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INFLUENCE OF DIET ON EMOTIONAL WELLBEING–A GENDER PERSPECTIVE

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ABSTRACT
The influence of diet on emotions explores how dietary choices can impact mood, cognition, and emotional well-being, highlighting the intricate relationship between nutrition and mental health. This study explores how diet and emotions interact, particularly examining gender differences in emotional and mindful eating behaviours among 102 participants in Urban Bengaluru through personal interviews and online surveys. Key findings from the Emotional Eating Questionnaire (EEQ) and Mindful Eating Questionnaire (MEQ) reveal significant trends: 66% of respondents use food to cope with anxiety, while 45% struggle to control sweets, particularly chocolates, and 43% emotionally eat under stress, anger, or boredom; nearly half 49% feel guilt after consuming forbidden foods and 50% overeat while dieting, indicating the challenges in dietary control. Statistical analyses, including Chi-square and ANOVA tests, affirm significant gender-based disparities in eating behaviours and emotional responses. Females demonstrate higher susceptibility to emotional triggers such as anxiety, stress, or boredom, contributing to greater emotional eating tendencies and challenges in mindful eating and males exhibit lower engagement in emotional eating behaviours but may demonstrate less mindfulness during eating; 22% of males versus 18% of females feel controlled by food. Addressing these gender specific patterns through targeted interventions aimed at enhancing emotional regulation and promoting mindful eating practices is crucial for fostering healthier eating behaviours and improving emotional well-being across genders.

Keywords: *Diet, Emotions, Emotional Eating, Mindful Eating, Gender Differences, Dietary Self-regulation, Emotional Well-being*

INTRODUCTION

Hippocrates is often quoted as having said the following in approximately 400 BCE: "Leave your drugs in the chemist's pot if you can heal the patient with food," stresses a long-standing understanding of the therapeutic potential of diet. This historical perspective sets the groundwork for modern nutritional psychiatry, which builds upon ancient practices using current scientific validation. By acknowledging this historical context, we appreciate the progression of knowledge that connects past and present understanding of diet's impact on health.

A healthy dietary pattern can affect mental health and well-being through anti-inflammatory, antioxidant, neurogenesis, microbiome- and immune-modifying mechanisms, as well as through epigenetic modifications **(Marx *et al.*, 2017)**. The complex association of diet and emotional well-being has eye-balled a noteworthy dialogue in the current scenario, signalling an increasing understanding of the insightful effects that nutrition can have on emotional health. The ultra-modern lifestyle has brought about the luxury of so-called convenience foods loaded with sugar and fat, which have adverse effects on mood, resulting in anxiety and depression. Emerging evidence suggests that dietary patterns rich in fruits, vegetables, whole grains, and lean proteins are associated with improved mood and mental health outcomes, whereas diets rich in processed foods and sugars are associated with adverse psychological effects **(Jacka *et al.*, 2014)**.

Forced dietary interventions that can range from short-term modifications to long-term dietary patterns for research purposes have shown to induce changes in brain structure, chemistry and physiology. For example, diets rich in specific nutrients (e.g., omega-3 fatty acids, B vitamins) have been linked to alterations in neurotransmitter levels impacting mood and behaviour **(Prasad *et al.*, 1998)**.

The gut-brain axis acts as a two-way fabric that connects the gastrointestinal tract and central nervous system, thus playing a pivotal role in moderating the effects of diet on mood. This intricate system involves interactions between the

gut microbiota, immune responses, and neurochemical signalling pathways, underscoring the importance of gut health in emotional regulation **(Mayer *et al.*, 2015; Foster *et al.*, 2017)**. Furthermore, specific nutrients, such as omega-3 fatty acids, B vitamins, and amino acids, have been shown to influence neurotransmitter function and brain structure, thereby affecting mood and cognitive function **(Berk *et al.*, 2013; Grosso *et al.*, 2014)**.

Interestingly, a study of university students found no association between dietary habits and mental health status, indicating that other factors may play a more significant role in mental health **(Afiqah *et al.*, 2023)**. The role of gut microbiota in brain health and the psycho-protective potential of certain dietary interventions have also been noted **(Grajek *et al.*, 2022; Keskin *et al.*, 2023)**. Moreover, emotional eating behaviours and their influence on dietary choices are recognized as important factors in the context of mental health and dietary habits **(Torrado *et al.*, 2015)**.

Studies have shown that diet and nutrition are critical not only for physiological health, but also have significant effects on mood and mental well-being**.** Western dietary habits have been investigated for their relationship with neuropsychiatric disorders and overall mental health, suggesting a beneficial effect of specific nutrients on stress, sleep disorders, anxiety, and cognitive function **(Muscaritoli *et al.*, 2021)**.

Emotional well-being is influenced by nutrition-based dietary preferences and healthy eating habits, but the link at all times is not forthright. Some studies have found that nutrition knowledge significantly partners with healthy eating and have also found strong connection of nutrition knowledge to food choice. Moreover, the positive role of certain nutrients in mental health and the potential of nutrition education to influence dietary choices highlight the importance of further studies. **(Wardle *et al.*, 2000; Muscaritoli *et al.*, 2021)**

There are certain gaps concerning the underlying mechanisms and long-standing outcomes of dietary interventions, regardless of the convincing evidence supporting the connection between diet and emotional well-being. This research aims to evaluate the existing literature on the influence of several dietary patterns on emotional well-being, explore the role of the gut-brain axis mood regulation, and deliberate probable dietary approaches in supporting emotional well-being. This study aims to gather public health schemes and discrete dietary preferences that can enhance mental health by shedding more light on the interconnectivity between mental health and nutrition.

METHODOLOGY

The study titled “INFLUENCE OF DIET ON EMOTIONAL WELLBEING - A GENDER PERSPECTIVE” was executed in order to dig deep into the relationship between dietary choices and emotional wellbeing. Following is the methodology that was adopted in the study;

3.1. Area and the Population of the Study

The "area of study" refers to the specific field or discipline within which the research is conducted. It defines the main theme or topic that the study explores and contributes to. The "Population of Study" refers to the specific group of respondents that the researcher plans to study and obtain inferences from and characterizes the larger target group or population to which the research findings would be generalized. This research was conducted in urban Bengaluru and attracted participants from a broad spectrum of age groups, spanning from individuals younger than 18 to those as old as 62 years.

3.2. Research Strategy

This is the flow chart of the study and embraces the plan of action to organize data so as to accomplish the research goal. A cross-sectional study using quantitative method (pre-defined questions formatted in standardized questionnaires) was used that provided access to quantitative and qualitative information**.** The nutritional educational campaign educated the sample group and provided healthy eating guidelines to maintain an emotional wellbeing.

3.3. Sample Size, Sampling Method and the Sample Selection Criteria

“**Sample size**” refers to the number of respondents included in the study and signifies the measure of the population that is chosen and evaluated to obtain inferences about the entire population. A sample size of 102 participants (n=102) was considered.

Sample Selection Criteria

- **Inclusion criteria**:
- The willingness of the individuals to participate in the study along with the completion of the given questionnaires.
- The individuals were not having any known medical condition.
- The individuals being co-operative.
- The individuals residing in urban Bengaluru.
- **Exclusion criteria**:
- The individuals with known medical conditions were excluded.
- The individuals who were not willing to participate and who did not complete the questionnaires were excluded.
- Children were excluded.
- Adults over the age of 70+ were excluded.

- The individuals not residing in urban Bengaluru were excluded.

3.4. Tools and Techniques of the Study

Demographic Information of the Respondents

General information about the respondents, such as Name, Age, Gender, Marital Status, Educational Qualification and Employment Status was collected using a pre-tested questionnaire.

Emotional Eating Questionnaire

The Emotional Eating Questionnaire (EEQ) is a dietary assessment tool, a 10-item questionnaire designed to evaluate the effectiveness with which you handle challenges, emotions, stress and desires with relation to food. The 10 questions are divided into 3 subscales- the first subscale, Internal Disinhibition has 6 questions like - "Do you feel less control over your diet when you are tired after work at night? or "Do you eat more of your favourite food and with less control when you are alone?"; the second subscale – Type of Food, include 2 questions like - "Do you crave for specific foods?" and the third factor – Sense of Guilt that include 2 questions related with persons' emotions and their relation with the weighing scales and the sense of guilt that eating "forbidden" foods (e.g. sweets or snacks) produces. A Likert Scale having four likely replies: 1) Never, 2) Sometimes;3) Generally and 4) Always and each reply was given a score of 1 to 4, the lower the score, the healthier the emotional behaviour **(Garaulet *et al.*, 2012)**.

Mindful Eating Questionnaire

The Mindful Eating Questionnaire (MEQ), the initial assessment tool formulated by Framson and colleagues helps in assessing the levels of mindfulness of the participants. It is a self-assessment instrument that consists of five-mindful eating factors: disinhibition, awareness, external cues, emotional response and distraction. There are 6 questions - "I stop eating when
I'm full…even when eating something I love" and "If there's good food at a party, I'll continue eating even after I'm full" under the disinhibition factor; 1 question - "I appreciate the way my food looks on my plate" under the awareness factor ; 1 questions - "When I eat a big meal, I notice if it makes me feel heavy or sluggish" under external cues; 3 questions - "I recognize when food advertisements make me want to eat" and "I snack without noticing that I am eating" under emotional response and 2 questions - "I think about things I need to do while I am eating" under distraction subscales. A Likert Scale having four likely replies: 1) Never, 2) Sometimes; 3) Generally and 4) Always and each reply was given a score of 1 to 4, with higher scores indicating more mindfulness **(Framson et al., 2009)**.

3.5. Data Reliability

Cronbach's alpha (α) is a measure of internal consistency, used to determine the reliability of a scale composed of multiple 'Likert Scales' in a questionnaire. This statistical approach helped in determining the internal consistency and reliability of the factor sets, providing a solid foundation for subsequent analysis and ensuring that the measurements used were both reliable and accurate. This meticulous verification process underscores our commitment in maintaining high standards of data integrity and accuracy throughout the study.

Table No. 3.1 - Cronbach Alpha (α) Value

Calculated - Cronbach Alpha (α):	Internal consistency
0.8921	Good

The table no. 3.1 gives the *Cronbach Alpha (α) Value* – 0.8921 which poses as '**Good' on the internal consistency level** and indicates that the **collected data is more accurate and reliable (Framson *et al.*, 2009; Bernabéu *et al.*, 2020).**

3.6. Pre-testing of the Questionnaire

The questionnaire was pre-tested with 10 respondents, so as to check the rationality and suitability of the questionnaire to achieve the proposed objectives and outcome of the study. Essential edits were done in the questionnaire wherever it was required. These participants were not who were counted in into the final sample batch.

3.7. Data Collection Methods

The data from the respondents was collected using the standard questionnaires (both EEQ and MEQ) by contacting them personally or by forwarding Google forms after their explicit consent. The questionnaires' were tailored together along with the questions related to demographic profile, so as to ensure that the relevant data is gathered in an effective way.

3.8. Statistical Analysis and Correlation

The data collected was tabulated and was subjected to statistical analysis. SPSS (Statistical Package for the Social Sciences) software was used for the statistical analysis of the obtained data. Data was subjected to descriptive statistical analysis and the results on categorical measurements were presented in number (%). The percentages of the data collected are presented in tabular form or graphical representations for each factor, which helped to draw the significance of the study. Chi-square test was applied as the variables were categorical in nature and to show the

responses were independent. Analysis of Variance (ANOVA) was used to compare variances across the means (or average) of different factors.

3.9. Nutritional Education Program

Raising public awareness about the influence of diet on emotions is crucial for promoting healthier eating habits. Any online platform that enables users and audiences to generate content and interact with one another is considered social media. An online platform like "whatsapp" has the potential to penetrate into diverse regions within no time and communicate the message quite loud and clear thus, imparting abundant knowledge as well. Grabbing this potential, a nutrition educational program was made on whatsapp and forwarded. An e-brochure was designed titled - "Mood on the Menu: Nourishing Insights into the Impact of Diet on Emotional Well-being." Also, 2 "whatsapp shorts" – "Food Fables" and "You are what you eat" were made and circulated.

The e-brochure highlighted the following pointers;

- What is Emotional Well-being?
- The Way in which Diet Influences Mood
- Key Nutrients for Emotional Health
- Foods that Boost Mood
- Foods to Avoid or Limit
- Nutrient Rich and Balanced Foods - Quick Recipe Ideas

The information for the e-brochure was gathered with meticulous care and attention and the layout was planned and executed keeping in mind the targeted population. A pictorial and infographic material along with a brief explanation of the topics has been used to design the brochure. The e-brochure and the "whatsapp shorts" were a breeze to circulate, not to forget they are less vulnerable and also reduce clutter. Finding common ground and making the information relatable fostered a sense of belonging and relatability with the subject at hand. And witnessing the active participation of the respondents in the absorbing the material and taking up the survey brought a deep sense of satisfaction.

RESULTS AND DISCUSSION

In the present study a survey method of research i.e., Personal Interview and Online Survey methods were adopted to collect the responses from the respondents in Urban Bengaluru on the influence of diet on emotional wellbeing of the individuals. A total of 102 respondents

participated in the survey and the data collected is analyzed using suitable Statistical Techniques so as to validate the reliability and consistency of the responses and results are presented below

4.1. Demographic data analysis

I. Age and Gender:

Table no. 4.1 - Age and Gender Wise Distribution

	Gender		
Age	**Female**	**Male**	**Total**
< 18	5	0	5
18-24	4	3	7
25-34	14	13	27
35-44	16	15	31
45-54	9	20	29
> 54	2	1	3
Total	**50**	**52**	**102**

The table no. 4.1 displays the 'Age and Gender Wise Distribution of Respondents' wherein, a relatively equal proportion of participants belong to both the genders - 52 (51%) respondents being male and 50 (49%) respondents being female.

When it comes to age, majority of respondents i.e., 31 (30%) respondents are in the age group of 35-44 years; followed by 29 (28%) respondents in the age group of 45-54 years; about 27 (26%) respondents in the age group of 25-34 years and 7 (7%) respondents are in the age group of 18-24 years out of total 102 respondents.

II. Marital Status:

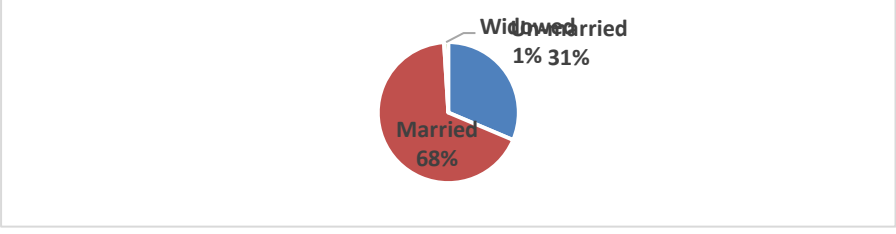

Figure No. 4.1 - Marital Status-wise Distribution

The above figure no. 4.1 shows

the 'Marital Status-wise Distribution of Respondents' wherein, a large majority of respondents i.e., 69 (68%) respondents are married and 32 (31%) respondents' marital status is un-married out of total 102 respondents.

III. Educational Qualification and Employment Status:

Table no. 4.2 - Educational Qualification and Employment Status-wise Distribution

Employment Status	Education Qualification					Total
	Up to 12th Grade	Bachelor's Degree	Master's Degree	PhD	Others	
Student	6	2	4	0	1	13
Un-Employed	2	0	0	0	1	3
Full-Time	12	23	30	1	0	66
Part-Time	5	7	4	0	0	16
Retired	0	1	0	0	0	1
Others	1	1	1	0	0	3
Total	**26**	**34**	**39**	**1**	**2**	**102**

The table no. 4.2 demonstrates the 'Educational Qualification and Employment Status-wise Distribution of Respondents' wherein, a large majority of respondents i.e., 66 (65%) respondents are working as full time employees; followed by 16 (16%) respondents who are working in part-time jobs and about 13% (13) respondents are students. When it comes to educational qualification a majority of respondents i.e., 39 (38%) respondents are having the master's degree; followed by 34 (33%) respondents who have bachelor's degree and 26 (25%) respondents are 12th graders.

4.2. Emotional Eating Questionnaire

Factor 1 – Disinhibition

Table No. 4.3 - 'Disinhibition' Factor of the Emotional Eating Questionnaire

Item	Gender	Responses – n (%)				Total
		Never/Rarely	Always/Usually	Sometimes	Generally	
Do you feel less control over your diet when you are tired after work at night?	**Female**	12 (11.76%)	20 (19.61%)	7 (6.86%)	11 (10.78%)	**50 (49.02%)**
	Male	11 (10.78%)	26 (25.49%)	10 (9.80%)	5 (4.90%)	**52 (50.98%)**
Do you eat more of your favourite food and with less control when you are alone??	**Female**	13 (12.75%)	22 (21.57%)	7 (6.86%)	8 (7.84%)	**50 (49.02%)**
	Male	13 (12.75%)	21 (20.59%)	11 (10.78%)	7 (6.86%)	**52 (50.98%)**
Do you eat when you are stressed, angry or bored?	**Female**	10 (9.80%)	24 (23.53%)	7 (6.86%)	9 (8.82%)	**50 (49.02%)**
	Male	10 (9.80%)	22 (21.57%)	14 (13.73%)	6 (5.88%)	**52 (50.98%)**
How often do you feel that food controls you, rather than you controlling food?	**Female**	17 (16.67%)	18 (17.65%)	5 (4.90%)	10 (9.80%)	**50 (49.02%)**
	Male	11 (10.78%)	22 (21.57%)	10 (9.80%)	9 (8.82%)	**52 (50.98%)**
Do you have problems controlling the amount of certain types of food you eat?	**Female**	16 (15.69%)	20 (19.61%)	5 (4.90%)	9 (8.82%)	**50 (49.02%)**
	Male	12 (11.76%)	26 (25.49%)	9 (8.82%)	5 (4.90%)	**52 (50.98%)**
When you overeat while on a diet, do you give up and start eating without control, particularly food that you think is fattening?	**Female**	12 (11.76%)	22 (21.57%)	10 (9.80%)	6 (5.88%)	**50 (49.02%)**
	Male	13 (12.75%)	28 (27.45%)	6 (5.88%)	5 (4.90%)	**52 (50.98%)**

The table no. 4.3 displays the '**Disinhibition'** factor and covers six aspects related to discontrol with respect to eating.

- The item 'Gender vs. Do you feel less control over your diet when you are tired after work at night?' portrays a majority of respondents i.e., 26 (26%) respondents and 20 (20%) female respondents 'always' have less control on the diet when they are tired after working at night.
- The item 'Gender vs. Do you eat more of your favourite food and with less control when you are alone??' displays a majority of respondents i.e., 43 (42%) respondents out of which 22 (22%) female respondents and 21 (21%) male respondents who 'always' eat favourite food with less control when they are alone.

- The item 'Gender vs. Do you eat when you are stressed, angry or bored?' represents a majority of respondents i.e., 24 (24%) female respondents and 22 (22%) male respondents who 'always' eat while they feel stressed, angry or bored.
- The factor 'Gender vs. When you overeat while on a diet, do you give up and start eating without control, particularly food that you think is fattening?' flaunts a majority of respondents i.e., 28 (28%) male respondents and 22 (22%) female respondents who 'always' overeat while on a diet, so they gave up the diet and start eating without control, particularly food that you think is fattening.
- The item 'Gender vs. How often do you feel that food controls you, rather than you controlling food?' surfaces a majority of respondents i.e., 22 (22%) male respondents and 18 (18%) female respondents who 'always' feel that food controls them rather than they control the food.
- Finally, the factor 'Gender vs. Do you have problems controlling the amount of certain types of food you eat?' exhibits a majority of respondents, 45% (46 individuals) that includes 26 (25%) male respondents and 20 (20%) female respondents, reported that they 'always' have problems controlling the amount of certain types of food.

Factor 2 – Type of Food

Table No. 4.4 - 'Type of Food' Factor of the Emotional Eating Questionnaire

Do you crave specific foods?	**Female**	9 (8.82%)	26 (25.49%)	8 (7.84%)	7 (6.86%)	**50 (49.02%)**
	Male	11 (10.78%)	27 (26.47%)	8 (7.84%)	6 (5.88%)	**52 (50.98%)**
Is it difficult for you to stop eating sweet things, especially chocolate?	**Female**	13 (12.75%)	20 (19.61%)	3 (2.94%)	14 (13.73%)	**50 (49.02%)**
	Male	9 (8.82%)	26 (25.49%)	11 (10.78%)	6 (5.88%)	**52 (50.98%)**

The table no. 4.4 depicts the **'Type of Food'** factor and covers two aspects wherein people eat most frequently in given situations wherein, the item 'Gender vs. Do you crave specific foods?' flaunts a majority of male respondents i.e., 27 (26%) respondents and 26 (25%) female respondents who 'always' crave for specific foods and for the item 'Gender vs. Is it difficult for you to stop eating sweet things, especially chocolate?' the results reveal a majority of male respondents i.e., 26 (25%) respondents and 20 (20%) female respondents who feel it is 'always' difficult for them to stop eating sweets, especially chocolates.

Factor 3 – Sense of Guilt

Table No. 4.5 - 'Sense of Guilt' Factor of the Emotional Eating Questionnaire

Do the weight scales have a great power over you? Can they change your mood?	**Female**	24 (23.53%)	8 (7.84%)	2 (1.96%)	16 (15.69%)	**50 (49.02%)**
	Male	20 (19.61%)	15 (14.71%)	5 (4.90%)	12 (11.76%)	**52 (50.98%)**
Do you feel guilty when eat "forbidden" foods, like sweets or snacks?	**Female**	12 (11.76%)	24 (23.53%)	7 (6.86%)	7 (6.86%)	**50 (49.02%)**
	Male	12 (11.76%)	26 (25.49%)	7 (6.86%)	7 (6.86%)	**52 (50.98%)**

The table no. 4.5 illustrates the **'Sense of Guilt'** factor and covers two things felt by individuals when they look at the weighing scales or the consumption of forbidden foods which includes the item 'Gender vs. Do the weight scales have a great power over you? Can they change your mood?' wherein the results outline a majority of respondents i.e., 24 (24%) females and 20 (19%) males 'always' felt guilty after weighing them on the scales and the item 'Gender vs. Do you feel guilty when eat "forbidden" foods, like sweets or snacks?' indicate a majority of respondents i.e., 26 (26%) males and 24 (24%) females 'always' felt guilty while having forbidden foods like sweets or snacks.

Emotional Eating Questionnaire Score

Table No. 4.6 - Gender vs. Type of Eaters

Gender	**Responses# - n (%)**				**Total**
	1	**2**	**3**	**4**	
Female	20 (19.61%)	8 (7.84%)	12 (11.76%)	10 (9.80%)	50 (49.02%)
Male	7 (6.86%)	12 (11.76%)	13 (12.75%)	20 (19.61%)	52 (50.98%)
Total	27 (26.47%)	20 (19.61%)	25 (24.51%)	30 (29.41%)	102 (100%)

#1=Non-emotional Eater #2=Low-emotional Eater #3=Emotional Eater #4=Very Emotional Eater

The table no. 4.6 depicts the responses on 'Gender vs. Type of Eaters' based on the Emotional Eating Questionnaire (EEQ) Score wherein out of 102 respondents, 30% (30 respondents) including 20 (20%) males and 10 (10%) females are categorized as 'Very Emotional Eaters; 27% (27 respondents), comprising 20 (20%) females and 7 (7%) males as 'Non-emotional Eaters'; about 25% (25 respondents) with 13 (13%) males and 12 (12%) females as 'Emotional Eaters' and 20% (20 respondents) including 12 (12%) males and 8 (8%) females as 'Low-emotional Eaters' based on their Emotional Eating Questionnaire (EEQ) scores.

All in all, 55% (55 respondents) – 22 females and 33 males from the total respondents, fall in the categories of Emotional to Very Emotional Eaters.

To further our findings, a study is presented which explored the gender differences in dietary intakes, eating behaviours, and motivational variables in men and women with cardiovascular risk factors, wherein 64 men and 59 premenopausal women were assessed using the Regulation of Eating Behaviours scale, a validated food frequency questionnaire, and the Three-Factor Eating questionnaire. Men showed lower emotional susceptibility to disinhibition, while women had higher scores for eating-related self-determined motivation (SDI); indicating women exhibited a better dietary profile and higher eating-related SDI compared to men **(Leblanc *et al.*, 2015)**.

The study examines the relationship between emotional eating and weight outcomes in adults. It discusses self-report measures for assessing emotional eating, such as the Dutch Eating Behaviour Questionnaire (DEBQ), the Three Factor Eating Questionnaire (TFEQ), and the Emotional Eating Scale (EES). The review explores the link between emotional eating and weight gain in longitudinal studies, as well as challenges with weight loss and maintenance in intervention studies. It also evaluates current interventions targeting emotional eating, including mindfulness, Acceptance and Commitment Therapy (ACT), Cognitive Behaviour Therapy (CBT), and Dialectical Behaviour Therapy (DBT). Understanding this relationship is crucial for developing effective weight loss interventions for emotional eaters **(Frayn *et al.*, 2018)**.

Călinescu *et al.*, 2020 found that women had a lower emotional susceptibility to disinhibition compared to men, which suggests a gender-specific pattern in emotional eating behaviour. Furthermore, the study highlighted that women scored higher on emotional and restrained eating scales than men, indicating a potential inclination towards emotional eating among women. This finding is further supported by **(Dietrich *et al.*, 2014)**, who demonstrated a positive relationship between emotional eating domains and BMI z-scores for the entire sample. It is evident that gender plays a significant role in emotional eating behaviour, with women exhibiting higher susceptibility to emotional eating and disinhibition.

Hypothesis Testing

Chi-Squire Test:

To check the relation between the 'Gender and Responses on Emotional Eating Questionnaire (EEQ)' Chi-square Test is applied as both the variables are categorical in nature. Chi-square Test shows not only association between the two or more categorical variables but also shows how the recorded responses are independent.

Table No. 4.7 - Chi-square Test – Gender vs. Emotional Eating Questionnaire (EEQ)

Statistic	DF	Value	Probability
Chi-Square	3	10.3974	0.0155

The table no. 4.7 displays the 'Chi-square Test – Gender Vs. Responses on Emotional Eating Questionnaire (EEQ)' results wherein, the predicted probability of EEQ score is less than the level of significance (Alpha Value) i.e., 0.05. So, we reject the null hypothesis and accept the alternative hypothesis. Thus, there is a significant difference in the dietary habits of the respondents based on their gender and emotions.

Null Hypothesis (H0):

There is no significant difference in the dietary habits of the respondents based on their gender and emotions.

Alternate Hypothesis (H1):

There is a significant difference in the dietary habits of the respondents based on their gender and emotions.

Dimensional and Factor Level Study

Mean - Emotional Eating Questionnaire

Table No. 4.8 - Mean of Emotional Eating Questionnaire

Sl. No.	EEQ Parameters	Mean
1	Do the weight scales have a great power over you? Can they change your mood?	1.186275
2	Do you crave for specific foods?	1.215686
3	Is it difficult for you to stop eating sweet things, especially chocolate?	1.313726
4	Do you have problems controlling the amount of certain types of food you eat?	1.137255
5	Do you eat when you are stressed, angry, or bored?	1.303922
6	Do you eat more of your favourite food and with less control when you are alone?	1.215686
7	Do you feel guilty when you eat "forbidden" foods like sweets or snacks?	1.176471
8	Do you feel less control over your diet when you are tired after work at night?	1.254902

9	When you overeat while on a diet, do you give up and start eating without control, particularly food that you think is fattening?	1.127451
10	How often do you feel that food controls you, rather than you controlling food?	1.245098

The table no. 4.8 shows 'mean responses of all the items and correlation of every item with the rest of the test'; means range observed was from 1.127 to 1.313 (score range: 0 to 3). Participants showed lowest score on item 9 ("When you overeat while on a diet, do you give up and start eating without control, particularly food that you think is fattening"? and highest on item 3 ("Is it difficult for you to stop eating sweet things, especially chocolate?").

Testing of Mean:

To test the significance of **mean values of Gender vs. Emotional Eating Questionnaire Factors**, ANOVA is used to see is there any significant difference amongst the responses given, based on mean. Following hypothesis is drawn;

Table No. 4.9 – Testing of Mean

Null Hypothesis	Alternative Hypothesis
H0 - Mean Responses of the genders are equal	H1 & Not H0
H0 - Mean Responses of all Emotional Eating Questionnaire factors are equal	H1 & Not H0
H0 - No interaction effect between the gender of respondents and Emotional Eating Questionnaire factors	H1 & Not H0

ANOVA –Overall and Individual Level:

Table No. 4.10 - Overall ANOVA Model Fit

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	19	403.99959	6.41269	4.26	<0.0001

Based on the table no. 4.10, calculated probability (Pr > F) value **<0.0001** is less than the table probability. Hence, overall models on responses of different gender respondents vs. Emotional Eating Questionnaire factors are significant.

Table No. 4.11 – Individual Level ANOVA

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Gender	1	334.9888684	111.6629561	74.13	<0.0001
EEQ Factors	9	29.4697368	1.9646491	1.30	0.1896
Gender* EEQ Factors	9	39.5409805	0.8786885	0.58	0.9884

*Pr>F = **<0.0001**

The table no. 4.11 proposes the following;

Gender of Respondents:

The calculated probability (Pr > F) value **<0.0001** is less than the table probability. Hence, Mean Responses of the genders based on EEQ factors are not equal (H1 & Not H0).

EEQ factors:

The calculated probability (Pr > F) **0.1896** is greater than the table probability. Hence, Mean Responses of different EEQ factors are equal (H1 & Not H0).

Gender* EEQ Factors -Interaction effect:

The calculated probability (Pr > F) **0.9884** is much greater than the table probability. Hence, interaction effect of Gender of respondents and EEQ factors is insignificant (H1 & Not H0).

Mindful Eating Questionnaire (MEQ)

Factor 1 - Disinhibition

Table No.4.12 - 'Disinhibition' Factor of the Mindful Eating Questionnaire

Item	Gender	Responses - n (%)				Total
		Never/Rarely	Always/Usually	Sometimes	Generally	
I stop eating when I'm full…even when eating something I love.	**Female**	13 (12.75%)	20 (19.61%)	7 (6.86%)	10 (9.80%)	**50 (49.02%)**
	Male	13 (12.75%)	25 (24.51%)	11 (10.78%)	3 (2.94%)	**52 (50.98%)**
If there's good food at a party, I'll continue eating even after I'm full.	**Female**	13 (12.75%)	20 (19.61%)	9 (8.82%)	8 (7.84%)	**50 (49.02%)**
	Male	14 (13.73%)	21 (20.59%)	13 (12.75%)	4 (3.92%)	**52 (50.98%)**
If there are		20	20	1	9	**50**

leftovers that I like, I take a second helping even though I'm full.	**Female**	(19.61%)	(19.61%)	(0.98%)	(8.82%)	**(49.02%)**
	Male	15 (14.71%)	21 (20.59%)	11 (10.78%)	5 (4.90%)	**52 (50.98%)**
When I eat at "all you can eat" buffets, I tend to overeat.	**Female**	16 (15.69%)	19 (18.63%)	6 (5.88%)	9 (8.82%)	**50 (49.02%)**
	Male	15 (14.71%)	25 (24.51%)	8 (7.84%)	4 (3.92%)	**52 (50.98%)**
When I'm eating one of my favorite foods, I don't recognize when I've had enough.	**Female**	12 (11.76%)	22 (21.57%)	10 (9.80%)	6 (5.88%)	**50 (49.02%)**
	Male	15 (14.71%)	28 (27.45%)	5 (4.90%)	4 (3.92%)	**52 (50.98%)**
If it doesn't cost much more, I get the larger size food or drink regardless of how hungry I feel.	**Female**	14 (13.73%)	17 (16.67%)	10 (9.80%)	9 (8.82%)	**50 (49.02%)**
	Male	14 (13.73%)	22 (21.57%)	10 (9.80%)	6 (5.88%)	**52 (50.98%)**

The table no. 4.12 displays the '**Disinhibition'** Factor and covers six aspects related to discontrol with respect to eating.
- The item 'Gender vs. I stop eating when I'm full…even when eating something I love' depicts a majority of respondents i.e., 25 (25%) male respondents and 20 (20%) female respondents said they 'always' or 'usually' stop eating when feeling full, despite it being their favourite food.
- The 'Gender vs. If there's good food at a party, I'll continue eating even after I'm full' item shows a majority of respondents i.e., 41 (41%) which includes 21 (21%) male respondents and 20 (20%) female respondents 'always' or 'usually' indulge in eating more at parties as there is abundance of their favourite foods.
- The factor 'Gender vs. If there are leftovers that I like, I take a second helping even though I'm full' puts forth that a majority of respondents i.e., 21 (21%) male respondents and 20 (20%) female respondents 'always' or 'usually' took second helping even though they were full, so as to just avoid leftover food followed by almost similar number of respondents i.e., 20 (20%) female respondents and 15 (15%) male respondents' never' to 'rarely' did the same; showing the responses at both ends, 'always' and 'never' for the said item.
- The item 'Gender vs. When I eat at "all you can eat" buffets, I tend to overeat' portrays a majority of respondents – 43% respondents i.e., 25 (25%) male respondents and 19 (19%) female respondents 'always' tend to overeat at buffets and about 14% respondents which includes 8 (8%) male respondents and 6 (6%) female respondents said they 'sometimes' tend to overeat at buffets; showing that over 57% respondents tend to overeat at buffets.
- The factor 'Gender vs. When I'm eating one of my favorite foods, I don't recognize when I've had enough' pinpoints that a majority of respondents – 50% respondents which includes 28 (28%) male respondents and 22 (22%) female respondents 'always' tend to indulge blindly into eating when it's their favorite food.
- And the item 'Gender vs. If it doesn't cost much more, I get the larger size food or drink regardless of how hungry I feel' marks 22% (22) male respondents and 17% (17) female respondents as people who 'always' consume more food, when it costs cheaper; followed by a 10% (10) male respondents and 10% (10) female respondents as people who 'sometimes' consume more food, when it costs cheaper; pinpointing towards a 59% respondents who consumed more food, when it costed cheaper.

Factor 2 – Awareness

Table No. 4.13 - 'Awareness' Factor of the Mindful Eating Questionnaire

I appreciate the way my food looks on my plate.	**Female**	8 (7.84%)	27 (26.47%)	8 (7.84%)	7 (6.86%)	**50 (49.02%)**
	Male	10 (9.80%)	27 (26.47%)	9 (8.82%)	6 (5.88%)	**52 (50.98%)**

The table no. 4.13 displays the '**Awareness'** factor which gives an insight of being aware of and appreciating the effects of food on the senses and the item 'Gender vs. I appreciate the way my food looks on my plate' highlights 54% of the respondents - 27% (27) male respondents and 27% (27) female respondents appreciated the way food looked on their plate.

Factor 3 – External Cues

Table No. 4.14 - 'External Cues' Factor of the Mindful Eating Questionnaire

When I eat a big meal, I notice if it makes me feel heavy or sluggish.	**Female**	17 (16.67%)	18 (17.65%)	5 (4.90%)	10 (9.80%)	**50 (49.02%)**
	Male	11 (10.78%)	22 (21.57%)	10 (9.80%)	9 (8.82%)	**52 (50.98%)**

I recognize when food advertisements make me want to eat.	**Female**	19 (18.63%)	20 (19.61%)	0 (0.00%)	11 (10.78%)	**50 (49.02%)**
	Male	12 (11.76%)	23 (22.55%)	11 (10.78%)	6 (5.88%)	**52 (50.98%)**
I recognize when I'm eating and not hungry.	**Female**	7 (6.86%)	23 (22.55%)	7 (6.86%)	13 (12.75%)	**50 (49.02%)**
	Male	8 (7.84%)	23 (22.55%)	15 (14.71%)	13 (12.75%)	**52 (50.98%)**

The table no. 4.14 displays the '**External Cues'** Factor which concentrates on eating in response to environmental cues.
- The item **'**Gender vs. When I eat a big meal, I notice if it makes me feel heavy or sluggish' holds high around 40% of the respondents – 22% (22) male respondents and 18% (18) female respondents 'always' or 'usually' felt heavy or sluggish after having a big meal and another 15% of the respondents - 10% (10) male respondents and 5% (5) female respondents 'sometimes' felt the same, suggesting that a 55% of the respondents used to feel heavy or sluggish after a big meal.
- The item 'Gender vs. I recognize when food advertisements make me want to eat' tells that around 43% of the respondents – 23% (23) males and 20% (20) females 'always' or 'usually' recognized when advertisements increased their cravings with another 11% of the respondents 'sometimes' recognized the urge, suggesting that a 54% respondents recognized when the advertisements used to increase their cravings. The impact of food labelling systems on food choices and eating behaviours has been studied, indicating that gender differences exist in brand commitment, impulse buying, and hedonic consumption **(Tifferet *et al.*, 2012)**. This suggests that gender-specific factors may influence the effectiveness of food labelling systems in shaping food selection and intake.
- The 'Gender vs. I recognize when I'm eating and not hungry' factor suggests around 46% of the respondents – 23% (23) male respondents and 23% (23) female respondents 'always' or 'usually' used to recognize when they were binge eating with another 15% of the respondents - 8% (8) male respondents and 7% (7) female respondents 'sometimes' understood that they were binge eating, implying that a 61% of the total respondents used to recognize that they were binging and still did not have control over it.

Factor 4 – Emotional Response

Table No. 4.15 - 'Emotional Response' Factor of the Mindful Eating Questionnaire

I snack without noticing that I am eating.	**Female**	7 (6.86%)	27 (26.47%)	11 (10.78%)	5 (4.90%)	**50 (49.02%)**
	Male	13 (12.75%)	25 (24.51%)	9 (8.82%)	5 (4.90%)	**52 (50.98%)**

The table no. 4.15 displays the '**Emotional Response'** Factor which talks about eating in response to negative emotional states. The item 'Gender vs. I snack without noticing that I am eating' puts forward around 25% (25) males and 27% (27) females 'always' used to snack without giving much thought to it, with another 20% of the respondents - 9% (9) male respondents and 11% (11) female respondents 'sometimes' did the same, proposing a 45% of the total respondents used to snack without giving much thought to it.

Factor 5 – Distraction

Table No. 4.16 - 'Distraction' Factor of the Mindful Eating Questionnaire

I think about things I need to do while I am eating.	**Female**	15 (14.71%)	12 (11.76%)	14 (13.73%)	9 (8.82%)	**50 (49.02%)**
	Male	13 (12.75%)	24 (23.53%)	9 (8.82%)	6 (5.88%)	**52 (50.98%)**
I eat so quickly that I don't taste what I'm eating.	**Female**	11 (10.78%)	26 (25.49%)	3 (2.94%)	10 (9.80%)	**50 (49.02%)**
	Male	8 (7.84%)	19 (18.63%)	13 (12.75%)	12 (11.76%)	**52 (50.98%)**

The table no. 4.16, displays the '**Distraction'** Factor which focuses on other activities while eating. The item 'Gender vs. I think about things I need to do while I am eating' signifies that around 24% (24) males and 12% (12) females 'always' used to think about things needed to be done while eating, with another 23% of the respondents - 9% (9) male respondents and 14% (14) female respondents 'sometimes' did multitask, advocating a 59% of the total respondents do think about things needed to be done while eating. The item 'Gender vs. Don't taste the food' implies that around 44% (45 respondents) including, 25% females (26) and 19% males (19) don't usually taste food while eating or don't pay much attention into it; with another 16% of the respondents 'sometimes' pay attention on the taste of food, intimating a 60% of the total don't pay much attention on the taste of food.

Mindful Eating Questionnaire (MEQ) Score:

Table No. 4.17 - Gender vs. Type of Eaters

Gender	Responses#				Total
	1	**2**	**3**	**4**	
Female	22 (21.57%)	18 (17.65%)	10 (9.80%)	0 (0.00%)	**50 (49.02%)**
Male	20 (19.61%)	29 (28.43%)	3 (2.94%)	0 (0.00%)	**52 (50.98%)**
Total	**42 (41.18%)**	**47 (46.08%)**	**13 (12.75%)**	**0 (0.00%)**	**102 (100%)**

#1-Very Low-Mindful Eaters #2-Low-Mindful Eaters #3-Moderate-Mindful Eaters #4-Mindful Eater

The table no. 4.17, shows the 'Gender vs. Types of Eaters' based on the Mindful Eating Questionnaire (MEQ) Score wherein 47% (47) respondents - 29% (29) male respondents and 18% (18) female respondents are categorized as Low-mindful eaters; followed by 42% (42) respondents- 22% (22) female respondents and 20% (20) male respondents as Very low mindful eaters and 13% (13) respondents as Moderate mindful eaters.
The above data reveals a significant trend regarding gender and mindful eating. Out of 102 respondents, 40 females and 49 males are classified as low to very low-mindful eaters.
A study conducted on a sample size of 120, selected using convenience sampling technique to understand the gender and age-based differences (between the ages 18 to 55) among Indian population on dietary patterns, body image, mindful eating and physical appearance highlighted that, the gender significantly influenced meal skipping behaviours, with females showing a higher tendency to skip meals compared to males ($F(1,114) = 6.46$, $p < .05$); females exhibited higher levels of snacking and convenience eating behaviours compared to males ($F(1,114) = 4.19$, $p < .05$) and in terms of body evaluation, females reported higher dissatisfaction with their height ($F(1,114) = 8.79$, $p < .05$), higher fatness evaluation ($F(1,114) = 5.94$, $p < .05$), and lower fitness evaluation ($F(1,114) = 5.33$, $p < .05$) compared to males. The tools used were Eating Behaviour Pattern Questionnaire (EBPQ) [43], Body Self- image Questionnaire (BSIQ) [40], Mindful Eating Questionnaire (MEQ) [18] and Personal Evaluation Inventory (PEI) [44] and the collected data was analyzed using SPSS Software **(Jacob *et al.*, 2023)**.

Another study piloted to differentiate the mindful awareness while eating found males scoring higher than females in the disinhibition dimension of mindful eating (Males: 58.24, Females: 52.95); females scoring higher than males in the emotional response dimension of mindful eating (Males: 76%, Females: 76.14%) and females showing higher scores than males in the distraction dimension of mindful eating (Males: 64.71%, Females: 69.11%) in the administered Mindful Eating Questionnaire among 95 students of VIII and IX grades in a public school **(Putri *et al.*, 2024)**.

Hypothesis Testing
Chi-Squire Test:
To check the relation between the Respondents Gender and Responses on Mindful Eating Questionnaire (MEQ) score, Chi-square Test is applied as both the variables are categorical in nature. Chi-square Test shows not only association between two or more categorical variables and also shows how the recorded responses are independent.

Table No. 4.18 - Chi-square Test – Gender vs. Mindful Eating Questionnaire (MEQ)

Statistic	DF*	Value	Probability
Chi-Square	2	6.4022	0.0407

*DF - Degrees of Freedom

The table no. 4.18 shows the ' Chi-square Test – Gender Vs. Responses on Mindful Eating Questionnaire (MEQ) score' wherein, the predicted probability of MEQ score is less than level of significance (Alpha Value) i.e., 0.05. So we reject the null hypothesis and accept the alternative hypothesis. Thus, there is a significant difference in the impact of dietary habits of the respondents on their gender and emotions.

Null Hypothesis (H0):
There is no significant difference in the impact of dietary habits of the respondents on their gender and emotions.

Alternate Hypothesis (H1):
There is a significant difference in the impact of dietary habits of the respondents on their gender and emotions.

Dimensional and Factor Level Study
Mean- Mindful Eating Questionnaire (MEQ):

Table No. 4.19 - Mean of Mindful Eating Questionnaire (MEQ)

Sl. No.	Variables	Mean
1.	I eat so quickly that I don't taste what I'm eating.	1.401961
2.	When I eat at "all you can eat" buffets, I tend to overeat.	1.088235
3.	I think about things I need to do while I am eating.	1.245098

4.	I recognize when food advertisements make me want to eat.	1.137255
5.	When I'm eating one of my favorite foods, I don't recognize when I've had enough.	1.078431
6.	If it doesn't cost much more, I get the larger size food or drink regardless of how hungry I feel.	1.215686
7.	If there are leftovers that I like, I take a second helping even though I'm full.	1.04902
8.	I snack without noticing that I am eating.	1.196078
9.	When I eat a big meal, I notice if it makes me feel heavy or sluggish.	1.245098
10.	I stop eating when I'm full…even when eating something I love.	1.176471
11.	I appreciate the way my food looks on my plate.	1.245098
12.	If there's good food at a party, I'll continue eating even after I'm full.	1.186275
13.	I recognize when I'm eating and not hungry.	1.441177

The table no. 4.19 shows 'mean responses of all the items and correlation of every item with the rest of the test'; means range observed was from 1.049 to 1.441 (score range: 0 to 3). Participants showed lowest score on item 7 ("If there are leftovers that I like, I take a second helping even though I'm full") and highest on item 10 ("I recognize when I'm eating and not hungry").

Testing of Mean:

To test the significance of **mean values of Gender vs. Mindful Eating Questionnaire Factors**, ANOVA is used to see is there any significant difference amongst the responses given, based on mean. Following hypothesis is drawn;

Table No. 4.20 –Testing of Mean

Null Hypothesis	Alternative Hypothesis
H0 - Mean Responses of the genders are equal	H1 & Not H0
H0 - Mean Responses of all Mindful Eating Questionnaire factors are equal	H1 & Not H0
H0 - No interaction effect between the gender of respondents and Mindful Eating Questionnaire factors	H1 & Not H0

ANOVA –Overall and Individual Level:

Table No. 4.21 - Overall ANOVA Model Fit

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	25	59.571267	9.062851	5.11	<0.0001

Based on the table no. 4.21, the calculated probability (Pr > F) value **<0.0001** is less than the table probability. Hence overall models on responses of different gender respondents vs. Mindful Eating Questionnaire factors are significant.

Table No. 4.22- Individual Level ANOVA

Source	DF	Anova SS	Mean Square	F Value	Pr > F*
Gender	1	10.7444030	10.744403	0.78	0.0312
MEQ Factors	12	106.238310	1.3531925	1.42	0.1514
Gender* MEQ Factors	12	90.5885532	0.79904610	0.84	0.6128

*Pr>F = **<0.0001**

The table no. 4.22 proposes the following;

Gender of Respondents:

The calculated probability (Pr > F) **0.0312** is greater than the table probability. Hence, Mean Responses of the genders based on MEQ factors are not equal (H1 & Not H0).

MEQ factors:

The calculated probability (Pr > F) **0.1514** is greater than the table probability. Hence, Mean Responses of different MEQ factors are not equal (H1 & Not H0).

Gender* MEQ Factors -Interaction effect:

The calculated probability (Pr > F) **0.6128** is much greater than the table probability. Hence, interaction effect of Gender of respondents and MEQ factors is insignificant (H1 & Not H0).

Conclusion

Results from the Emotional Eating Questionnaire (EEQ) and Mindful Eating Questionnaire (MEQ) show that emotional states significantly impact eating behaviours. High EEQ scores, indicating emotional eating, often correlate with low mindfulness in eating practices. Of the 102 respondents, 55% are identified as emotional to very emotional eaters. In terms of mindful eating, 47% are low-mindful eaters, with more males (29%) than females (18%). Focusing on

emotional well-being and mindful eating practices can help individuals make better dietary choices, enhancing their overall health.
The survey highlights the complex link between diet and emotions, showing distinct gender differences in eating behaviours. Males and females experience varying levels of food control, with many feeling that food often dictates their eating habits. This suggests emotional factors influencing these behaviours differently across genders, possibly due to societal expectations or psychological differences. Both genders face challenges with low-mindful eating, leading to overeating and less nutritious food choices, which can worsen emotional issues related to body image, health, and mental well-being.

SUMMARY

"Just as foods determine our moods so do our moods determine what we eat" (**Lyman *et al.*, 1989)**, being invigorated with this idea this research paper was started. The study "INFLUENCE OF DIET ON EMOTIONAL WELLBEING - A GENDER PERSPECTIVE" opens up the complex affiliation of dietary patterns with emotional well-being, considering alongside gender dissimilarities and mood conditions. The study boarded 102 individuals who were chosen as the "population of the study" and the "study area" was several parts of Urban Bengaluru.

Socio-economic and Demographic factors play an important role on the pattern of consumption of food and nutrients. The gender distribution in this survey is notably balanced, with 49% of the participants being female and 51% male. This near-equal representation ensures that the insights and conclusions drawn from the survey are not biased towards one gender. Such balance is crucial for obtaining a comprehensive understanding of the surveyed topics, allowing the data to reflect a broader spectrum of perspectives and experiences.

The survey included participants aged from under 18 to 62 years, with an average age of 41.5 years, highlighting a middle-aged demographic. A significant majority, 68% (68 individuals), are married, while 31% (31 individuals) are unmarried. In terms of education, 38% have a Master's Degree and 33% have a Bachelor's Degree, indicating a highly educated group. Regarding employment, 65% (65 individuals) work full-time, and 16% work part-time, suggesting that most participants have stable, full-time jobs. This diverse demographic range ensures a comprehensive understanding of different age groups, marital statuses, education levels, and employment situations.
The survey results show that 66% (67 out of 102) respondents tend to eat when feeling anxious, indicating many use food to cope with anxiety. Additionally, 53% (53 respondents) including 27% males (27) and 26% females (26) always or generally crave specific foods. A significant portion, 45% (46 respondents), including 26% males (26) and 20% females (20), struggle to stop consuming sweets, especially chocolates. Overall, 45% of respondents have difficulty controlling their consumption of certain foods, with more males reporting this challenge than females. Emotional eating is common, with 43% (43 respondents), including 22% females (22) and 21% males (21), eating when stressed, angry, or bored.
When alone, 43% (43 respondents), including 22% females (22) and 21% males (21), indulge in favourite foods with less control. Guilt is also a common response, with 49% (50 respondents), including 26% females (26) and 24% males (24), feeling guilty after eating forbidden foods like sweets and snacks. Fatigue impacts diet control, with 45% (46 respondents), including 26% males (26) and 20% females (20), losing control over their diet when tired after working at night. Diet failure is frequent, with 50% (50 respondents) overeating while on a diet and eventually giving up, particularly eating foods they consider fattening. Food control perceptions show that 22% of males and 18% of females often feel controlled by food, while 28% say food never controls them. A substantial portion, 55% (55 respondents) are emotional to very emotional eaters.
The Chi-square test shows a significant difference in eating habits based on gender and emotional attitudes (p-value = 0.0155). The ANOVA model indicates significant differences in responses from different genders on the Emotional Eating Questionnaire ($p < 0.0001$). The survey highlights a strong link between emotions and eating behaviour, showing that managing emotional well-being is crucial for improving dietary habits and overall health. Addressing emotional triggers can lead to better dietary choices and health outcomes for emotional eaters.
In the survey of 102 people, 44% (45 individuals) reported not tasting their food when eating quickly, with more females (26) than males (19) experiencing this. Additionally, 19% never taste their food, and 16% sometimes notice this when eating fast. About 44% (45 respondents) admit to occasionally or frequently overeating at buffets, with 24% being males and 12% females. Also, 44% (45 respondents) consistently think about tasks and responsibilities while eating, indicating a tendency to multitask during meals.
Forty-three % (44 respondents), including 23% males and 20% females, report increased food cravings due to advertisements. Half of the respondents (50%) indulge blindly in favourite foods, with 28% being males and 22% females. Thirty-nine % (40 respondents), consisting of 22% males and 17% females, are likely to eat more when food is priced lower. Forty-one % (42 respondents), including 21% males and 20% females, often go for seconds if it's their favourite food.
A majority, 52% (53 respondents), frequently consume snacks mindlessly. Forty % (41 respondents), including 22% males and 18% females, feel heavy or sluggish after large meals. Forty five % (46 respondents) always or usually stop eating when full, despite the food being their favourite. Fifty-four % (55 respondents) appreciate how food looks on their plate.
Forty-one % (42 respondents), including 21% males and 20% females, overeat at parties due to abundant favourite foods. Forty-six % (47 respondents), equally split between males and females crave food even when not hungry. The

Mindful Eating Questionnaire (MEQ) data shows 47% of respondents are low-mindful eaters, with 29% being males and 18% females. Additionally, 42% fall into the very low mindful category, with 22% females and 20% males.
The Chi-square test indicates a significant difference in mindful eating based on gender ($p = 0.0407$). The ANOVA model also shows significant differences in responses between genders on the MEQ factors ($p < 0.0001$). The survey highlights a strong connection between eating habits and mindfulness, emphasizing the impact of gender on dietary behaviours and emotional well-being.

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