



Research Paper

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A Comparative Analysis of Resilience and Coping Strategies among Various Levels of Gymnasts

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Abstract

Purpose of the study: The main objective was to find out the difference between Resilience and Coping Skills among State Level and national-level gymnasts.

Methods: Total of 50 Gymnasts (25 of national and 25 of state-level athletes) were selected from Madhya Pradesh and Rajasthan State. The age range was 18 to 28 years. The difference in Resilience between State Level and National Level Gymnasts was discovered by using the Nicholson McBride Resilience Questionnaire (NMRQ) created by Nicholson in 2020, which consists of total 12 questions, and the difference in Coping Skill was discovered by using the Athletic Coping Skills Inventory (ACSI), constructed by Smith, Schutz, Smoll & Ptacek in 1995, which consists of total 28 questions.

Result: The test was used to analyze the data and it was found that there was a significant difference in both the variables that is Resilience and Coping Skills among State Level and National Level Gymnasts.

Conclusion: The study indicates that national-level gymnasts exhibit significantly higher resilience and coping abilities compared to state-level athletes, suggesting that increased physical activity and exposure to a demanding training environment contribute to these enhanced qualities. These findings underscore the importance of further research to explore the factors influencing resilience and coping strategies across different athletic levels and demographics.

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Manuscript Information

1. INTRODUCTION

Sports differentiation and professionalization have grown greatly during periods of rapid change. In a changing and dynamic work environment, adaptability and stress resistance are essential. While some people struggle to respond to these challenges, research has revealed that others are better at dealing with them, a trait known as resilience. Resilience is the ability to adapt to new and difficult situations, recover from them, and overcome hardship while progressing (Codonhato et al., 2018). Athletes who are seen to be resilient are more likely to adapt. Positive playing attitudes are related to less psychological distress. As a result, resilient players have a competitive advantage, which boosts success (Karamipour et al., 2015). According to research, high levels of resilience are positively associated with success on the ground (Heydari et al., 2018). According to studies, resilience is most beneficial in the process of performance growth because it helps individuals work at a high level despite adversity and quickly adapt to changes in the environment (Lyu et al., 2022). Two decades ago, sport psychology researchers began to focus on resilience. It is now widely recognized that athletes must learn to manage stress. People are more likely to develop resilience as a necessity for their daily tasks when confronted with a variety of stressors and significant pressure to succeed. As a result, resilience may be viewed as a necessary trait for becoming a successful elite athlete. An increasing body of research has acknowledged the critical role that resilience can play in achieving success in difficult situations. It also adds validity to the concept that resilience is inversely associated to stress-related outcomes and that these outcomes are even less likely if the resilient athlete has a high level of social support. Psychologists give evidence to the contrary, showing an interdependent relationship between resilience and adversity: the authors discovered that the more frequently exceptional athletes face hardship, the higher their levels of resilience (Gupta & Sudhesh, 2019). The findings call for further inquiry, not only to draw conclusions about the relationship between resilience and performance in recreational athletes, but also to explore this relationship in professionals in their respective sports. Researchers discovered that a professional gymnast's mental toughness and resilience are linked to the athlete's level of achievement. According to Lazarus and Folkman (1984), coping is "a dynamic process in which a person constantly changes cognitive and behavioral efforts to manage internal and external stressors." They discovered two broad classes of coping strategies aimed at mitigating the effects of a stressor. Coping is simply a strategy that does not ensure the absence of negative feelings. Regaining one's composure, creating the proper mental set (the psychological preparation to respond to subsequent stimuli), and maintaining appropriate arousal and focus are all essential components of excellent sports coping (Sullivan et al., 2023). Individual preferences for different coping approaches in response to various stressors have been connected to the efficacy of specific coping strategies.

That is, people are thought to have a propensity, or orientation, toward using a preferred coping strategy. This approach is known as a coping style. Coping styles are coping processes that define people's responses to stress in various circumstances or over time within a given situation (Blanco-García *et al.*, 2021). When confronted with a specific type of incident, a person's coping style reflects their inclination to behave predictably. Although the study focused on the differences in coping skills between different levels of gymnasts and how to avoid coping tendencies from a general psychology perspective, it did reflect the theoretical framework of coping styles.

Sample

A total 50 Gymnasts were selected from the state of Madhya Pradesh, consisting of 25 state-level and 25 national-level male Gymnasts. Participants were ranged from 18 to 28 years of age. Participation was voluntary and they read and agreed to an informed consent and were assured that their responses would be kept confidential.

2. METHODOLOGY

Based on relevant literature, appropriate personality traits were selected to measure psychological resilience, Nicholson McBride Resilience Questionnaire (NMRQ) was used. Which consists of 12 questions, where 0 is the lowest score and 60 is the highest score. It is a 5-point rating scale questionnaire. To measure Athletic Coping skills, Athletic Coping Skills Inventory (ACSI) by Smith et al. was used, which is a 4-point rating scale questionnaire. The Athletic Coping Skills Inventory (ACSI) contains 28 questions, where 0 is the lowest score and 84 is the highest score.

To analyze the differences in resilience and coping skills between national and state-level Gymnasts, descriptive statistics and an independent 't' test was used to test the mean difference through SPSS (V26) with the 0.05 level of significance.

3. **RESULTS**

 Table 1: Descriptive Statistics of the Responses on the Resilience of State and National Level Gymnasts

	Groups	Ν	Mean	Std. Deviation
Resilience	State Level	25	32.72	4.316
	National Level	25	39.76	7.981

Table 1 indicates the Resilience in the State level group mean and the standard deviation is 32.72 ± 4.316 respectively, whereas the national level's Resilience mean and standard deviation is 39.76 ± 7.981 respectively.

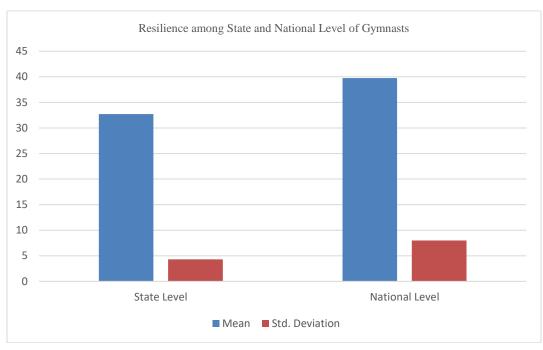


Figure 1: Graphical Representation of Resilience among State and National Level of Gymnasts.

Table 2: Independent 't' test of the responses on Resilience of State and National Level Gymnasts.

Independent Samples Test								
	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
Resilience	Equal variances not assumed	9.249	.004	3.88	36.93	.000	-7.040	1.815

Table 2 Indicates that the value of t statistics for resilience is 3.88. This t value is significant as p-value is 0.000 which is less

than 0.05. Hence there is a significant difference in resilience level between state and national level Gymnasts.

Table 3: Descriptive Statistics of the responses on the Coping Skills of State and National Level Gymnasts.

Group Statistics								
	Groups	Ν	Mean	Std. Deviation				
Coping skill	State Level	25	50.6	3.013				
Coping Skill	National Level	25	61.68	4.802				

Table 3 indicates the Coping Skill in the State-level group mean and the standard deviation is 50.6±3.013 respectively, whereas

the national level's Resilience mean and standard deviation is 61.68±4.802 respectively.

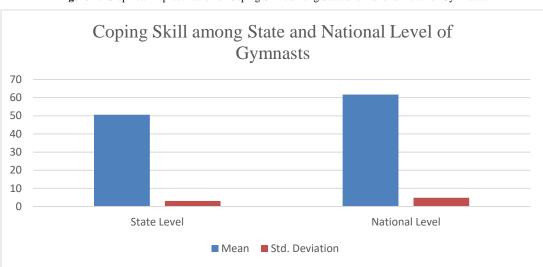


Figure 2: Graphical Representation of Coping Skills among State and National Level of Gymnasts.

Table 4: Independent 't' test of the responses on the Coping Skills of State and National Level Gymnasts.

Independent Samples Test								
		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
Coping skill	Equal variances not assumed	4.749	.004	9.772	40.368	.000	-11.08	1.133

Table 4 Indicates that the value of t statistics for coping skills is 9.772. This t-value is significant as the p-value is 0.000 which is less than 0.05. Hence there is a significant difference in coping skill level between state and national level Gymnasts.

4. **DISCUSSIONS**

The goal of this study is to compare the resilience and coping abilities of national and state-level gymnasts. According to our findings, national-level athletes have significantly greater resilience and coping skills. Furthermore, we can expect physical activity to alter the levels of these specific variables because national players are more accustomed to training and a demanding playing environment than state-level athletes (Kegelaers, 2019). This study demonstrates that by increasing the level of difficulty, resilience can be developed over time. This research implies that elite athlete resilience is influenced by extra factors, implying the existence of an elite athlete personality profile (Jadaun et al., 2021). Although exceptional athletes had greater resilience than the average population of dual students and employees, we discovered that high levels of resilience and coping skills are equally common in groups outside of competitive sports (Maher, 2016). When exceptional athletes and employees in top and middle management roles are compared, they exhibit similar levels of resilience. According to studies, record holders are stronger than non-record holders. Elite athletes have mastered soft skills, which are becoming increasingly vital for success in a rapidly changing and tough workplace (Mehrparvar & Soltani, 2013). As a result, after the end of their careers, professional athletes can be immensely useful to corporations. They demonstrate essential general competencies by achieving resilience levels comparable to the state level. In terms of generic talents, national-level athletes outperform inactive athletes when it comes to obtaining a highlevel job in the context of pressure-handling work (Trigueros et al., 2019). As a result, we provide a more nuanced and accurate understanding of resilience, with a focus on coping strategies and sports (Sarkar & Fletcher, 2014). Workplace research has already shown that coping skills is a significant predictor of athletic achievement. Athletes endure difficulties more frequently than idle people. Longer careers in top-level sports, such as gymnastics, allow more resilient athletes to gain more sport-specific knowledge and improve their performance levels (Sorkkila et al., 2019). Coping capacity allows athletes to effectively apply a certain skill to a given situation.

5. CONCLUSION

The study showed that national-level players have high levels of resilience and coping capacity. Athletes who engage in more physical exercise than lower-level athletes performed better in both categories. More research in that sector is needed to distinguish between these two parameters based on zone, gender, and playing area. In contrast, state athletes reported lower levels of mental involvement, attentiveness, and emotional venting than national athletes. The study's findings have the potential to lead to more in-depth and exploratory research into coping styles and tactics, as well as improvements in athlete resilience.

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