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A study on psychosomatic skills among football players of University of Delhi

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Abstract

The study's goal was to analyze and compare the mental abilities of selected variables, namely psychosomatic abilities, which include sub variables such as Stress Control, Relaxation, Fear Control, and Energizing, of Strikers and Midfielders of Intercollegiate Football Players at the University of Delhi. The study included a sample of 60 participants from the University of Delhi. The players were divided into two further groups: midfielders (N is the number of=30) and strikers (N is the number of=30). The current study exclusively comprised male participants. The participants' ages ranged from 18 to 25. The researcher examined strikers' and midfielders' mental profiles using a standardized technique. The researcher utilized the Ottawa Mental Skills Assessment Tool-3 (OMSAT-3 Version 2-2). The acquired data was subjected to an Independent Sample 't' Test, which was intended to compare. The Independent Sample 't' Test was used on the acquired data to compare the mental abilities selected variable, i.e., Psychosomatic abilities, of strikers and midfielders to see if there were any significant differences between the two player roles. At a significance level of 0.05, the study found no significant differences in Psychosomatic Skills (Stress Control, Relaxation, Fear Control and Energizing) between attackers and midfielders. This result was reached based on p-values from the statistical analysis that exceeded the significance level of 0.05.

Keywords: Psychosomatic skills, stress control, relaxation, fear control, energizing, OMSAT-3 version 2-2, descriptive statistics, level of significance, independent sample 't' test.

Introduction

Psychosomatic abilities (relaxation, energizing, stress management, and fear control) affect physiological activation and can be used to control mental and physical intensity.

Stress control is a transactional model of stress and coping emphasizes how individuals perceive and respond to stressors. They argue that stress control involves cognitive appraisal and coping efforts to manage stress effectively (Lazarus & Folkman, 1984) ^[1].

Pelletier explores stress management from a holistic health perspective, integrating physical, emotional, and spiritual dimensions. Stress control, in his view, encompasses lifestyle changes, relaxation techniques, and mindfulness practices to foster overall well-being and resilience (Pelletier, 2005) ^[6].

Gordon's work underscores the significance of adopting effective stress control strategies in mitigating the negative impact of stress on mental health. By understanding and applying these strategies, individuals can enhance their resilience and maintain psychological well-being in the face of stressors (Gordon, 2009) ^[8, 10].

Cotterill *et al.* (2010) ^[12] study found no significant differences in the effectiveness of pre-performance routines in reducing stress and enhancing performance, suggesting variability in individual responses to routines.

Cumming & Ramsey (2009) ^[11] research indicated no significant differences in stress reduction between athletes using imagery and those not using it, highlighting that imagery effectiveness may vary.

Gardner & Moore (2004) ^[5] study found no significant differences in stress control between athletes practicing mindfulness-based techniques and those using other mental training methods.

Hanton & Jones (1999) ^[3] study found no significant differences between the effectiveness of relaxation techniques and cognitive strategies in reducing competitive anxiety, suggesting both methods can be equally effective.

Meichenbaum (1993) ^[2] study found no significant differences in stress control between athletes receiving Cognitive-Behavioral Therapy (CBT) and those using other stress management techniques, indicating CBT's variable effectiveness.

Relaxation refers to the process of reducing tension and stress in both the body and mind, resulting in a state of calm and tranquility. It involves a variety of techniques and practices aimed at promoting physical, emotional, and mental well-being.

Relaxation involves a reduction in physiological and psychological arousal levels, leading to a state of calmness and decreased stress (APA, 2020).

Reducing stress and arousal through a variety of methods, including gradual relaxation of muscles, deep breathing, and meditation, is the process of relaxation (Jones *et al.*, 2019) ^[20].

When people are relaxed, their levels of stress and tension are lower. Progressive relaxation and mindfulness are two common practices that help people achieve this state of calmness (White & Black, 2016) ^[19].

Gucciardi *et al.* (2009) ^[8, 10] underscore the importance of relaxation as a key mental skill within the OMSAT-3 framework. Effective relaxation techniques are crucial for managing stress and enhancing mental toughness, which in turn supports optimal athletic performance. By assessing and training relaxation skills, coaches and sports psychologists can significantly contribute to an athlete's mental resilience and success.

Dominikus *et al.* (2009) ^[9] emphasize the importance of relaxation in enhancing athletic performance. Relaxation techniques help athletes manage stress and anxiety, which are common in competitive sports. The study identifies a number of beneficial relaxation methods for athletes, such as progressive muscular relaxation, visualization, and deeply breathing practices. These techniques aim to lessen heart rate, ease tense muscles, and encourage control and serenity.

Fear control refers to the psychological processes and strategies individuals use to manage and reduce fear responses, thereby regulating their emotional and behavioral reactions in fearful situations.

Fear control refers within the context of emotion regulation strategies. She discusses how rumination and distraction techniques can influence fear responses and contribute to emotional resilience (Nolen-Hoeksema, 2012) ^[14].

Fredrickson's broaden-and-build theory of positive emotions discusses how positive emotions can counteract fear responses and enhance emotional resilience. She highlights the role of positive affectivity in promoting adaptive coping strategies (Fredrickson, 2001) ^[4].

Brenton *et al.* (2016) ^[18] focuses on visual anticipation skills in cricket, understanding fear control in sports psychology involves a broader consideration of mental skills and strategies that support optimal performance under pressure. Integrating these insights can enhance athletes' ability to manage fear and anxiety effectively in competitive environments.

MacDonald *et al.* (2013) ^[15] underscore the importance of fear control in sports performance, particularly in high-pressure environments like cricket. By using techniques such as mental imagery, deep breathing, and cognitive-behavioral strategies, athletes can manage fear effectively, which in turn supports

consistent performance and mental toughness. Integrating fear control training into regular practice routines is essential for developing resilient and confident athletes capable of performing under pressure.

Energizing refers to the psychological and physiological processes that increase an individual's level of arousal, motivation, and readiness to perform tasks. In the context of sports psychology, energizing techniques are used to boost athletes' energy levels, focus, and overall performance.

Energizing involves using psychological strategies to boost energy levels, enhance focus, and prepare mentally for optimal performance (Orlick, 2008) ^[7].

Energizing is the continuous self-motivation and management of energy to sustain effort and achieve long-term goals (Duckworth, 2016) ^[17].

Khodayari *et al.* (2011) ^[13] emphasize that effective energizing techniques can play a significant role in reducing sport anxiety. By managing their energy levels, athletes can better cope with the stress and pressure of competition, leading to improved performance. Techniques such as visualization, positive self-talk, and arousal control are identified as effective methods to boost energy levels and reduce anxiety.

Maleki *et al.* (2014) ^[16] underline the importance of energizing as a mental skill for athletes in different sports, particularly basketball and gymnastics. They highlight the varying needs and techniques based on the sport and the athlete's level of experience. Effective use of energizing techniques, such as mental imagery and positive self-talk, is linked to improved performance, making it a critical component of mental skills training programs.

Methodology

Selection of Subjects

The current data was gathered from (N = 60) male students at the University of Delhi who were regular participants with a high degree of ability and who belonged to the 18–25 age range. Football players participated in the event. The players were divided into two further groups: midfielders (N is the number of=30) and strikers (N is the number of=30).

Selection of Variables

The psychosomatic skills which includes the following sub-variables: stress control, relaxation, fear control, and energizing, was analyzed by the researcher using a standardized method on University of Delhi Intercollegiate Football Players' (Strikers and Midfielders). The Ottawa Mental Skills Assessment Tool-3 (OMSAT-3 Version 2-2) was employed by the researcher.

Statistical Technique Used

Descriptive statistics, including mean and standard deviation, as well as comparative statistics, were employed to evaluate the gathered data. An Independent Sample 't' test was employed, with a significance level of 0.05, to evaluate the psychosomatic skills.

Results

The study focused on psychosomatic skills (stress control, relaxation, fear control, and energizing) and examined data from 60 male football players who were played as Strikers (N=30) and Midfielders (N=30). Descriptive data and results of the Independent Sample 't' test has been displayed in the tables below:

Table 1: Psychosomatic Skills Descriptive Statistics & Independent Sample 't' test

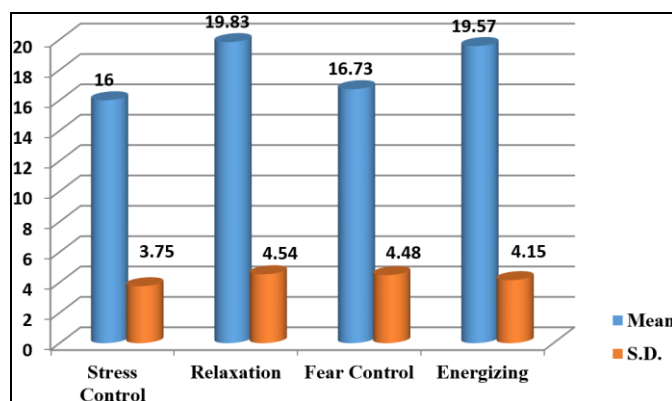
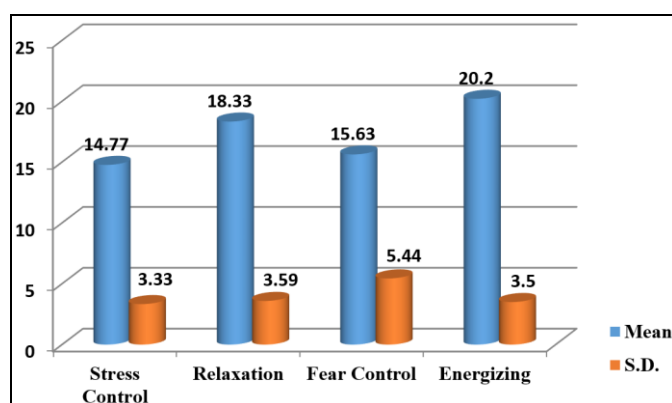
Variable	Game	N	Mean	S.D.	Std. Error Mean	Mean Difference	T	Sig. (2- tailed)
Stress Control	Strikers	30	16.00	3.75	0.68	1.23	1.35	0.18
	Midfielders	30	14.77	3.33	0.60		1.35	0.18
Relaxation	Strikers	30	19.83	4.54	0.83	1.50	1.42	0.16
	Midfielders	30	18.33	3.59	0.66		1.42	0.16
Fear Control	Strikers	30	16.73	4.48	0.82	1.10	0.86	0.40
	Midfielders	30	15.63	5.44	0.99		0.86	0.40
Energizing	Strikers	30	19.57	4.15	0.76	-0.63	-0.64	0.53
	Midfielders	30	20.20	3.50	0.64		-0.64	0.53

Table 1 shows the psychosomatic skills variables such as Stress Control, Relaxation, Fear Control and Energizing was compared in totality of both Strikers and Midfielders, the researcher found Mean & Standard Deviation score of Strikers of Stress Control (16.00±3.75), Midfielders of Stress Control (14.77±3.33), Strikers of Relaxation (19.83±4.54), Midfielders of Relaxation (18.33±3.59), Strikers of Fear Control (16.73±4.48), Midfielders of Fear Control (15.63±5.44), Strikers of Energizing (19.57±4.15) and Midfielders of Energizing (20.20±3.50).

Although there are relatively small mean differences in a number of characteristics between the Strikers and Midfielders groups, these differences are statistically insignificant.

In conclusion the information that has been provided does not meet the criteria for statistical significance at the 0.05 level in terms of position-based differences in the analyzed variable.

The results reveal that, at the 0.05 level, none of the observed group differences are statistically significant. This implies there is inadequate data to indicate a substantial position difference in psychosomatic skills factors.

**Fig 1:** Graphically Representation: Mean & S.D. of Strikers**Fig 2:** Graphical Representation: Mean & S.D. of Midfielders

Discussion of Findings

The 60 participants in the University of Delhi Football Inter-

collegiate Players provided the data for this study; 30 of them were strikers and 30 of them were midfielders. A bilingual, standardized, and calibrated assessment by a standardized psychological questionnaire of mental skills related to Indian conditions was used to gather the data (OMSAT-3 Version 2-2). The t-test for independent samples was used to assess the data.

The information presented compares the psychological traits of a striker with a midfielder in terms of psychosomatic skills, such as stress control, relaxation, fear control, and energizing. Table 1 showed that in terms of stress control, relaxation and fear control, strikers have a higher mean value than midfielders.

It also showed that in terms of energizing, midfielders have a higher mean value than strikers.

Conclusions

The inferences made in light of the findings the findings demonstrated that in all psychosomatic skills, there was no discernible difference between strikers and midfielders, such as stress control, relaxation, fear control, and energizing.

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