Section 7. Psychology

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PSYCHOLOGICAL CORRELATES OF EATING DISORDERS AMONG FEMALE UNDERGRADUATES OF OBAFEMI AWOLOWO UNIVERSITY ILE-IFE

Abstract. The study investigated the extent of eating disorders and the psychological correlates that might predispose young adults to serious health problems. It also examined the influence of body image, fear of negative evaluation, religiosity and general psychopathology on eating disorder. 1000 female undergraduates aged 15–30 years were recruited using a stratified random sampling design at the Obafemi Awolowo University Ile-Ife. Data were collected on socio-demographic variables. In addition, the adapted versions of the Eating Attitudes Test (EAT), Body Shape Questionnaire (BSQ), Fear of Negative Evaluation (FNE), Religious Orientation Test (ROT) and General Health Questionnaire (GHQ) were administered. Data were analysed using descriptive (frequency counts, percentages, means and standard deviation) and inferential statistics (2 Way ANOVA and post-hoc tests). 171 respondents were classified as highly at risk for eating disorders. The results showed that body image ($F = 18.8$; $p < .05$) and fear of negative evaluation on eating

disorder ($F = 6.59$; $p < 0.05$) had statistical influence on eating disorders. There was no statistically significant influence of general psychopathology ($F = 1.37$, $p > 0.05$) and religiosity ($F = 0.45$, $p > 0.05$) on eating disorder.

Keywords: Eating disorders, body image, fear of negative evaluation, religiosity and general psychopathology.

Introduction

All over the world, one will notice that very high value is placed on women physique. Our society admires men for what they accomplish and what they achieve, but women are usually evaluated by and accepted for how they look, regardless of what they do. This was not so in the past, a woman was evaluated for how well she trained her children and how she maintained her home but today a new clause has been included, that is, despite all that she does, how good she looks is more important. Though beauty is in the eye of the beholder, an image has been painted for the average woman regarding how she should look. Thus, there is a need for this disorder to be nipped in the bud before it plagues the country like it has done in the western world.

Eating disorders were once viewed as uncommon in Africa. In fact, up until the 1990's, only a few cases were accounted for, all of which were in Zimbabwe and Nigeria (Nwaefuna [18]; Gregory and Buchan [11]; Famuyiwa [7]). Unuhu, Ebiti, Oju, and Aremu [25]) reported a case of female secondary school leaver with history of refusing food and progressive weight loss. Izevbigie and Owie [13] found that adolescents having eating disorders displayed personality profile changes indicating problems of low self-esteem, feeling of inadequacy, anxiety, social dysfunction, and depression. These reports were all described as symptoms that arose due to exposure to societal norms associated with the western nations, coupled with the implementation of consumption based educational system. This pervasive perception associated with eating disorder such as anorexia nervosa and bulimia nervosa were largely confined to white Europeans or Americans. The explanations for such observations were thought to be principally cultural in nature, which explains why eating disorders spread, but does not necessarily mean that certain cultures are protected from such pathologies (Dolan [3]). Evidence points to the fact that eating disorders were undiagnosed in certain areas, but there is also data showing that the number of eating disorder cases is increasing due to socio-cultural factors.

Eating disorders involve complex behavioural factors that are associated with underlying psychopathologies such as emotional and personality disorders. Genetic or biologic susceptibility contributes to environmental factors to increase the chances of developing an eating disorder. The effects of a globally connected culture of consumption, along with powerful demands on the attainment of a specific body-type, have unquestionably had an impact on body-image, diet, and the rise of eating disorders. Not to be ignored with an increase in such pathologies are the paradoxical burdens that materialise when women, in particular, start to gain access to equal education, professional employment, and high-ranking positions in public life. The extreme pressures that individuals, especially females, may face are especially challenging in societies where the transformation into a new role is abrupt and contrasts sharply with customary norms that once demanded submissiveness, obedience, and deference to patriarchical forces.

Body image is the dynamic perception of one's body how it looks, feels, and moves. It is influenced strongly by self-esteem and self-evaluation, more so than by external evaluation by others. Body image concerns have become widespread among adolescents, It can, however, be powerfully influenced and affected by cultural messages and societal standards of appearance and attractiveness. Religious adherents would thus not only derive self-worth from a deity's

acceptance, but also from their service and kindness to others (Commerford and Reznikoff [2]; Ellison [5]). Examinations of religion's influence have expanded to its relationship with health (Ellison and Levin [6]; Powell, Shahbi, and Thoresen [19]), and have reported religion's significant relationships with body weight (Ferraro [8]; Kim Sobal and Wethington [15]), and its significant role in eating disorders (Morgan, Affleck, and Solloway [16]; Richards et al. [20]; Smith, Richards, and Maglio [4]; Warren et al. [26]).

The overall aim of the study was to examine the influence of body image, fear of negative evaluation, religiosity and general psychopathology on eating disorder. This was with the view of assessing the relationship between this psychological correlates and eating disorders among young adults.

Research Hypotheses

The following hypotheses were proposed and tested in this study

1. Female undergraduates who are dissatisfied with their body image will be significantly more prone to eating disorders than those who are moderately satisfied or satisfied with their body image.

2. Female undergraduates who have high level of fear of negative evaluation will be significantly more prone to eating disorders than those who are moderate or low levels in fear of negative evaluation.

3. Female undergraduates who are superficially religious will be significantly more prone to eating disorders than those who are either moderately or deeply religious.

4. Female undergraduates with high symptoms of general psychopathology will be significantly more prone to eating disorders than those with moderate or low levels of general psychopathology.

Research Design

This phase employed the cross-sectional survey design.

Sampling Procedure

The population for the study was the female undergraduates' students of Obafemi Awolowo University Ile-Ife. The stratified random sampling technique was used to select 15% of this population for the study within 15 years to 30 years. The mean age was 21.9 years with standard deviation of 3.38. Participants were selected randomly from across the female hostels on the campus.

Participants

One hundred and seventy one (171) respondents self reported symptoms of eating disorder of the magnitude to merit the categorisation of at risks for eating disorders.

Measures

Procedure

Instruments

The research instrument consists of one questionnaire made up of five standardized psychological scales and Personal Information Section, making six sections. The Personal Information Questions (PIQ) which was used to elicit information on the sociodemographic background of the respondents.

The Eating Attitudes Test (EAT-26) developed by Garner and Garfinkel [9] was used to measure eating disorder. The Body Shape Questionnaire is a 34-item self report measure designed to assess negative feelings about one's body size and shape (Cooper et al., [1]). Fear of Negative valuation (FNE) developed by Watson and Friends (1969) was used to assess fear of negative evaluation. General Health Questionnaire (GHQ) was used to measure to measure the general psychopathology. Religious Orientation Test (ROT) developed by Idehen (2000) was used to measure respondents' strength of religiousness.

Data Analysis

Descriptive and inferential statistics was used analyse the data collected in the study. Descriptive statistics (frequency counts, percentages, mean and standard deviation) was used to describe general characteristics of sample included in this study. The Two-way analysis of variance was used to test the hypothesis. The Statistical Package for the Social Sciences (SPSS Inc., Chicago, IL) Version 16 was used for the analysis of the data.

Results

Table 1. — Summary of the 2-Way ANOVA on Eating Disorder by Body Shape, Fear of Negative Evaluation, Religiosity and General Psychopathology

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	93672.659[a]	61	1535.617	7.508	.000
Intercept	125359.910	1	125359.910	612.947	.000
BSQG	7697.760	2	3848.880	18.819	.000
FNEG	2698.091	2	1349.045	6.596	.001
GHQG	564.085	2	282.042	1.379	.252
ROTG	186.045	2	93.023	.455	.635
BSQG * FNEG	1505.218	4	376.304	1.840	.119
BSQG * GHQG	1632.416	4	408.104	1.995	.093
BSQG * ROTG	2018.374	4	504.593	2.467	.043
FNEG * GHQG	569.030	4	142.257	.696	.595
B FNEG * ROTG	1756.770	4	439.192	2.147	.073
GHQG * ROTG	985.296	4	246.324	1.204	.307
BSQG * FNEG * GHQG	498.324	5	99.665	.487	.786
BSQG * FNEG * ROTG	5376.387	7	768.055	3.755	.001
BSQG * GHQG * ROTG	674.572	6	112.429	.550	.770
FNEG * GHQG * ROTG	1997.926	8	249.741	1.221	.283
BSQG * FNEG * GHQG * ROTG	532.709	2	266.354	1.302	.272
Error	191839.740	938	204.520		
Total	1632329.000	1000			
Corrected Total	285512.399	999			

Note: BSQG =Body Image; FNEG= Fear of Negative Evaluation; GHQG = General psychopathology; ROTG = Religiosity

Hypothesis One: This hypothesis states that female undergraduates who are dissatisfied with their body shape will be significantly more prone to eating disorders than those who are either moderately satisfied or satisfied with their body image. The hypothesis was tested with two ways analysis of variance (2-Way ANOVA) summarized in Table1. The results of the analysis indicates that there was a statistically significant main influence of body image on eating disorders ($F\{2,938\} = 18.82$, $p < .05$). This finding suggests significant differences between the mean scores of the body image groups on the eating disorder. The Scheffe's formula for post-hoc comparisons of means was therefore used to compare the mean scores of the three groups. The results of this analysis are presented in Table 2. The results of the analysis indicates that female undergraduates who are satisfied with their body image ($M = 21.28$) are significantly less prone to eating disorder than those who moderately satisfied with body image ($M = 33.61$, $MD = 15.47$, $p < .05$).

Table 2. — Multiple Comparison of Body Shape Groups on Eating Disorder

Group (i) — Group (;)	Mean(i) — Mean(j)	MD	Std. error	P
Satisfied Moderate	21.28–33.61	– 15.47	1.55	**.000**
Satisfied Dissatisfied	21.28–49.67	– 31.12	1.90	**.000**
Moderate Dissatisfied	33.61–49.67	– 15.65	1.33	**.000**

The result also indicates that female undergraduates who are satisfied with their body shape (M = = 21.28) are significantly less prone to eating disorder than those who are dissatisfied with their body image (M = 49.67, MD = 31.12 p < .05). The results further indicates that female undergraduates who are moderately satisfied with their body image (M = =33.61) are significantly less prone to eating disorder than those dissatisfied with their body image (M = = 49.67, MD = 15.65, p < .05). These findings suggest that those who are dissatisfied their body image are the most prone to eating disorders. The hypothesis stated above is therefore accepted.

Hypothesis Two: This hypothesis states that female undergraduates who have high level of fear of negative evaluation will be significantly more prone to eating disorder than those who have either moderate or low fear of negative evaluation. This hypothesis was also tested with the results of the 2-way ANOVA presented in Table 3. The results of data analysis indicates that there is a statistically significant main influence of fear of negative evaluation on eating disorder (F {2,938} = 6.59, p < .05). This finding suggests significant differences between the mean scores of the fear of negative evaluation groups. The Scheffe's formula for Post Hoc comparisons of mean was therefore used to compare the mean scores of the fear of negative evaluation groups on eating disorder. The results of the analysis are presented in Table 3. Results indicates that female undergraduates who have low levels of fear of negative evaluation (M = 27.43) are significantly less prone to eating disorders than those who have moderate levels of fear of negative evaluation (M = 34.57; MD = 8.06, p < .05).

Table 3. — Multiple Comparison of the Fear of Negative Evaluation Groups on Eating Disorder

Group (i) — Group (;)	Mean(i) — Mean(j)	MD	Std. error	P
Low Moderate	27.43–34.57	-8.06	1.18	**.000**
Low High	27.43–45.09	–16.52	1.51	**.000**
Moderate High	24.57–45.09	–8.46	1.23	**.000**

The results presented in Table 3 also indicates that female undergraduates who have low levels of fear of negative evaluation (M = 27.43) are significantly less prone to eating disorders than those who have high levels of fear of negative evaluation (M = 45.09, MD = 16.52, p < .05). The results further indicates that female undergraduates who have moderate levels of fear of negative evaluation (M = 34.57) are significantly less prone to eating disorder than those who have high levels of fear of negative evaluation (M = 45.09, MD = 8.46, p < .05). These findings suggest that those who have high levels of fear of negative evaluation are the most prone to eating disorder. The hypothesis stated above is therefore accepted.

Hypothesis Three: This hypothesis states that female undergraduates who are superficially religious will be significantly more prone to eating disorder than those who are moderately or deeply religious. The hypothesis was also tested with result of the 2-way ANOVA presented in table 3. The results of data analysis indicates that there is no statistically significant main influence of religiosity on eating disorders (F {2,938} = 0.45, p > .05). This finding suggests

that the religious orientation of female undergraduates' does not influence their eating behaviour. This hypothesis is therefore rejected. The alternate hypothesis which states that female undergraduates who are superficially religious are not significantly more prone to eating disorder than those who are either moderately or deeply religious is therefore accepted.

Hypothesis Four: This hypothesis states that female undergraduates with high symptoms of general psychopathology will significantly be more prone to eating disorder than those who have either moderate or low levels of general psychopathology. This hypothesis was tested with the results of the 2-way ANOVA presented in Table 3. The results of data analysis indicates that there is no statistically significant mean influence of general psychopathology on eating disorder ($F\{2,938\} = 1.37, p > .05$). This finding suggests that female undergraduates' level of psychopathology do not influence their eating behaviour. The hypothesis is therefore rejected. The alternate hypothesis that female undergraduates with high symptoms of general psychopathology are not significantly be more prone to eating disorder than either those with moderate or low level of general psychopathology is therefore accepted.

Two hypotheses were tested in this phase of the study.

Discussion

In terms of Body shape, prediction that female undergraduates who are satisfied with their body shape are significantly less prone to eating disorder than those who moderately satisfied with body shape was confirmed. The findings showed that female undergraduates who are satisfied with their body shape are significantly less prone to eating disorder than those who are dissatisfied with their body shape. The findings showed that female undergraduates who are moderately satisfied with their body shape are significantly less prone to eating disorder than those dissatisfied with their body shape. Some of the findings above are consistent with existing literatures. Stice, Schupak-Neuberg, Shaw, and Stein (1994) found that, among young college women, greater media exposure was linked directly with more eating disorder symptoms and indirectly through stronger internalisation of the ideal-body stereotype with greater body dissatisfaction. These findings suggest that women's internalisation of socio-cultural standards of female beauty is an important factor mediating the association between media exposure and body dissatisfaction.

The study confirmed that that female undergraduate who have high level of fear of negative evaluation are significantly more prone to eating disorder than those who have either moderate or low fear of negative evaluation. The findings revealed that female undergraduates who have low levels of fear of negative evaluation are significantly less prone to eating disorders than those who have moderate levels of negative evaluation. The findings revealed that female undergraduates who have low levels of fear of negative evaluation are significantly less prone to eating disorders than those who have high levels of fear of negative evaluation. The findings further indicated that female undergraduates who have moderate levels of fear of negative evaluation are significantly less prone to eating disorder than those who have high levels of fear of negative evaluation.

The study also found that female undergraduates who are superficially religious will be significantly more prone to eating disorder than those who are moderately or deeply religious was refuted in this study. The findings suggested that female undergraduates who are superficially religious will not be significantly more prone to eating disorder than those who are either moderately or deeply religious. The results are in line with those of Gluck and Geliebter (2002), who compared seventy eight Orthodox Jewish female college students with forty eight secular Jewish females in the United State of America. The authors found that secular women scored significantly higher on body shape and on eating disorder symptomatology than did Orthodox women. Secular women were twice as likely to have a fear of becoming fat and were four times more likely than were

orthodox women to be influenced by issues related to shape and weight.

The findings that female undergraduates with high symptoms of general psychopathology will significantly be more prone to eating disorder than those who have either moderate or low levels of general psychopathology was refuted. This is contrary to the findings of Ekeroth et al., [4]. They investigated general psychopathology among women with eating disorders and women from the general population with and without self-reported eating disorder problems. They found that eating disorders patients scored significantly higher on all subscales compared with women without self-reported eating problems, and higher on several scales compared to women reporting previous eating problems. There were no differences between eating disorders patients and controls with current eating problems. Their findings suggested that increased psychopathology in both eating disorders patients and women with self-reported eating problems suggests that general psychopathology is related to eating disturbances per se, and not only to being a mentally ill patient.

Conclusion

Now that it is evident that, anorexia and bulimia are no longer a western disorder, the various health institutions and governmental bodies should work hand in hand to help prevent the full blown manifestation of this disorder in Nigeria. Since research within this field in the African context is sparse, there is need for further investigation. Detailed studies analysing the underlying reasons for this disorders in the Nigerian perspective will also assist in curbing the spread of eating disorders.

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