



Influence of sociological factors on anorexia nervosa behavior in university of Port Harcourt students

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Abstract

The purpose of the study was to ascertain how some sociological factors influence anorexia nervosa behavior in university of Port Harcourt students. The study adopted an ex post-factor design. Two research questions and two corresponding hypotheses guided the study. The population of this study consisted of males and females in first year at the University of Port Harcourt between ages 16 – 20 years. The researcher used purposive sampling technique and a sample of 296 students was used for this study (Males = 83, Females = 213). Two instruments were used for the study, namely the Sociological Assessment Scale (SAS) and the Eating Attitude Test (EAT-26). The face and content validities of the instruments were determined. The reliability of the instrument was determined using Cronbach alpha method which assesses the internal consistency of the items in the instrument. Mean, standard deviation, independent t-test, analysis of variance were used for data analysis. Results obtained were that; socioeconomic status does not significantly influence students' anorexia nervosa behavior; gender does not significantly influence students' anorexia nervosa behavior. Based on the findings of the study, recommendations were made which are that; more attention should be given by parents and lecturers/teachers to the adolescents during this transitional period so as to educate them on the implications of anorexia nervosa behavior in every action they take; psychologists and nurses should get involved in caring adequately for the psychological aspects of these adolescents; a unit for nutritionist and social workers should be created in the university and students should be mandated to visit these officers yearly to ascertain their fitness and receive support where and when necessary.

Keywords: influence, sociological, factors, anorexia nervosa, university, students

Introduction

It is perceived that there is an increase gastric reflux after eating, dehydration due to frequent vomiting, lacerations in the lining of the mouth and throat constipation, epigastric pains, weight fluctuations, low self-esteem, irregular menstruation, thinness, fatigue, dizziness, insomnia, loss of appetite, disturbed eating Behaviors and general malaise.

Adolescents have failed in varying degrees, to accomplish psychosocial development tasks like; ability to develop and use formal operational thought processes, especially in reference to themselves; ability to experience bodily sensations originating within them as normal or valid, realistic perception of body size; pre-occupation with weight and food, reflecting dependence on social opinion and judgment; normalizing eating and exercise; realistic expectation for themselves and ability to develop autonomy. These signs and symptoms of anorexia nervosa are usually observed by the researcher in her work environment within the University. These lapses, informed the studying of influence of sociological factors on anorexia nervosa among adolescents at the University of Port Harcourt, Choba.

Anorexia nervosa is a common eating disorder and a common phenomenon associated with the adolescents during their transitional period from childhood to adolescent. It is as a result of some physiological changes that occur during this development stage. The issue of eating disorder amongst the adolescents is classified into different types; ranging from Anorexia nervosa to bulimia nervosa. Others are binge eating type which leads to obesity and the orthorexia nervosa.

For the purpose of this study, attention has been focused on anorexia nervosa which is one of the eating disorders seen

amongst adolescents. Eriega (2006) defined anorexia nervosa as a prolonged and severe refusal to eat, which leads to death of 5 to 15% of anorexics of the psychiatric patients. Following a review of epidemiological studies, Hoek cited in Mcfarlane, Trottier, Polivy, Herman, Arsenault and Boivin (2012) reported that the incidence rate of AN is 8 per 100,000 while the average prevalence rate among young female is 0.3%. With respect to ethnicity, Hoek (2006) found that AN is a common disorder among young White females but extremely rare among Black females. There has been a report of an increase in the incidence of AN but it is unclear whether this is due to increased awareness and recognition. The APA (2000) has reported that anorexia nervosa affects 1% of young women in the US annually. Presently only about one third of those with AN receive mental health care (Mcfarlane *et al*, 2012). Mayo Foundation for Medical Education and Research (MFMER 2012) defined anorexia nervosa as an eating disorder that causes people to be obsessed about their weight and the food they eat. People with anorexia nervosa attempt to maintain a weight that is far below normal for their age and height. In addition, they tend to prevent weight gain or continue losing weight hence people with anorexia stare themselves or exercise excessively which may lead to health hazards or death in extreme cases.

Eating disorders are serious problems with the highest mortality rate of all psychiatric disorders ranging from 5% to 8% (Mcfarlane *et al*, 2012). These authors also reported that a study by Fichter *et al* (2006) of individuals with AN found that over a 12 – year follow-up period, 28% had a good outcome, 25% intermediate outcome, 40% poor outcome and 8% were deceased. Szczepleniak, Parka, Krysta

and Krupkai-Matiszczyk (2012) conducted a study titled "Eating disorders in Silesian School – Pilot Study". The sample was 116 secondary school students with an average age of 17.24. The schools were located in Chorzow and Siemianowice Slaskie (Silian region). Instruments used were the Eating Attitude Test (EAT – 26) to diagnose daily eating disorders that could tend to anorexia nervosa and the Behavioral Four Questions Test (BFQT) for pre-diagnosis of one of the eating disorders – bulimia, anorexia and compulsive overeating. Data collected was analyzed using probability test and Pearson's linear correlation coefficient using Analysis TookPak. The results showed that while over 90% of respondents belonged to a group with a small risk of developing eating disorders, 6% were at high risk. Ten percent were compulsive overeating group, 7% probable anorexics and 3% bulimia.

In two studies carried out by Amirkhan, Risinger and Swickert (1995) in a paper titled "Extraversion: a hidden personality factor in coping reported two studies. The influence of personality on the use of social support and other coping strategies was examined in a sample of students aged 19.2 years. The first study was conducted in California State University, Long Beach, USA and examined 100 introductory psychology students (50 men and 50 women) mean aged 19.2 years. The coping strategy indicator (CSI, Amirkhan, 1990) was used to assess coping while the neuroticism, extraversion and openness to experience personality inventory (NEO-PI), Costa and McCrae, 1989) was used to measure extraversion. The optimism and Pessimism Scale (Dember, Martin, Hummer, Hower, and Melton, 1989) was used to indicate how positively and negatively participants viewed their lives.

The second study was also conducted in Southern California Universities using introductory psychology students. Although 111 volunteered, the sample was restricted to 91. Of these, 20 were male and 71 were female, with an average age of 18.7 years. Extraversion, neuroticism and agreeableness scales of the NEO-PI, Form S, were used as indicators of the personality traits of interest and self-esteem Inventory (SEI, Coopersmith, 1987) was used to reflect the degree of self-esteem. Pearson correlations and descriptive statistics were used for all variables in the two studies. The means and standard deviations of the personality scores were comparable to normative data available for both the SEI and NEOPI scales (Coopersmith, 1987; Costa and McCrae, 1989). Zero-order correlations showed a high degree of covariation between the personality traits and the help-seeking latency, as well as among the traits themselves. Although mean personality scores approximated scale norms, the degree of covariation among extraversion, neuroticism, and agreeableness proved much higher than that found in the normative sample (Costa & McCrae, 1989).

Reagan (2005) conducted a study titled "Influence of race, gender and socioeconomic status on binge eating frequency in population-based sample". The results showed for women, frequency of anorexia nervosa was negatively associated with age and family income, and positively associated with the adolescents, depression, and the time residing in polluted neighbourhoods. For men, the frequency is negative associated with age but was not affected by education race, obesity or current dieting. In an additional study by Wang (2004) titled "Influences of ethnicity and socioeconomic status on the body dissatisfaction and eating

disorders of Australian children and adolescents' the sample population was 10 to 18 years old. The 768 participants used were also differentiated based on SES; high (82%), middle (8.6%), and low (9.4%) according to parents' occupations. The χ^2 was used to determine the interaction between variables. The testing arrived at these results showed that females and older participants were more likely to desire a body figure that was perceived as thinner than their perceived current figure. Additionally, the same groups were also more likely to be more preoccupied with eating problems. However, participants whose parents were professionals or in manager positions were more likely to desire a body figure than those from white collar and blue-collar families.

O'Dea and Caputi (2001) conducted a study titled "Association between socioeconomic status, weight, age, and gender, and the body image and weight control practices of 6 to 19 years old children and adolescents. Physical self-esteem was lowest among overweight girls of middle/upper SES, despite the latter being more likely to be overweight. Being overweight does not appear to adversely affect the physical self-esteem of children of low SES, particularly boys. Sharma (2013) carried out a study titled "Gender differences in adolescent neuroticism". The data collected was analyzed using descriptive statistical methods. The female adolescents were more prone to negative self-evaluations considering themselves as plain. Although the mean neuroticism in adolescent females is slightly higher than in males, the level of neuroticism did not vary with gender. Significantly positive correlations (low and moderate) were obtained for the parent-child-relationship that are indifferent.

Another study was carried out by Fawzi, Hashim, Fouad and Abdel-Fattah (2010) titled "Prevalence of eating disorders in a sample of rural and urban secondary school girls in Sharkia, Egypt". No statistically significant association was found with the other variables. The rural-urban difference in the total diagnoses was not statistically significant. However, BN cases in the total urban group were two and half as frequent as in the total rural group but this difference failed to reach statistical significance. Dike (2009) conducted a study titled "Anorexia and bulimia nervosa: The scenario among Nigerian female students". The number of students found to be masking their obsession behind religious fasting were 50.1%, purging by vomiting 10.2%, purging with the aid of laxative 17.7% and finally fasting and purging (either by vomiting or use of laxative) 20.9%. Izevbigie and Owie (2006) carried out a study titled 'Eating disorders and personality profile of female secondary schools students in Benin Metropolis, Nigeria. The result indicated that the use of unsafe weight losing method would significantly result in change in personality profiles.

Crosscope-Happel (1999) conducted a study titled "Male anorexia nervosa: exploratory study". The results contend that anorexia nervosa is seldom to be a female disorder because of the shame and relevance of males to admit to eating disordered Behaviors. Literature indicating that the prevalence among males indicates approximately one-tenth as common as it is in females. From the forgoing, the researcher observed that most of the previous studies reviewed on anorexia nervosa were carried out by foreign authors in foreign countries; a fact that further necessitated this present study to bridge the existing gap.

Purpose of the study

The purpose of the study was to ascertain how some sociological factors influence anorexia nervosa behavior in university of Port Harcourt students. Specifically, the study sought to achieve the following objectives:

1. Ascertain the extent to which socio-economic status (low, middle and high) influence students’ anorexia nervosa behavior in the University of Port Harcourt.
2. Determine the extent to which gender (male and female) influence University of Port Harcourt students’ anorexia nervosa behavior.

Research questions

The following research questions guided the study

1. To what extent do socio-economic status (low, middle and high) influence students’ anorexia nervosa behavior in the University of Port Harcourt?
2. To what extent do gender (male and female) influence University of Port Harcourt students’ anorexia nervosa behavior?

Hypotheses

The following hypotheses guided the study at 0.05 level of significance:

1. Socio-economic status does not significantly influence students’ anorexia nervosa behavior.
2. Gender does not significantly influence students’ anorexia nervosa Behaviors.

Research methodology

The study adopted an ex post-factor design. The population for this study consists of males and females in first year at the University of Port Harcourt between ages 16 – 20 years. The researcher used purposive sampling technique and a sample of 296 students was used for this study (Males = 83, Females = 213). The students were not limited to any particular Department or Faculty but must be between the ages of 16 to 20 years and in the first year programme of study in the University of Port Harcourt.

Two instruments were used for the study, namely the Sociological Assessment Scale (SAS) and the Eating Attitude Test (EAT-26). The face and content validities of the instruments were determined. The reliability of the instrument was determined using Cronbach Alpha method which assesses the internal consistency of the items in the instrument. Mean, standard deviation, independent t-test, analysis of variance were used for data analysis.

Data analysis

Research question 1: To what extent do socio-economic status (low, middle and high) influence students’ anorexia nervosa behavior in the University of Port Harcourt?

Hypothesis 1: Socioeconomic status does not significantly influence students’ anorexia nervosa behavior.

Table 1: Mean and standard deviation on students’ anorexia nervosa behavior based on their socioeconomic status

Socioeconomic status	N	Mean	SD
Low	65	80.74	27.93
Middle	178	84.78	22.69
High	53	82.30	25.45
Total	296	83.45	23.56

Table 1 shows that the mean score of the students from the low SES was 80.74 (SD = 27.93), that of those from middle SES was 84.78 (SD=22.69) while that of high SES was 82.30 (SD = 25.45). This indicated that the students’ from middle SES had the highest mean score, followed by those from high SES and then those from low SES. However, to determine if the difference observed are significant or not ANOVA was employed. The results obtained are as presented in table 2 below.

Table 2: Analysis of variance showing the influence of students’ parental SES on students’ anorexia nervosa behavior

Source of variance	Sum of squares	Df	Mean square	F	Significance
Between group	860.40	2	430.20	0.774	0.462
Within group	162850.74	293	555.81		
Total	163711.14	295			

Table 2 shows that the calculated F value 0.774 obtained was significant at 0.462 level which is higher than 0.05, the chosen level of probability. This means that the null hypothesis which states that socioeconomic status does not significantly influence students’ anorexia nervosa behavior was rejected while the alternative hypothesis was retained.

Research question 2: To what extent do gender (male and female) influence University of Port Harcourt students’ anorexia nervosa behavior?

Hypothesis 2: Gender does not significantly influence students’ anorexia nervosa Behaviors.

Table 3: Influence of gender on students’ anorexia nervosa

Gender	N	Mean	SD	T	Df	Sig. (2-tailed)
Female	213	84.86	23.77	1.66	294	0.097
Male	83	79.81	22.73			

Table 3 above shows that the number of females was 213 with a mean score of 84.86 and a SD of 23.77. The males were 83 in number with a mean score of 79.81 and a SD of 22.73. This shows that the female score higher than their male counterparts on anorexia nervosa behavior. However, the t (294) for equal variances assumed = 1.664 and significance for 2 tailed test = 0.097. This t value is not significant, P>0.05. Hence, the null hypothesis which states that gender does not significantly influence students’ anorexia nervosa Behaviors is retained.

Discussion of Results

Influence of socio-economic status on Anorexic Nervosa Behaviors

The results showed that students of low socioeconomic status had a mean score of 80.74, SD =27.93 on anorexic nervosa. Students of middle socio-economic status had a mean score = 84.78, SD = 22.69. Lastly, students of high socioeconomic status had a mean score of 82.30, SD = 20.45. The F = 0.774 and significance value of = 0.462 was not significant at 0.05 level of significance. Hence, socioeconomic status does not significantly influence students of anorexia nervosa behavior in University of Port

Harcourt. This result is unexpected since the socio-economic status is expected to affect the case which one acquires/purchases the type of food one wants to eat. Hence, eating disorder behavior is expected to have been influenced by availability of money. This unexpected result could have been as a result of education and training the high SES received on eating disorders and their negative effects on health, longevity as well measures to control one's eating habit.

Influence of Gender on students' Anorexia Nervosa Behaviors

The result showed that the females scored higher than their male counterparts. The female had a mean score of 84.86, SD = 23.77 while the male had a mean score of 79.81 and SD = 22.73 (see table 8). The $t(294) = 1.66$, significance = 0.097 was significant at 0.05 level of significance. Although the mean score for females was higher than males, gender had no significant influence on University of Port Harcourt students' anorexia nervosa behavior. This result is surprising because females are generally more concerned about their feeding habits than males. However, this is particularly prevalent in adults who watch weights which may lead to eating disorders. Previous studies in consonance with the result of the present study include the work of Sharma (2013) who carried out a study on gender differences in adolescent neuroticism. The result showed that although the mean neuroticism in adolescent females is slightly higher than in males, this was not significant. This divergent result could be adduced to the different age groups that were used in conducting the study. Another study discordant with the findings of the present work is that of Wang (2004) who conducted a similar study and found that females were more likely to desire a body figure that was perceived as current figure.

Conclusion of the study

Although previous reports tend to show anorexia nervosa as a female disorder, the present findings indicate there is no preference to any one gender with respect to students' anorexia behavior. Therefore, the males and females would be treated and studied closely, so as to eschew gender bias in dictating and counseling adolescents against having anorexia nervosa. More so, socioeconomic status should also be considered so as to treat these adolescents as unique individual personalities and not as aggregate or collection of adolescents.

Recommendations

Based on the findings of the study, the following recommendations are made.

1. More attention should be given by parents and lecturers/teachers to the adolescents during this transitional period so as to educate them on the implications of anorexia nervosa behavior in every action they take.
2. Psychologists and nurses should get involved in caring adequately for the psychological aspects of these adolescents.
3. A unit for nutritionist and social workers should be created in the university and students should be mandated to visit these officers yearly to ascertain their fitness and receive support where and when necessary. This will reduce ingestion of drugs for every health issue including the ones psychological care can handle.

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