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A comparative study of personality traits of different level of Indian boxers

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Abstract
This study is aimed at to know the personality traits of boxing players and relation with sports performance. Through this study we try to know the various personality traits like neuroticism, extroversion, social desirability and psychoticism affect the performance of the player of boxing who have participated at state, national, and inter university championship. This study has been done on 60 boxers who are practicing at Indira Gandhi stadium New Delhi and the other boxing centers of India. Their performance was assessed and points were given by three experts who are the qualified coaches working in sports authority of India. And the marks of certificates were given. In this study the questionnaire was filled by different weight categories boxers. The statistical analysis was done by applying the mean, standard deviation, Pearson's correlation, and ANOVA to get the results.

Keywords: Neuroticism, Extroversion, Social desirability, Psychoticism, personality traits.

Introduction
The study of personality traits is key to the understanding of violent behavior; although it is a complex and controversial aspect of psychological assessment. Today many outlets and coaches look to sport psychology for a sports competitive edge by seeking psychological traits and training programme in order to learn among other thing. It also emphasize on way to manage, competitive stress, central concentration, improve confidence and increase communication skill and better harmony. The sport of boxing, where young people compete in a safe, tightly controlled environment which promotes qualities such as self-defense, self-discipline and respect. No matter how skillful or fit a boxer might be physically, this will count for nothing if the boxer is not prepared mentally and developed the traits. This study is aimed at to know the psychological traits of Indian boxers.

Recently, De Young *et al.* (2007) [3] attempted to clarify this literature by reconciling two dominant methods of inquiry in trait psychology: the psychometric approach—where personality scales, dimensions, or factors are uncovered by data reduction at the item- (Costa & McCrae, 1992) [2] or adjectival level—and the genetic approach—where the presence of traits is uncovered through an analysis of monozygotic twins or neuropsychological analysis (Kumari, Ffytche, Williams, & Gray, 2004). De Young *et al.* developed a 10-facet lower-order trait taxonomy (two facets for each Big Five trait).

Personality is more or less stable and enduring organization of a person's character temperament, intellect, & physique, which determine his unique adjustment to the environment. The personality traits, mental qualities and type of personality also required for the specific sports competition. It can be concluded that personality is a dynamic, inherited traits & characteristics, environmental effects, interaction between genetic potential & environment forces, a integrated aspect- body, mind, intelligence, spirit, culture and society. This study is based on the personality traits assessment of different level of Indian boxers through personality. For that purpose a personality assessment questionnaire, Eysenck personality questionnaire-revised (EPQ-R) was used which is constructed by psychologists Hans Jürgen Eysenck and Sybil B. G. Eysenck. It consist 48 statements/ questions. These personality traits are measured in the study using the short revised version of the Eysenck Personality Questionnaire – Revised scale requiring "Yes/No" answers, the EPQ-R contains simple questions such as, " Are your feelings easily hurt?",

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"Do you enjoy meeting new people?", and "Do good manners and cleanliness matter much to you?" Groups of questions load onto each of the above facets of personality - neuroticism, extroversion psychoticism and social desirability. There are 12 items for each of neuroticism, extraversion, psychoticism and social desirability, each scored 0 or 1. Items are then totaled out of a maximum of 12 for each subscale.

The reported alpha reliabilities for the extroversion and neuroticism scales are high (>0.80) while that of the psychoticism scale is not as high, but satisfactory (>0.60) Test retest reliability for the scale is >0.70. In the 2001 study, the alpha coefficients were similarly high for the extroversion and neuroticism scales as 0.88 and 0.81 respectively but rather low for the psychoticism scale 0.46.

Four personality traits which are stated in this questionnaire are as follows-

1. **Neuroticism**-Neuroticism refers to general emotional instability and the individual's predisposition to neurotic breakdown under stress. An enduring tendency to experience negative emotional state, such as anxiety, anger, guilt and depression.
2. **Extraversion**-It indicates how outgoing and social a person is. A person who scores high in extraversion on a personality test is the life of the party. They enjoy being with people, participating in social gathering and are full of energy.
3. **Psychoticism**- Psychoticism is defined as a personality type that is prone to take risks, might engage in anti-social behaviours, impulsiveness, or non-conformist behaviour.
4. **Social Desirability**- Social desirability bias is a social science research term that describes the tendency of survey respondents to answer questions in a manner that will be viewed favourably by others.

Objective of the study- The purpose of this study was to know the personality traits of different level of Indian boxers in relation to their sports performance in different level of boxing competition.

Methodology- The selections of subjects for the purpose of this study sixty boxers were randomly selected from the various training centers and from National, Interuniversity and state level boxing competitions. They are practicing at Indira Gandhi Stadium and others places in New Delhi. Twenty players were selected from each level of competition. The ages of the players were between 18 and 29 years.

Variables- the dependent variable selected was the sports performance of the boxers. The independent variable of Personality Traits measured such as- Neuroticism, Extroversion, Psychoticism and Social desirability.

Criterion measures/tools administration: To assess the personality of different level Indian boxers, the Personality traits as variable were selected measured with the help of Eysenck personality questionnaire revised EPQ-R, which was constructed and developed by psychologists Hans Jürgen Eysenck and Sybil B. G. Eysenck. It consist 48 statements/ questions. 12 for each of the traits of neuroticism, extraversion, psychoticism and social desirability or lie scale. Each question has a binary response, 'yes' or 'no'. Each dichotomous item was scored 1 or 0, and each scale had a maximum possible score of 12 and minimum of zero. The questionnaire used in the study was of Hindi version for better understanding to the subjects. The performance of the boxers had been assessed by the three experts and their points of certificates would also assess in aggregate score.

The design of study was a survey type of research design applied on competitive boxers. The survey for the purpose of this study has been done at Indira Gandhi Stadium and others training centers and competitions in the month of June 2015. All the 60 boxers, who have been selected as subjects were asked to fill the selected questionnaire. Their performance was assessed by a panel of three experts coaches of boxing.

Collection of Data: The data had been collected on selected variables with the help of standardized questionnaire to measured personality traits from national, inter-university and state level boxing players. A panel of three experts was formed to assess the performance of boxers. Experts are the qualified coaches from NIS and working as boxing coach at various centers of sports authority of India. The performance was judged out of 10 marks.

Statistical Analysis: To compare the personality traits of different level of Indian boxers the analysis of variance (ANOVA) and to find out the relationship Pearson's correlation also used at 0.05 level of significance. The descriptive statistics was also calculated

Results: The data were compiled and processed for statistical calculation using SPSS-20 version package software to calculate different variables (four personality variables such as- psychoticism, neuroticism, extraversion and social desirability) in this questionnaire and boxing performance.

Table 1: Descriptive Statistics

Weight Categories		N	Minimum	Maximum	Mean	Std. Deviation
LT. FLY WEIGHT	Psychoticism	10	4	8	5.00	1.155
	Extroversion	10	5	10	7.10	1.729
	Neuroticism	10	5	10	6.80	1.932
	Social Desirability	10	6	9	7.30	1.160
FLY WEIGHT	Psychoticism	10	4	10	6.50	2.173
	Extroversion	10	4	8	6.20	1.135
	Neuroticism	10	4	8	6.60	1.647
	Social Desirability	10	2	10	5.30	3.020
LIGHT WEIGHT	Psychoticism	10	4	10	5.90	2.331
	Extroversion	10	4	10	6.50	1.650
	Neuroticism	10	5	10	6.70	1.703
	Social Desirability	10	2	9	5.90	2.132
LT.WELTER WEIGHT	Psychoticism	10	4	10	5.80	2.394
	Extroversion	10	4	9	6.40	1.350
	Neuroticism	10	5	8	6.50	1.354
	Social Desirability	10	2	8	5.10	2.132
WELTER WEIGHT	Psychoticism	10	4	8	5.40	1.506
	Extroversion	10	4	7	5.90	1.101

	Neuroticism	10	4	8	6.50	1.581
	Social Desirability	10	2	10	5.30	3.164
MIDDLE WEIGHT	Psychoticism	10	4	10	5.40	1.838
	Extroversion	10	4	10	6.80	1.476
	Neuroticism	10	5	10	6.50	1.780
	Social Desirability	10	2	7	5.00	1.886

Findings- The table-1 reveals that the mean value of psychoticism was found higher (6.50) in fly weight category and the lowest psychoticism is found (5.0) in fly weight category. The second variable extroversion was found higher (7.10) in Lt. Fly weight category and extroversion found lower (5.90) in welter weight category. As far as neuroticism was concerned, it was found higher (6.80) in Lt. Fly weight category whilst it was lower (6.50) in Lt. welter, welter and middle weight category. The social desirability was found higher (7.30) in Lt. fly weight category and it was lower (5.0) in the middle weight category.

Table 2: Analysis of variance for the selected variables of personality traits and sports performance

		Sum of Squares	df	Mean Square	F	Sig.
Psychoticism	Between Groups	13.533	5	2.707	.710	.618
	Within Groups	205.800	54	3.811		
	Total	219.333	59			
Extroversion	Between Groups	9.083	5	1.817	.893	.493
	Within Groups	109.900	54	2.035		
	Total	118.983	59			
Neuroticism	Between Groups	.800	5	.160	.057	.998
	Within Groups	151.600	54	2.807		
	Total	152.400	59			
Social Desirability	Between Groups	37.550	5	7.510	1.360	.254
	Within Groups	298.100	54	5.520		
	Total	335.650	59			

Findings

In relation to the variable psychoticism, table - 2 revealed that the obtained 'F' value of 0.710 was found to be insignificant at 0.05 level. In relation to the variable extroversion, table - 2 revealed that the obtained 'F' value of 0.893 was found to be insignificant at 0.05 level. In case of the variable Neuroticism, table-2 revealed that the obtained 'F' value of 0.057 was found to be insignificant at 0.05 level and for variable of social desirability, table -2 revealed that the obtained 'F' value of 1.360 was found to be insignificant at 0.05 level.
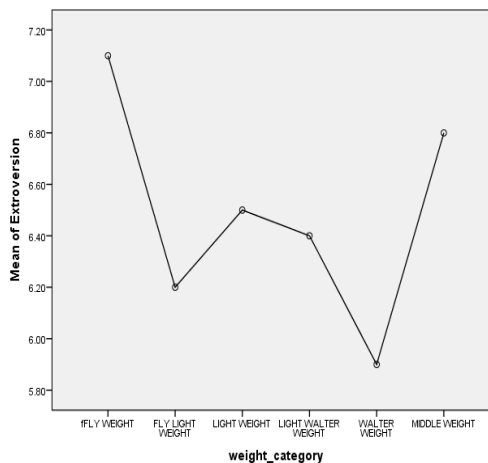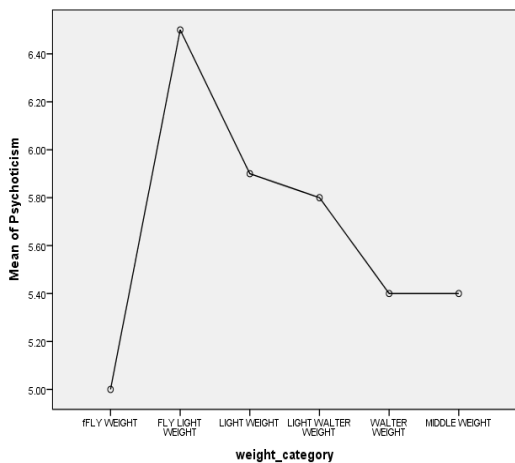

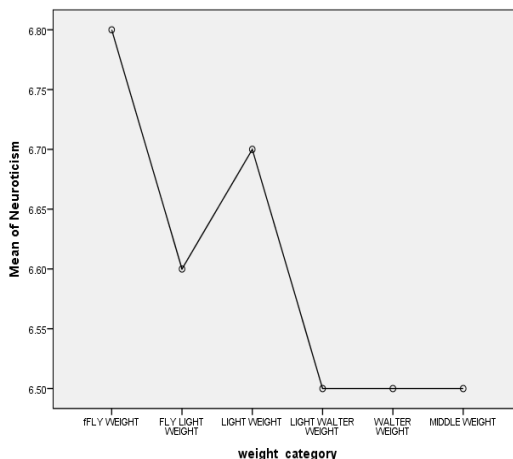**Fig-** Mean pilot in graphical presentation of psychoticism and extroversion

Fig- Mean pilot in graphical presentation of neuroticism and extroversion

Table 3: Pearson's Correlations of coefficient among the selected variables

Variables		Psychoticism	Extroversion	Neuroticism	Social desirability	Performance
Psychoticism	Pearson Correlation		-.045	-.290[*]	.107	.029
	Sig. (2-tailed)		.731	.025	.416	.829
Extroversion	Pearson Correlation			.183	.306[*]	.143
	Sig. (2-tailed)			.162	.017	.275
Neuroticism	Pearson Correlation				-.497[**]	-.018
	Sig. (2-tailed)				.000	.889
Social desirability	Pearson Correlation					.005
	Sig. (2-tailed)					.967

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

The table-3 showed that the result of correlation of all the four personality variables in relation to boxing performance. The psychoticism and neuroticism (-.290) found high significant negative correlation and at the 0.05 level. Social desirability is found significantly correlated with extroversion (.306) at 0.05 levels. Psychoticism is significantly correlated with neuroticism (-.290) at 0.05 level. Social desirability is correlated with neuroticism significantly (-.497) at the level of 0.01. The others not found any high correlation among the selected variables.

Conclusion
The mean value of psychoticism personality traits, which is good for sports competition was found higher in fly weight category and the lowest psychoticism (negative for sports competition) was found in fly weight category. The second variable extroversion was found higher in Lt. Fly weight category and extroversion found lower in welter weight category. As far as neuroticism was concerned, it was found higher in Lt. Fly weight category whilst it was lower in Lt. welter, welter and middle weight category. The social desirability or lie score was found higher in Lt. fly weight category and it was lower in the middle weight category.

Under the conditions of the present study and within the limitations imposed by the type of subjects and the variable selected for this study, it may be concluded that there are no significance differences is found when ANOVA was applied among all the variables .i.e. psychoticism, extroversion, neuroticism, social desirability and boxing performance used in present study. It signify that these level of the boxers found similar in personality traits. But as far as correlation is concerned there are few significant correlations are found in the analysis like psychoticism and neuroticism were found highly correlated and social desirability also has high correlation with neuroticism and extroversion.

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