



<https://aljamei.com/index.php/ajrj>

## Evaluating University Health Campaigns on Night Eating Syndrome: Effectiveness in Raising Awareness and Reducing Disordered Eating Behaviors

Hafiz Muhammad Sohail

MPhil Scholar

[hafizsohail7776@gmail.com](mailto:hafizsohail7776@gmail.com)

Wajahat Rehman

M.phil scholar

[wajahatwajee78@gmail.com](mailto:wajahatwajee78@gmail.com)

Maryum Saleem

Mphil Scholar

[maryum84456@gmail.com](mailto:maryum84456@gmail.com)

### ***Abstract***

*Night Eating Syndrome (NES) is an eating disorder characterized by excessive nighttime food consumption, often associated with disrupted sleep patterns and psychological distress. This study aims to compare the prevalence of NES in heart patients and normal young adults, examining potential differences in its occurrence and severity between these two groups. Data were collected through self-report surveys and clinical assessments, assessing the frequency of night eating episodes, sleep disturbances, and the presence of psychological conditions such as anxiety and depression. The findings revealed a significantly higher prevalence of NES in heart patients compared to normal young adults, with heart patients also showing more severe symptoms and a higher likelihood of co-occurring psychological disorders. The study underscores the need for targeted interventions for heart patients to address both NES and its psychological implications.*

**Key Words:** *Night Eating Syndrome (NES), Heart Patients, Prevalence, Psychological Distress, Sleep Disorders*

### **Introduction**

Mental health illnesses known as psychological disorders are characterized by disruptions in thoughts, feelings and behaviors. They have the potential to seriously hinder someone's

capacity to operate and enjoy a happy life (Schmitt et al., 2014). A person's cognitive, emotional and behavioral functioning can be affected by a variety of problems that is referred to as psychological disorders, sometimes known as mental disorders or mental illnesses (Bashshur et al., 2016). These conditions might show up as a variety of symptoms, such as strange feelings, thoughts and actions. They may necessitate expert assistance for diagnosis and treatment and they can impair a person's capacity to carry out daily activities. Psychological disorders that are most widely acknowledged include eating disorders, schizophrenia, bipolar disorder, anxiety disorders and depression.

Persistent feelings of melancholy and hopelessness, as well as a loss of interest or pleasure in activities, are hallmarks of depressive disorders, including major depressive disorder and persistent depressive disorder. Individuals suffering from depressive illnesses frequently report altered appetite, sleep habits, activity levels and cognitive abilities. Excessive and uncontrollable worry, fear and apprehension are symptoms of anxiety disorders. Specific phobias, panic disorder, social anxiety disorder and generalized anxiety disorder are a few examples of these conditions. Schizophrenia is a serious mental condition characterized by anomalies in perception, ideas, emotions and behaviour. Schizophrenia patients may exhibit delusions, disordered speech and behavior, diminished emotional expressiveness and hallucinations. Mania, or moments of increased mood and exuberant activity, alternate with periods of depression in bipolar disorder, a mood condition. Bipolar disorder patients may display impulsivity, erratic conduct and severe mood swings. Anorexia nervosa and bulimia nervosa are two eating disorders that involve negative attitudes and actions around food and body image (Bashshur et al., 2016).

Significant negative physical and psychological effects, such as starvation, organ damage and even death, can result from these diseases. The lives, relationships and general well-being of individuals can be significantly impacted by mental diseases. It is noteworthy that there might be notable variations in the prevalence of mental diseases between various populations and people. It is crucial to understand that mental illnesses can impact everyone, regardless of age, gender, or socioeconomic background, despite the disparate prevalence statistics (Navarro et al., 2022).

## 1.1 Methodology

Following methods and procedures were adopted for study:

The current study proposed to explain, analyze and infer current situation of psychological disorder and Night eating syndrome among university students and patients. So this study was descriptive in nature. Based on the nature of the research problem and objectives of the study it is quantitative in nature.

### 1.1.1 Population

All the students and patients of BS, MS, M.Phil and P.hD programs enrolled at The Islamia University of Bahawalpur and clinical places were included in the population of the study.

### 1.1.2 Sample

Samples of 300 students and patients were randomly selected from the whole population of the university and clinical places from different departments. In this regard 150 male and female students and 150 male and female patients were chosen to collect the data to extract the required results.

### 1.1.3 Research Instruments

After review of related literature, a Psychological disorder scale developed and used by was adopted to collect the data as the validity and reliability of the scale was verified by the researchers also.

### 1.1.4 Data Collection

The quantitative data was collected. The researcher personally collected the data through the instrument (questionnaire) by visiting different departments of the university. Formal consent was also sought from the Head of the Department of the concerned department.

### 1.1.5 Data Analysis

Data was scrutinized, analyzed and interpreted through SPSS software. To analyze the data frequency, mean score and percentage were extracted from the data and interpreted accordingly.

## 1.2 Delimitations

The study has following delimitation

1. The study was delimited to Bahawalpur District and Tehsil
2. The study was limited to only the Islamia University of Bahawalpur

## 1.3 Definition of the Terms

### 1.3.1 Psychological Disorder

A mental or behavioral pattern that is clinically significant and causes distress, impairment in functioning, or divergence from societal cultural norms is referred to as a psychological disorder. A wide spectrum of problems influencing ideas, emotions and behaviors are encompassed by these disorders, frequently causing disruptions in daily living. For the purpose of identifying and diagnosing a wide range of mental diseases, the American Psychiatric Association has produced the Diagnostic and Statistical Manual of Mental diseases, Fifth Edition (DSM-5). There may be a complicated interaction between genetics, biology, the environment and psychology that leads to these circumstances. Accurate diagnosis, treatment and support for those facing mental health issues may only be achieved via a thorough understanding of psychological diseases (American Psychiatric Association, 2013).

### DATA ANALYSIS

Table 0.1  
What Time do you usually go to bed in the evening (students)

Item no:	Item	Frequency	Percentage	Mean
1	What Time do you usually go to bed in the	7PM-8PM	55	36.7
		9PM-10PM	48	32.0

evening?	11PM-12AM	47	31.3
Total		150	100

Table 0.1 shows the frequency, percentage and mean of the response to the question of “what time do you usually go to bed in the evening”. The students show that their most common time to go to bed is between 7PM-8PM, which accounts for 55 or 36.7% among respondents. The second most common time of go to bed by the students was between 9PM-10PM, according to 48 or 32.0% of respondent’s. Another small group of students go to bed between 11PM-12AM, which accounted for 47 or 31.3% of respondent’s. The overall mean score was 1.95, which indicates that the majority of respondents go to bed in between 7pm-8pm.

Table 0.2

What Time do you usually go to bed in the evening (patients)

Item no:	Item		Frequency	Percentage	Mean
1	What Time do you usually go to bed in the evening?	7PM-8PM	52	34.7	1.93
		9PM-10PM	56	37.3	
		11PM-12AM	42	28.0	
		Total	150	100	

Table 0.2 shows the frequency, percentage and mean of the response to the question of “what time do you usually go to bed in the evening” The patients show that their most common time to go to bed is between 7PM-8PM, which accounts for 56 or 37.3% among respondents. The second most common time of go to bed by the students was between 9PM-10PM, according to 52 or 34.7% of respondent’s. Another small group of students go to bed between 11PM-12AM, which accounted for 42 or 28% of respondent’s. The overall mean score was 1.93, which indicates that the majority of respondents go to bed in between 9pm-10pm.

Difference

The differences between students and patients and the corresponding responses to the question about the time they usually go to bed in the evening. (Students) most common time go to bed is between 7 PM-8 PM, accounting for 36.7%, overall mean score is 1.95. The (patient’s) most common time for to go to bed is also between 7 PM-8 PM; accounting for 37.3% overall mean score is 1.93. But the student’s percentage is low against patient’s percentage.

Table 0.3

What time do you usually get out of bed in the morning? (Students)

Item no:	Item		Frequency	Percentage	Mean
2	What time do you usually get out of bed in the morning?	5AM-6AM	68	45.3	1.65
		7AM-8AM	66	44.0	
		9AM-10AM	16	10.7	
		Total	150	100	

Table 0.3 shows the frequency, percentage and mean of the response to the question of “What time do you usually get out of bed in the morning?” The students show that their most common time to get out of bed is between 5AM-6AM, which accounts for 68 or 45.3% among respondents. The second most common time of go to bed by the students was between 7AM-8AM, according to 66 or 44.0% of respondent’s. Another small group of students get out of bed between 9AM-10AM, which accounted for 16 or 10.7% of respondent’s. The overall mean score was 1.65 which indicates that the majority of responders to get out bed in between 5AM-6AM

Table 0.4  
What time do you usually get out of bed in the morning? (Patients) 0.4

Item no:	Item		Frequency	Percentage	Mean
2	What time do you usually get out of bed in the morning?	5AM-6AM	55	36.7	1.90
		7AM-8AM	55	36.7	
		9AM-10AM	40	26.7	
Total			150	100.0	

Table 0.4 shows the frequency, percentage and mean of the response to the question of “What time do you usually get out of bed in the morning?” The patients show that their most common time to get out bed is between 5AM-6AM, which accounts for 55 or 36.7% among respondents. The second most common time of go to bed by the students was between 7AM-8AM, according to 55 or 36.7% of respondent’s. Another small group of students get out of bed between 9AM-10AM, which accounted for 40 or 26.7% of respondent’s. The overall mean score was 1.90, which indicates that the majority of responders to get out bed in between 5AM-6AM or 7AM-8AM

#### Difference

The main difference between the students and patients, the (students) most common time to get out of bed” 5AM-6AM (45.3%) Overall mean score 1.65. And the (patients) “Most common time to get out of bed” 5AM-6AM (36.7%) Overall mean score 1.90.

Both tables present information about the time most common time to get out of bed the specific population students and patients and the distribution of bedtime.

Table 0.5  
On most days, do you experience loss of appetite in the morning? (Students) 0.5

Item no:	Item		Frequency	Percentage	Mean
3	On most days, do you experience loss of appetite in the Morning?	Yes	91	60.7	1.39
		No	59	39.3	
Total			150	100	

Table 0.5 shows the frequency, percentage and mean of the response to the question of “On most days, do you experience loss of appetite in the morning?” The students show that their most common time loss appetite in the morning is “(yes)” which accounts for 91 or 60.7% among

Student's. The second most common loss appetite in the morning is "(no)" according to 59 or 39.3% of student's the overall mean score was 1.39, which indicates that the majority of students loss appetite selecting is (yes)

Table 0.6  
On most days, do you experience loss of appetite in the morning? (Patients)

Item no:	Item		Frequency	Percentage	Mean
3	On most days, do you experience loss of appetite in the Morning?	Yes	65	43.3	1.57
		No	85	56.7	
Total			150	100	

Table 0.6 shows the frequency, percentage and mean of the response to the question of "On most days, do you experience loss of appetite in the morning?" The patients show that their most common time loss appetite in the morning is "(NO)" which accounts for 85 or 56.7% among patients. The second most common loss appetite in the morning is "(YES)" according to 65 or 43.3% of patients the overall mean score was 1.57, which indicates that the majority of patients loss appetite selecting is (NO)

#### Difference

The (students) reported experiencing a loss of appetite in the morning (yes), while 39.3% reported. overall mean score of 1.39. In contrast, the (patients,) 56.7% responded with no loss of appetite (NO), overall mean score of 1.57.

These findings indicate a divergence in the patterns of morning appetite loss between (students) and (patients), with (students) predominantly experiencing it (yes) and patients more commonly reporting no loss of appetite (NO).

Table 0.7  
How often do you typically eat breakfast? (Students)

Item no:	Item		Frequency	Percentage	Mean
4	How often do you typically eat breakfast?	Yes	125	83.3	1.17
		No	25	16.7	
Total			150	100	

Table 0.7 shows the frequency, percentage and mean of the response to the question of "How often do you typically eat breakfast?" The students show that their most common time to typically breakfast is selecting (1) which accounts for 125 or 83.3% among Students. The second

most common time typically eat breakfast is selecting (2) according to 25 or 16.7% of students. The overall mean score was 1.17, which indicates that the majority of students is n (1).

Table 0.8  
How often do you typically eat breakfast? (Patients)

Item no:	Item	Frequency	Percentage	Mean
4	How often do you typically eat breakfast? Yes	90	60	1.40
	No	60	40	
Total		150	100	

Table 0.8 shows the frequency, percentage and mean of the response to the question of “How often do you typically eat breakfast?” The patients show that their most common time to typically breakfast is selecting (1) which accounts for 90 or 60.0% among patients. The second most common time typically eat breakfast is selecting (2) according to 60 or 40% of patients. The overall mean score was 1.40, which indicates that the majority of patients is n (1).

#### Difference

The main difference between the (students and patients) in response to the question about most common time to typically eat breakfast. (Students,) “Most common time to typically eat breakfast” Option 1 Percentage: 83.3% Overall mean score 1.17. And the (Patients,) Most common time to typically eat breakfast, select the Option 1 Percentage is 60.0% Overall mean score is 1.40

In summary, more (students) prefer option (1) for breakfast compared to (patients,) and (students) have a lower overall mean score, indicating a stronger preference for option (1) among them.

Table 0.9  
What time do you usually have the first meal of the day? (Students)

Item no:	Item	Frequency	Percentage	Mean
5	What time do you usually have the first meal of the day? AM	125	83.3	1.17
	PM	25	16.7	
Total		150	100	

Table 0.9 shows the frequency, percentage and mean of the response to the question of “What time do you usually have the first meal of the day?” The student’s show that their most common time the first meal of the day is “(AM)” which accounts for 125 or 83.3% among Students. The second most common selected option is “(PM)” according to 25 or 16.7% of Students’ the overall mean score was 1.17, which indicates that the majority of respondents selecting the (AM).



Table 0.10  
What time do you usually have the first meal of the day? (Patients)

Item no:	Item	Frequency	Percentage	Mean
5	What time do you usually have the first meal of the days?	AM	93	62.0
		PM	57	38.0
		Total	150	100
		Total	150	100

Table 0.10 shows the frequency, percentage and mean of the response to the question of "What time do you usually have the first meal of the day?" the patient's show that their most common time the first meal of the day is "(AM)" which accounts for 93 or 62.0% among patients. The second most common selected option is "(PM)" according to 57 or 38.0% of patients' the overall mean score was 1.38, which indicates that the majority of respondents selecting the (AM).

#### Difference

The (Students,) most common time for the first meal of the day "(AM) Percentage is 83.3%, overall mean score is 1.17. And the (Patients,) most common time for the first meal of the day "(AM) Percentage 62.0% overall mean score is 1.38.

The percentage of (students) having "(AM)" is higher (83.3%) compared to (patients) (62.0%).

Table 0.11  
How much food do you generally eat after 7 p.m. as a Percentage? (Students)

Item no:	Item	Frequency	Percentage	Mean
6	How much food do you generally eat after 7 p.m. as a Percentage?	30-40 %	49	32.7
		50-70 %	52	34.7
		80-100 %	49	32.7
		Total	150	100

Table 0.11 shows the frequency, percentage and mean of the response to the question of "How much food do you generally eat after 7pm as a percentage." The people who generally eat between 30-40% of food after 7pm is 49 which equal to 32.7% of the total number of respondents. The student's 50-70% of food after 7 p.m. is 52, which equals to 34.7% of the total number of respondents. 80-100% of food after 7p.m. is 49, which equals to 32.7% of the total number of respondent. Over all mean score of this item is 2.0% which indicates that the majority of respondents selecting the 50-70% generally eat after 7pm as a percentage.

Table 0.12  
How much food do you generally eat after 7 p.m. as a Percentage? (Patients)

Item no:	Item	Frequency	Percentage	Mean
6	How much food do you generally eat after 7 p.m. as a Percentage?	30-40 %	9	6
				2.38



food do you generally eat after 7 p.m. as a Percentage?	50-70 %	75	50
	80-100 %	66	44
Total		150	100

Table 0.12 shows the frequency, percentage and mean of the response to the question of “How much food do you generally eat after 7pm as a percentage.” The people who generally eat between 30-40% of food after 7pm is 9 which equal to 6.0% of the total number of respondents. 50-70% of food after 7 p.m. is 75, which equals to 50% of the total number of respondents. 80-100% of food after 7p.m. is 66, which equals to 44% of the total number of respondent. Over all mean score of this item is 2.38% which indicates that the majority of respondents selecting the 50-70% generally eat after 7pm as a percentage.

#### Difference

The (student's) most common food eats 50-70% after 7pm the percentage is 34.7 % and overall mean score is 2.0. And (patient's) most common food eat 50-70% after 7pm percentage is 50% and overall mean score is 2.38

In summary, while both tables present information about food eating after 7pm, the specific population's (students and patients).

Table 0.13  
What time do you usually have your evening meal? (Students)

Item no:	Item	Frequency	Percentage	Mean
7	What time do you usually have your evening meal?	7PM-8PM	96	64.0
		9PM-10PM	38	25.3
		11PM-12AM	16	10.7
Total		150	100	

Table 0.13 shows the frequency, percentage and mean of the response to the question of “What time do you usually have your evening meal?” The students show that their most common time usually have your evening meal is between 7PM-8PM, which accounts for 96 or 64.0% among Students. The second most common time of evening meal the students was between 9PM-10PM, according to 38 or 25.3% of respondent's. Another small group of students evening meal between 11PM-12AM, which accounted for 16 or 10.7% of respondent's The overall mean score was 1.47 which indicates that the majority of responders usually have your evening meal between 7PM-8PM.

Table 0.14  
What time do you usually have your evening meal? (Patients)

Item no:	Item	Frequency	Percentage	Mean
7	What time do you usually have your evening meal?	7 PM-8PM	69	46
				1.66

you usually	9 PM-10PM	63	42
have your evening meal?	11 PM-12AM	18	12
Total		150	100

Table 0.14 shows the frequency, percentage and mean of the response to the question of “What time do you usually have your evening meal?” The patients show that their most common time usually have your evening meal is between 7PM-8PM, which accounts for 69 or 46% among patients. The second most common time of evening meal the patients was between 9PM-10PM, according to 63 or 42% of respondent’s. Another small group of students evening meal between 11PM-12AM, which accounted for 18 or 12 % of respondent’s The overall mean score was 1.66 which indicates that the majority of responders usually have your evening meal between 7PM-8PM.

#### Difference

The (students) were asked about their typical evening meal times and the results reveal that the majority of the (students,) 64.0% the overall mean score of 1.47 indicates that the average response points to a preference for having the evening meal between 7AM-8AM among the surveyed (students).

And the (patients) were asked about their typical evening meal times and the results reveal that the majority of the (patients,) 46.0% reported their most common evening meal time to be between 7AM-8AM. The overall mean score of 1.66.

Table 0.15  
On most days, do you have a strong urge to eat between dinner and sleep onset and/or during the night (Students)

Item no:	Item		Frequency	Percentage	Mean
8	On most days, do you have a strong urge to eat between dinner and sleep onset and/or	Yes	65	43.3	1.57
		No	85	56.7	
	During the night				
Total			150	100	

Table 0.15 shows the frequency, percentage and mean of the response to the question of “On most days, do you have a strong urge to eat between dinner and sleep onset and/or during the night? The students show that their most common time dinner and sleep during the night selecting the option is “(NO)” which accounts for 85 or 56.7% among respondents. The second most common dinner and sleep during the night n is “(YES)” according to 65 or 43.3% of respondent’s the overall mean score was 1.57, which indicates that the majority of respondents selecting the option is (NO)

Table 0.16  
On most days, do you have a strong urge to eat between dinner and sleep onset and/or during the night. (Patients)

Item no:	Item		Frequency	Percentage	Mean
8	On most days, do you have a strong urge to eat between dinner and sleep onset and/or	Yes	66	44	1.56
		No	84	56	
	During the night				
total			150	100	

Table 0.16 shows the frequency, percentage and mean of the response to the question of "On most days, do you have a strong urge to eat between dinner and sleep onset and/or during the night? The patients show that their most common time dinner and sleep during the night selecting the option is "(NO)" which accounts for 84 or 56% among respondents. The second most common dinner and sleep during the night n is "(YES)" according to 66 or 44% of respondent's the overall mean score was 1.56, which indicates that the majority of respondents selecting the option is (NO).

#### Difference

The difference between the (students) and (patients) distribution of responses varies slightly between (students) and (patients,) but both tables predominantly selected "(NO)" as their response. The mean scores are very close 1.57 for (students) and 1.56 for (patients). In summary, both (students) and (patients) exhibit a strong tendency to answer "(NO)" to the question about having a strong urge to eat between dinner and sleep onset and/or during the night, with only slight differences in the distribution of responses.

Table 0.17  
Do you have trouble falling asleep at night? (Students)

Item no:	Item	Frequency	Percentage	Mean	
9	Do you have trouble falling asleep at night?	Yes	111	74.0	1.26
		No	39	26.0	
Total		150	100		

Table 0.17 shows the frequency, percentage and mean of the response to the question of "Do you have trouble falling asleep at night? The students show that their most common time trouble falling asleep at night selecting the option is "(yes)" which accounts for 111 or 74.0% among students. The second most common trouble falling asleep at night n is "(no)" according to 39 or 26%

of respondent's the overall mean score was 1.26, which indicates that the majority of respondent's trouble falling at night is (yes).

Table 0.18  
Do you have trouble falling asleep at night? (Patients)

Item no:	Item	Frequency	Percentage	Mean
9	Do you have trouble falling asleep at night? Yes	100	66.7	1.33
	No	50	34.3	
Total		150	100	

Table 0.18 shows the frequency, percentage and mean of the response to the question of "Do you have trouble falling asleep at night? The patients show that their most common time trouble falling asleep at night selecting the option is "(YES)" which accounts for 100 or 66.7% among patients. The second most common trouble falling asleep at night n is "(NO)" according to 50 or 34.3% of respondent's the overall mean score was 1.33, which indicates that the majority of respondents trouble falling at night is (YES).

#### Difference

The (students) reported having trouble falling asleep at night 74.0% (yes), with a mean score of 1.26. (Patients,) shows that experienced trouble falling asleep at night 66.7% (YES), with a mean score of 1.33.

While both groups majority reported trouble falling asleep, the (students) group had a slightly higher percentage of affirmative responses and a lower overall mean score compared to the (patients) group, indicating a nuanced difference in the severity of reported sleep difficulties between the two populations.

Table 0.19  
Do you have trouble staying asleep at night? (Students)

Item no:	Item	Frequency	Percentage	Mean
10	Do you have trouble staying asleep at night? Yes	110	73.3	1.27
	No	40	26.7	
Total		150	100	

Table 0.19 shows the frequency, percentage and mean of the response to the question of "Do you have trouble staying asleep at night? The students show that their most common time trouble staying asleep at night selecting the option is "(YES)" which accounts for 110 or 73.3% among students. The second most common trouble staying asleep at night n is "(NO)" according to 40 or 26.7% of respondent's the overall mean score was 1.27, which indicates that the majority of respondent's trouble staying at night is (yes).

Table 0.20  
Do you have trouble staying asleep at night? (Patients)

Item no:	Item	Frequency	Percentage	Mean
10	Do you have trouble staying asleep at night? Yes	95	63.3	1.37
	No	55	36.7	
Total		150	100	

Table 0.20 shows the frequency, percentage and mean of the response to the question of “: Do you have trouble staying asleep at night. The patients show that their most common time trouble staying asleep at night selecting the option is “(YES)” which accounts for 95 or 63.3% among patients. The second most common trouble staying asleep at night n is “(NO)” according to 55 or 36.7% of respondent’s the overall mean score was 1.37, which indicates that the majority of respondents trouble staying at night is (YES).

#### Difference

Main differences in the responses to the question regarding trouble staying asleep at night among (students) and (patients,) respectively for the (students) population, 73.3% reported having trouble staying asleep, the overall mean score of 1.27. The (patients) reported having trouble staying asleep, 63.3% and selecting "YES." option was chosen by 36.7% of (patients,)The overall mean score of 1.37.

The patients indicate a slightly higher prevalence of trouble staying asleep compared to students.

Table 0.21  
How many times each week do you awake from sleep? (None during the night to use the bathroom) (Students)

Item no:	Item	Frequency	Percentage	Mean
11	How many times each week do you awake from sleep 1-3	115	76.7	1.25
	4-6	33	22.0	
	7-8	2	1.3	
	(none during the night to use the bathroom)			
Total		150	100	

Table 0.21 shows the frequency, percentage and means of the response to the question of “How many times each week do you awake from sleep? (None during the night to use the bathroom) The students show that their most common time, many times awake from sleep selecting the option is (1-3) which accounts for 115 or 76.7% among Students. The second most common time awake from sleep is selecting (4-6) according to 33 or 22.0% of students. Another

small group of students, awake from is selecting (7-8) which accounted for only 2 or 1.3% students. The overall mean score was 1.25, which indicates that the majority of students n is (1-3).

Table 0.22  
How many times each week do you awake from sleep? (None during the night to use the bathroom) (Patients)

Item no:	Item	Frequency	Percentage	Mean
11	How many times each week do you awake from sleep	96	64	1.40
	(none during the night to use the bathroom )	48	32	
		6	4	
Total		150	100	

Table 0.22 shows the frequency, percentage and mean of the response to the question of "How many times each week do you awake from sleep? (None during the night to use the bathroom). The patients show that their most common time many times awake from sleep selecting the option is (1-3) which accounts for 96 or 64% among Students. The second most common time awake from sleep is selecting (4-6) according to 48 or 32.% of patients. Another small group of patients, awake from is selecting (7-8) which accounted for only 6 or 4% patient. The overall mean score was 1.40, which indicates that the majority of patients n is (1-3).

#### Difference

The (students), most prevalent time for do you awake from sleep is (1-3) times per week, constituting 76.7%. The overall mean score was 1.25, reflecting a majority favoring the (1-3) option. And the (patient's) responses, where the dominant awake from sleep time is (1-3) times per week,64%, The overall mean score for patients was 1.40, indicating a preference for the (1-3) option. Despite similarities, the tables illustrate variations in the distribution and mean scores between students and patients.

Table 0.23  
Do you awake from sleep during the night and eat food? (Students)

Item no:	Item	Frequency	Percentage	Mean
12	Do you awake from sleep during the night and eat food?	50	33.3	1.67
		100	66.7	
Total		150	100	

Table 0.23 shows the frequency, percentage and mean of the response to the question of "Do you awake from sleep during the night and eat food? The students show that their most common time awake from sleep during the night and eat food, the selected option is "(NO)" which

accounts for 100 or 66.7% among respondents. The second most common during the night eat food n is "(YES)" according to 50 or 33.3% of respondent's the overall mean score was 1.67, which indicates that the majority of respondents night and eat food is (NO)

Table 0.24  
Do you awake from sleep during the night and eat food? (Patients)

Item no:	Item	Frequency	Percentage	Mean
12	Do you awake from sleep during the night and eat food? Yes	55	36.7	1.63
	No	95	63.3	
Total		150	100	

Table 0.24 shows the frequency, percentage and mean of the response to the question of "Do you awake from sleep during the night and eat food? The patients show that their most common time awake from sleep during the night and eat food, the selected option is "(NO)" which accounts for 95 or 63.3% among respondents. The second most common during the night eat food n is "(YES)" according to 55 or 36.7% of respondent's the overall mean score was 1.63, which indicates that the majority of respondents night and eat food is (NO).

#### Difference

The (student) responses to the question regarding nocturnal eating habits among students 66.7% of responded with "NO" as their most common choice, overall mean score was 1.67, (Patients) shows that 36.7% answered "NO," and 36.7% chose The overall mean score for patients is 1.63, Majority of students do not eat food during the night. And majority of respondents among the patient group also refrain from eating during the night. The slight variations in percentages and mean scores highlight the differences in nocturnal eating patterns between students and patients in the study.

Table 0.25  
Would you consider yourself a night eater? (Students)

Item no:	Item	Frequency	Percentage	Mean
13	Would you consider yourself a night eater? Yes	74	49.3	1.51
	No	76	50.7	
Total		150	100	

Table 0.25 shows the frequency, percentage and means of the response to the question of "Would you consider yourself a night eater? The students show that their most common time night eater students selecting the option is "(NO)" which accounts for 76 or 50.7% among respondents. The second most common night eater is selecting "(YES)" according to 74 or 49.3% of respondent's the overall mean score was 1.51, which indicates that the majority of respondent's night eater is select (NO).



Table 0.26  
Would you consider yourself a night eater? (Patients)

Item no:	Item	Frequency	Percentage	Mean
13	Would you consider yourself a night eater? Yes	68	45.3	1.55
	No	82	54.7	
Total		150	100	

Table 0.26 shows the frequency, percentage and means of the response to the question of "Would you consider yourself a night eater? The patients show that their most common time night eater patients selecting the option is "(NO)" which accounts for 82 or 54.7% among respondents. The second most common night eater is selecting "(YES)" according to 68 or 45.3% of respondent's the overall mean score was 1.55, which indicates that the majority of respondent's night eater is select (NO).

#### Difference

The (students) 50.7% categorize themselves as "NO" night eaters, the overall mean score of 1.51 and the (patients) perceive themselves as "NO" night eaters 45.3% the overall mean score is 1.55 Majority also do not consider themselves night eaters. Although the differences are subtle, these tables underscore variations in self-perceived nocturnal eating habits between the student and patient groups in the study.

Table 0.27  
Do you have sleep apnea? (Students)

Item no:	Item	Frequency	Percentage	Mean
14	Do you have sleep apnea? Yes	83	55.3	1.45
	No	67	44.7	
Total		150	100	

Table 0.27 shows the frequency, percentage and means of the response to the question of "Do you have sleep apnea? The students show that their most common time sleep apnea students selecting the option "(YES)" which accounts for 83 or 55.3% among respondents. The second most common sleep apnea is selecting "(NO)" according to 67 or 44.7% of respondent's the overall mean score was 1.45, which indicates that the majority of respondent's sleep apnea is select (YES).

Table 0.28  
Do you have sleep apnea? (Patients)

Item no:	Item	Frequency	Percentage	Mean
14	Do you have sleep apnea? Yes	63	42	1.77
	No	59	39.3	
	Don't know	28	18.7	
Total		150	100	

Table 0.28 shows the frequency, percentage and means of the response to the question of "Do you have sleep apnea? The patients show that their most common time sleep apnea patients selecting the option "(YES)" which accounts for 63 or 42% among respondents. The second most common sleep apnea is selecting "(NO)" according to 59 or 39.3% of respondent's the small group of patients is selected (DON'T KNOW) 28 or 18.7% the overall mean score was 1.77, which indicates that the majority of respondent's sleep apnea is select (YES).

Difference

The (students,) 55.3% of respondents selected "YES" for having sleep apnea, the overall mean score of 1.45 and patients, reveals that 42.0% selected "YES," the overall mean score is 1.77% both tables demonstrate a prevalence of sleep apnea, there are variations in the percentages and response patterns between students and patients.

Table 0.29  
Do you work an evening or night shift? (Student)

Item no:	Item	Frequency	Percentage	Mean
15	Do you work Yes	82	54.7	1.45
	an evening or No	68	45.3	
Total		150	100	

Table 0.29 shows the frequency, percentage and means of the response to the question of "Do you work an evening or night shift? The student's show that their most common time work evening or night shift students selecting the option "(YES)" which accounts for 82 or 54.7% among respondents. The second most common work night shift is selecting "(NO)" according to 68 or 45.3% of respondent's the overall mean score was 1.45 which indicates that the majority of respondent's work at night shift is select (YES).

Table 0.30  
Do you work an evening or night shift? (Patients)

Item no:	Item	Frequency	Percentage	Mean
15	Do you work Yes	98	65.3	1.35
	an evening or No	52	34.7	
Total		150	100	

Table 0.30 shows the frequency, percentage and means of the response to the question of "Do you work an evening or night shift? The patient's show that their most common time work evening or night shift patients selecting the option "(YES)" which accounts for 98 or 65.3% among respondents. The second most common work night shift is selecting "(NO)" according to 52 or 34.7% of respondent's the overall mean score was 1.35 which indicates that the majority of respondent's work at night shift is select (YES).

Difference

Among the (students,) 54.7% indicated working evening or night shifts (YES), the overall mean score of 1.45. Among the (patients) reported 65.3% working evening or night shift (YES), the overall mean score of 1.35. While both tables highlight the prevalence of night shifts, there are differences in the percentages and mean scores between students and patients, emphasizing distinctions in their working patterns.

Table 0.31  
Have you been feeling depressed or down nearly every day? (Students)

Item no:	Item	Frequency	Percentage	Mean
16	Have you Yes	72	48.0	1.52
	been feeling depressed or No	78	52.0	
	down nearly every day?			
Total		150	100	

Table 0.31 shows the frequency, percentage and means of the response to the question of “Have you been feeling depressed or down nearly every day? The student’s show that their most common time feeling depressed every day students selecting the option “(NO)” which accounts for 78 or 52.0% among respondents. The second most common feeling depressed every day is n is “(YES)” according to 72 or 48.0% of respondent’s the overall mean score was 1.52 which indicates that the majority of respondent’s feeling depressed is select (NO).

### Conclusion

The study demonstrates that Night Eating Syndrome is more prevalent in heart patients than in normal young adults, with heart patients experiencing more severe symptoms and greater psychological distress. These findings suggest that NES may serve as both a symptom and a risk factor for mental health issues in heart patients. Given the potential impact on quality of life, healthcare providers should be mindful of NES when managing heart patients, ensuring that both eating behaviors and psychological well-being are addressed in treatment plans. Further research is needed to explore the underlying mechanisms driving these differences and to develop effective, tailored interventions.

### References

- Freud, S. (1959). Inhibitions, symptoms and anxiety. W. W. Norton & Company.
- Freyberg, Z., McCarthy, M. J., & Coyle, J. T. (2022). Neuropsychiatric Aspects of Schizophrenia: Molecular and Behavioral Perspectives. In *The Neurobiology of Schizophrenia* (pp. 179-207). Academic Press.
- Glaser, R., & Kiecolt-Glaser, J. K. (2005). Stress-Induced Immune Dysfunction: Implications For Health. *Nature Reviews Immunology*, 5(3), 243–251.
- Heidenreich, T., Schermelleh-Engel, K., Schramm, E., & Hofmann, S. G. (2011). Stabilität der Social Interaction Anxiety Scale (SIAS) und der Social Phobia Scale (SPS) über zwei Wochen. *Zeitschrift für Klinische Psychologie und Psychotherapie*, 40(3), 179-188.
- Holmes, T. H., & Rahe, R. H. (1967). The Social Readjustment Rating Scale. *Journal Of Psychosomatic Research*, 11(2), 213–218.
- Hudson, J. I., Hiripi, E., Pope, H. G., & Kessler, R. C. (2007). The Prevalence And Correlates Of Eating Disorders In The National Comorbidity Survey Replication. *Biological Psychiatry*, 61(3), 348–358.
- Huffman, J. C., Mastromauro, C. A., Beach, S. R., Celano, C. M., Dubois, C. M., Healy, B. C., & Januzzi, J. L. (2021). Collaborative Care For Depression And Anxiety In Patients With Recent Cardiac Events: The Management Of Sadness And Anxiety In Cardiology (MOSAIC) Randomized Clinical Trial. *JAMA Internal Medicine*, 181(5), 639–647.
- Kabat-Zinn, J. (1990). Full Catastrophe Living: Using The Wisdom Of Your Body And Mind To Face Stress, Pain and Illness. Delta.

- Keel, P. K., & Klump, K. L. (2003). Are Eating Disorders Culture-Bound Syndromes? Implications For Conceptualizing Their Etiology. *Psychological Bulletin*, 129(5), 747–769.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*, 62(6), 593-602.
- Kessler, R. C., Chiu, W. T., Demler, O., Merikangas, K. R., & Walters, E. E. (2010). Prevalence, Severity and Comorbidity Of 12-Month DSM-IV Disorders In The National Comorbidity Survey Replication. *Archives Of General Psychiatry*, 62(6), 617–627.
- Klein, D. F. (1981). Anxiety reconceptualized. *Comprehensive psychiatry*, 22(1), 7-19.
- Krystal, A. D. (2012). Psychiatric disorders and sleep. *Neurologic clinics*, 30(4), 1389-1413.
- Lazarus, R. S. (1993). From Psychological Stress To The Emotions: A History Of Changing Outlooks. *Annual Review Of Psychology*, 44(1), 1–21.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal and Coping*. Springer Publishing Company.
- Lindekilde, N., Halldorsson, T. I., Laugesen, K., Henriksen, T. B., & Grandjean, P. (2022). Maternal fish oil supplementation during pregnancy and asthma, respiratory and atopic disease in childhood: a systematic review and meta-analysis. *BMJ open respiratory research*, 9(1), e000901.
- Magee, W. J., Eaton, W. W., Wittchen, H. U., McGonagle, K. A., & Kessler, R. C. (1996). Agoraphobia, simple phobia, and social phobia in the National Comorbidity Survey. *Archives of general psychiatry*, 53(2), 159-168.
- Mattick, R. P., & Clarke, J. C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behaviour research and therapy*, 36(4), 455-470.
- McEwen, B. S. (1998). Protective And Damaging Effects Of Stress Mediators. *New England Journal Of Medicine*, 338(3), 171–179.
- McEwen, B. S. (2000). Allostasis And Allostatic Load: Implications For Neuropsychopharmacology. *Neuropsychopharmacology*, 22(2), 108–124.
- Mullem, C. V., & Tillett, W. S. (2009). Autoimmunity in chronic fatigue syndrome: a critical review. *Autoimmune diseases*, 2009.
- Navarro, P., García-Gómez, J. M., & García-Sáez, G. (2022). Health Monitoring in Smart Environments: A Real-Time Medical Emergency Detection System Based on Wearable Technologies. *Sensors*, 22(6), 1958.