to improve students' psychological strength.

6. Conclusion

The study concludes that athletic students exhibit significantly higher mental toughness than non athletic female students at the college level. This highlights the importance of athletic activity and structured athletic experiences in fostering key psychological attributes. Enhancing mental toughness across academic disciplines can contribute to improved well-being, academic performance, and overall personal development.

7. Recommendations

- Integrate physical activity modules into college programs.
- Conduct mental toughness training workshops for all students.
- Offer counseling and resilience-building programs on campus.
- Encourage interdisciplinary activities that combine academic and physical challenges.

8. References

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