RESEARCH ARTICLE

LGU
Journal of Life Sciences
ISSN (Print): 2519-9404
ISSN (Online): 2521-0130

Evaluation of Psychological Behavior Towards Dietary Choices, Among Nutrition Science Students of Lahore

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DOI:10.54692/lgujls.2025.0901380

Vol 9 Issue 1 January- June 2025

Received: 20-01-2024

Revised: 04-06-2024

Accepted: 04-07-2024

Citation: Anjum K, Tariq A, Bajwa MAI, Saeed S (2025). Evaluation of Psychological Behavior Towards Dietary Choices, Among Nutrition Science Students of Lahore. LGU Journal of Life Sciences. 9(01):1-12.

ABSTRACT

The present study was done to evaluate the psychological relationship between dietary choices of nutrition students in Lahore. A sample of 400 nutrition students was taken, the age of which ranged from 18 to 25 years, all of these students were nutrition students. The cross-sectional Research method was used for this study. Data was collected using PSS-10 (Perceived Stress Scale) and EAT-26 (Eating Attitude Test). The surveys were made in person. The questionnaire included all the questions related to how the dietary choices of nutrition students were affected by environmental factors as well as academic stress. The Statistical Procedures and analysis techniques utilized in this research were descriptive analysis, inferential analysis, correlational analysis, and hypothesis testing. The hypothesis showed that there was a positive correlation between students with high self-esteem and good dietary choices. This study students behave psychologically when making nutritional decisions and how perceived stress correlates with eating pattern.

Keywords: Psychological behavior, Self-esteem, dietary choices, Stress eating, disordered eating behavior

INTRODUCTION

Psychological behavior has a great impact on dietary choices. A psychologically healthy person tends to have better quality of life. University students have dietary choices probably different from others because of accessibility and taste. Thus, university students consume fast food a lot (Falk et al., 2001). Most of the students ignore the basic food group recommendations. Poor dietary choices are a major concern among university students (Morse and Driskell, 2009). Factors such as stress, absence of time, substance misuse, and so forth are the obstructions against the reception of solid dietary decisions (Júdice et al., 2017). Though these psychological ways of behaving are brief, as a feature of college life undesirable dietary choices got up age. The fascinating field of nutrition sciences helps to understand the Psychological behavior

toward dietary choices. It inspects the cognitive, emotional, and motivational factors (Ross et al., 1999). That influences individuals' dietary choices. This foundation data gives an outline of the key components related to psychological behavior towards dietary choices.

It plays an important role in molding dietary choices. This incorporates decision-making and self-control (Papier et al., 2015). People depend on cognitive mechanisms to evaluate and pick between various foods choices. Factors like the accessibility heuristic (depending on promptly accessible data) or the mooring impact (being affected by starting data) can influence food choices. In addition, discretion is fundamental in opposing enticements and going with better dietary choices (Roman et al., 2019).

Both (Emotions and motivations) can affect dietary choices. Emotional eating is the act of consuming food as a response to emotional states including stress, sadness, or boredom. Individuals frequently use food as a survival technique to direct their feelings, which can prompt unfortunate decisions. Motivation, for example, the desire for weight reduction for certain body images, can likewise impact food choices. Emotions can cause 75% of overeating (Chad A. Buck, 2011). Both (Attitudes and beliefs) can affect dietary choices. Attitudes allude to people's assessments or sentiments towards specific food varieties or eating ways of behaving. Positive attitudes towards healthy foods, such as fruits and vegetables, can promote their consumption, while negative attitudes towards unhealthy foods, like fast food, sugary snacks or fried products, may lead to avoidance. Beliefs about the health benefits or risks associated with specific foods also play a role in dietary choices (Lim and van Dam, 2020).

It can play a role in dietary choices. Cultural norms, social influences, and environmental factors significantly affect food choices. Food availability, affordability, and convenience all are affected by social and cultural factors (Lo et al., 2009).

Key dominants of dietary choices are knowledge and education. People with knowledge of the nutritional value of different foods and the health risks associated with certain dietary choices are more likely to make informed and healthier choices. Education campaigns and interventions aimed at improving nutrition literacy can positively influence dietary behaviors (Wu et al., 2022). Psychological behavior towards dietary choices involves a range of factors that influence individuals' food choices. Cognitive processes, emotions, motivations, attitudes, beliefs, sociocultural factors, and health knowledge all can affect the dietary choices of individuals. Understanding these psychological factors provides information for developing interventions and strategies aimed at promoting healthy food choices (Shepherd, 1999).

Biological models propose that dietary choices are affected by individual-level and more extensive context-oriented factors including social/social, assembled climate, and strategy factors. As youth invest energy in numerous areas every day, with much time normally that they spend at home and at university the relevant

variables inside these areas will individually prompt, support, or compel active work and eating patterns related to psychological behaviors. For example, university might empower active work through actual exposure to the world and unfriendly dietary choices of (Li et al., 2022). Assessment of how areas relate to psychological behaviors and dietary choices. While past writing has exhibited contrasts in where youth gather moderate-to-overwhelming active work (MVPA). Supporting the significance of universities, and dietary ways of behaving shift across areas.

This cross-sectional study initially planned to analyze whether actual work, stationary time, and markers of sound and undesirable dietary choices towards psychological behaviors among university’s students and different areas as caught unbiasedly (actual work and stationary time) or from various 24-hour reviews with revealed behavior related to their diet (Yun et al., 2018). This point propels past work by all the while analyzing different wellbeing ways of psychologically behaving across areas to see completely locational designs for these ways of behaving. The concentrate's subsequent point

analyzed the relationship of these ways of behaving between different universities in Lahore (e.g., UMT, UCP, USA) to distinguish the degree to which students who participated in better ways of behaving in one area were bound to lock in better ways of behaving in different universities. While contrasts in MVPA across areas in this example have been introduced already in the current paper, areas were assembled diversely with the goal that similar areas could be researched between dietary choices and psychological behaviors (Justamente et al., 2020).

This study aims to inspect the psychological behavior toward food choices among university students and their association. The research will focus on identifying the prevalence of irregular eating patterns among the student population because of the risk of being overweight and underweight. Surveys will be used to gather data on student's dietary choices. The study will analyze the relationship between psychological behavior and food choices that may lead to irregular eating behaviors, such as skipping meals, snacking, and reliance on convenience foods. The findings will help to develop targeted interventions and educational programs to promote healthy food choices among this population.

Students have a problem with disordered eating attitudes. It is critical to recognize that these unhealthy eating habits are the result of the daily stress and overburdening that university student's encounter. Assessments, assessments, tasks, the fear of a failure, and peer pressure all cause stress in university students, which has a negative impact on their eating habits and radically modifies their nutritional choices. Students frequently engage into emotional eating; disturbed eating choices as a means of coping with the unpleasant feelings they confront academically (Meyer and Gast, 2008).

MATERIALS AND METHODS

Research design

An observational type of study was held in which cross sectional study was done in the form of questionnaires. After talking demographic and anthropometric data, two different scales were used including, the Perceived Stress Scale 10 (PSS-10) and Eating Attitudes Test 26 (EAT-26) (Ambrosi-Randić and Pokrajac-Bulian, 2005). The scales were then correlated to each other to see how stress plays a role in the different eating behaviors of nutrition major students.

Sample and sampling strategy

Questionnaires were distributed over the period of two months in different universities across Lahore, Pakistan offering Nutrition Science, Human Nutrition and Dietetics and Doctor of Nutrition Sciences programs. These universities included University of Management and Technology (UMT), University of Lahore, and University of Central Punjab. 400 questionnaires were distributed to students enrolled in Nutrition programs across these universities. The main objectives of the survey was explained to the respondents and the respondents agreed to give their consent before participating in the research. After screening, the questionnaires were used for further thorough analysis for correlational study.

Participant's inclusion criteria

The sample included in the study were students enrolled in Nutrition programs across different universities of Lahore. The sample included the students who; out of 25 those who were stressed, had disordered eating attitudes. The sample included students from the age group 19-25.

Participant's exclusion criteria

The sample did not include students who were diagnosed with diabetes; Type 1 Diabetes, Maturity onset diabetes of the young (MODY). The sample excluded students with different genetic metabolic disorders, any student diagnosed with psychiatric disorders, any infectious disease; viral or bacterial and also any student below the age of 19 or above the age of 25.

The aim of this study was to look into the psychological behavior towards dietary choices among nutrition science students of Lahore. In this study multistage and convenience sampling was used. In multistage sampling the population is divided into groups and them the sample is recruited

(Bhandari, 2023). It can be a complex form of sampling. While convenience sampling is the easiest for the researches to access and it provides fast results than random sampling methods.

Data Collection Techniques / Assessment Measures

Data collection tools

For this research Offline surveys (questionnaires) were held and then these surveys were used for data collection purposes. Students within the age group of 19 to 25 were selected, students from nutrition department of different universities.

Data collection techniques

The following are the scales that were used in this research:

Demographic

Form was made to determine the general characteristics of the participants which includes, age, gender, institution, marital status.

Anthropometric measurements

Anthropometric measurements were used to determine the physical condition of the participant, which includes the height in feet, weight in kg, BMI (kg/m2) and BMI is further characterized into three more categories. People with BMI less than 18.00 is considered underweight. People with a BMI ranging from 18.50 to 24.5 are considered as people with normal weight. People with a BMI ranging from 25 to 30 are considered overweight.

Perceived stress scale

We have used this scale to assess the mental condition of the participant. It is a measurement of how stressful certain circumstances are perceived to be in a person's life. The scale is used to assess the respondents' perception or feelings during the past month.

This scale consists of 1- question with scoring. For each question there are 5 alternatives and options, 0 indicates "never", 1 indicates "almost never", 2 indicates "sometimes", 3 indicates "fairly often" and lastly 4 indicates "very often" (Cohen et al., 1983).

Figuring your PSS scale

For some specific questions including 4, 5, 7, and 8, the scoring is reversed. 0 equals to 4, 1 equals to 3, 2 equals to 2, 3 equals to 1. And 4 equals to 0. Now to find the overall score add up the score from each item.

The total range of the PSS scale is 0 to 40.

- Low Stress: An overall score of 0-13.
- Moderate Stress: An overall score of 14-26.
- High Perceived Stress: An overall score of 27-40.

Depending on how every individual looks at different situations and how they react to these situations over the past month, the total scoring will place these individuals in the low stress category, moderate stress category, or the high stress category.

Eating attitude test

Another scale we have used in our research is eating attitude test. This test consist of

2 different parts. This includes a part A and a part B. Part A consists of 26 questions, and part B consists of behavioral questions, which are further distinguished into A, B, C, D,

E. Eat scale consist of three sub categories:

- Dieting
- Bulimia and food preoccupation
- Oral control

In this test 3 means "always", 2 means "usually", 1 means "often", 0 means "sometimes", 0 means "rarely", and 0 means "never". The total score between (0 and 78) provided an overall risk score, the higher scores indicate the greater risk of disordered eating patterns. And the total score which is 20 or above, suggests a higher likelihood of disordered eating attitudes and behaviors (Arnow et al., 1995).

Statistical procedures/ analysis techniques

For this study, Cochran's Method was selected to determine sample size. This method allows to calculation the sample size at the favored level of precision. This method was used for its immense benefits including less cost, greater speed, greater scope, and more accuracy. A sample of 400 students was collected. The material from which we are selecting the sample must be uniform and a large population was selected so Cochran's Method was used (Garritty et al., 2021).

Descriptive analysis

Descriptive statistics were applied to give a thorough overview and assessment of the sample population's demographics, eating habits, and psychological attitudes about food. Means, standard deviations, frequencies, and percentages were determined as key descriptive measures (Thompson, 2009). For example, the mean age, standard deviation, and age range of the participants were computed. Similarly, the frequency and proportion of students who reported having breakfast on a regular basis, as well as the sorts of foods usually consumed and their attitudes towards healthy eating, were summarized.

Inferential analysis

Inferential statistics were applied to analyze the correlations between numerous variables and to test hypotheses associated with Nutrition Sciences students' psychological behavior towards food choices (Allua and Thompson, 2009). The results of these analyses aimed to identify whether there were any significant relationships or differences between variables. Following are some examples of inferential analysis:

Correlational analysis

In order to determine the magnitude as well as the direction of the correlations among variables, correlational analysis was used. The correlation coefficient, for example, was performed to assess the relationship between the number of different servings of fruits and number of different servings of vegetables consumed every day and the student's scores on a test of psychological attitudes toward healthy eating. The test contained PSS scale and EAT scale (Curtis et al., 2016).

We have used the Version IBM SPSS STATISTICS 25. This is most reliable, we used for the statistical analysis of our data.

RESULTS

Distribution of students as per gender:

In the current study, the total sample size was 400. Table 1 showed that 185(46.3%) males and 215(53.8%) females.

Table 1: Distribution of students as per gender

Gender of the students					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	185	46.3	46.3	46.3
	Female	215	53.8	53.8	100.0
	Total	400	100.0	100.0	

Classification of data based on marital status:

Table 2 showed on marital status, total sample size was 400. The frequency of individuals from UMT (n=131(32.8%)), from UCP (n=132(33.0%)), and from USA (n=136(34%)), only n=1(0.3%) or totally 3% from total sample size found is married.

Table:2 Classification of data based on marital status

Educational institution					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	UMT	131	32.8	32.8	32.8
	UCP	132	33.0	33.0	65.8
	USA	136	34.0	34.0	99.8
	8.00	1	.3	.3	100.0
	Total	400	100.0	100.0	

Note: UMT= University of Management and Technology, UCP= University of Central Punjab, and USA= University of South Asia

Analysis of Cross-tabulation among EAT 26 and PSS 10:

Table 3 showed the results for cross-tabulation of EAT 26 and PSS 10, among a total sample size of 400 is also analyzed. The sample with risk less than 20 includes, 11 individuals with low stress, 153 with moderate stress, and 73 with high stress among total of 237 with this risk less than 20. On the other hand, the sample with 20 or more than 20, includes total 163 individuals, only 2 were with low stress. With moderate stress there were only 122, and 39 individuals with high stress.

Table:3 Analysis of Cross-tabulation among EAT 26 and PSS 10

Eating Attitude Test item no 26 * Perceived Stress Scale item no 10 Cross-tabulation					
Count					
		Perceived Stress Scale item no 10			Total
		Low stress	Moderate stress	High stress	

Eating Attitude Test item no 26	< 20 (low risk)	11	153	73	237
	20 or more (high risk)	2	122	39	163
Total		13	275	112	400

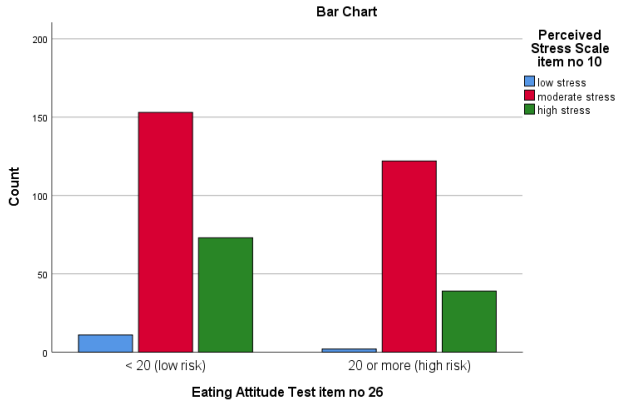

Figure:1 Analysis of Cross-tabulation among EAT 26 and PSS 1

Distribution of sample size according to BMI:

Table 4 showed, BMI was also calculated among the individuals. Among the total sample of 400 individuals, only 31(7.8%) individuals were found underweight. Among the rest of the sample size, only 311(77.8%) were found with normal BMI, and the remaining 58(14.5%) were found overweight according to their BMI.

Table:4 Distribution of sample size according to BMI

BMI					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Underweight	31	7.8	7.8	7.8
	Normal	311	77.8	77.8	85.5
	Overweight	58	14.5	14.5	100.0
	Total	400	100.0	100.0	

Other correlations applied:

Table 5 described, the correlations for PSS 10 and EAT 26, shows a Pearson Correlation of 1 and in EAT 10 the value is -0.034. And the value shows the negative correlation between stress and eating habits. If stress is more eating habits are disturbed too, and if stress is less eating habits are good too. The data is summarized in table 3.5.

Table:5 Other correlations applied:

Correlations			
		Perceived Stress Scale item no 10	Eating Attitude Test item no 26
Perceived Stress Scale item no 10	Pearson Correlation	1	-.034
	n	400	400
Eating Attitude Test item no 26	Pearson Correlation	-.034	1
	N	400	400

Chi-square for finding frequency:

In the current study, the Chi-square values have an expected count. If the p-value is <0.05, there is a statistically significant relationship, and that means the H_A is accepted. In this study the p-value = 0.037, hence the H_A is accepted and there is a statistically significant relationship between psychological behavior and dietary choices.

Table:6 Chi-square for finding frequency

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.582[a]	2	.037
Likelihood Ratio	7.078	2	.029
Linear-by-Linear Association	.459	1	.498
N of Valid Cases	400		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.30.			

Distribution on PSS-10 according to educational institution:

Table 7 showed the trends, a sample of individuals from UMT, (n=9 with low stress, n=87 with moderate stress, and n=35 with high stress). The sample from UCP contains individuals with (n=1 with low stress, n=94 with moderate stress, and n=37 with high stress). Among the USA, n=3 with low stress, 93 with moderate stress, and n=40 with high stress. Total of (n=131 from UMT, n=132 from UCP, and n=136 from the USA, n=1 sample not specified, where total sample size, n=400.

Table:7 Distribution on PSS-10 according to educational institution

Perceived Stress Scale item no 10 * Educational institution Cross tabulation

Count						
		Educational institution				Total
		UMT	UCP	USA	8.00	
Perceived Stress Scale item no 10	low stress	9	1	3	0	13
	moderate stress	87	94	93	1	275
	high stress	35	37	40	0	112
Total		131	132	136	1	400

Distribution on EAT-26 according to educational institution:

In our study, from the total sample size (n=400), the number of individuals with low risk (<20) are (n=85 from UMT, n=75 from UCP, and n=76 from USA, n=1 from not specified). From UMT with high risk (20 or more); (n=46 individuals), from UCP n=57, and from USA n=60, n=1 from not specified. Table 3.8 illustrates the summary of the data on trends in educational institutions.

Table:8 Distribution on EAT-26 according to educational institution

Eating Attitude Test item no 26 * Educational institution Cross-tabulation					
Count					
	Educational institution				Total
	UMT	UCP	USA	8.00	
< 20 (low risk)	85	75	76	1	237
20>(high risk)	46	57	60	0	163
Total	131	132	136	1	400

DISCUSSION

We investigated the psychological behavior towards food choices among Nutrition Sciences students in Lahore, Pakistan, in this study. Our study aims to shed light on the factors influencing these students' eating habits and to investigate the relationship between psychological characteristics and disordered eating behaviors. The findings give vital insights into this unique population's food habits and attitudes, which we will now examine and assess in the context of previous literature.

In-Depth Analysis of our survey results The outcomes include descriptive statistics for the variables "Gender of the students," "Educational institution," and "Single or married." The research had 400 individuals in total, with no missing data. The students' genders are as follows, the mean gender value is roughly 1.54, indicating that one gender may have a somewhat larger proportion than the other. The standard deviation is roughly 0.50, indicating that the gender distribution is relatively spread out around the mean. A skewness score of around -0.15 shows that the gender distribution is somewhat negatively skewed, implying that one gender may have a slightly larger frequency in the sample. A kurtosis score of roughly -1.99 indicates that the gender distribution is platykurtic, showing fewer severe values in the tails as compared to a normal distribution.

The findings show the gender distribution of the study's participants. 185 (46.3%) of the total valid sample of 400 students identified as male, whereas 215 (53.8%) identified as female. This data shows that female students had a little higher representation in the study than male students. According to the data, more than half of the participants (53.8%) are female, while male students account for around 46.3% of the sample**.**

This gender distribution gives vital insights into the research participants' makeup and enables for a better understanding of the sample's demographic features. It is important to highlight, however, that the gender distribution of the study may have consequences for the generalizability of the findings to larger groups, since the representation of males and females in the target population may not be proportionate to their actual numbers.

The average educational institution value is around 2.03, suggesting that most participants belong to the second educational institution group. The standard deviation is roughly 0.87, indicating that there is some variation in the distribution of participants among educational institutions. A skewness score of around 0.75 shows that the distribution of educational institutions is slightly favorably skewed, implying that the second group may have a larger frequency of participation. A kurtosis value of around 3.79 indicates that the distribution of educational institutions is leptokurtic, meaning that the tails have considerably more extreme values than a normal distribution**.**

These results show how participants in the study

were distributed among various educational institutions. The majority of participants in the total valid sample of 400 students came from three major institutions: the University of Management and Technology (UMT), with 131 students (32.8%); the University of Central Punjab (UCP), with 132 students (33.0%); and the University of South Asia (USA), with 136 students (34.0%).

These statistics show that each institution has a generally equal ratio of students, with UCP and USA having a somewhat greater share than UMT. The study's sample appears to be evenly dispersed among all three universities, boosting the results' generalizability to the larger community of Nutrition Sciences students in Lahore.

Whether a participant is single or married, the average single or married number is roughly 1.03, indicating that individuals are more likely to be single on average. The standard deviation is roughly 0.17, indicating that there is little fluctuation in the distribution of marital status. A skewness score of roughly 5.53 shows that the marital status distribution is extremely positively skewed, implying that there may be a significantly larger frequency of single individuals in the sample. A kurtosis score of roughly 28.74 indicates that the marital status distribution is very leptokurtic, with exceptionally high peak ness and heavy tails when compared to a normal distribution.

The data reflects the distribution of participants in the research according to their marital status. The great majority of participants in the overall valid sample of 400 students were single, accounting for 388 individuals (97.0%). On the other side, a tiny minority of participants, 12 students (3.0%), were married.

According to these statistics, the majority of Nutrition Sciences students in Lahore are single, with a low number of married students. This distribution is consistent with the typical tendency among undergraduate students, in which the majority of people do not marry during their school years.

Overall, these descriptive statistics give useful information regarding the central trends, spread, and shape of the variable distributions under consideration. More inferential studies, however, are required to derive more thorough findings and examine probable links and correlations between these variables.

According to the sample size distribution based on the Eating Attitude Test (EAT) item 26, 59.3% had a reduced risk (EAT score 20), whereas 40.8% had a greater risk (EAT score 20) of disrupted eating patterns. These data suggest that eating disorders are common in the participant group. The Bahrain study, on the other hand, focused on emotional eating behavior, which is separate from our assessment of psychological behavior toward food choices. Our study presents a full picture of how stress levels and emotional eating behaviors interact among Nutrition Sciences students by studying these two characteristics side by side.

The cross-tabulation analysis of EAT 26 and PSS 10 revealed some fascinating trends. Among those at lower risk (EAT 20), 11 reported little stress, 153 had moderate stress, and 73 had severe stress. In comparison, just 2 of those at greater risk (EAT 20) had little stress, 122 had moderate stress, and 39 had severe stress. This study deciphers the intricate relationships between stress levels and eating habits. The "Association of Anthropometric Status, Perceived Stress, and Personality Traits with Eating Behavior in University Students" study, on the other hand, did not expressly investigate cross-tabulations between certain eating attitudes and stress levels. By examining the link between stress, eating attitudes, and dietary choices among Nutrition science students our study adds a layer of subtlety.

Furthermore, the sample size distribution by BMI indicated that 7.8% were underweight, 77.8% had a normal BMI, and 14.5% were overweight. These proportions give information about the weight distribution among the participant group. Notably, the research "Emotional Eating Behavior among University of Bahrain Students" did not specifically address BMI distribution. This element of our research helps to a better knowledge of how psychological variables influence weight categories among Nutrition Sciences students in Lahore.

Finally, the use of correlations between PSS 10 and EAT 26 yielded intriguing results. The association between PSS 10 and EAT 26 was found to be one, whereas the correlation between EAT 26 and PSS 10 was the same, confirming the interconnectivity of stress and eating attitudes. This unique component of our research adds to our understanding of the complex links between stress and eating behaviors among Nutrition Sciences students**.**

In a 2019 study, Patterns of Eating Behavior, missing meals, and consuming too much fast food influence appetite. Disordered eating patterns and unhealthy eating behaviors were found among Nutrition Sciences students in our research, and they were frequently connected with stress, anxiety, and depression. The geographical backdrop of the 2019 study is unknown. Our research focuses on Nutrition Sciences students in Lahore, Pakistan. The study from 2019 suggests strategies to encourage healthy eating habits among university students while our study may also provide strategies to address the discovered disordered eating behaviors as well as psychological variables impacting food choices among Nutrition Sciences students. (Association of Anthropometric Status, Perceived Stress, and Personality Traits with Eating Behavior in University Students (2019)

The researchers aimed to assess the impact of psychosocial factors on the eating habits of university students during their transition to more independent living in the study titled "Psychosocial factors affecting dietary habits of university students. When compared to our study, both recognize the importance of psychosocial influences on food patterns among university students. There are, nevertheless, significant distinctions. While our study concentrated on Nutrition Sciences students in Lahore, the 2022 study was carried out at the University of Sharjah and comprised a larger sample of university students. Furthermore, our study investigated the influence of psychological qualities such as stress on food choices, whereas the 2022 study focuses on psychosocial aspects such as family living situations, smoking, and emotional eating are all factors to consider. These findings highlight the need to address psychosocial variables in fostering healthy eating habits among university students. Both results imply that establishing nutrition education campaigns and health-related courses at universities might improve students' knowledge and comprehension of their dietary choices. (University of Sharjah in 2022)

When investigating psychological behavior toward nutritional choices among Nutrition Sciences students in Lahore, it is useful to draw similarities and contrasts with research undertaken in comparable environments. When these two researches are compared, we gain a better knowledge of the psychological factors that influence food behaviors: Both studies had different target groups, with the Bahrain research focusing on university students in Bahrain and the Lahore study focusing on Nutrition Sciences students from several institutes in Lahore, Pakistan. While the Bahrain study focuses on emotional eating behavior among university students, the Lahore study aims to analyze the wider psychological behavior toward nutritional choices. Nutrition Science students have a variety of options. This difference in focus suggests that, although the Bahrain study focuses on the emotional components of eating habits, the Lahore study adopts a multidimensional approach that takes into account a range of psychological characteristics. Although both studies use a cross-sectional approach, their underlying research topics differ. The Bahrain study will most likely investigate the prevalence and correlates of emotional eating behavior, whilst the Lahore study will investigate the subtle interplay between stress, anxiety, depression, and food choices among Nutrition Sciences students. While the findings of the Bahrain study may have implications for dealing with emotional eating behaviors, the findings of the Lahore study may lead to suggestions for interventions targeted at fostering healthy dietary behaviors among Nutrition Sciences students. We acquire a more sophisticated understanding by contrasting these researches. (The 2019 "Emotional Eating Behavior among University of Bahrain Students)

First, our study offers a more in-depth understanding

of how gender affects stress and nutritional choices among Nutrition Sciences students. We specifically looked at participant gender distribution and its effects on stress levels and eating behaviors, in contrast to prior studies that majorly focused on students in general and almost independent of gender. It is interesting that more female students (53.8%) than male students (46.3%) made up the participation population. (See figure). Male and female students may experience stress levels and eating behaviors differently depending on gender-related factors such societal expectations and coping techniques .Understanding these gender-specific differences can assist treatments be tailored to address the particular difficulties male and female Nutrition Sciences students have in the area of stress and nutrition. .While gender may not directly affect dietary preferences, it may have an impact on how people see their bodies, how satisfied they are with their bodies, and how society views food intake.

It is also important to note that, unlike the 2019 study on "Effect of Academic Stressors on Eating Habits among Medical Students in Riyadh, Saudi Arabia," our research did not expressly focus on academic stress as a main area of examination. Students majoring in nutrition sciences may undoubtedly experience academic stress, but our study takes a more comprehensive look at stress levels and how they relate to eating habits, taking into account many areas of students' lives. (Riyadh 2019)

According to the Perceived Stress Scale 10, our study revealed that among 400 Nutrition Sciences students, 3.3% indicated low-stress levels, 68.8% reported moderate stress, and 28.0% reported severe stress. This distribution reveals the prevalence of stress levels among the participants. In contrast, the "Emotional Eating Behavior among University of Bahrain Students" study looked at emotional eating behavior among Bahraini students rather than stress levels. The contrast in our study demonstrates a distinct emphasis on stress and its possible impact on food patterns among Nutrition Sciences students in Lahore.

In contrast to all other percentages of the individuals included in the sample, the distribution of the sample of individuals on the basis of educational institutions on the PSS-10 scale shows a total of 131 from UMT, 132 from UCP, and 136 individuals from the USA. Among them, from UMT, UCP, and USA only 9, 1, and 3 respectively show low-stress individuals. With moderate stress 87, 94, and 93 from UMT, UCP, and USA respectively. And total of 112 from three universities show high stress.

In contrary to that, on the EAT-26 scale total of 131 individuals were found to have disturbed eating attitudes from UMT. The number of students from UCP is 132, among which only 75 show that they are at lower risk, and 57 show that they are at high risk of disturbed eating attitudes. And from the USA the total of 136 among 400 shows the effect on eating attitudes. Depending upon the gender the stress eating and disturbed eating attitudes may vary. The individuals who perceived stress do have disturbed eating attitudes. Thus, psychologically disturbed individuals are much affected by their eating patterns.

Conclusion

In conclusion, stress especially academic stressors significantly impacts the eating patterns of students. Though this relationship between stress and different eating behaviors varies from person to person, through our research we deduced the most common ways by which perceived stress affects the dietary habits of students. When students are under stress they often opt for food which is more convenient. This usually leads to an increased consumption of fast food and processed food. Students under academic stress rely on these unhealthy food choices. Moreover, for some students, academic stress may lead to a change in their appetite. This may result in meal skipping and irregular eating patterns. Some students often turn to food to cope with their emotions when they feel stressed. They tend to eat foods that are high in calories, fat, and sugar to provide themselves with temporary relief from the stress they face on a daily basis. Due to academic stress, there may be an increase in snacking and irregular meal times, resulting in a lack

of structure in their diets. Mindless eating and overeating a common issues that students may face whether it be as a way students cope with their emotions or as a way to shift their focus off of loads of work, all of these issues combined may lead to weight gain which then leads to body image concerns, leading to restrictive or disordered eating patterns. This becomes a constant cycle that mainly results in inadequate energy and nutrition. This affects students in many ways, affecting their ability to work, focus, and perform well both physically and mentally. In this study, the sample with low stress is 3.3%, with moderate stress it is 68.8%, and with high stress, the sample size is 28.0%. The sample for Eating Attitudes Test 26, with a risk lower than 20 is 59.3%. For individuals with the risk of 20 or more the sample size is 40.8%. Therefore, it is important to understand the impact that academic stress has on the eating patterns of students.

Acknowledgment

The authors declare that they have no acknowledgments to disclose.

Ethical Statement

Not Applicable

Conflict of Interest

Authors declare no conflict of interests.

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