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## A comparative study on psychological traits among male and female junior Indian boxers

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### Abstract

The purpose of the present study was to compare the psychological traits among male and female junior Indian boxers. A total of (N=60); 30 male and 30 female Junior Indian Boxers with age ranging between 15 – 21 years were selected as subjects for a comparative study. Psychological variables selected for the present study were aggression, motivation, trait and state anxiety. Motivation was measured by questionnaire constructed by M.L. Kamlesh (1992), anxiety i.e. trait and state anxiety were measured by the questionnaire constructed by Spielberger, (1966). To measure the aggression questionnaire developed by Buss & Perry (1992) was used. Independent T-Test was employed for the analysis of data and the level of significance was set at 0.05. The results indicated that Positive Energy (P= 0.03), Attitude Control (P= 0.01), Concentration (P= 0.04), Confidence and Achievement Motivation (P= 0.01) and Goal setting and Mental Preparation (P= 0.03) have a significant difference between the Medalist and non-medalists boxers. All other variables found insignificant.

**Keywords:** Psychological traits, male and female, boxers

### Introduction

Boxing a combat sports played an important part since ancient Greece; both in the four great Pan-Hellenic festivals – the Olympian, Pythian, Nemean and Isthmian. The most Prestigious Games, the Olympic, began in 776 BC, and Boxing was introduced in 688BC. And it was introduced in modern Olympic in 1904.

Psychological health and sport performance improvement has been considered as two main factors. Psychological health is a phenomenon that examines the body impact on mind. Sport performance improvement depends on psychological factors and includes the issues of anxiety, focusing, self-confidence and motivation. This area isn't limited just for skilled athletes but include an extensive spectrum from athletes like members of club teams but also include old people that exercise for fun (Parya, 2015) <sup>[15]</sup>.

Lack of public recognition on success of teams and athletes leads to waste energy and time and cost because success in professional sports is not only contingent upon defense-related and fitness, but also depends on mental skills (Shahzad, 2013) <sup>[22]</sup>. Research on the psychological differences among athletes include Jafari *et al.* (2006), Kashani *et al.* (2011), YZ (2009), Yazid *et al.* (2012) and Sabina *et al.* (2014) <sup>[21]</sup>. All of them concluded that there was no difference in the mental athlete's components. Research on the lack of psychological differences among athletes involved (Kakhajaleh, 1999; Umenski *et al.*, 2011; Mirzaee & Rahmaniyan, 2008) <sup>[17]</sup>. The role of psychological factors is important in all sports competitions; studies also show that all of the study variables are important in skilled performance. Allen *et al.* (2011), Kierkaldy (1982), Fratzk (1975) showed that neuroticism personality traits in the athlete group were lower than others and high levels of neuroticism are less competitive compared to group with low competitive levels. Study by Vipene (2013) <sup>[24]</sup> and Shahzad (2013) <sup>[22]</sup> showed that athletes in personality traits of neuroticism obtained lower scores compared to non-athletes.

Neuroticism represents the experience of negative emotions, such as anxiety, anger or depression (Johnson, 2000; quoted Ali Aghaee, 2005) <sup>[1]</sup>. It seems that the number of years of practice experience in Taekwondo will lead to lower neuroticism, since it is negatively correlated with success at high levels (Shahzad, 2013; Ali Aghaee, 2005) <sup>[22, 1]</sup>.

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Similar results on relationship between neuroticism and participation in sport can be found in Mac Cleves (2003) and Lodvic (1980) who pointed out that athlete's score on a scale of neuroticism levels were significantly lower than non-athletes. The findings also showed that neuroticism is somewhat reduced by exercise (Chavris, 2009) [4]. The findings also showed that the mental skills in all subscales of mental skills were significantly differed so that those in league division 1 achieved a higher score. Importance of mental skills has been repeatedly expressed and investigating the relationship between the success of these skills and sports athletes performance dealt with factor between success and failure. Orrick and Parrington (1988), Kruger (2010) [12] confirmed that Athletes at a high level competition seem area affected by high levels of stress, so athletes can tolerate high external pressure, to maintain their optimum performance.

To deal with this stress, athletes adopt certain strategies and the mental skills to improve their confidence and protection. The other strong point on mental skills is that these skills are learned (Vaez Mousavi *et al.*, 2007). Numerous studies have shown that competitive anxiety in successful athletes is lower than others (Kakhajaleh, 1998; Neil *et al.*, 2012; Géczi *et al.*, 2009) [18, 6]. Regular physical activity lowers anxiety to much extent (Lut. tamam, 2010; Neil *et al.*, 2012) [16, 18]. The skilled athletes adopt competitive anxiety in better manner and anxiety in sports is affected by age, training, abilities (skills) and previous achievements (Hanton *et al.*, 2008; Kul *et al.*, 2008) [7].

Anxiety involves unpleasant feelings in the form of anticipation of something that is uncomfortable. Unlike fear, which is caused by a realistic, well-known danger, anxiety is difficult to identify. Normal (objective) anxiety occurs when people react appropriate to the situation, but after a certain period comes to adaptation and anxiety disappears. Anxiety as a feature of anxiety disorders is of disproportionately high intensity compared to the situation that causes a feeling of anxiety and interferes with the individual's ability to perform normal activities. Common is the co-morbidity of anxiety with depression, addiction and aggressive behavior. The particular aggressiveness and violence is likely to develop as a result of generally disturbed emotional regulation, such as abnormally high or low levels of anxiety. Analysis of aggression in sports requiring additional attention, because it carries a certain sport related specifics. Aggressiveness and violence in sport are, or at least should be, sanctioned, and those who take part in sports with a "high risk" are taking the

risk of personal physical injury. Philosophy of "win at all costs" for athletes often leads to unethical and aggressive behavior, creating a negative and destructive impact, not only to young athletes, but also the entire community. In this context by research is still difficult to answer whether sports provides a positive outlet for the instinctive tendencies of aggression or, conversely, because of its competitive nature, even leading to an increased aggressiveness.

Modern sports psychologists are more concerned with specific conditions, mental functions or dispositions, and coping skills that athletes are manifested in various sports and situations that significantly determine quality of their competition performances. The reason for this is, probably, complexity of personality's make-up as general individual characteristics. Inside sport is a large number of different sports branches and disciplines, which themselves expose athletes to different situations and specific requirements (Lansky, 1999) [15]. Thus, the purpose of the present study was to compare the psychological traits among male and female junior Indian boxers

## Research Methodology

### Procedure

A comparative study was designed where purposive sampling was conducted on participants (boxers) of U-17 and U-21 group in Khelo India Youth Games 2019, held from Jan13, to Jan19, 2019 at Pune, Maharashtra. A total of 60 participants; 30 male and 30 female boxers were selected for the study. Each participant was informed about the importance of this study and the information in the questionnaire was filled by the participants after their boxing competition. Psychological variables selected for the present study were aggression, motivation and trait and state anxiety. Motivation was measured by questionnaire constructed by Dr. ML. Kamlesh (1992), anxiety i.e. trait and state anxiety were measured by the questionnaire constructed by Dr. Spielberger, (1966). To measure the aggression questionnaire developed by Buss & Perry (1992) was used.

### Statistical Techniques

The data of the Psychological traits were collected through the established and reliable questionnaires after the competition. Independent t-test was employed as the statistical tool for analyzing the data for the study.

## Results

**Table 1:** Descriptive Statistics of the study

Variables	Gender	N	Mean	Std. Deviation	Std. Error Mean
Self-Confidence	Male	30	2.36	0.48	0.09
	Female	30	2.51	0.56	0.10
Negative Energy Control	Male	30	3.09	0.64	0.12
	Female	30	3.08	0.58	0.11
Attention Control	Male	30	2.89	0.59	0.11
	Female	30	2.79	0.66	0.12
Visual/Imagery Control	Male	30	1.87	0.73	0.13
	Female	30	2.07	0.60	0.11
Motivational Level	Male	30	2.03	0.64	0.12
	Female	30	2.12	0.63	0.12
Positive Energy	Male	30	1.66	0.48	0.09
	Female	30	1.96	0.56	0.10
Attitude Control	Male	30	1.94	0.41	0.07
	Female	30	2.32	0.67	0.12
Task	Male	30	3.56	1.21	0.22
	Female	30	3.71	0.99	0.18
Ego	Male	30	3.36	0.90	0.16

	Female	30	3.26	0.80	0.15
Coping with Adversity	Male	30	2.23	0.52	0.09
	Female	30	2.02	0.60	0.11
Coachability	Male	30	2.31	0.71	0.13
	Female	30	2.09	0.55	0.10
Concentration	Male	30	2.24	0.62	0.11
	Female	30	1.90	0.62	0.11
Confidence and	Male	30	2.13	0.59	0.11
Achievement Motivation	Female	30	1.69	0.70	0.13
Goal Setting and	Male	30	1.97	0.71	0.13
Mental Preparation	Female	30	1.60	0.56	0.10
Peaking Under Pressure	Male	30	1.68	0.42	0.08
	Female	30	1.48	0.54	0.10
Freedom from Worry	Male	30	2.27	0.60	0.11
	Female	30	2.06	0.49	0.09
Cognitive State Anxiety	Male	30	2.30	0.45	0.08
	Female	30	2.36	0.60	0.11
Somatic State Anxiety	Male	30	2.08	0.47	0.09
	Female	30	2.19	0.48	0.09
Self - Confidence	Male	30	3.06	0.51	0.09
	Female	30	2.88	0.49	0.09

The mean and standard deviation of Self-Confidence was 2.36 and 0.48 for male and for the female it was 2.51 and 0.56 respectively. The junior Indian boxers exhibited a mean and standard deviation of 3.09 and 0.64 for male and for the female shows mean of 3.08 and standard deviation of 0.58 respectively for Negative Energy Control. The mean and standard deviation of Attention Control was 2.89 and 0.59 for male and for the female it was 2.79 and 0.66 respectively. The junior Indian boxers exhibited a mean and standard deviation of 1.87 and 0.73 for male and for the female shows mean of 2.07 and standard deviation of 0.60 respectively for Visual/Imagery Control. The mean and standard deviation of Motivational Level was 2.03 and 0.64 for male and for the female it was 2.12 and 0.63 respectively. The junior Indian boxers exhibited a mean and standard deviation of 1.66 and 0.48 for male and for the female shows mean of 1.96 and standard deviation of 0.56 respectively for Positive Energy. The mean and standard deviation of Attitude Control was 1.94 and 0.41 for male and for the female it was 2.32 and 0.67 respectively. The junior Indian boxers exhibited a mean and standard deviation of 3.56 and 1.21 for male and for the female shows mean of 3.71 and standard deviation of 0.99 respectively for Task.

The mean and standard deviation of Ego was 3.36 and 0.90 for male and for the female it was 3.26 and 0.80 respectively. The junior Indian boxers exhibited a mean and standard deviation of 2.23 and 0.52 for male and for the female shows mean of 2.02 and standard deviation of 0.60 respectively for

Coping with Adversity. The mean and standard deviation of Coachability was 2.31 and 0.71 for male and for the female it was 2.09 and 0.55 respectively. The junior Indian boxers exhibited a mean and standard deviation of 2.24 and 0.62 for male and for the female shows mean of 1.90 and standard deviation of 0.55 respectively for Concentration. The mean and standard deviation of Confidence and Achievement Motivation was 2.13 and 0.59 for male and for the female it was 1.69 and 0.70 respectively. The junior Indian boxers exhibited a mean and standard deviation of 1.97 and 0.71 for male and for the female shows mean of 1.60 and standard deviation of 0.56 respectively for Goal Setting and Mental Preparation.

The mean and standard deviation of Peaking under Pressure was 1.68 and 0.42 for male and for the female it was 1.48 and 0.54 respectively. The junior Indian boxers exhibited a mean and standard deviation of 2.27 and 0.60 for male and for the female shows mean of 2.06 and standard deviation of 0.49 respectively for Freedom from Worry. The mean and standard deviation of Cognitive State Anxiety was 2.30 and 0.45 for male and for the female it was 2.36 and 0.60 respectively. The junior Indian boxers exhibited a mean and standard deviation of 2.08 and 0.47 for male and for the female shows mean of 2.19 and standard deviation of 0.48 respectively for Somatic State Anxiety. The mean and standard deviation of Self - Confidence was 3.06 and 0.51 for male and for the female it was 2.88 and 0.49 respectively.

**Table 2:** Independent t-test

Variables		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Self-Confidence	Equal variances assumed	-1.108	58	0.27
	Equal variances not assumed	-1.108	56.669	0.27
Negative Energy Control	Equal variances assumed	0.084	58	0.93
	Equal variances not assumed	0.084	57.457	0.93
Attention Control	Equal variances assumed	0.598	58	0.55
	Equal variances not assumed	0.598	57.365	0.55
Visual/Imagery Control	Equal variances assumed	-1.171	58	0.25
	Equal variances not assumed	-1.171	55.902	0.25
Motivational Level	Equal variances assumed	-0.57	58	0.57
	Equal variances not assumed	-0.57	57.998	0.57
Positive Energy	Equal variances assumed	-2.185	58	0.03
	Equal variances not assumed	-2.185	56.775	0.03
Attitude Control	Equal variances assumed	-2.648	58	0.01

	Equal variances not assumed	-2.648	48.088	0.01
Task	Equal variances assumed	-0.524	58	0.60
	Equal variances not assumed	-0.524	55.869	0.60
Ego	Equal variances assumed	0.455	58	0.65
	Equal variances not assumed	0.455	57.338	0.65
Coping with Adversity	Equal variances assumed	1.454	58	0.15
	Equal variances not assumed	1.454	56.704	0.15
Coachability	Equal variances assumed	1.324	58	0.19
	Equal variances not assumed	1.324	54.469	0.19
Concentration	Equal variances assumed	2.121	58	0.04
	Equal variances not assumed	2.121	57.998	0.04
Confidence and Achievement Motivation	Equal variances assumed	2.578	58	0.01
	Equal variances not assumed	2.578	56.459	0.01
Goal Setting and Mental Preparation	Equal variances assumed	2.226	58	0.03
	Equal variances not assumed	2.226	54.918	0.03
Peaking Under Pressure	Equal variances assumed	1.585	58	0.12
	Equal variances not assumed	1.585	54.691	0.12
Freedom from Worry	Equal variances assumed	1.519	58	0.13
	Equal variances not assumed	1.519	55.698	0.13
Cognitive State Anxiety	Equal variances assumed	-0.439	58	0.66
	Equal variances not assumed	-0.439	53.815	0.66
Somatic State Anxiety	Equal variances assumed	-0.871	58	0.39
	Equal variances not assumed	-0.871	57.959	0.39
Self - Confidence	Equal variances assumed	1.372	58	0.18
	Equal variances not assumed	1.372	57.911	0.18

The table No.2, Independent t-test revealed that the variables Positive Energy, Attitude Control, Concentration, Confidence and Achievement Motivation and Goal setting and Mental Preparation have a significant difference in Male and Female Junior Indian Boxers. All others Variables like Negative Energy Control, Attention Control, Visual/Imagery Control, Motivational Level, Task, Ego, Coping with Adversity, Coachability, Peaking Under Pressure, Freedom from Worry, Cognitive State Anxiety and Somatic State Anxiety found to be insignificant.

### Discussion of Findings

The purpose of the present study was to compare the psychological traits among male and female junior Indian boxers. Many times at elite level mere skill competency and fitness may not give desired success. The success of an athlete also depends on psychological traits. Many psychological traits are inherent but some of them can be learnt with psychological skill training e.g. focus attention, sustained attention etc. achievement motivation, imagery control, somatic anxiety varies in players. Stress coping strategies of achievers has reported much better than non-achievers in critical situation and that resulted in success. The findings of the study had been supported by Verma *et al.* (2011) [23]; Rani & Bhukar (2018) [20]. Sanjeev & Bhukar (2013) had cited that College students should pay attention to their physical and mental health and examine their emotions at all times to avoid onset of stress-induced depression or physical disorders. In face of stress, they can take a different perspective and learn to cope with it by changing their views. Stress-induced emotions can be self-managed

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