

Age and Resilience Dynamics in University Women Cricketers': Implications for Cricketing Performance

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ABSTRACT

Background: Understanding the psychological resilience of athletes, particularly young female cricketers, is crucial for their success and well-being in competitive sports. This study investigates the relationship between age, resilience, and sports performance among university women cricket players. **Methods:** A descriptive study focused on female cricketers aged 18 to 25 selected for the East Zone inter-university women's cricket coaching camp. A brief Resilience Scale was used to measure psychological resilience. The snowball sampling method was used to find participants. It resulted in a sample size of 25. **Results:** Descriptive statistics revealed that most players exhibited normal to higher levels of resilience, with mean BRS scores falling within the normal resilience range. On average, older players tended to have higher resilience levels, indicating a positive correlation between age and resilience. Graphical representation further illustrated the direct proportionality between age and resilience. **Conclusion:** This study contributes to understanding age and resilience dynamics among young female cricketers, highlighting the importance of resilience in sports success. The results emphasize the necessity of specialized interventions to boost athletes' psychological toughness and improve their competitive sports performance.

Keywords: *Psychological Resilience, Athletes, Age, Sports Performance, Brief Resilience Scale, Female Cricketers*

Possessing physical and psychological capacity is crucial when playing competitive sports. The player's capacity for adaptation and adjustment is frequently the primary factor determining win or defeat, particularly in close matches with the opposition.

Since the 1970s, the number of girls participating in sports has increased steadily (Senne, 2016), driving the need to understand athletes' psychology better (Herrero et al., 2021). Participating in sports has several advantages. Participating in sports can have a positive psychological influence, improve physical health (Kaestner & Xu, 2010), and reduce the use of substances (Sabo et al., 2005).

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Athletes who want to reach high-performance levels must first build resilience (experiencing adversity and positively adapting to that adversity)(Collins & Ine Macnamara, n.d.). Suppose young female athletes do not learn healthy coping mechanisms for adversity in sports. In that case, they may face unfavorable developmental outcomes like poor relationships with coaches, negative peer pressure, parental pressure, and the problematic psychological environment of competitive sports.(Fraser-Thomas & Côté, 2009; Theokas, 2009)

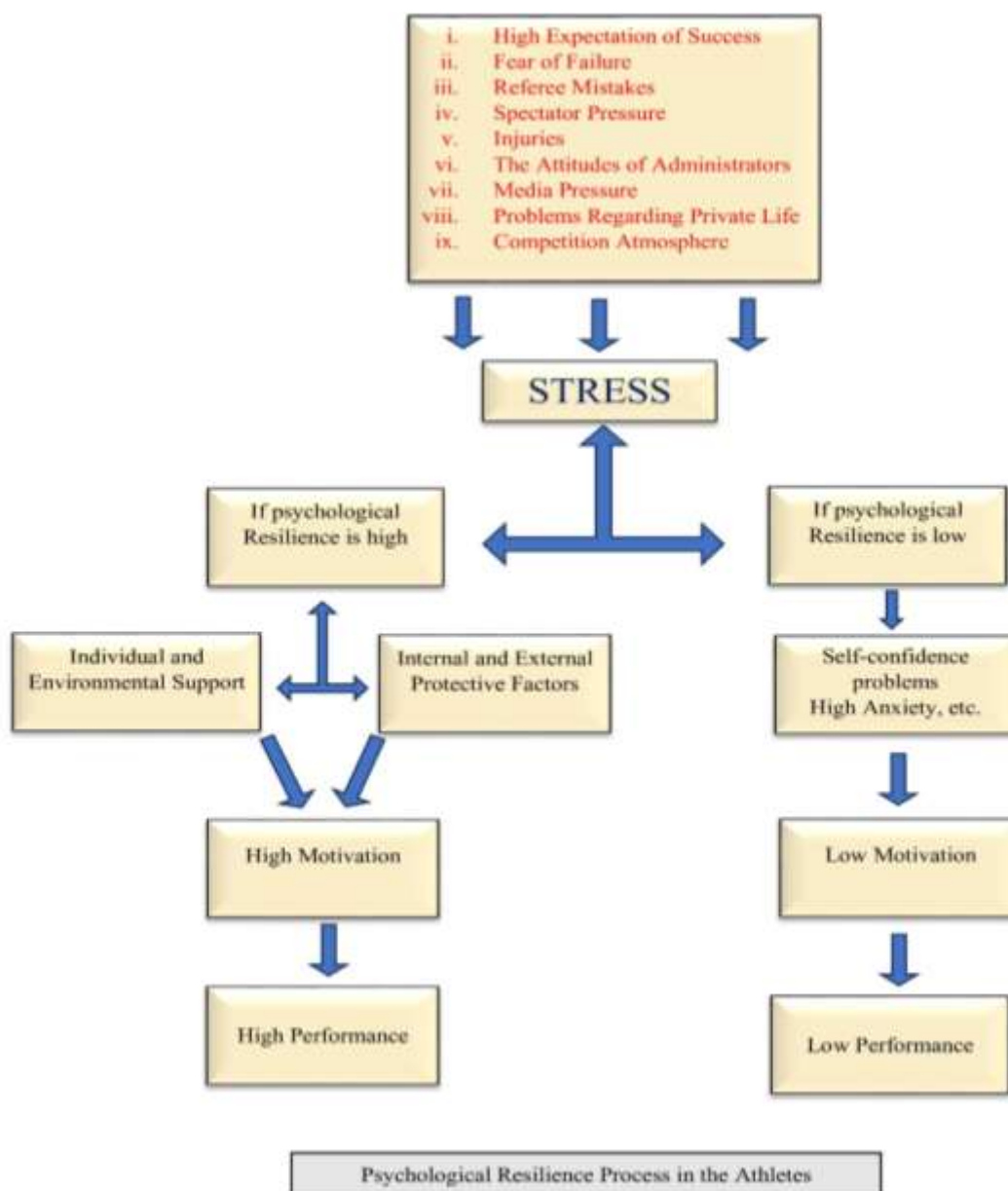
Resilience is the process and result of effectively adjusting to trying or demanding situations in life, particularly by displaying mental, emotional, and behavioral flexibility and adapting to demands from both the inside and the outside. (*Resilience*, n.d.)

Over the years, many cricket teams and individuals have displayed incredible tenacity, overcoming multiple difficulties and failures to succeed. The Indian team's historic Test series victory against Australia in 2020–21 is one recent example of resiliency in cricket. Numerous difficulties experienced by the Indian team included injuries, quarantine limitations, racial insults, and adverse conditions. Not only on the team but also on individual players such as Yuvraj Singh displayed tenacity by overcoming cancer and returning to international cricket in 2012(Mahato Amrit, 2023)

A young female athlete who plays sports must contend with complicated, ambiguous, and limiting norms and ideas such as (gender inequality and discrimination, body image, disordered eating, energy deficiency, fatigue and poor sleep, and mental distress) that may impact their health and performance.(Lunde & Gattario, 2017) Few factors that may increase psychological resilience such as adversity and positive adaptation stress coping ability, supportive athletic environments(McManama O'Brien et al., 2021)

Athletes' performance in sports might also suffer when they are under a lot of stress, such as expectations, game pressure, umpire mistakes, etc. When athletes are under pressure, they should be aware of their stress and select and employ coping mechanisms to help them manage it(Dugdale Jeremy R. et al., 2002). The athlete's potential for psychological resilience is intimately linked to this skill. It follows that many athletes should be able to handle the competitive environment and crisis impact it creates easily, feel less burnout, and have a high degree of success motivation, all of which are reflected in their success in sports. Many successful elite athletes pass away before their time due to psychological issues that the athletes find challenging to manage, such as low motivation, stress, high anxiety, and self-confidence problems. (Özdemir, 2019)

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METHODOLOGY

Design and Participants

The researcher conducted a descriptive study. The study focused on cricketers aged between 18 to 25 who were active competitors. The researcher used the snowball sampling technique, selecting the sample based on personal contacts and social networks, using a nonprobability and incidental approach. Twenty-five samples were collected for those selected for the East Zone inter-university women's cricket coaching camp.

Inclusion criterion:

- Those who have been selected for inter-university cricket coaching camp.
- Those who have come under the age of 18-25.

Exclusion criterion:

- Those who have not been selected for inter-university cricket coaching camp.

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- Those who are under 18 or over 25 years are not selected.
- The incomplete survey was excluded.

Variable and measure

The Brief Resilience Scale (BRS) is used to measure psychological resilience. Brief Resilience Scale (Smith et al., 2008) is a reliable and valid questionnaire for assessing resilience. The Brief Resilience Scale (BRS) consists of 6 questions. Items 1, 3, and 5 all use positive language, whereas items 2, 4, and 6 all use negative language, and the mean of the six items is calculated to determine the BRS score. The scale is administered according to the guidelines below: Please use the following scale to indicate how much you agree with each of the following statements: 1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree.

Scoring: Your answers' values (1–5) for each of the six items add up to a range of 6–30. To find your final score, divide the total by the number of questions that were answered (6).

BRS Score	Interpretation
1.00 - 2.99	Low resilience
3.00 - 4.30	Normal resilience
4.31 - 5.00	High resilience

Procedure

The completed survey was converted into a Google Forms questionnaire, which was then posted and distributed on the Google online survey platform. A link to the Google forms was distributed to personal contacts via WhatsApp. After getting the BRS score, they were categorized according to their BRS score interpretation (Smith et al., 2008) cut-off points: Low resilience group, Medium resilience group, and High resilience Group.

Statistical Analysis

The arithmetic mean (M) was used to describe the data. MS Excel was used to perform statistical analysis.

RESULT & DISCUSSION

Table 1 Descriptive statistics of psychological resilience of university women cricket players

Mean of Age and BRS score			
	Low resilience	Normal resilience	High resilience
N	6	13	6
Age	19	19.69	23
BRS score	2.74	3.33	4.27

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Figure-1 Graphical representation of psychological resilience of University women cricket players

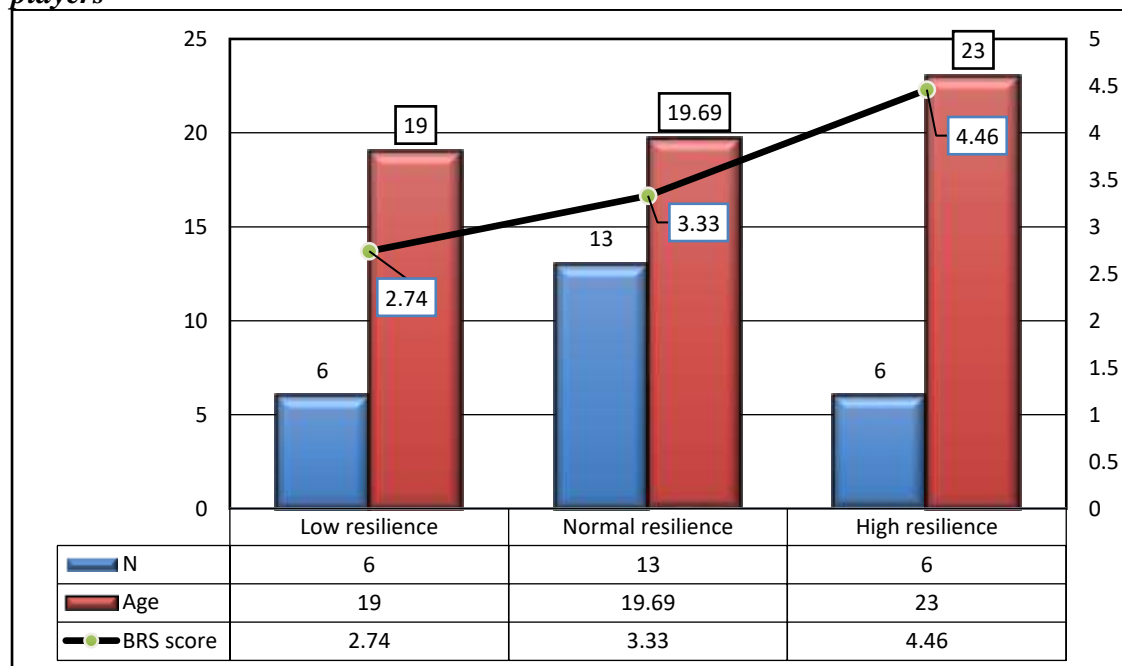


Table 1 represents the mean of age group and BRS score. Twenty-five valid subjects were there, and out of 25, 6 subjects came to the low resilience group (1.00 - 2.99) as per their BRS score interpretation cut-off points, which, mentioned by (Smith et al., 2008) and their mean BRS score was 2.74 and age mean was 19, 13 subjects came to medium resilience(3.00 – 4.30) group and there mean of BRS score was 3.33 and age mean 19.69 and 6 subjects came to High resilience group (4.31 – 5.00). The mean of the BRS score was 4.46, and the age mean was 23.

- **Low resilience:** BRS scores falling between 1.00 and 2.99 indicate low levels of resilience. Individuals within this range may struggle to cope with stressors and may have difficulty bouncing back from setbacks.
- **Normal resilience:** BRS scores ranging from 3.00 to 4.30 suggest normal levels of resilience. Individuals within this range typically demonstrate adequate coping skills and can effectively manage moderate stress levels.
- **High resilience:** BRS scores falling between 4.31 and 5.00 indicate high levels of resilience. Individuals in this range tend to be highly adaptable, effectively cope with significant stressors, and demonstrate solid emotional stability and perseverance.

The mean BRS score of 3.33 falls within the range for Normal resilience (3.00 - 4.30), indicating that, on average, individuals in the dataset demonstrate normal levels of resilience based on the BRS score interpretation cut-off points (Smith et al., 2008). Since earlier research also revealed normal psychological resilience and participation in sports, the mean discovered in this study would be consistent with existing findings.(Blanco-García et al., 2021; Kyriazos et al., 2018; Mira et al., 2023).

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(Onturk et al., 2020; Orlando et al., 2017) When examining samples of judo competitors and university students from the Faculty of Sport Sciences, they discovered that males had considerably greater resilience levels than females.

The literature is generally in agreement that there is a favorable correlation between sports performance and resilience (Belem et al., 2014; Fletcher & Sarkar, 2012; Galli & Vealey, 2008; Hosseini & Besharat, 2010; Meggs et al., 2015; Yang et al., 2019). This study correlates with one of the two studies identified, wherein potential variations in resilience levels were examined in relation to the athletes' level of competition (Castro Sánchez et al., 2016; Patsiaouras, 2021).

According to these authors, resilience and age positively correlate (Codonhato et al., 2018; Rodríguez-Rey, 2016). The correlation between age and resilience could be a result that aligns with the notion of resilience itself. It is believed that older people have encountered more adversities in various life circumstances, which may have increased their resilience, assuming that building resilience is a process that takes place over time and depends on lived experiences.

This study was conducted on a squad from the university having 25 girls. Out of them, 16 were selected for inter-university cricket teams. The assessment of this study demarcates that players with higher BRS scores, i.e., the Resilience determinate factor, have also been established. The mean age of 19.69 years showed normal to higher resilience and has been selected. So, this study suggested that age and resilience are correlated to each other as with an increase in age, resilience seems to increase, improving sports performance.

The graph recorded the direct proportionality of age and resilience. There are supporting studies that have cofounded and proven the results of this study to be accurate, as mentioned above.

We think the study's findings also offer helpful information from a practical standpoint for coaches, psychologists, physical trainers, sports medicine specialists, and other support personnel involved in competitive sports. According to this study, focusing on all those protective elements may help the athlete manage stressors and, as a result, perform better when faced with challenges in a competitive setting.

CONCLUSION

In conclusion, the study conducted on a squad of university girls, specifically focusing on those selected for the inter-university cricket team, revealed several significant findings regarding the relationship between age, resilience, and sports performance.

Firstly, the analysis of the subjects' Brief Resilience Scale (BRS) scores indicated that most players demonstrated normal to higher levels of resilience, with a mean BRS score falling within the normal resilience range. This finding aligns with existing literature, suggesting a positive correlation between sports participation and resilience levels. Additionally, the selection of players with higher BRS scores for the cricket team supports the notion that resilience is a determinant factor in athlete selection, indicating its importance in sports performance.

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Secondly, the study highlighted a correlation between age and resilience, with older players exhibiting higher levels of resilience on average. This finding is consistent with the idea that resilience is a dynamic trait that may develop over time through exposure to various life experiences and challenges. The positive correlation between age and resilience underscores the importance of considering age-related factors in understanding and fostering resilience among athletes.

Furthermore, the graph depicting the relationship between age and resilience indicated a direct proportionality, providing visual evidence to support the study's findings. This graphical representation reinforces the notion that age is a significant factor influencing resilience levels among athletes.

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Conflict of Interest

The author(s) declared no conflict of interest.

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