

Two-Factor Interaction Effect Of Culture And Neuroticism Personality Trait On Eating Disorder Tendencies In Working Women

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Abstract

The present study was conducted to find out the effect of culture and neuroticism personality trait on eating disorder tendencies among working women. Total 200 working women, 100 from northern parts of India and 100 from western part of India (Average age 31.11 to 32.23 years) were selected as sample of the study randomly. To assess eating disorder tendencies among working women, Eating Disorder Inventory (EDI) prepared by Agashe and Karkare (2007) and for assessment of neuroticism personality trait, inventory prepared by Menon et al. (1978) in Hindi based on Eysenck's PEN inventory were used. For a 2x2 factorial set-up, high and low neuroticism was calculated by Mean \pm 1/2 S.D. as the cutting point while culture automatically has two categories. Data analysis revealed a significant effect of culture and neuroticism personality trait on eating disorder tendencies in working women ($p < .01$) but the two-factor interaction effect of these two variables on eating disorder tendencies in working women comes out to be statistically not-significant. It was concluded that eating disorder tendencies in working women get affected by culture and neuroticism personality trait.

Keywords: eating disorder, culture, neuroticism, working women

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I. Introduction

Eating disorder is a sort of behavioural condition of an individual characterised by unhealthy eating habits and negative thoughts and emotion (Guarda, A. 2021). There are several factors that affect the eating habits disorder such as personality traits, genetics, hereditary, socio-cultural and brain biology particularly the level of brain messengers (Peter, A. 2019). Peoples of all genders, ages, races, religions, ethnicities, sexual orientations, body shapes, and weights may suffer in eating disorder (NEDA). A desirable body type leads to the eating disorder in the form of anorexia nervosa, bulimia nervosa, binge eating and compulsive eating. Research pointed out that body dissatisfaction is the major cause of eating disorder i.e. anorexia nervosa and bulimia nervosa (Stice, E. and Shaw, H.E. 2002). Several million people at any given time, most often women several million people may be affected by eating disorder at any given time, most often women between the ages of 12 and 35 (Guarda, A., 2021).

Men often do not report about eating disorder. The ratio of frequency of eating disorder in young male and female is 1:4 ratio (Mohandoss, A.A., 2018; Striegel-Moore, R.H., Rosselli, F., et al., 2009). Several studies have reported the ever-increasing trend of eating disorder in young women and adolescent females (Pike and Dunne, 2015; Khandelwal et al., 1995). Various survey and case studies have also documented the increasing prevalence of eating disorder in women. It has been noted increasing population (Mammen et al., 2007; Upadhyay et al., 2014; Sebastian and Nuzaiaba, 2014) and demographic change, economic development, urbanization (from 26% to 32%, (The World Bank, 2015)), women's education ((Neff et al., 2012; Kapsos et al., 2014). (from 16.1% to 36% (Kapsos et al., 2014)), childbearing patterns (from 4.0 to 2.5 children per woman (The World Bank, 2014a)), changing cultural attitude (Krisnan D, 2020) changing pattern of jobs, media advertisements, sense of economic independence among Indian women. Moreover several programs and policies such as funding to skills and vocational training programs and gender-based employment quotas has been introduced by Govt. to increase women's access to labor market opportunities (Fletcher, E. K., Pande, R., and Moore, C. T., 2017). Therefore, there might be increasing in the number of working women in India. At the same time irregular work schedule, unbalanced diet, nature of jobs and concept of the ideal body might be intervening to the eating disorder in Indian working women.

Cultural linkage of an eating disorder can be found for ages because there exist certain criteria and yardstick about acceptable shape and figure of women in the societies which is considered as ideal. To attain the

desirable ideal shape and figure, women limits themselves in terms of their eating habit. This may include eating too little or too much. In psychological studies, it has been shown that eating disorder may be caused by distinguishing personality traits. Extraversion, neuroticism, perfectionism etc. are traits that tend to associate themselves with an eating disorder (Gade H, Rosenvinge JH, Hjelmsæth J, Friborg O., 2014). The exact mechanism of personality towards eating disorder is a bit complex although few studies have shown that anxiety, extraversion and perfectionist individuals are predisposed towards developing an eating disorder.

The number of studies has been conducted in India in which eating disorder in women has been explored from various angles. Impulsiveness can lead to an eating disorder in women (MacLaren and Best, 2009) and there is a significant relationship between negative emotions with distorted eating behaviour (Kaye et al., 2009). Adolescent girls tend to develop abnormal eating habits for the sake of controlling their body weight (Mishra and Mukhopadhyay, 2010). Randy (2012) created a model to predict eating disorder based on age, gender and race for the adolescent population. Evidence of significant relationship between eating disorder and body image is also found out (Anamika and Singh, N., 2014). There is strong association between monetary problems with eating habits of adolescent students (Richardson et al. 2015). Singh and Gadiraju (2020) studied the prevalence of disordered eating in Indian youth. More specifically researcher like Prabha S. Chandra et al. (2011), Ganesh and Sridevi (2014), Lal et al. (2015) explored eating disorder in the light of well established psycho-social parameters.

OBJECTIVE :

The objective of the present study was to assess the main and interaction effect of culture and neuroticism personality trait on eating disorder tendencies in working women of India.

HYPOTHESIS :

It was hypothesized that culture would significantly interact with neuroticism personality trait to influence eating disorder tendencies in working women.

II. METHODOLOGY

Sample

To conduct the study total 200 working women of age 31 to 33 years; 100 working women from western region of India; 50 each from Pune and Nagpur City and 100 working women from the northern region of India; 50 each from Delhi and Chandigarh were selected as sample randomly. Sample of geographical region of the was selected purposively.

Tools

In the study to collect the data Eating Disorder Inventory, prepared by Agashe and Karkare (2007) and Hindi version of Eysenck's PEN inventory prepared by Menon et al. (1978) were used.

Eating Disorder Inventory:

To assess eating disorder, the Eating Disorder Inventory, prepared by Agashe and Karkare (2007) was used. This questionnaire comprises 25 positive and negative worded questions which measure the 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.

Eysenck's Pen Inventory

To tap the neuroticism dimension of personality, the Hindi version of Eysenck's PEN inventory prepared by Menon et al. (1978) was preferred. This Hindi PEN Inventory comprises 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

Total 200 working women from Northern and Western parts of India were selected as sample randomly. Ethical considerations for this study was taken care of by the researcher. Eating Disorder Inventory (EDI) prepared by Agashe and Karkare (2007) and Hindi version of Eysenck's PEN inventory prepared by Menon et al. (1978) was sent through a google form. The responses were automatically generated on an Excel sheet and they were scored off as per the guideline given in the manual. The score of neuroticism dimension was recorded in the PEN inventory. Mean \pm ½ S.D. was used as the cutting point to identify the high and low

neurotic working women and then their eating disorder scores were arranged accordingly. Data analysis is shown in table 1 and 1(a) respectively.

Data Analysis :

Table 1
Effect of Culture and Neuroticism personality Trait on Eating Disorder Tendencies in Working Women

		Neuroticism (B)		Marginal Means
		High (b ₁)	Low(b ₂)	
Culture(A)	Working women Northern India(a ₁)	N=50 M=8.92 S.D.=5.44	N=50 M=7.57 S.D.=4.52	8.24
	Working women Western India (a ₂)	N=50 M=8.73 S.D.=4.63	N=50 M=5.80 S.D.=4.71	7.26
Marginal Means		8.82	6.68	

Table 1 reveals the following facts–

The F ratio of 4.01 reported in the ANOVA summary highlighted that the eating disorder tendencies in working women from northern India was significantly higher (M=8.24) as compared to working women from western India (M=7.26), hence the significant main effect of culture was established on eating disorder tendencies in working women.

The F ratio of 19.13 reported in ANOVA summary highlights that eating disorder tendencies in high neurotic working women was significantly higher (M=8.82) as compared to low neurotic working women (M=6.680, hence the significant main effect of neuroticism personality trait was established on eating disorder tendencies in working women.

The F of 2.60, an indicator of AxB (culture x neuroticism personality trait)interaction on eating disorder tendencies in working women was not found to be statistically significant.

III. RESULTS:

Based on the data analysis following results are drawn:

1. A significant main effect of culture was observed on eating disorder tendencies in working women. The working women from northern India tend to show more eating disorder tendencies as compared to working women from Western India.
2. A significant main effect of neuroticism personality trait was observed on eating disorder tendencies in working women. The high neurotic working women were more predisposed to acquire eating disorder as compared to low neurotic working women.
3. The two-factor interaction effect of culture and neurotic personality trait was not observed on eating disorder tendencies in working women.

IV. DISCUSSION:

Finding reveals the significant effect of culture and neuroticism personality trait on eating disorder tendencies in working women.

Our findings supports previous findings of previous research on eating disorders.Culture has been identified as one of the strongest causative factors towards eating disorder tendencies. The prevalence of eating disorder varies in a different culture. Cultural pressure on men and women is the major influencing factor to lead eating disorders (Eisenberg, M.E., Neumark-Sztainer, D., Story, M., Perry.,2005; Garner, D.M., Garfinkel, P.E., 1980). The incidence of increasing eating disorder in women is observed when they evaluate themselves upon for considerable culturally ideal body (Jung, J., Lennon, S.J., 2003).Socio-cultural factors influences eating disorder.Individualsmay develop eating disorder as they try to become a part of the new culture (Bemporad, J.R., 1997). Moreover, certain sociocultural factors promotes or inhibits the frequency and type of eating disorders (Bemporad, J.R., 1996; Bruch, 1966; Rowland, 1970; Pumariega, J.A., 1986;Pumariega A.J., Gustavson, C.R., Gustavson, J.C. et al. 1994). Demand of culture of professional (working) environment such as particular specific industries, modeling, sports and etc. where body type is key factor of performance also influence in the eating disorder of individuals especially in female (Healthwise Staff, 2019).

The “Big Five” personality dimensions i.e. Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness are relatively stable in various cultures and ages (McCrae, Costa, del

Pilar, Rolland, & Parker, 1998; Hendriks, Perugini et al., 2003). Neuroticism has strongly linked to developing eating disorder behaviours (Cho, L., 2018; Digman, J.M., 1990; Weisberg, Y.J., DeYoung, C.G., Hirsh JB, 2011). Neuroticism was also predicted as highest contributor of eating disorder among female patients with eating disorders. Positive correlation between disordered eating and high scores on a measure of neuroticism was also established in a population of female undergraduate students (Maclaren, V.V., Best, L.A., 2009; Podar, I., Hannus, A., Allik J. (1999). Gartner et al. (1989) also reported that the patients with an eating disorder tend to show the characteristics such as lack of emotional stability and heightened insensitivity. Some people eat more when they are anxious and stressed because they try to control their negative emotions through eating. Hence eating disorder is governed by culture and personality trait i.e. Neuroticism.

The two-factor interaction effect of culture and neuroticism personality trait on eating disorder in working women was not supported statistically but that is expected because of the power of two independent variables on eating disorder.

V. CONCLUSION:

Based on results following conclusions are drawn:

1. Culture affects eating disorder tendencies in working women.
2. Neuroticism personality trait affects eating disorder tendencies in working women.
3. Interaction of culture and neuroticism has no predictive value for eating disorder in working women.

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