



Effect of Extraversion-Introversion on Eating Disorder in Women : A Study

KEYWORDS

Eating disorder, extraversion, Indian women

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ABSTRACT

The objective of the present study is to assess the impact of personality dimension viz. extraversion-introversion on eating disorder in women. 1000 Indian women (Ave. age 33.35 years) were selected across Indian territory i.e. from northern, eastern, central, western and southern states of India. The selected subjects were between the age range of 25 to 45 years. Random sampling method was used for selection of sample in the present study. To assess eating disorder in selected women subjects, Eating Disorder Inventory, prepared by Agashe and Karkare (2007) was used. For the purpose of tapping extraversion dimension of personality, Hindi version of Eysenck's PEN inventory prepared by Menon et al. (1978) was preferred. Q1 and Q3 (i.e. percentile values at 25 and 75) statistical technique was used to divide cases into extrovert, introvert and ambivert personality type. Results showed that women who are extrovert are significantly more prone to develop eating disorder as compared to women with introvert or ambivert personality characteristics. It was concluded that extraversion, a dimension of Eysenck's personality theory, is a significant contributor for eating disorder in women.

INTRODUCTION

Eating disorders are abnormal eating habits which may range from starving to over eating. Initially it was thought that disordered eating is related with thinness but clinical researches have demonstrated that eating disorders are psychological problems which involves insufficient or excessive food intake which is harmful to person's physical and psychological health. Eating disorders are considered to be major physical and mental health hazards. When a person focuses too much on his weight or body shape, then invariably he/she develops unhealthy eating practices which is considered as eating disorder.

Researcher such as Ritenbaugh et al. (1992), Brookings and Wilson (1994), Wang (2004), Jáuregui Lobera et al. (2009), Anamika and Singh Neetu (2014) have studied eating disorder in the light of different aspects such as culture, family environment, personality, socio economic status, body image, self esteem etc.

Previously some researchers have established relationship between personality dimensions and eating disorder in which extraversion, a dimension of personality, have also been paid attention.

Personality traits such as neuroticism (emotional stability), obsessiveness, and perfectionism play a large role in facilitating some eating disorders, particularly anorexia and bulimia. Research suggests that these traits are at least partially driven by genetics. Individuals with these personality features are predisposed to be anxious, depressed, perfectionistic and self-critical; all factors that may contribute to their difficulty managing weight and eating in a healthy manner. As far as relationship between extraversion and eating disorder is concerned it has been observed in the light of reward sensitivity but the results in this regard are inconclusive. Hence researchers decided to assess eating disorder in Indian women in the light of Eysenckian personality dimension viz., extraversion.

HYPOTHESIS

It was hypothesized Level of extraversion will significantly

influence eating disorder in women.

Methodology :-

The following methodological steps were taken while conducting the present research work.

Sample :-

For present study, 1000 Indian women (Ave. age 33.35 years) were selected across Indian Territory i.e. from northern, eastern, central, western and southern states of India. The selected subjects were between the age range of 25 to 45 years. Random sampling method was used for selection of sample in the present study.

Tools:

Following tools were used to fulfil the objectives of the study -

(a) Eating Disorder Inventory:

To assess eating disorder in selected women subjects, Eating Disorder Inventory, prepared by Agashe and Karkare (2007) was used. This questionnaire comprises in all 25 positive and negative worded questions which measures eating habits of the respondent. The test-retest reliability of the inventory is .82 while the content validity is .72. Higher scores indicate inferior eating behaviour is the direction of scoring.

(a) Eysenck's PEN Inventory

For the purpose of tapping extraversion dimension of personality, Hindi version of Eysenck's PEN inventory prepared by Menon et al. (1978) was preferred. This Hindi PEN Inventory comprises of in all 78 items of which 20 items are for tapping P, 20 items for measuring E, 20 items for tapping N and 18 items are for measuring tendency to tell a lie (L). So far as the reliability and validity of this Hindi PEN inventory are concerned it can be said that, the inventory is highly reliable and valid. The test-retest reliability coefficients have been found as 0.630, 0.888, 0.687 and 0.337 for P, E, N and L scales respectively.

Procedure:

First of 1000 Indian women across all over India, between age range of 25-45 years were selected. After establishing a good rapport with the subjects they were assured that their responses and identities will be kept under strict confidence and will not be disclosed anywhere. Thus, they are free to give their answers comfortably and honestly whatever they felt. In this way, subjects were encouraged to give their proper co-operation during the testing. The printed instructions given on the cover page of the questionnaires were explained to all the subjects before the administration. First of all Eating Disorder Inventory prepared by Agashe and Karkare (2007) was administered. After sufficient rest Hindi version of Eysenck's PEN inventory prepared by Menon et al. (1978) was administered. The responses so obtained for both the inventories were scored off as per author's manual. Only extraversion dimension was scored off in PEN inventory. After scoring, the data was tabulated according to their groups. To bifurcate cases in extrovert, introvert and ambivert personality type, Q_1 and Q_3 (i.e. percentile values at 25 and 75) statistical technique was used. Subjects whose extraversion scores fall above Q_3 were grouped into extroverted group; subjects whose extraversion scores fall below Q_1 were grouped in as introverted subjects and subjects whose scores fall between Q_1 and Q_3 were treated as ambivert. The scores on eating disorder of these identified subjects were tabulated for each group. One way ANOVA technique was used to find out the difference in eating disorder scores between these groups. The obtained results of such statistical analysis are presented in Table 1 and 1(a) respectively.

Table 1

Effect of Level of Extraversion-Intra version, a Dimension of Personality, on Eating Disorder in a Group of Selected Indian Women (N=1000)

Groups	N	Eating Disorder	
		Mean	S.D.
Extrovert	405	7.62	4.74
Introvert	379	6.65	3.83
Ambivert	216	6.58	3.71

Table 1 (a)
ANOVA Summary

Source	df	Sum of Squares	Mean Squares	F	Sig.
Between Groups	02	237.401	118.700	6.71	.01
Within Groups	997	17616.374	17.669		
Total	999	17853.775			

Results obtained through One Way ANOVA suggesting that eating disorder in women exhibiting extrovert, introvert and ambivert personality vary significantly with each other. The F ratio of 6.71, which is statistically significant at .01 level, confirms this finding.

This result is also confirmed by Least Significant Difference Test presented in table no. 2.

Table 2

Comparison of Eating Disorder among Indian Women on the Basis of Level of Extraversion-Intraversion, a Dimension of Personality Least Significant Difference Test with Significance Level .05

Mean (I)	Mean (J)	Mean Difference (I-J)
Extrovert	Introvert	.96*
	Ambivert	1.03*
Introvert	Extrovert	-.96*
	Ambivert	.07
Ambivert	Extrovert	-1.03*
	Introvert	-.07

* Significant at .05 level

A perusal of entries reported in table 23 reveal that eating disorder in extroverted women subjects was found to be significantly higher as compared to women subjects who were of introverted and ambivert personality. Statistically, no significant difference was observed in eating disorder between women possessing introvert and ambivert personality.

DISCUSSION

In the present study extraversion emerged as major variable responsible for eating disorder in women. Extraversion is often referred to as elevated level of reward sensitivity. Since reward sensitivity has been associated with over eating and weight gain hence the results of the present study are not surprising. The results of the present study are also consistent with the previous studies in which a positive association was observed between personality traits and eating disorder [Corstorphine, Mountford, et al., 2007; MacLaren and Best, 2009; Miotto et al., 2010; Mottus et al., 2012].

CONCLUSION

It was concluded extroverted women are greater risk to develop eating disorder as compared to women with introverted and ambivert personality.

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