

Eating Disorder among Female Undergraduate Students and Ameliorating Strategies: Case Study of University of Nigeria, Nsukka

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Abstract

This study is centered on eating disorder among female University Undergraduates and its ameliorating strategies in University of Nigeria. Four research questions and four null hypotheses guided the study. The study adopted case study research design. The population for the study was 4,561 second year female students of the University as at 2014/2015 session. A purposive sample of 456 was drawn for the study. Data was analyzed using mean scores, standard deviation and t-test at 0.05 level of significance. Results showed that social, financial and health problems were associated with eating disorder syndrome among the respondents. These include, among others feeling guilty after eating and feeling terrified about overweight; taking laxatives or self induced purging after eating food and spending more money on health care. The findings further showed that the female students tend to exhibit extreme loss of weight and experience irregular menstrual period due to poor eating habits. It was recommended that talking it over with parents, teacher/ lecturer or counsel on how to improve the eating plan, and restore lost weight is important. The female undergraduate students should also not skip breakfast and stick to a regular eating schedule among others.

Key words: Eating Disorder, Undergraduates, Health, Problems.

Introduction

Eating disorder refers to abnormal eating habits which are characterized by inadequate or too much of food intakes. According to Hudson, Hiripi, Pope and Kessler (2007) eating disorder is a condition of abnormal eating habits that may involve either insufficient or excessive food intake to the detriment of an individual's physical and mental health. An individual can decide to be in this condition or as a result of body's need for food. This means that it can be a voluntary idea of an individual to be in that condition or the body's food consumption need. According to Winter (2004) eating disorder is a condition which affects an individual's eating habits either as a result of their own doing (self inflicted), or as a body reaction to the consumption of food.

There are different types of eating disorder. Duyff (2004) categorized eating disorder into three main types. They include Anorexia nervosa (AN), Bulimia nervosa (BN), and Binge eating disorder. Anorexia nervosa is characterized by eating little or refusal to eat or ignores feeling of hunger and obsessive fear of gaining weight and unrealistic perception of current body weight (Sokol, 2000). Bulimia nervosa (BN) according to Uher and Treasure (2005) is a disorder characterized by recurrent binge eating or eating very large amount of food at a time followed by compensatory behaviors such as purging (self induced), vomiting, excessive use of laxatives or excessive exercise in an attempt to

prevent weight gain. The third is binge eating disorder characterized by excessive eating. In binge eating, the individual binges (excessive consumption) but does not purge or exercise. The individual may be overweight or maybe between losing and gaining weight.

Some eating disorders have similar characteristics. According to Hudson (2007) Anorexia and Bulimia are very similar because both disorders are conscious of gaining weight. They prefer to lose weight. The three types of eating disorder all involve unhealthy eating pattern that begin gradually and builds to the point where a person is unable to control them. Individuals that are involved in eating disorders are mostly young girls. Winters (2004) noted that eating disorder occur mainly in teens and young adult, especially females. Eating disorders are common in Nigeria; one or two out of every one hundred students may be found with one type of eating disorder. There are evidences of negligence of healthy eating behavior by many female undergraduate students of the University of Nigeria, Nsukka. This condition could be attributed to peer group influence, psychological misconception, ego, affluence or poverty among students. The students are in the habit of expressing affluence through eating. The affluent ones tend to eat as it appeals to their sight in negligence of expected eating schedule or better described as eating in-between meal time. On the other

hand, the indigent students find it difficult to eat as and when due. Some students follow the food selection pattern of their peers. Okoli, (2009) opined that every year at least ten out of every hundred undergraduates students that are hospitalized developed health problems associated with eating disorders.

Eating disorder is found mostly among young girls. Bailer (2004) observed that people who indulge in eating disorder are mostly teenagers especially girls. It is obvious that teenagers of this age bracket in Nigeria are likely to be in upper level of secondary education and tertiary institutions of learning. Sometimes, due to academic pressures and peer group influence, students may skip eating foods at appropriate time. When they eat later in the day, some tend to over eat while others lose appetite after snacks consumption. This type of eating status might precipitate weight gain or loss. Bailer (2004) again noted that it is completely normal and necessary for girls to gain some additional body fat during puberty, some respond to this change by becoming very fearful of their new weight. They might mistakenly feel compelled to get rid of it any way they can.

The two campuses (Enugu and Nsukka) of the University of Nigeria, Nsukka have greater number of young female students than males with various eating disorder behavior, some of which result to health challenges. Studies have shown that

university students skip breakfast, some consume unnecessary greasy based and fattening foods, some sugary foods and alcohol, others inadequate meals (Winter, 2004) and (Okoli, 2009). Hainer (2006) opined that it is not difficult to see why some teens develop a negative view of themselves. Celebrity teens and athletes conform to the "Nollywood Ideal". Moreover, eating disorders may run in families. This shows that eating disorders may be genetically or self inflicted.

Apart from keeping shape to look like models, some financial problems were acknowledged to contribute to eating disorder in some female students. Lack of money force some female students to fast and skip meals. Studies show that this happens more among students from low economic group (Matthew, 2007). Eating disorders are serious medical illnesses (Frederich, Raymond & Pomeney, 2002). They often go along with other problems such as stress, anxiety, depression and substance use. Eating disorders can lead to the development of serious physical health issues such as heart conditions or kidney failure. Frederich *et al* (2002) noted that someone whose body weight is at least 15% less than the average weight for that person's height may not have enough body fat to keep organs and other body parts healthy. In severe cases, eating disorders may lead to severe malnutrition and death, if not curbed.

From the available records and observation from the University of Nigeria Medical centre, there was substantial evidence that many of the students hospitalized after having running stomach, stomach upset and in severe cases of diarrhea were later proved to be individuals in a consistent state of eating disorder. The above evidences, therefore, creates a lot of concern on an average adult in the University to fashion out measures that will re-orient students towards a better eating habit in the campuses. There seem to have been little or no studies carried out to reduce the incidence arising from eating disorder among female undergraduate students in the University of Nigeria, Nsukka and Enugu campuses. Based on this background, the researcher deemed it expedient to carry out a case study to ameliorate eating disorder among university female undergraduates in the University.

Purpose of the Study

The major purpose of the study was to investigate ameliorating strategies of eating disorder among female undergraduate students of the University of Nigeria. Specifically the study:

1. identified social problems associated with eating disorder among female undergraduates.
2. identified financial problems associated with eating disorder among the female university undergraduates.

3. identified health issues associated with eating disorder among female university undergraduates
4. determined ways of enhancing healthy eating habits among female university undergraduates.

Hypotheses

Ho₁: There is no significant difference between the mean ratings of the female undergraduates of Nsukka and Enugu campuses on the social problems associated with eating disorder.

Ho₂: There is no significant difference between the mean ratings of the female undergraduates at Nsukka and Enugu campuses on the financial problems associated with eating disorder.

Ho₃: There is no significant difference between the mean ratings of the female undergraduates at Nsukka and Enugu campuses on the health problems associated with eating disorder.

Ho₄: There is no significant difference between the mean ratings of the female undergraduates at Nsukka and Enugu campuses on the ways to enhance healthy eating habit among female undergraduates in University of Nigeria.

Methodology

Design of the Study: The design of the study is a case study research. The study was conducted in the University of Nigeria. The university operates in two locations; its main campus at Nsukka and a branch at Enugu in

Enugu state, Nigeria. All the states of the federation are available in both campuses. Although Enugu state is considered to be an agrarian state, food supply is insufficient to the fast growing population of people trooping into the state for academic, business and tourism. This ever increasing number of students in the state contributes to the high cost of living. This informed the choice of the institution.

The target population of the study was 4,560 comprising of all second year female undergraduate students officially residing in all the female hostels in both campuses of `Enugu and Nsukka (Students' Affairs Department, Enugu and UNN campuses, 2014).

The sample for this study is 456 female second year undergraduate students at both Enugu and Nsukka campuses of the university. Random sampling technique was used to select three out of the ten female hostels in Nsukka campus of the university and two out of six female hostels in Enugu campus. According to Nworgu (2006) ten per cent can be used as a representative of the population. Ten per cent (10%) of 3,060 was used to give 306 female second year undergraduate students from Nsukka campus while also 10% of 1501 which is 150 of the Enugu campus second year students to give a total of 456 female second year undergraduate students of the University of Nigeria. Second years were purposively selected for the study because at

second year the students have spent one year in the school and mastered the school environment and people around them. Also, at this level most of them are still within the teenage range of indulging in eating disorder.

The structured questionnaire consisting of 40 items were used to elicit information from the students. The four point rating scale questionnaire was face validated by three experts. One from Home Economics and Hospitality Management Education in Faculty of Vocational and Technical Education, one from Home Science, Nutrition and Dietetics, Faculty of Agriculture and one from Measurement and Evaluation, Faculty of Education, University of Nigeria. Cronbach alpha Statistical tool was used to determine the internal consistency of the instrument and yielded a co-efficient of 0.79.

The copies of the questionnaires were administered to the respondents by hand and retrieved after completion to ensure high rate of return. Two hundred and forty eight (248) female undergraduates from Nsukka campus and 90 from Enugu campus returned their questionnaire. A total of 338 female second year undergraduates returned their questionnaire from both campuses.

The instrument was analyzed using mean scores and standard deviation. The arithmetic mean of the scale was 2.50 on the 4-point scale. Any mean of items which scored 2.50 and above was deemed accepted

while any mean with less than 2.50 was rejected. The four null hypotheses were tested using t-test statistics at 0.05 level of significance. When the t-calculated is greater than the t-critical table value of 1.96, the hypothesis was considered rejected.

But when the t-calculated is less than the t-critical table value of 1.96, the hypothesis was not considered rejected.

Results

Table 1: Social problems

Mean Ratings and Standard Deviation of Respondents on the Social Problems Associated with Eating Disorder among Female Second year undergraduate Students of both Campuses

S/N	Social Problems	Mean	SD	Dec.
1	Feel guilty after eating especially in group	2.53	0.51	Accept
2	Feel terrified about over weight	3.60	0.82	Accept
3	Suffer social alienation due to over eating	2.23	0.56	Reject
4	My clothes do not to fit tightly	3.48	0.86	Accept
5	Other people think that I am too thin	3.63	0.91	Accept
6	Eat secretly	1.93	0.33	Reject
7	Like eating with other people	1.42	0.20	Reject
8	Prepare food for others but do not eat the food I cook	2.62	0.67	Accept
9	Becoming anxious prior to eating	2.92	0.74	Accept
10	Eat faster than other people	2.96	0.81	Accept
	Overall	2.66	0.64	

SD-Standard Deviation Dec- Decision

The data presented on table 1 indicated that students frequently commit acts predisposing them to eating disorder by their eating habits. This is highlighted in the cluster mean of (2.66) of the respondents which is

above the criterion mean of 2.50 indicated. The table also revealed that item mean of 1, 2, 4,5,8,9 and 10 that are above 2.50 were much evidences to show that students agree to have been indulging in eating disorder.

Table 2: Financial Issues

Mean ratings and Standard Deviation of Respondents on the Financial Problems Associated with Eating Disorder among Female University Undergraduates of both campuses

S/N	Financial Problems	Mean	SD	Decision
11	Enjoy trying new rich food no matter the cost	2.16	0.54	Reject
12	Can afford to eat only snacks	2.57	0.59	Reject
13	Find myself preoccupied with food when I have so much money	3.12	0.78	Accept

14	Spend more money on food	2.91	0.73	Accept
15	Eat different variety of food at a time	2.43	0.61	Reject
16	Take laxatives or Self induced purging when I over feed	2.82	0.71	Accept
17	Only able to eat cheapest food	2.22	0.56	Reject
18	Eat more than I can afford	2.89	0.73	Accept
19	Spend more money on health care	1.92	0.41	Reject
20	Spend money on exercise to keep fit	1.42	0.21	Reject
	Overall	2.48	0.59	Reject

The data on the table 2 indicated that they had problems with funds for their proper feeding. Many students were unable to feed healthily due to either having excess money to spend or they do not have. Items, 12,13,14,16 which were accepted supported this findings. Items 11, 19 and 20 were regarded as not accepted since they

are not seen to be common with the students having been scored to less than 2.50 on the financial problems associated with eating disorder among second year female university undergraduates.

Research Question 3

Table 3: Health issues

Mean ratings and Standard Deviation of Respondents on the health issues Associated with Eating Disorder among Female University Undergraduates of both campuses

S/N	Health Problems	Mean	SD	Decision
21	Exercise strenuously to burn off fat	2.16	0.54	Reject
22	Vomit after I have eaten	2.91	0.73	Accept
23	Suffer from constipation	2.98	0.75	Accept
24	Unhealthy teeth and gum	2.91	0.73	Accept
25	Experience irregular menstrual period	2.63	0.67	Accept
26	Noticeable extreme loss of weight	2.82	0.71	Accept
27	Stomach is empty and experience sharp pain	2.22	0.56	Reject
28	Experience back pain as a result of ulcer	1.92	0.41	Reject
29	Always feel dizzy	2.92	0.73	Accept
30	Always sick and visit the doctor regularly	2.91	0.73	Accept
	Overall	2.48	0.59	Reject

The table above represents the mean ratings and standard deviation of respondents on the social problems associated with eating disorder among female undergraduate in both

campuses of Enugu and Nsukka. Items number 21, 27 and 28 were rejected as the health problems that are associated with eating disorder. The remaining items were all accepted

to be the health related issues affecting the students' preponderance to eating disorder in the Campuses.

Table 4: Mean ratings and Standard Deviation of Ways of Enhancing healthy Eating behavior among Female University Undergraduates of both campuses.

S/N	Ways of Enhancing ED	Mean	SD	Decision
31	Recognition of eating disorder	1.74	0.36	Reject
32	Talk it over with parents, teacher or counselor	2.96	0.74	Accept
33	Improve overall eating plan	3.15	0.80	Accept
34	Avoid nibbling between meals	3.09	0.78	Accept
35	Watch out for food allergy and avoid such food	3.27	0.83	Accept
36	Restore normal weight after excess eating	2.61	0.66	Accept
37	Start each day with a good break fast	3.84	0.96	Accept
38	Get involved in a regular healthy exercise	3.66	0.92	Accept
39	Include complex carbohydrates in the diet	3.21	0.80	Accept
40	Eat vegetables and fruits in season daily	3.20	0.80	Accept
	Overall	3.07	0.77	Accept

The data on the table indicated that almost all the items except item 31 were accepted indicating that students were eager to embrace the suggested strategies for ameliorating eating disorder. Most of the items scored above 2.50. These measures were accepted as a way of enhancing healthy eating behavior of female

university undergraduates. Whereas other item has the mean below 2.50 and therefore not accepted as the ways of enhancing eating behavior among female university undergraduates at both campuses of the university was insignificant.

Null Hypothesis One

Table 5: Summary of t-test on the difference between the Mean rating of the second year Female at Enugu and Nsukka campuses on the Social Problems associated with Eating Disorder

S/N	Respondent Group	No. of Respondent	Mean	SD	DF	t-Cal	t-value	Decision
1	Nsukka Female Students	306	2.76	0.20	454	0.07	1.96	NS
2	Enugu Female Students	150	2.66	0.15				

SD-standard Deviation; DF- Degree of freedom; t-cal-T calculated; t-value Table value; NS = Not Significant

The table above shows the calculated t-value of 0.07 at 454 degree of freedom and 0.05 level of significance. Since the calculated t-value of 0.07 is

less than the table value of 1.96, the null hypothesis is accepted. Therefore, there is no significant difference in the mean rating of the second year female students in Nsukka campus and second year undergraduates of Enugu

campus female students on the social problems associated with eating disorder.

Null Hypothesis Two

Table 6: Summary of t-test on the difference between the Mean rating of the Second Year Female undergraduates of Nsukka Campus and Second year female undergraduates of Enugu campus on the Financial Problems associated with Eating Disorder

S/N	Respondent Group	No. of Respondent	Mean	SD	DF	t-Cal	t-value	Decision
1	Nsukka Campus Female Students	306	2.46	0.17	454	0.06	1.96	NS
2	Enugu Campus Female Students	150	2.49	0.16				

SD-standard Deviation; DF- Degree of freedom; t-cal-T calculated; t-value Table value; NS =Not Significant

The table above shows the calculated t-value of 0.06 at 454 degree of freedom and 0.05 level of significance. Since the calculated t-value of 0.06 is less than the table of 1.96, the null hypothesis is accepted. Therefore, there is no significant difference in the mean rating of the second year female

undergraduates of Nsukka campus and second year female undergraduates of Enugu campus on the social problems associated with eating disorder.

Null Hypothesis Three

Table 7: Summary of t-test on the difference between the Mean rating of the Second Year Female undergraduates of Nsukka and Enugu campuses on the Health Problems Associated with Eating Disorder

S/N	Respondent Group	No. of Respondent	Mean	SD	DF	t-Cal	t-value	Decision
1	Nsukka Campus Female Students	306	2.48	0.59	454	0.06	1.96	NS
2	Enugu Campus Female Students	150	2.46	0.57				

SD-standard Deviation DF- Degree of freedom t-cal-T calculated t-value Table value; NS = Not Significant

The Table 7 above shows the calculated t-value of 0.06 at 454 degree of freedom at 0.05 level of significance. Since the calculated t-value of 0.06 is less than the table of 1.96, the null hypothesis is accepted. Therefore, there is no significant difference in the

mean rating of the second year female undergraduates of Nsukka and of Enugu campuses on the health problems associated with eating disorder.

Null Hypothesis Four

Table 8: Summary of t-test on the difference between the Mean rating of the Second Year Female undergraduates of Nsukka Campus and Enugu campuses on the Ways of Enhancing Healthy Eating Habit

S/N	Respondent Group	No. of Respondent	Mean	SD	DF	t-Cal	t-value	Decision
1	Nsukka Campus Female Students	306	3.07	0.77	454	0.06	1.96	NS
2	Enugu Campus Female Students	150	3.06	0.78				

SD-standard Deviation DF- Degree of freedom t-cal-T calculated t-value Table value; NS = Not Significant

The last table above shows the calculated t-value of 0.06 at 454 degree of freedom and 0.05 level of significance. Since the calculated t-value of 0.06 is less than the table value of 1.96, the null hypothesis is accepted. Therefore, there is no significant difference in the mean rating of second year female students in Nsukka campus and of Enugu campuses female students on the ways of enhancing healthy eating habit.

Discussion of findings

The findings of this study agreed with Duyff (2004), (Wright (2004), Whitney and Rolfes (2010) and Wardlaw and Hampl (2014) that individuals should

be aware of healthy eating pattern and this can be achieved by eating at normal time of the day such as breakfast, lunch and dinner, choosing fast foods wisely, eating healthy snacks and avoiding starvation. So the negligence of healthy eating behaviors by some university undergraduates causes some forms of eating disorder as evidenced by this study.

Conclusion

From the findings the study, it was concluded that social problems associated with eating disorder are feeling terrified about over weight, female students think that clothes do not fit her, the thought of looking too

thin or too fat. Other social problems as indicated in table one are; girls becoming anxious before eating and the habit of eating faster than other people.

Financial problems associated with eating disorder can be experienced when female students find themselves preoccupied with food; this will make them consume food in an unhealthy manner. Other financial problems common with eating disorder are: spending more money by female students on food, the attitude of eating variety of food at a time, spending more money on the intake of laxatives and the act of female students eating more than they can afford.

Health problems associated with Bulimia nervosa vomit after they had eaten, those with Binge eating suffer from constipation. They have teeth problems, experience irregular menstruation, noticeable weight loss, feel dizzy and always seek medical attention.

Ways of enhancing healthy eating behavior as depicted in table four are: the ability of female students to get counseling from Home Economics teachers, guidance counselors and parents, improving overall eating plan, avoiding the act of nibbling between meals, and watching their weight. Other constructive strategies for enhancing healthy eating food behavior as inscribed in table four are: restoration of lost weight through adequate diet, starting the school day with a good breakfast, indulging in a healthy exercise, and provision of

school based nutrition educationist and finally eating of vegetable and fruits in season. To a great extent, both the UNN and UNEC undergraduate female students shared a common view with regard to the three major problems associated with eating disorder as posited in this study. They also shared a common view in terms of ways of enhancing healthy eating habit.

Recommendations

Based on the above conclusions of the study the following recommendations were made:

- 1 Undergraduate students of the University of Nigeria should stick to a regular eating schedule. Skipping meals or fasting for long stretches may be dangerous. To avoid this eat three times a day by Planning ahead of meals and snacks.
2. Students should adopt healthy eating plan as the key to avoiding weight gain. They should focus on nutritious foods that will energize and make the body strong. Think of food as fuel for the body. The body knows when the tank is low, one should listen to it. Eat when truly hungry, and then stop when full or satisfied.
3. The school authority should include the study of food and meal planning in the curriculum of the undergraduates in their first year General studies course.
4. The Federal Government should provide counseling services in

teaching and public hospitals where teenage and adolescent girls can seek for advice on their state of health.

5. Develop a solid support system. Surround yourself with people who support, appreciate you and want to see you healthy and happy. Avoid people that drain ones energy, encourage disordered eating behaviors, or make one feel bad about yourself.
6. Fill your life with positive activities. Make time for activities that bring you joy and fulfillment. Try something you have always wanted to do, develop a new skill, pick up a fun hobby, or volunteer in your community. The more rewarding your life, the less desire you will have to focus on food and weight.
7. Avoid pro-ana and pro-mia websites. Do not visit websites that promote or glorify anorexia and bulimia. These sites are run by people who want excuses to continue down their destructive path. The "support" they offer is dangerous and will only get in the way of your recovery.
8. Identify what triggers one's destructive behaviors. Triggers could be holidays, examination periods, rainy season, and harmattan season among others. Have a plan for dealing with them, such as going to therapy more often or asking for extra support from family and friends.

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