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EFFECTS OF EMOTIONAL EATING ON THE ALIMENTARY-UNHEALTHINESS OF FEMALE STUDENTS IN IGNATIUS AJURU UNIVERSITY OF EDUCATION RIVERS STATE, NIGERIA

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ABSTRACT

The likelihood that the disposition to eat in reaction to impulses and emotions rather than thirst and hunger could be associated with poor dieting behaviour and its attendant nutritional diseases prompted the study on effects of emotional eating on alimentary-unhealthiness of female students in Ignatius Ajuru University of Education. A cross-sectional study of 360 equitably selected undergraduate female students (aged 16-30 years) across six (6) faculties participated in the study. A 20 item self-structured instrument titled "University Students Emotional Eating and Alimentary Unhealthiness Scale" (USEEAUS) was used for the collection of data analyzed using mean, standard deviation and Pearson Product Moment Correlation (PPMC). The study revealed that non-adherence to meal schedules ($\bar{X} = 3.72$ & $r = 0.830$), unhealthy dietary pattern ($\bar{X} = 3.69$ & $r = 0.835$), skipping breakfast ($\bar{X} = 3.73$ & $r = 0.830$), and poor dieting behaviour ($\bar{X} = 3.66$ & $r = 0.838$) positively and very strongly correlated with the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State. The study recommended that Home Economics, Hospitality and Tourism Department should organize sensitization programmes aimed at helping to raise awareness on the importance of adhering to meal schedules to female students' agility, stamina and fitness towards effectively attending lectures and successful accomplishing the goal of university education. Alongside, the academic planning unit in Ignatius Ajuru University of Education should schedule lectures with one hour afternoon break period to enable female students to eat, rest and become refreshed and energized to attend other afternoon-evening lectures including social activities. Keywords: Emotional Eating, Alimentary-Unhealthiness, Female Students, IAUE.

INTRODUCTION

Emotional eating (EE) entails the increased impulsive or spontaneous consumption of food and drink in response to emotions or present frame of mind that most often causes stressors among other negative issues (Manchón et al., 2022). This makes it to be aptly ascribed as an eating

disorder because it is mostly associated with an individual's intake of certain foods and drinks as a result of stressful situations to the response to negative emotions issues and debilitating stressors. Naja and Hamadeh (2020) stated that positive mood could result in an individual increase intake of healthy and even unhealthy foods. However, Konttinen (2020) stated that emotional eating could emanate as an individual crave or desire for foods as a reaction to ease, console, alleviate and/or respond from the traumatic experiences, stressful issues or negative emotions such as separation, divorce, heartbreak, anxiety, anger, depression and loneliness that occurs anytime.

Traumatic experiences that induce intense anxiety tend to beget and overwhelm an individual with emotions that could precipitate towards impulsive activities and reactions among which include eating and drinking what he/she may not ordinarily consume if the situation was not at that moment stressful (Scott et al., 2020). In view of this, Mróz et al. (2022) pointed out that emotional distress and anxiety seem to play a key role in really or intuitively defining or predicting an individual's choice and consumption of unhealthy quantity of foods that could likely increase their Body Mass Index (BMI) and its associated health challenges. Asouzu (2014) found that the possession of high BMI could predispose an individual to obesity, diabetes among other non-communicable nutritionally-induced diseases.

Also, traumatic experiences that stir negative emotions often lead to the excessive intake of foods rich in fats and sugars (such as chocolates, caffeinated drinks, alcohol, etc.) and its associated abdominal obesity, overweight and other diseases induced by nutritional-unhealthiness (Asouzu, 2017; Betancourt-Núñez et al., 2022). Similarly, Betancourt-Núñez et al. (2023) stated that a person's non-adherence to advisory on daily eating of vegetables and fruits as well as not eating breakfast and skipping daily meals leads to high calorie and buildup of cholesterol climaxes to alimentary-unhealthiness (conceptualized as nutritional unhealthiness due to negative dietary behaviours that could predispose an individual to nutritional diseases). This implies that female university students that are susceptible to skipping breakfast and even lunch due to their justifiably involvement in jam-packed lectures or class sessions can be summarily termed as alimentary-unhealthy due to their poor dietary behaviours that is often associated with negative health impacts.

Eating breakfast may be an important dietary behaviour for cardiometabolic health. Therefore, consuming breakfast is common among young adults, yet it appears to be the most frequently skipped or missed meal especially among those university students who are disposed to catching up on early morning class or exam schedules (Pendergast et al., 2016). Thus, the quest towards meeting up with lecturers on daily and even weekend basis in universities can be stressful (Deliens et al., 2014). The stressful nature of the university is linked to unhealthy changes that increasingly alters students eating behaviours due to their living conditions, engaging in social activities and meeting often busy academic schedules that is now known to relate to an individual's dietary behaviours that extends to their alimentary or nutritional health status (Sogari et al., 2018).

Furthermore, socio-economic statuses, emotional state, living conditions as well as meeting or fulfilling engagements (social, religious, academic and official) aggregates to the daily routines and hustles. These regular routines and hustles preoccupy a person's mind with issues that may greatly influence or affect the eating habit and diet quality of themselves and even other

dependents or subordinates across varying age stratification (such as infants, children, adolescents, adults and even aged). In view of this, Matsumura et al. (2022) stated that the attitude of university students skipping breakfast and indulging in the intake of alcoholic or energy drinks in the course of meeting early class schedules and tarrying in daily academic activities culminates to poor dietary behaviour and alimentary-unhealthiness that could overtime result in adverse health impacts.

Also, an individual's quest towards fulfilling assignments, appointments and activities could engulf his/her emotions resulting to impulsive reactions that could be highly linked or associated with the excessive consumption of energy-dense, fat-rich and fibre-low foods that can predispose them to obesity and its associated health challenges (Asouzu, 2014; 2017; Ripoll et al., 2022). Corroborating this view, Betancourt-Núñez et al. (2023) linked eating in reaction to activities and programmes that engulfs emotions (like meeting appointments, early class schedules, etc.) to the intake of energy and macronutrients, especially fats and carbohydrates and excluding fibre-rich foods. Thus, the continuity of these stressors that engulfs a person's emotions as well as induces impulsive or spontaneous dieting could overtime lead to their addiction to certain foods and drinks either as stabilizers, stimulants and sedatives culminates to alimentary unhealthiness that often come with negative rather than positive health impacts. This standpoint was corroborated by Gonçalves et al. (2022) that observed in their study that only females reported having a food addiction. This could explain why the majority of obesity cases are evident in females.

The transition to university is crucial for young people particularly females in respect to making dietary choices that should promote their health, yet they are highly inclined to adopting unhealthy eating habits that can predispose them to weight gain (Asouzu & Uku, 2014; Asouzu, 2017; Alharbi & Alharbi, 2023). Also, female university students fall into the young people that erroneously regard the routine, pattern and motives of consuming certain foods and alcohol as a source of pleasure, status achievement and fulfillment of their social lives and economic prowess (Scott et al., 2020; Okumus et al., 2022). On the other hand, university students are predominantly young adults that are in a very important period of their life where they are inclined to establish good habits and healthy eating patterns (Betancourt-Núñez et al., 2022). These healthy eating patterns will build their immunity against the nutritional and chronic diseases that would in the short and long run affect the quality of their life (Deliens et al., 2014; WHO, 2015; Asouzu, 2020).

Unhealthy eating behaviour that is rife among female university students is directly related to their heavy alcohol usage in reaction to their ego, social, emotional and cultural lives (Scott et al., 2020). Obviously, a greater percentage of emotionally-induced dieting could manifest in overeating that is usually associated with alcohol intake that can adversely impact on the normal-weight of female university students (Constant et al., 2018). Also, poor dietary behaviour is closely associated with poor dieting on plant protein rich foods especially beans, cowpea and soyabean among female university students (Abraham et al., 2018; Asouzu, 2021; Okumus et al., 2022). Another form of poor dietary behaviour that is triggered by female reaction to school, social and extracurricular activities that emotionally overwhelms them is poor quality sleep and rest time. Gelaye et al. (2014) reiterated that having quality sleep and rest time could have impact on the mental health of university students. In view of this, Aucoin et al. (2021) observed a relationship between diet and multifaceted mental health issues that can affect academic outcomes.

The typical motivation to eat like thirst, hunger and fatigue differs from the motives behind emotional eaters increased intake of food and drink that they perceive will distract, comfort or console them as well as regulate their emotions from stressors ultimately leads to addiction (Macht, 2008; Alharbi & Alharbi, 2023). In this regard, female students are prone to experience and report high-level anxiety and nutritionally-induced ailments like obesity, cardiovascular diseases from unhealthy dieting (Mróz et al., 2022). Costarelli and Michou (2023) stated that poor dietary behaviour mainly from impulsive eating rather than craving or hunger for food and drink can make female students alimentary unhealthy. This implies that impulse eating can affect female students' dietary health and mental composure to effectively learn and attain high academic achievement.

Lopez-Moreno et al. (2020) observed that more emotional experiences and changes that incites spontaneous reactions and impulsive eating occur in females especially during the period of their studentship in colleges and tertiary institutions (like universities). Alluding to this, Alharbi and Alharbi (2023) assert that the dietary patterns that is accentuated by emotions or sentiments rather than thirst, hunger, appetite and fatigue occur more among female university students. Also, eating energy-dense, high-sugar, fatty and low-fibre foods as well as drinking energy, caffeinated and alcoholic drinks in response to emotions rather than real hunger for food and thirst for water respectively is considered alimentary-unhealthiness (i.e. poor dietary pattern) that can predispose them to obesity and cardiovascular diseases that is associated with anxiety, depression, sleepy or sluggish nature, and disordering of genes (Asouzu, 2017; Konttinen, 2020; Aucoin et al., 2021).

Globalization has facilitated shifts from individual-initiated and accepted practices such as counselling, retrospection, resting and even sleep as first response to emotional debilitating issues and experiences. These practices have now transited to social media propelled lifestyles and suggestions that could lead to the intake of food and drink as the first and sometimes the only response for stresses and emotional issues. Corroborating this view, Lovan et al. (2022) observed that female students appeared to have lower inclination and susceptibility to eat food based on internal bodily workings and signals of hunger and satiety to now higher reliance on extraneously propelled actions especially from technology as well as emotions to regulate or control their dieting patterns in high activity environment (like universities) in Nigeria.

Furthermore, alimentary or nutritional unhealthiness could result in the regular intake of non-nutritive foods and drinks (like soft, caffeinated and alcoholic) that is existing among female university students can stimulate anxiety, restlessness or nervousness that could impede their cognitive development in the university (Mróz et al., 2022). Hence their study found a significant relationship between alcohol consumption and the perception of apathy and anxiety related to food addictions and cravings between meals. This therefore, implies that the instinctive, spontaneous or impulsive eating could most often or at a greater percentage lead to an individual's choice of either small or large quantity of unhealthy diets or foods rather than his/her choice of quality foods that is supposed to promote their proper dieting, nutritional health, wellbeing and holistic development.

Statement of the Problem

Emotion propels and controls human's indulgence and participation respectively in virtually all social, religious, educational, occupational, extracurricular and even nutritional engagements or schedules. Implicitly, age and gender as well as socio-economic status, living conditions among other inevitable and transiting demographics respectively could engulf an individual's emotions so much so that it could greatly influence their own schedules (like meal) as well as that of even their dependents or subordinates across different age groups (like infants, children, adolescents, adults and aged). In specificity, the sentiments, impulses and reactions that emanate from emotionally overwhelming issues and activities have the propensity to affect the dietary patterns and extensively the health of even the female students in universities.

The likely effect of emotionally nauseating issues to virtually everything including food intake underscores the emphasis and association of meal intake (especially breakfast and lunch) with high extent of reaction to emotionally devastating issues rather than thirst, hunger and fatigue that would help food to serve its purpose of replenishing lost energy, needed nutrients and repairing tissues. However, and unfortunately so, the skipping of meals like breakfast and lunch that is synonymous with students even with the right reasons or intents of catching up with class schedules, timely turning-up assignments, and participating in social activities could be quite problematic. Thus, the weight of this nutritionally-induced problem that is accentuated by poor dietary behaviour and pattern stems on the resultant unhealthiness or health effects such as malnutrition, ulcer, weight loss, etc. on the female university students. It is based on this backdrop that this study examines the effects of emotional eating on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education Rivers State, Nigeria.

Objectives of the Study

The objective of the study are to:

1. examine how the activities causing non-adherence to meal schedules relate to the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State.
2. identify how the constituents of unhealthy dietary pattern contribute to the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State.
3. ascertain the effect of skipping breakfast on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State.
4. determine the effects of poor dieting behaviour on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State.

Research Questions

1. How does the activities causing non-adherence to meal schedules relate with the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State?
2. How does the constituents of unhealthy dietary pattern contribute to the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State?
3. What are the effects of skipping breakfast on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State?
4. What are the effects of poor dieting behaviour on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State?

Methodology

Research Design: The cross-sectional study was conducted among undergraduate female students at Ignatius Ajuru University of Education Rumuolumeni Obio-Akpor Local Government Area, Rivers State.

Study Area: The study was carried out in Rumuolumeni Obio-Akpor Local Government Area, Rivers State where Ignatius Ajuru University of Education (IAUE) is located. Ignatius Ajuru University of Education is one of the two state government-owned universities in Rivers State. In addition, Ignatius Ajuru University of Education (IAUE) comprises of seven (7) faculties namely Education, Social Science, Humanities, Management, Natural and Applied Sciences, Vocational and Technical Education, and Agriculture. However, the first six faculties have departments that are located in Rumuolumeni campus (i.e., main campus) with all the departments in the seventh faculty located at the Ndele campus. Each of the six (6) faculties has different departments where students (both male and female) are admitted to run Bachelor of Education (BEd.), Bachelor of Arts (BA), and Bachelor Science (BSc.) programme.

Population of the Study: The population of the study comprised all the 8597 female undergraduate students in the six (6) faculties that are located in the Rumuolumeni campus of Ignatius Ajuru University of Education (IAUE).

Sample and Sampling Technique: A sample of three hundred and sixty (360) undergraduate female students age 16-30 years were equitably selected (60 each) using random sampling technique across the six (6) faculties (such as Education, Social Science, Humanities, Management, Natural and Applied Sciences, and Vocational and Technical Education) that are located in the Rumuolumeni campus of Ignatius Ajuru University of Education (IAUE).

Instrument for Data Collection: A 20 item self-structured instrument titled "University Students Emotional Eating and Alimentary Unhealthiness Scale" (USEEAUS). The USEEAUS instrument was patterned after a four point rating scale of "Strongly Agree" (SA = 4 Points), "Agree (A = 3 Points), "Disagree" (D = 2 Points), and "Strongly Disagree" (SD = 1 Point). In terms of validity, the USEEAUS instrument was validated by two (2) nutritionists from the Department of Home Economics and Hospitality Management; Ignatius Ajuru University of Education in order to effectively determine what the instrument purports to measure. Also, the reliability of the USEEAUS instrument was ascertained using Cronbach Alpha (r_a) method to determine a reliability coefficient of 0.916, which necessitated the use of the USEEAUS instrument for data collection.

Method of Data Collection and Analysis: The face-to-face direct delivery technique was used for the collection of data. Out of the 360 copies of the USEEAUS instrument that was administered to the respondents, only 331 copies (approximately 92% return rate) analyzed using mean, standard deviation and Pearson Product Moment Correlation (PPMC) to answer the research questions. All analysis was done using statistical package for social science (SPSS) version 23.0.

Results

Research Question 1: How does the activities causing non-adherence to meal schedules relate with the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State?

Table 1: Mean, Standard Deviation and Pearson Product Moment Correlation (PPMC) on how the activities causing non-adherence to meal schedules relate with the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State

S/N	How activities causing non-adherence to meal schedules relate with alimentary-unhealthiness among female students in Ignatius Ajuru University of Education include:	N = 331		r	Decision
		Mean	SD		
1	Tight scheduling of education and core courses	3.73	.46	.837**	SA/VS
2	Jam-packed scheduling of courses in the timetable without break affect meal and rest time	3.63	.51	.829**	SA/VS
3	Stress associated with GNS courses can lead to skipping meals	3.70	.47	.814**	SA/VS
4	Intent of getting seats during class and exam schedules can lead to skipping meals	3.69	.47	.848**	SA/VS
5	Meeting up with early morning class schedules can lead to skipping meal	3.84	.39	.822**	SA/VS
Grand Mean		3.72	0.46	.830**	SA/VS

SA (Strongly Agree) = ≥ 2.50 while SD (Strongly Disagree) < 2.50. Also VS (Very Strong) $r = \geq 0.800$, S (Strong) $r = 0.600- 0.799$, M (Moderate) $r = 0.400- 0.599$ while W (Weak) $r = \leq 0.399$

Table 1 shows the mean, standard deviation and Pearson Product Moment Correlation (PPMC) on how the activities causing non-adherence to meal schedules relate with the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State include: meeting up with early morning class schedules can lead to skipping meal ($\bar{x} = 3.84$ & $r = 0.837$) in item 5, tight scheduling of education and core courses ($\bar{x} = 3.73$ & $r = 0.829$) in item 1, stress associated with GNS courses can lead to skipping meals ($\bar{x} = 3.70$ & $r = 0.814$) in item 3, intent of getting seats during class and exam schedules can lead to skipping meals ($\bar{x} = 3.69$ & $r = 0.848$) in item 4, while the least was jam-packed scheduling of courses in the timetable without break affect meal and rest time ($\bar{x} = 3.63$ & $r = 0.822$) in item 2. Furthermore, the grand score of 3.72 and correlation coefficient (r) of 0.830 indicated that the activities causing non-adherence to meal schedules positively and very strongly correlated with the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State.

Research Question 2: How does the constituents of unhealthy dietary pattern contribute to the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State?

EFFECTS OF EMOTIONAL EATING ON THE ALIMENTARY-UNHEALTHINESS OF FEMALE.....**Table 2:** Mean, Standard Deviation and Pearson Product Moment Correlation (PPMC) on how the constituents of unhealthy dietary pattern contribute to the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State

S/N	How the constituents of unhealthy dieting pattern contribute to alimentary-unhealthiness among female students in Ignatius Ajuru University of Education include:	N = 331			Decision
		Mean	SD	r	
1	Non-eating of fruits, vegetables and breakfast increase calorie and buildup of cholesterol	3.62	.54	.815**	SA/VS
2	Intake of energy, caffeinated and alcoholic drinks to console and regulate emotions lead to addiction	3.80	.44	.828**	SA/VS
3	High intake of fatty, high calorie and low-fibre foods can lead to metabolic diseases like diabetes, heart disease and obesity	3.69	.48	.832**	SA/VS
4	Regular and excessive intake of candies, pastries and other sweets can be linked to abdominal obesity and diabetes	3.54	.54	.851**	SA/VS
5	Regular eating of snacks alone without observing rest, siesta and physical exercise can lead to poor mental health and low-level articulation in the class	3.79	.41	.849**	SA/VS
Grand Mean		3.69	0.48	.835**	SA/VS

SA (Strongly Agree) = ≥ 2.50 while SD (Strongly Disagree) < 2.50. Also VS (Very Strong) $r \geq 0.800$, S (Strong) $r = 0.600- 0.799$, M (Moderate) $r = 0.400- 0.599$ while W (Weak) $r = \leq 0.399$

Table 2 shows the mean, standard deviation and Pearson Product Moment Correlation (PPMC) on how the constituents of unhealthy dietary pattern contribute to the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State include: intake of energy, caffeinated and alcoholic drinks to distract, console and regulate emotions can lead to addiction (\bar{x} = 3.80 & $r = 0.828$) in item 2, regular eating of snacks alone without observing rest, siesta and physical exercise can lead to poor mental health and low level articulation in the class (\bar{x} = 3.79 & $r = 0.849$) in item 5, high intake of fatty, high calorie and low-fibre foods can lead to metabolic diseases like diabetes, heart disease and obesity (\bar{x} = 3.69 & $r = 0.832$) in item 3, non-eating of fruits, vegetables and breakfast increase calorie and buildup of cholesterol (\bar{x} = 3.62 & $r = 0.815$) in item 1, while the least was regular and excessive intake of candies, pastries and other sweets can be linked to abdominal obesity and diabetes (\bar{x} = 3.54 & $r = 0.851$) in item 4. Furthermore, the grand score of 3.69 and correlation coefficient (r) of 0.835 indicated that the constituents of unhealthy dietary pattern positively and very strongly correlated to the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State.

Research Question 3: What are the effects of skipping breakfast on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State?

Table 3: Mean, Standard Deviation and Pearson Product Moment Correlation (PPMC) on the effects of skipping breakfast on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State

S/N	The effects of skipping breakfast on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education include:	N = 331			Decision
		Mean	SD	R	
1	Increases the opportunity for the intake of high calorie foods that rises their cholesterol level	3.78	.49	.816**	SA/VS
2	Rising level of addiction to energy and alcoholic drinks affects mental health and emotional stability needed for effective study in the university	3.60	.60	.827**	SA/VS
3	Regular intake of snacks and junk foods with their high sugar, calorie and fat content can affect the cardiometabolic health of female students	3.74	.48	.839**	SA/VS
4	Skipping breakfast increases female students experience of malnutrition, ulcer, weight loss, obesity and diabetes with its related depress mood	3.89	.32	.825**	SA/VS
5	Rising level of restlessness, sleepiness and stress that affects proper articulation	3.65	.49	.843**	SA/VS
Grand Mean		3.73	0.48	.830**	SA/VS

SA (Strongly Agree) = ≥ 2.50 while SD (Strongly Disagree) < 2.50 . Also VS (Very Strong) $r = \geq 0.800$, S (Strong) $r = 0.600- 0.799$, M (Moderate) $r = 0.400- 0.599$ while W (Weak) $r = \leq 0.399$

Table 3 shows the mean, standard deviation and Pearson Product Moment Correlation (PPMC) on the effects of skipping breakfast on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State include: skipping breakfast increases female students experience of malnutrition, ulcer, weight loss, obesity and diabetes with its related depress mood ($\bar{x} = 3.89$ & $r = 0.825$) in item 4, increases the opportunity for intake of high calorie foods that rises their cholesterol level ($\bar{x} = 3.78$ & $r = 0.816$) in item 1, regular intake of snacks and junk foods with their high sugar, calorie and fat content can affect the cardiometabolic health of female students ($\bar{x} = 3.74$ & $r = 0.839$) in item 3, rising level of restlessness, sleepiness and stress that affects proper articulation ($\bar{x} = 3.65$ & $r = 0.843$) in item 5, while the least was increased level of addiction that can affect mental health and emotional stability for studying ($\bar{x} = 3.60$ & $r = 0.827$) in item 2. Furthermore, the grand score of 3.73 and correlation coefficient (r) of 0.830 indicated that the effects of skipping breakfast positively and very strongly correlated with alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State.

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Research Question 4: What are the effects of poor dieting behaviour on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State?

Table 4: Mean, Standard Deviation and Pearson Product Moment Correlation (PPMC) on the effects of poor dieting behaviour on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State

S/N	The effects of poor dieting behaviour on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education include:	N = 331			Decision
		Mean	SD	r	
1	Poor eating habit increases calorie and buildup of cholesterol that leads to obesity and heart diseases	3.76	.45	.836**	SA/VS
2	Avoiding plant protein rich foods results to increase in body mass index	3.51	.52	.852**	SA/VS
3	Skipping of fruits and vegetables results to weight issues, oxidative stress and inflammation in the body	3.79	.44	.819**	SA/VS
4	Reduced intake of water in place of soft, energy, caffeinated and alcoholic drinks can lead to dehydration	3.61	.50	.847**	SA/VS
5	Seating for long hours in the class without break can lead to back pain and lack of rest that triggers complex mental health issues that affects students' composure and emotional stability	3.63	.51	.835**	SA/VS
Grand Mean		3.66	0.48	.838**	SA/VS

SA (Strongly Agree) = ≥ 2.50 while SD (Strongly Disagree) < 2.50. Also VS (Very Strong) $r = \geq 0.800$, S (Strong) $r = 0.600- 0.799$, M (Moderate) $r = 0.400- 0.599$ while W (Weak) $r = \leq 0.399$

Table 4 shows the mean, standard deviation and Pearson Product Moment Correlation (PPMC) on the effects of poor dieting behaviour on the alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State include: skipping of fruits and vegetables results to weight issues, oxidative stress and inflammation, swelling or sore in the body ($\bar{x} = 3.79$ & $r = 0.818$) in item 3, poor eating habit increases calorie and buildup of cholesterol that leads to obesity and cardiovascular or heart-related diseases ($\bar{x} = 3.76$ & $r = 0.836$) in item 1, seating for long hours in the class without break can lead to back pain and lack of rest that triggers complex mental health issues that affects students composure and emotional stability ($\bar{x} = 3.63$ & $r = 0.835$) in item 5, reduced intake of water in place of soft, energy, caffeinated and alcoholic drinks can lead to dehydration ($\bar{x} = 3.61$ & $r = 0.847$) in item 4, while the least was avoiding plant protein rich foods results to increase in body mass index ($\bar{x} = 3.51$ & $r = 0.852$) in item 2. Furthermore, the grand score of 3.66 and correlation coefficient (r) of 0.838 indicated that poor dieting behaviour positively and very strongly correlated with the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State.

Discussion of Findings

The result in Table 1 revealed a grand score of 3.72 and correlation coefficient (r) of 0.830, which indicated that how the activities causing non-adherence to meal schedules positively and very strongly correlated with the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State include: meeting up with early morning class schedules can lead to skipping meal, tight scheduling of education and core courses, stress associated with GNS courses can lead to skipping meals, intent of getting seats during class and exam schedules can lead to skipping meals, and jam-packed scheduling of courses in the timetable without break affect meal and rest time. This finding is consistent with the previous finding by Pendergast et al. (2016) that women with university education were more likely to eat emotionally and skip meals due to the stressful experiences associated with their busy and jam-packed lectures, exams, academic and social schedules.

The result in Table 2 revealed a grand score of 3.69 and correlation coefficient (r) of 0.835, which indicated that the constituents of unhealthy dietary pattern positively and very strongly correlated to the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State include: intake of energy, caffeinated and alcoholic drinks to distract, console and regulate emotions can lead to addiction, regular eating of snacks alone without observing rest, siesta and physical exercise can lead to poor mental health and low level articulation in the class, high intake of fatty, high calorie and low-fibre foods can lead to metabolic diseases like diabetes, heart disease and obesity, non-eating of fruits, vegetables and breakfast increase calorie and buildup of cholesterol, and regular and excessive intake of candies, pastries and other sweets can be linked to abdominal obesity and diabetes. This finding is in agreement with (Asouzu, 2017; Betancourt-Núñez et al., 2022) that regular and excessive intake of chocolates and other sweets including energy and caffeinated drinks that are rich in fats and sugars with reduced intake of water can be linked to abdominal obesity, overweight, and diabetes among other diseases induced by nutritional or alimentary-unhealthiness.

Furthermore, this finding aligns with Alharbi and Alharbi (2023) that the consumption of soft, caffeinated and alcoholic drinks to distract, console, stabilize and regulate their emotions can lead to addictions that can affect mental health. Equally, the studies by (Abraham et al., 2018; Okumus et al., 2022; Betancourt-Núñez et al., 2023) found that the non-intake of plant protein rich foods especially beans, cowpea and soyabean among female university students constitutes unhealthy dietary pattern that can lead to alimentary-unhealthiness. While Gelaye et al. (2014) found that the non-observance of rest and missing sleep can lead to poor mental health and improper articulation that makes students attending class confused and affects their performance. Also, the study by (Asouzu, 2014; 2017; 2021) revealed that eating energy-dense, fatty, high calorie, and low-fibre foods predisposes women to obesity challenges. While Betancourt-Núñez et al. (2023) found that non-eating of fruits and vegetables and skipping of breakfast increase calorie and buildup of cholesterol could culminate to alimentary-unhealthiness.

The result in Table 3 revealed a grand score of 3.73 and correlation coefficient (r) of 0.830, which indicated that the effects of skipping breakfast positively and very strongly correlated with alimentary-unhealthiness of female students in Ignatius Ajuru University of Education, Rivers State include: skipping breakfast increases female students experience of malnutrition, ulcer, weight loss, obesity and diabetes with its related depress mood, increases the opportunity for the intake of high calorie foods that rises their cholesterol level, regular intake of snacks and junk foods with their high sugar, calorie and fat content can affect the cardiometabolic health of female students, rising level of restlessness, sleepiness and stress that affects proper articulation, and increased level of addiction that can affect mental health and emotional stability needed for studying. This finding is consistent with the studies by (Asouzu, 2020; Matsumura et al., 2022; Costarelli & Michou, 2023) that skipping breakfast constitute poor or negative dietary behaviour and pattern that could overtime result in adverse health impacts that affects cardiometabolic health. Also, the finding of this study aligns with the findings in the studies by (Pendergast et al., 2016; Asouzu, 2020; Betancourt-Núñez et al., 2022; Mróz et al., 2022) that female university students are frequently skipping breakfast and missing meal in order to catch up with early morning class as well as meet up with jam-packed daily lecturers has the propensity to increase their experience of malnutrition, ulcer, weight loss, obesity and diabetes.

The finding of this study also agrees with the position of Deliens et al. (2014) that female students' participation in jam-packed lecturers with little or no break period could lead rising level of restlessness, sleepiness and stress that affects their mental health and proper articulation needed for academic success in universities. While (Asouzu & Uku, 2014; Ruiz et al., 2016; Asouzu, 2017; Liu, 2020; Asouzu, 2021; Veselska et al., 2021; Telleria-Aramburu & Arroyo-Izaga, 2022) found that the busy class schedules in university puts students in the habit of skipping healthy breakfast for intake of coffee, energy drinks, pies, sandwiches, croissants and other high sugar and calories junk foods increases sugar levels, body weight and obesity with its depressive stigmas and mental issues that can offset the mood required for female students to participate and excel in daily social and academic activities in the university.

The result in Table 4 revealed a grand score of 3.66 and correlation coefficient (r) of 0.838, which indicated that how the activities causing non-adherence to meal schedules positively and very strongly correlated with the alimentary-unhealthiness among female students in Ignatius Ajuru University of Education, Rivers State include: skipping of fruits and vegetables results to weight issues, oxidative stress and inflammation, swelling or sore in the body, poor eating habit increases calorie and buildup of cholesterol that leads to obesity and cardiovascular or heart-related diseases, seating for long hours in the class without break can lead to back pain and lack of rest that triggers complex mental health issues that affects students composure and emotional stability, reduced intake of water in place of soft, energy, caffeinated and alcoholic drinks can lead to dehydration, and avoiding plant protein rich foods results to increase in body mass index.

This finding is in agreement with the studies by (Aucoin et al., 2021; Matsumura et al., 2022), which found that the attitude of female university students skipping breakfast and reduced or no intake of water supplemented with alcoholic, energy or caffeinated drinks in order to meet up with all the busy class schedules and school activities culminates to poor dieting behaviour and

high-level addiction that is associated with dehydration and complex mental health issues. Also, (Antonio et al., 2016; Asouzu, 2017; 2020; Betancourt-Núñez et al., 2023) found that poor eating behaviour is very strongly associated with high-calorie and low-fibre foods, buildup of cholesterol that may have a direct effect on weight status, obesity, diabetes and heart related diseases that can induce mental issues, anxiety and depression that hinders the success of female university students.

Furthermore, this finding is similar with studies by (Mróz et al., 2022; Costarelli & Michou, 2023) that engaging in impulsive eating rather than craving or hunger for food and drink climaxes to poor dietary behaviour. Equally, studies by (Antonio et al., 2016; Asouzu, 2017; Abraham et al., 2018; Asouzu, 2021; Okumus et al., 2022; Alharbi & Alharbi, 2023) observed that poor dietary behaviour accentuates the non-intake of the daily required quantity of fruits and vegetables and foods rich in plant protein that increases incidence of dehydration, body mass index, oxidative stress, inflammation and obesity. Also, this finding aligns with (Asouzu & Uku, 2014; Becker et al., 2018; Pal & Moitra, 2022) that seating for long hours in the class in the busy class and exam schedules without break triggers sedentary lifestyle that can lead to back pain and lack of rest that triggers complex mental health issues that affects students' composure and emotional stability.

Conclusion

The study revealed that emotional eating was a catalyst that propelled the eating disorder, unhealthy dietary pattern, poor dietary behaviour and unhealthy habit exhibited by female students in Ignatius Ajuru University of Education. In specificity, impulsive eating rather than hunger for food and drink led to unhealthy/poor dietary patterns, behaviour and habit that is associated with intake of fatty, high-calorie, low-fibre, and low plant-protein foods. Alongside, low intake of daily required water, fruits and vegetables including low physical activity, exercise and rest. All these aggregated to alimentary unhealthiness that can increase incidence of diabetes, heart disease, obesity among others as well as back pain, stress, mental health issues and depression that very strongly affected their holistic success in the university. Furthermore, the eating disorder exhibited by female university students coerced them to skipping of breakfast and other meals for high sugar, calorie and fatty junk foods as well as energy, caffeinated and alcoholic drinks in order to meet very jam-packed lectures without break eventually predisposed them to ulcer, weight loss, obesity and diabetes that is associated with traumatic experience, depressive mood and poor articulation.

Hence, the study postulates a theory in its conclusion that the quest to meet with very busy or jam-packed academic and social schedules and activities propelled female students in Ignatius Ajuru University of Education to emotional eating. This occurred through their frequent cravings for fatty, high-calorie, low-fibre, and poor nutritive junk and cooked foods as well as intake of energy drinks and alcoholic drinks without water as supplement for skipped breakfast in response to emotional issues. In addition, the aggregation of these emotionally-induced eating with non-observance of physical exercise and rest in the midst of sedentary lifestyle of sitting hours in the class culminates to alimentary unhealthiness. Thus, alimentary-unhealthiness predisposes female students in Ignatius Ajuru University of Education to metabolic diseases such as diabetes, heart disease, obesity, dehydration, ulcer, diabetes, weight loss among others, including back pain, poor

mental health, and low articulation that could summarily impede successful university education. In a nut shell, this research provides further data that could contribute to the creation of a database of female undergraduate students inevitably inclined to poor dietary patterns, lifestyles, habits and behaviours giving rise to their alimentary-unhealthiness especially in Ignatius Ajuru University of Education.

Recommendations

1. Home Economics, Hospitality and Tourism Department should coordinate sensitization programmes aimed at helping to raise awareness on the importance of adhering to meal schedules to female students' agility, stamina and fitness towards effectively attending lectures and successful accomplishing the goal of university education.
2. The academic planning unit in Ignatius Ajuru University of Education should schedule lectures with one hour afternoon break period to enable female students to eat, rest and become refreshed and energized to attend other afternoon-evening lectures including social activities.
3. Female students should reduce the rate of skipping and substituting breakfast with intake of junk foods or snacks as well as energy, caffeinated and alcoholic drinks in order to prevent the incidence of malnutrition, ulcer, weight loss, obesity and diabetes among other negative health impacts linked to depression, anxiety and mental issues that can affect school performance.
4. Female university students are encouraged to prioritize their alimentary healthiness through proper intake of the daily required quantity of clean water, fruits and vegetables (like banana, oranges, pineapple, cucumber, water melon, peas, etc.), fibre-rich plant-protein foods (like beans, cowpea and soyabeans) and food supplements with nutrient levels that would enhance their immunity, agility, articulation and healthiness.
5. The management of Ignatius Ajuru University of Education should restart the "monthly walk and keep fit programme" to enable staff and students to physically exercise in order to burn-off calories, relieve back pain emotional stress occasioned by the regimented and sedentary lifestyle of female students during the daily jam-packed class schedules.

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