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Impact of Different Individual Games on Selected Personality Traits

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ABSTRACT

The objective of the study was to find out the significant difference among the female elite players of five difference individual games in selected personality traits (Psychoticism, Extraversion, Neuroticism and Lie). The study was conducted by taking equal sample size related to five different Individual games. 100 Elite female players were selected from five different games. 20 subjects were selected from Athletics, 20 subjects were selected from Boxing, 20 subjects were selected from Badminton, 20 subjects were selected from Powerlifting, and 20 subjects were selected from Wrestling. The study was conducted by taking basic Personality traits (Psychoticism, Extraversion, Neuroticism and Lie) as an independent variable (I.V.) and by taking five different individual games as dependent variable (D.V.). It was decided to go for a Hindi version of Eysenck's PEN Inventory prepared by Monen, D. K., & Malhotra, S. K., (1987). On the basis of the objectives of the study, descriptive statistics, One Way Analysis of Variance and LSD Post-Hoc test were used. Significant difference was found between paired means of Extraversion, the paired of Athletics & Powerlifting (sig. = .012), Boxing & Powerlifting (sig. = .008) and Badminton & Powerlifting (sig. = .017) at .05 level of significance. In Neuroticism, the paired of Athletics & Wrestling (sig. = .011) and Boxing & Wrestling (sig. = .027) were found significant. On the other hand, in Extraversion, the paired of means Athletics & Boxing (sig. = .459), Athletics & Badminton (sig. = .893), Athletics & Wrestling (sig. = .053), Boxing & Badminton (sig. = .382), Badminton & wrestling (sig. = .071) and Powerlifting & Wrestling (sig. = .545) were found insignificant.

Keywords: Different Individual games, Psychoticism, Extraversion, Neuroticism and Lie.

INTRODUCTION

Personality is a term which is individualized in nature. Every individual of any age group possesses his/ her own personality. Personality has a variety of traits / variable. According to psychologist it is very different to define personality. It is very difficult to conduct research by taking a wide range of personality traits (Chaube S.P., 2002). In this research article researcher conducted study by taking, Psychoticism is closely related to psychotic tendencies. This may include breakdown and aggression. The behaviour associated with psychoticism is hostile aggression, reckless attitude impulsive, tough-minded but non-confirming and inconsiderate conduct. (SAPA Project Test, 1999), Extraversion Outgoing, talkative and desire for external stimulus are associated with extraversion (Morris, L. W., 1970). Increased cortical aroused is the reason quoted behind higher stimulation and Neuroticism high means that a person to be depressed and anxious. This

phenomena is activated by sympathetic nervous system and can be measured in terms of sweating, muscular tension, heart rate or cold hand (Revelle, W., 1999). In the field of Sports different games / sports need different high of traits to excel. Sports / games may individual in nature as well as may be of team. Each type i.e. individual or teams also have a sub variety.

MATERIALS AND METHODS

Objective of the study:

The objective of the study was to find out the significant difference among the female elite players of five difference individual games in selected personality traits (Psychoticism, Extraversion, Neuroticism and Lie).

Selection of subjects:

The study was conducted by taking equal sample size related to five different Individual games. 100 Elite female players were selected from five different games. 20 subjects were selected from Athletics, 20 subjects were selected from Boxing, 20 subjects were selected from Badminton, 20 subjects were selected from Powerlifting, and 20 subjects were selected from Wrestling.

Selection of games:

On the basis of availability of the players of different individual games and suitability of researcher, five games were selected i.e. Athletics, Boxing, Badminton, Powerlifting and Wrestling.

Selection of variables:

The study was conducted by taking basic Personality traits (Psychoticism, Extraversion, Neuroticism and Lie) as an independent variable (I.V.) and by taking five different individual games as dependent variable (D.V.). It was decided to go for a Hindi version of Eysenck's PEN Inventory prepared by Monen, D. K., & Malhotra, S. K., (1987).

Design of the study:

"Static group comparison design" (Clarke, D. H., & Clarke, H. H., 1984) was used to conduct this study, since study comprising of five groups belonging to five different individual games.

Statistical Analysis:

On the basis of the objectives of the study, descriptive statistics, One Way Analysis of Aariance and LSD Post-Hoc test (Field, A., 2009) were used.

Results and Discussion

In this study Neuroticism and Extraversion were compared between it player of individual and team game. In case of Extraversion, significant difference was found and in case of Neuroticism, no significant difference was found.

Table-1. Descriptive Statistics related to Psychoticism

		N	Mean	Standard Deviation	Standard Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Games	Athletics	20	5.70	3.32	.74	4.14	7.25
	Boxing	20	5.85	2.71	.60	4.57	7.12
	Badminton	20	3.65	2.53	.56	2.46	4.83
	Powerlifting	20	4.75	2.48	.55	3.58	5.91
	Wrestling	20	4.05	2.85	.63	2.71	5.38
	Total	100	4.80	2.88	.28	4.22	5.37

Table- 1. Shows the descriptive Statistics related to four traits of personality belonging to players of different games.

In case of the first trait i.e. Psychoticism, the observed values of Athletes are 5.70, 3.32, .74, 4.14 and 7.25 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Boxer are 5.85, 2.71, .60, 4.57 and 7.12 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Badminton Players are 3.65, 2.53, .56, 2.46 and 4.83 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Powerlifting Players are 4.75, 2.48, .55, 3.58 and 5.91 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Wrestler are 4.05, 2.85, .63, 2.71 and 5.38 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean.

Table II. Descriptive Statistics related to Extraversion

		N	Mean	Standard Deviation	Standard Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Games	Athletics	20	11.80	2.52	.56	10.61	12.98
	Boxing	20	11.25	2.39	.52	10.14	12.35
	Badminton	20	11.90	2.82	.63	10.57	13.22
	Powerlifting	20	13.70	2.02	.45	12.75	14.64
	Wrestling	20	13.25	1.83	.40	12.39	14.10
	Total	100	12.38	2.47	.24	11.88	12.87

In case of the second trait i.e. Extraversion, the observed values of Athletes player are 11.80, 2.52, .56,

10.61 and 12.98 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Boxer are 11.25, 2.39, .52, 10.14 and 12.35 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Badminton Players are 11.90, 2.82, .63, 10.57 and 13.35 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Power lifters are 13.70, 2.02, .45, 12.75 and 14.64 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Wrestler are 13.25, 1.83, .40, 11.88 and 12.87 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean.

Table- III Descriptive Statistics related to Neuroticism

		N	Mean	Standard Deviation	Standard Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Games	Athletics	20	8.60	3.40	.76	7.00	10.19
	Boxing	20	8.25	3.22	.72	6.74	9.75
	Badminton	20	6.60	3.21	.71	5.09	8.10
	Powerlifting	20	6.75	3.29	.73	5.20	8.29
	Wrestling	20	5.95	3.01	.67	4.53	7.36
	Total	100	7.23	3.32	.33	6.56	7.89

In case of the Third trait i.e. Neuroticism, the observed values of Athletes are 8.60, 3.40, .76, 7.00 and 10.19 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Boxer are 8.25, 3.22, .72, 6.74 and 9.75 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Badminton Players are 6.60, 3.21, .71, 5.09 and 8.10 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Power lifters are 6.75, 3.29, .73, 5.20 and 8.29 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Wrestler are 5.95, 3.01, .67, 4.53 and 7.36 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean.

Table- IV Descriptive Statistics related to Lie

		N	Mean	Standard Deviation	Standard Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Games	Athletics	20	7.95	2.62	.58	6.72	9.17
	Boxing	20	8.85	1.92	.43	7.94	9.75
	Badminton	20	7.30	2.59	.58	6.08	8.51
	Powerlifting	20	8.70	1.38	.30	8.05	9.34
	Wrestling	20	8.75	1.80	.40	7.90	9.59
	Total	100	8.31	2.16	.21	7.88	8.73

In case of the Fourth trait i.e. Lie, the observed values of Athletes are 7.95, 2.62, .58, 6.72 and 9.17 19 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Boxer are 8.85, 1.92, .43, 7.94 and 9.7519 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Badminton Players are 7.30, 2.59, .58, 6.08 and 8.5119 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Power lifters are 8.70, 1.38, .30, 8.05, and 9.3419 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean. In case of the Wrestler are 8.75, 1.80, .40, 7.90 and 9.5919 respectively for the measures of mean, standard deviation, standard Error, Lower Bound and Upper Bound of 95% confidence Interval for mean.

Table-V Levene statistics to test the homogeneity of variance

	Levene Statistic	df1	df2	Sig.
Psychoticism	.764	4	95	.551
Extraversion	1.855	4	95	.125
Neuroticism	.166	4	95	.955
Lie	2.090	4	95	.088

Table-V Shows the Levene Statistic of Psychoticism .764 (sig. = .551), Extraversion 1.855 (sig. = .125), Neuroticism .166 (sig. = .955) and Lie 2.090 (sig. = .088) which are insignificant at .05 level of Significance. This proves that all the five groups of different Individual games possess the same level of variance. Since, homogeneity of variance was found among the groups and this assumption is fulfilled, ANOVA is applied, as well as the results of ANOVA may be generalized.

Table-VI Analysis of variance (ANOVA) comparison of Psychoticism, Extraversion, Neuroticism and Lie among the players of different Individual Games

		Sum of Squares	df	Mean Square	F	Sig.
Psychoticism	Between Groups	76.00	4	19.00		
	Within Groups	746.00	95	7.85	2.420	.054
	Total	822.00	99			
Extraversion	**Between Groups**	86.86	4	21.71		
	Within Groups	520.70	95	5.48	3.962	.005
	Total	607.56	99			
Neuroticism	Between Groups	103.66	4	25.91		
	Within Groups	994.05	95	10.46	2.477	.049
	Total	1097.71	99			
Lie	Between Groups	35.74	4	8.93	1.985	.103
	Within Groups	427.65	95	4.50		
	Total	463.39	99			

Table-VII LSD post hoc to compare paired mean of the players of different Individual games in Psychoticism, Extraversion, Neuroticism and Lie

Traits	(I) Games	(J) Games	Mean Difference (I-J)	Stander Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Extraversion	Athletics	Boxing	.55	.740	.459	-.919	2.01
		Badminton	-.10	.740	.893	-1.56	1.36
		Powerlifting	-1.90*	.740	.012	-3.36	-.430
		Wrestling	-1.45	.740	.053	-2.91	.019
	Boxing	Badminton	-.65	.740	.382	-2.11	.819
		Powerlifting	-2.45*	.740	.001	-3.91	-.980
		Wrestling	-2.00*	.740	.008	-3.46	-.530
	Badminton	Powerlifting	-1.80*	.740	.017	-3.26	-.330
		Wrestling	-1.35	.740	.071	-2.81	.119
	Powerlifting	Wrestling	.45	.740	.545	-1.01	1.91
Neuroticism	Athletics	Boxing	.35	1.02	.733	-1.68	2.38
		Badminton	2.00	1.02	.054	-.030	4.03
		Powerlifting	1.85	1.02	.074	-.180	3.88
		Wrestling	2.65*	1.02	.011	.619	4.68
	Boxing	Badminton	1.65	1.02	.110	-.380	3.68
		Powerlifting	1.50	1.02	.146	-.530	3.53
		Wrestling	2.30*	1.02	.027	.269	4.33
	Badminton	Powerlifting	-.15	1.02	.884	-2.18	1.88
		Wrestling	.65	1.02	.527	-1.38	2.68
	Powerlifting	Wrestling	.80	1.02	.436	-1.23	2.83

*. The mean difference is significant at the 0.05 level.

In this study, Table VI shows the analysis of variance comparison of Psychoticism, Extraversion, Neuroticism and Lie among the players of different Individual Games. Insignificant different was found among the players of different individual games in case of psychoticism (F-value= 2.42) and Lie (F-value=1.98) at .05 level of significance.

In Table VI shows the significant difference was

found of extraversion (F-value 3.96) and Neuroticism (F-value=2.47) among the players of different individual games at .05 level of significance.

It is evident from Table- VII that paired means of Extraversion, the paired of Athletics & Powerlifting (sig. = .012), Boxing & Powerlifting (sig. = .008) and Badminton & Powerlifting (sig. = .017) were found significant at .05 level.

In Neuroticism, the paired of Athletics & Wrestling (sig. = .011) and Boxing & Wrestling (sig. = .027) were found significant at .05 level.

In Extraversion, the paired of Athletics & Boxing (sig. = .459), Athletics & Badminton (sig. = .893), Athletics & Wrestling (sig. = .053), Boxing & Badminton (sig. = .382), Badminton & wrestling (sig. = .071), Powerlifting & Wrestling (sig. = .545) were found insignificant at .05 level.

In Neuroticism, the paired of Athletics & Boxing (sig. = .733), Athletics & Badminton (sig. = .054); Athletics & Powerlifting (sig. = .074), Boxing & badminton (sig. = .110), Boxing & Powerlifting (sig. = .146), Badminton & Powerlifting (sig. = .884), Badminton & Wrestling (sig. = .527), Powerlifting & Wrestling (sig. = .436) were found insignificant at .05 level.

Study was conducted by Ilyasi, G. and Saeheian, M. H. (2011) to comparison personality of Individual and team games. Another study was conducted by Mokhtari, P. and Haghi, M. (2014) to comparison personality factors between athletes and non-athletes. Results showed that in both in variable i.e. neuroticism and extraversion, significant difference was found between athletes and non-athletes. Study was conducted by Ghosh, S.S. and Majumder, C. (2013) with a purpose to compare personality dimension between tribal and non-tribal football players. Result showed that insignificant difference was found between the neuroticism of tribal & non-tribal football player.

CONCLUSION

On the basis of above mentioned studies, it may be concluded that difference traits do not have any impact on neuroticism. Nature of same has impact on extraversion and do not have any impact on neuroticism. Sports participation has impact on neuroticism. Present study partially supported the above mentioned studies.

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