Relationship between Three Context Factors and Food Behavior
Of Students in Public Universities in Edo State

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Abstract: This paper examined the relationship between three context factors and food behavior of students in public universities in Edo State, Nigeria. The study was an ex-post facto research design adopting correlation approach. A sample of 956 students participated in the study. Three research questions and corresponding hypotheses guided the study. A self structured 43 item questionnaire was administered for data collection. The Mean, Standard deviation and Pearson Product Moment Correlation (PPMC) was used to establish the relationship between the variables. Findings revealed that: there is a significant relationship between personal factors and eating behavior of students in public universities in Edo State (r.062; P<.05); there is a significant relationship between school environment factors and eating behavior of students in Edo State (r.078; P<.05); and there is a significant relationship between peer factors and eating behavior of students in Edo State (r.076: P<.05). This paper recommends that it is of essence to give nutrition education a place in the curriculum of the university school system amongst other recommendations.

Introduction:

According to 1 eating behavior is a broad term that encompasses food choice, feeding practices, dieting and eating related problem. It is an attribute shaped over time in the life of an individual. Eating behavior can either be healthy or unhealthy. Eating behavior is said to be healthy when people and individuals balance their meal by using the food pyramid and practice these manners; masticate food slowly and properly to avert unnecessary consumption, drinking a tumbler of water at some stage at meals, addition of more fibre to enrich the meals and consuming smaller meals at a time. In addition, 2 described food behavior as unhealthy when you over consume food high in sugar, fat and salt; eating when not hungry, refusal to eat vegetables or fruits, being picky, over eating and comfort eating, skipping of breakfast and drinking too much sugary drinks. However, good eating behavior is constantly encouraged to promote good health. A sound health cannot be achieved in the absence of good nutritional practices. For over a decade now, there has been incessant swell of non-communicable diseases among people of all ages in developing countries. In Nigeria alone, 24% of the deaths were attributed to non-communicable diseases 3. Among the lots of factors predisposing people to these diseases, is obesity which is nutrition related. To this end, 4 attributed the cause of obesity to nutrition transition characterized by a trend towards consumption of foods high in fat, sugar and refined food that are low in fibre.

This change in food choice and life-style in Nigeria is linked with modernization and urbanization with the rapidly changing technology affecting all sectors of the society. Of greater interest is a situation where foods high in energy and fat have completely replaced natural, healthy indigenous foods. This risky happening is endangering the lives of all segments of the society; worthy of note is the university students who have total control of their life-style and food choice. They often engage in diverse behavioral changes to suit their interest and purpose as observed by 5 who postulated that students’ days in the institution of higher education is characterized by many changes in their eating
behavior and nutritional patterns, such as engaging in unhealthy dietary habits of excessive salt, sugar and alcohol intake. The university is also a place of pressure; this implies that the undergraduates can be so occupied with academic activities and would forget to give attention to feeding, which is an attitude capable of distorting their food behavior. \(^6\) noted that undergraduates eating habits can change due to taxing events. Whatever food behavior formed at this period may remain throughout life. A study by \(^7\) reported that nutritional lifestyle is fashioned at a youthful age. \(^8\) opined that poverty, limited access, age related deficiency, social environment issues and medications are the major causes of bad eating behavior among people, on the contrary, \(^9\) was of the opinion that societal factors and factors related to the university are determinants of any eating behavior among university students. However this study tend to consider other contextual factors for it is believed that people are generally influenced by several factors to practice good or bad eating behavior.

School environment is one of the contextual factors that could affect the eating behavior of students considered in this study. \(^10\) stated that the university school environment consists of the physical and social environment. In his/her view, the social environment is the interactions between the undergraduates at different levels while the physical are the buildings where people spend time. Whichever environment a student finds himself, he is likely to involve food choices, as it is well known they are self-governing therefore food eaten is likely to depend on its availability and accessibility within the school environment. Foods are usually available in eateries, restaurants for the students’ comfort. Studies by some researchers, for example \(^11\), and \(^12\) noted that fast food shops are on the increase in campuses and urban centres where universities are placed in Nigeria. Presently eating healthy among students is far from the norm. This is evident in the current rate students patronize fast food shops in the campuses, which in no doubt stalk from the fascination of urbanization. \(^13\) affirmed this when they opined that the university period is a critical period for weight gain, high fat intake in eateries Furthermore, the school is a social environment where there are interactions between students from different cultures, consequently may influence one another’s eating behavior. \(^14\) collaborated this observation when they stated that food choices are influenced by the environment and its many contexts. In this modern school environment the students have access to social media where food adverts are fascinating and lively. Several studies have also associated the school with the undergraduates eating behavior and their weight status. \(^15\)

Another factor under consideration in this study is the students’ personal factors. Individual likes and dislikes are functions of behavioral factors. People choose foods based on the satisfaction they derive in eating the particular foods and reject others even when it has nutritional benefit. They tend to eat and accept these foods as good meals as it appeals to them; youths are most vulnerable in that they accept meals for comfort and excitement. Other personal factors include financial capability of the student, Some students are faced with the challenge of high cost of purchasing balanced diet rather they opt for cheap junk food that gives temporary satisfaction. Another personal factor is sex of the students. \(^16\) reported higher diet quality among females than males. They stated that female students possess better culinary skills than the male counterparts. Furthermore, the level of students’ nutrition knowledge may influence his or her personal choice of some foods. For instance, a student with good nutrition knowledge works to add fruits and vegetable to their food preparation. Moreover, there is consistent agreement in the field between students’ cultural factors and eating behavior of students. Students are from homes where they have been exposed to certain beliefs, taboos and fallacies about certain foods. Wherever the student finds himself/herself, it will be difficult for him or her to go against those home practices earlier learnt.

In addition, peer group factors are considered when students’ eating behavior is the focus. Peers are generally of the same age range and of the same class. They relate at the same level and share certain things in common. Common among peers is habits and aspirations. Similarly, they respect the friendship between them which may have positive or negative influence on the student. Peers sometimes sway themselves whether to smoke, take beverages or drink alcohol. Hence, \(^17\) asserted that superior and poor habits are acquired in these groups. Peer group form the main source of approval and rejection of the attitudes and behavior of many individuals. They take the criticisms of the group members seriously. This is the reason why peers may starve the body to attain desired body size, when their peers do not approve of their stature. These ties and bound between peers may be associated with their eating

**Dr. (Mrs) B.E. Uwameiye et al.** *Relationship between Three Context Factors and Food Behavior Of Students in Public Universities in Edo State*

41 | Page  
Research and Analysis Journal, Vol. 2, Issue 04, 2019
Dr. (Mrs) B.E. Uwameiye et al. / Relationship between Three Context Factors and Food Behavior

Of Students in Public Universities in Edo State

behavior. 18 reported that interactions between peers have been found to be strongly associated with adolescents’ dietary behavior particularly the unhealthy diet of fast foods and soft drinks.

Method of Study:

Research Design:

The research design adopted for this study is the ex-post-facto research design adopting correlation approach.

Population of Study:

The population for this study is made up of all students in all the public universities in Edo State, Nigeria.

Sample and Sampling Technique:

The sample was obtained using the multiple random sampling technique. The three public universities in Edo State Nigeria were used in this study. Using the balloting technique, five faculties in each university were selected for use in this study. Also using the balloting technique, five Departments in each faculty were selected for use. In each Department, 40 students were randomly selected for use in this study, using the balloting technique. A total of 1000 students were therefore used in this study.

Instrument for the Study:

A self-structured 43-item questionnaire titled “Context Factors and Food Behavior Questionnaire (CFFBQ)”. CFFBQ was administered for data collection. The source of information for CFFBQ was the following: 1. Students’ Eating Behaviour, 2. Students’ Personal Factors, 3. School Environmental Factors and 4. Peer Group Factors. Information was also sought from public opinion on the matter. 12, 11, 12, and 8 questions respectively were raised from Students Eating Behaviour, Students’ Personal Factors, School Environmental Factors and Peer Group Factors. The Four point scale was used in this study, utilizing the following:

- Strongly Agree (SA) 4 points
- Agree 3 points
- Strongly Disagree (SD) 2 points
- Disagree 1 point

Validity of the Instrument:

The instrument was validated by two experts in Home Economics in the Department of Vocational and Technical Education, Ambrose Alli University, Ekpoma. The experts’ suggestions were taking into consideration in the final draft of the questionnaire.

Reliability of the Instrument:

Reliability of the instrument was established by the test retest procedure whereby the instrument was administered to the same subjects twice with a time lag of two weeks. Cronbach Alpha was used to test the consistency of the two sets of data obtained; yielding a reliability index of 0.88 indicating that the instrument was reliable.

Data Collection Technique:

1000 copies of the questionnaire were distributed by hand to the respondents at their various faculties and only 956 were correctly filled and returned for analysis after a period of two weeks which was 95.6% return rate. Three trained research assistants assisted the researcher in the administration of the instrument.

Data Analysis:
The main statistical tool used in this study is the mean, standard deviation and Pearson Product Correlation Coefficient (PPMC). For decision taken on the questionnaire, a mean of 2.5 was taken as the decision line such that any mean 2.5 above was taken as the decision line. Thus, any mean 2.5 and above is ‘Agree’ while a mean below 2.5 is ‘Disagree’.

**Presentation of Results:**

Research Question 1: What is the relationship between students’ personal factors and their eating behaviour among public university students in Edo State, Nigeria?

Hypothesis 1: There is no significant relationship between students’ personal factors and their eating behavior among public university students in Edo State Nigeria

| Variable                     | Mean  | N    | DF  | SD  | R    | P    | Remark |
|------------------------------|-------|------|-----|-----|------|------|--------|
| Eating behavior              | 72.02 | 956  | 954 | 7.52| 0.62 | 0.00 | sig    |

Table 1 indicates that there is a significant relationship between personal factors and eating behavior of respondents. (r=0.62; P<0.05). This reveals that unique characteristics peculiar to respondents influenced their eating behavior.

Research Question 2: What is the relationship between school environment factors and the eating behavior among public university students in Edo State, Nigeria?

Hypothesis 2: There is no significant relationship between school environment factors and eating behavior among public university students in Edo State Nigeria

| Variable                        | Mean  | N    | DF  | SD  | R    | P    | Remark |
|---------------------------------|-------|------|-----|-----|------|------|--------|
| Eating behavior                 | 72.02 | 954  |     | 7.52| 0.078| 0.00 | Sig.   |

Table 2 shows that there is a significant relationship between school environment factors and eating behavior of respondents. (r=0.078;P<0.05). This indicate that the more they integrate into the school environment the more the respondents eating behavior are influenced.

Research Question 3: What is the relationship between peer factors and the Students’ eating behaviour among public university students in Edo State, Nigeria?

Hypothesis 3: There is no significant relationship between eating behavior of Students’ and their peer factors among public university students
Table 3: Relationship between Peer Factors and Students’ Eating Behavior.

| Variable       | Mean | N   | DF  | SD  | R    | P       | Remark |
|----------------|------|-----|-----|-----|------|---------|--------|
| Eating Behavior| 72.02| 956 | 954 | 7.52| 0.76 | .000    | Sig.    |
| Peer factor    | 63.05|     |     | 18.81|     |         |        |

Table 3 reveal that there was a significant relationship between peer factors and eating behavior of respondents. (r.076: P<0.05). This implies that as the respondents relates with peers, friends, classmates and hostel mates their eating behavior are also influenced.

Discussion:

The result of this study shows that there is a significant relationship between personal factors and eating behavior of students. This finding corroborates 19, who opined that personal factors which include attitudes, beliefs, food preferences, self-efficacy and also biological changes are capable of influencing the eating behavior of people. This is an indication that eating behavior has a lot to do with the persons. Similarly, 16 reported higher diet quality among females than males. This is as a result of female students having better culinary skills than the male counterparts. Females are cultured to cook meals at home, so should be able to prepare varieties of dishes at school. This in turn differentiates the relationship between males and females in their eating behavior at school. This is also in line with the argument of 20, whose findings identified personal factor as one of the eight key factors responsible for food choices. Also, 1 supported the finding when he indicated that eating behavior among students are determined by a complex interplay between motivations and self-regulatory skills in college life. Similarly, 21 opined that psychological factors which are within the person such as attitudes, beliefs and self-efficacy are capable of influencing the eating behavior of people.

Furthermore, this study reveals that there is a significant relationship between school environment and eating behavior of respondents. This finding is supported by 15 who associated school environment with the respondents eating behavior. It must be noted that students usually carry out all their academic activities in a confined environment which is the school campus; therefore, students patronize school canteens, eateries and shops to have their meals. Similarly, 22 undertook a 24-hour recall study of middle aged scholars and found that the availability of a la carte food in the school was inversely related to fruits and vegetable intake and was positively correlated with fat intake.

In addition, this study reveals that there is a significant relationship between peer factors and eating behaviour of public university students in Edo State, Nigeria. This is in line with the findings of 23 who opined that peer likability was the major contributor in predicting eating and body concerns. Their findings indicated that relating with friends, course mates and roommates can influence the undergraduates’ eating behaviour.

Conclusion and Recommendations:

This study has shown that eating behavior of the undergraduates in tertiary institutions in Edo State is associated with students’ personal factors, school environment factors and peer factors. Therefore measures should be put in place to improve students eating behavior. Based on the findings, the recommendations were that:
Dr. (Mrs) B.E. Uwameiye et al. / Relationship between Three Context Factors and Food Behavior

Of Students in Public Universities in Edo State

1. Stakeholders and school authorities should give nutrition education a place in the tertiary school system. For lack of nutrition knowledge will give room to various influential factors to dictate the eating behavior of the undergraduates.

2. The university authority should provide outfits for monitoring the type of foods sold on campus, so as to provide sufficient opportunities for students to improve and develop good eating behavior.

3. Awareness campaign such as the use of workshops, posters, seminars and lectures should be organized by school authorities and stakeholders every semester to create consciousness among students on the need to eat healthy.

Teachers of home economics should be made to educate students regularly on the effect of poor eating behavior on their overall health.

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Dr. (Mrs) B.E. Uwameiye et al. / Relationship between Three Context Factors and Food Behavior

Of Students in Public Universities in Edo State

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