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## Psychological resilience as catalyzer to football performance

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### Abstract

The study sought to examine how psychological resilience of adult male undergraduate college footballers affects their game performances. The sample consisted of 30 medalists and 30 non-medalists, altogether 60 undergraduate male football players aged between 18-21 years with Mean age of 19.5 years. Their resilience levels had been assessed through Amat *et al.* (2014) Short Scale of Resilience, and football performances evaluated through field observations by three independent football coaches. Results indicated significantly higher levels of resilience among medalists compared to their non-medalist counterpart. Findings highlight the need for mandatory resilience training to sports persons for their excellence in team games, athletics and health perspectives.

**Keywords:** Psychological, resilience, catalyzer, performance, soccer player

### Introduction

Soccer players face many stressors during their sports careers which, if uncontrolled, could negatively influence their performances. One of the curative measures to deal with those setbacks could relate to enhancing psychological resilience in them. Borrowed from engineering science the term resilience was first used in behavioral science by an American Psychologist Emmy Werner (1971) who noted that resilient children and their families were those who, by definition, demonstrated traits that allowed them to be more successful than non-resilient children and families. Later on researchers show their devotion to discover the protective processes that explain individuals' adaptation to adverse conditions, such as maltreatment (Cicchetti and Rogosch, 1997) <sup>[6]</sup>, catastrophic life events (Fredrickson *et al.*, 2003) <sup>[10]</sup> or urban poverty (Luthar, 1999) <sup>[17]</sup>, to recover quickly from stress (Carver, 1998; Smith, Tooley, Christopher, and Kay, 2010) <sup>[5, 22]</sup>. Researchers, too, endeavor to uncover how some factors (e.g. connection to family) might contribute to positive outcomes of resilience (Luthar, 1999) <sup>[17]</sup>. The American Psychological Association (APA, 2014) defines resilience as "the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress. Resilience is a learned protective and defensive survival ability to return quickly or bounce back to original position after the pressures recede (de Terte and (2014; Hom and Feder, 2018) <sup>[3]</sup>. It is the individual's or group's skill of keeping performance levels relatively stable, and it can cause positive adaptation in response to exposure to significant adversity experienced by a given person (García Secades, Molinero, Salguero, Ruiz, de la Vega, & Márquez, 2016). According to Fletcher & Sarkar (2016) resilience is the ability to use personal qualities to withstand pressure. An example of resilient group behavior could be seen in one of the great Indian epic Mahabharata (Gita Press, Gorakhpur, India), probably compiled between the 3rd century BCE and the 3rd century CE by Maharishi Veda Vyas where it was mentioned that the strongest warriors Pandavas (five sons of King Pandu) remained calm and quite even seeing the scene of robbing of the clothes of their common wife Draupdi, because they (Pandavas) had been made slaves at that particular time. But just after the end of their slavery period of 13 years they (Pandavas) immediately bounced back to their original warriors' position, and killed all their enemies who had insulted or abused their common wife Droupadi.

Thus resilience appears to be a key psychological aspect of success in all activities. Resilient individuals and teams have the ability to maintain a consistent level of high performance in the

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face of change, adversity and stress. Psychological resilience has been found important in sports because players must utilize and optimize a range of mental qualities to withstand the pressures that they experience during their games. Sarkar, Fletcher, and Brown (2014)<sup>[21]</sup> found psychological resilience essential for winning their gold medals, including repeated non-selection, significant sporting failure, and serious injury. Several other investigators also report positive impact of resilience on sports performances (Secades *et al.* 2016; Fletcher *et al.* 2012; Arnold *et al.*, 2017; Howells *et al.*, 2017; Putukian, 2016). Hosseini & Besharat (2010) also revealed significant positive relation of resilience with sport achievement and mental health. Findings of Holt and Dunn (2004) and those of Weissensteiner, Abernethy and Farrow (2009) reveal for soccer and cricket respectively that a good resilience profile is an important variable for the development of high levels of performance. However, Singh and Roy (2013)<sup>[23]</sup> didn't find significant difference in psychological resilience of successful and unsuccessful sports persons. Hence to verify the impact of psychological resilience in soccer payers' performance this study was conducted. It was hypothesized that athlete's quality of performance would be positively related to their level of resilience.

### Materials and methods

**Sample-** The sample of respondents comprised 30 medalists and 30 non-medalist undergraduate male football players aged between 18-21 years with Mean age of 19.5 years, having experience of playing at least two inter-college football competitive games during three years of their undergraduate

studies. They had been purposefully selected from the constituent degree colleges of two universities of Bihar state.

### Research Tools

**Resilience Scale-** A Six items Amat's Brief Resilience Scale (2014) consisting of three positively worded items, and three negatively worded items. All the six items relate to the individuals' ability to bounce back from adversity or set-back faced in their current life situations.

**Performance Rating of the Players-** Three unbiased football coaches having experience of more than ten years were selected from three Universities of Bihar State for independent performance rating of players on given standard criteria.

### Procedure

The contestants had been numbered for identification. The sample initially comprised 80 football players from five degree colleges aged between 18-21 years. After 2 consecutive trials only 60 of them (30 medalists and 30 non-medalists) were finally selected for the study. Three experienced coaches rated their overall athletic performances during the final game.

### Results

In order to verify the hypothesis formulated for the present study participants (athletes) were classified on the basis of joint scores on resilience scale and coaches' ratings. Statistical analyses included counting of frequencies and percentages followed by calculation of t-ratio statistical test. Obtained results are presented in Table - 01 through 02 below.

**Table 1:** Frequencies and Percentages of Players Showing Better and Poor performances related to their Resilience Levels

Resilience	Performance Rating			
	Medalist		Non-Medalist	
	Better	Poor	Better	Poor
High	13 (43.33%)	04 (13.33%)	08 (26.67%)	05 (16.67%)
Low	03 (10%)	10 (33.33%)	05 (16.67%)	12 (40 %)

Results contained in Table-01 make it clear that greater number of high resilient medalist players (43%) showed better football performances compared to those of low resilient players (10%). Whereas among the low resilient group only 16.67% showed better performance, which lend support to the hypothesis. This result was further verified by calculating t-ratio statistics as presented in Table-02 below

**Table 2:** Comparison of Mean, SD, and SE of Resilience Scores of Medalist and Non-Medalist Football Players through t-ratio Statistical Test

Group	N	Mean Resilience score	SD of score	SE	t-ratio	df	P-value
Medalist	30	22.67	2.13	.39	33.69	58	<.01
Non-Medalist	30	15.54	1.36	.25			

Contents of Table-02 also reveal that medalists had higher mean resilience score (M=22.67; SD=2.13) compared to non-medalist (M=15.54), and such obtained difference was statistically significant beyond 99% of confidence level.

### Conclusion

Resilience positively activate the amygdale, hippocampus, and prefrontal cortex areas of brain which give a sense of internal control and helps people feel more positive in general. Hence resilience is important throughout life, especially in competitive sports life. References have been

arranged as per the style of American Psychological Association (APA, 2014).

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