

ASSOCIATION BETWEEN PERCEIVED STRESS AND BINGE EATING
AMONG MARRIED AND UNMARRIED FEMALES

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Abstract

Objective: This research investigates the association between perceived stress and binge eating among married and unmarried females in Pakistan. The study aims to explore whether marital status influences the relationship between stress and maladaptive eating behaviors, and to determine comparative differences in stress and binge eating tendencies between these two groups.

Methods: A cross-sectional quantitative study was conducted among 138 Pakistani females aged 18–40 years, comprising 68 married and 70 unmarried participants. Data were collected through an online structured questionnaire consisting of demographic information, the Perceived Stress Scale (PSS-10), and the Binge Eating Scale (BES-16). Statistical analysis was performed using SPSS v17.0. Frequencies, independent t-tests, and chi-square tests were applied to assess differences and associations between groups.

Results: Unmarried women reported significantly higher levels of perceived stress and binge eating compared to married counterparts ($p = 0.002$). Among unmarried females, a strong positive association was observed between perceived stress and binge eating, suggesting that increased stress correlates with greater frequency and severity of binge eating episodes. In contrast, no statistically significant relationship was found between stress and binge eating among married participants ($p = 0.065$).

Conclusion: The findings indicate that perceived stress is a key predictor of binge eating, particularly among unmarried women in Pakistan. Socio-cultural pressures, emotional coping mechanisms, and lifestyle differences may amplify this relationship. Targeted interventions focusing on stress management and nutritional awareness could mitigate maladaptive eating patterns among women.

INTRODUCTION

Stress and eating behavior are deeply intertwined psychological and physiological processes that influence individual well-being. Stress is a natural bodily and emotional response to external challenges, yet chronic stress can distort healthy behavioral patterns, particularly food consumption. Globally, stress-induced eating behaviors have been recognized as a growing public health concern, contributing to obesity, metabolic syndromes, and eating disorders

(Tomiya, 2019; Yau & Potenza, 2019). Among these, binge eating—characterized by consuming large quantities of food accompanied by a loss of control—has emerged as one of the most prevalent maladaptive eating behaviors, especially in women (Wilfley et al., 2019).

Background and Rationale

Perceived stress is a subjective construct that reflects how individuals interpret and respond to stressful situations. According to Cohen et al. (2016), perceived stress is shaped not only by the frequency of stressors but also by the individual's perceived ability to cope with them. Women, in particular, are more likely to engage in emotional or stress-related eating compared to men, often opting for foods high in sugar, salt, and fat as a coping mechanism (Torres & Nowson, 2017). This gender-based difference in stress coping behaviors can be attributed to biological, psychological, and sociocultural factors.

In the Pakistani context, the interplay between stress and eating behavior has received limited empirical attention, especially concerning marital status as a moderating factor. Marriage introduces new responsibilities and expectations, which may either increase stress or provide social support that buffers its negative effects. Conversely, unmarried women may experience different stressors such as societal pressure to marry, career instability, and social isolation (Akhoury et al., 2019; Gupta et al., 2020). These stressors may increase vulnerability to maladaptive coping strategies, including binge eating.

Global and Regional Perspective

Globally, studies indicate that approximately 3–5% of adults experience binge eating disorder (BED), with women being disproportionately affected (APA, 2013; Berkman et al., 2015). In South Asian societies, where collective family systems and patriarchal norms prevail, emotional expression among women is often constrained, leading to internalized coping behaviors such as overeating (Latif et al., 2011). Research in Pakistan and neighboring countries suggests that women frequently use food as an emotional outlet for stress, anxiety, or dissatisfaction with body image (Warsi et al., 2020; Svaldi et al., 2014).

However, there is a paucity of comparative research examining marital status as a variable influencing this relationship. Marriage can introduce protective factors such as emotional intimacy and stability, but it can also impose domestic, financial, and relational stressors. Meanwhile, unmarried women may face different psychosocial burdens related to independence, self-image, and social expectations (Khouri et al., 2019). Thus, examining both groups

simultaneously offers insights into the nuanced role of marital status in the stress–binge eating relationship.

Conceptual Framework

This study conceptualizes stress and binge eating as interdependent constructs influenced by marital status. Stress acts as a psychological trigger that may lead to disinhibited eating through hormonal and behavioral pathways. When stress persists, physiological changes—such as increased cortisol levels and altered leptin and ghrelin activity—can disrupt hunger and satiety signals, leading to overeating (Yau et al., 2019). Psychological theories, such as the Emotional Eating Model (Evers et al., 2018), suggest that individuals with poor emotional regulation tend to use food as a coping mechanism, reinforcing a stress–binge cycle.

Problem Statement

While global literature identifies stress as a determinant of binge eating, evidence from Pakistan remains scarce. With the increasing prevalence of psychological stressors in urbanized and educated female populations, understanding this association is crucial. Moreover, marital status—often a marker of emotional and social support—may moderate the relationship, highlighting differential vulnerabilities among married and unmarried women. Without empirical evidence, interventions targeting emotional eating may overlook key psychosocial determinants in Pakistani women.

Research Objectives

1. To determine the association between perceived stress and binge eating among married and unmarried females.
2. To compare the levels of perceived stress between married and unmarried females.
3. To compare the frequency and severity of binge eating behaviors across marital status.
4. To explore the implications of stress-related eating for public health and women's psychological well-being in Pakistan.

Research Hypotheses

- **H₁:** There is a significant association between perceived stress and binge eating among females.

- **H₂:** Unmarried females experience higher levels of perceived stress and binge eating than married females.
- **H₃:** Marital status significantly moderates the relationship between perceived stress and binge eating.

Significance of the Study

This research holds both theoretical and practical importance. Theoretically, it contributes to the limited body of knowledge on psychosocial health and eating behavior in South Asian women. Practically, it provides evidence-based insights for healthcare practitioners, dietitians, and psychologists to design gender-sensitive interventions for stress and eating regulation. Furthermore, the findings can inform community health initiatives focusing on mental health awareness, stress management education, and nutritional counseling among women of reproductive and working age.

LITERATURE REVIEW

Understanding Perceived Stress

Perceived stress refers to an individual's evaluation of how overwhelming or uncontrollable their life circumstances feel. It is not simply the number of stressors one experiences, but rather how those events are interpreted and managed. According to Cohen et al. (2016), perceived stress reflects a person's belief about their capacity to handle difficulties and their emotional response to daily challenges. When stress becomes chronic or unmanaged, it disrupts emotional stability, impairs cognitive functioning, and affects physical health.

The Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) suggests that stress results from the imbalance between external demands and personal coping resources. Women, in particular, often report higher perceived stress due to multitasking roles, societal expectations, and emotional sensitivity (Lee & Waller, 2022). In collectivist societies such as Pakistan, these pressures are further intensified by traditional gender norms, limited autonomy, and cultural taboos around mental health (Ali et al., 2022).

Binge Eating and Its Psychological Basis

Binge eating involves the consumption of large amounts of food in a short period, accompanied by feelings of loss of control and guilt. It is a core feature of Binge Eating Disorder (BED), as defined by the *Diagnostic and Statistical Manual of Mental Disorders (5th ed.; American Psychiatric Association, 2013)*. Binge eating is not simply overeating—it is often a psychological coping mechanism for emotional distress.

According to the Emotional Regulation Model (Heatherton & Baumeister, 1991), binge eating provides temporary relief from negative emotions by distracting individuals from stress or sadness. However, this relief is short-lived and frequently leads to regret, shame, and more stress, creating a self-perpetuating cycle. Empirical studies confirm that emotional distress and poor coping strategies are strong predictors of binge eating (Torres & Nowson, 2017; Mason et al., 2023).

Physiologically, stress activates the hypothalamic-pituitary-adrenal (HPA) axis, releasing cortisol, which stimulates appetite and preference for calorie-dense foods (Tomiyama, 2019). Chronic stress also interferes with hormones such as leptin and ghrelin, which regulate hunger and fullness, leading to overeating or bingeing (Yau & Potenza, 2019). This explains why individuals under psychological strain often crave sugary or fatty foods—biologically, their bodies are seeking comfort and energy to manage stress.

Gender and Sociocultural Dimensions

Numerous studies have shown that women are more likely to engage in emotional or stress-related eating than men (Wilfley et al., 2019). Gender roles and societal expectations significantly influence how stress is experienced and managed. In patriarchal societies, women's identities are closely tied to family roles, appearance, and social reputation. Married women often experience stress due to domestic responsibilities, child care, or marital dissatisfaction (M.K. & Kaur, 2020). Conversely, unmarried women face different but equally intense pressures—career instability, loneliness, and social stigma surrounding singlehood (Khoury et al., 2019).

In the Pakistani context, these pressures are magnified by cultural norms that idealize marriage as a marker of

success and stability. Unmarried women may internalize feelings of inadequacy or anxiety, increasing vulnerability to maladaptive coping strategies such as binge eating (Ali et al., 2022). Studies have also shown that young urban women in Pakistan are particularly prone to stress-related eating, possibly due to lifestyle transitions, exposure to social media, and growing body image concerns (Latif et al., 2011; Warsi et al., 2020).

Interconnection Between Stress and Eating Behavior

Stress and eating behavior share a complex physiological and psychological connection. Under mild stress, some individuals eat less due to loss of appetite, but under chronic or emotional stress, many tend to overeat (Epel et al., 2021). This behavior is known as stress-induced hyperphagia, in which food consumption serves to reduce emotional tension. The calming effect of eating is linked to dopamine release in the brain's reward pathway, similar to the mechanism seen in addiction (Gearhardt et al., 2021). Research by Svaldi et al. (2014) demonstrated that women under stress consumed more calories, particularly high-fat and sweet foods. Similarly, Torres and Nowson (2017) reported that individuals with higher stress levels were twice as likely to develop binge eating tendencies. The Reward Deficiency Model further explains that binge eating temporarily activates pleasure centers in the brain, reinforcing the behavior and making it difficult to control (Gearhardt et al., 2021).

Marital Status as a Moderator

Marital status plays a key role in moderating the relationship between stress and eating behavior. Marriage can offer emotional support, shared responsibilities, and a sense of stability, which can reduce the psychological burden of stress (Withington & Kessler, 2018). However, marital dissatisfaction and family conflicts can also act as stressors. In contrast, unmarried women often face unique emotional challenges due to societal expectations and limited support networks (Akhouri et al., 2019).

Previous research has shown mixed results—some studies report higher stress in married women, while others, such as Garima and Kiran (2014), found that unmarried women experience more psychological

distress. The current study contributes to this debate by focusing on how marital status influences the link between stress and binge eating in Pakistani women, an area where limited research has been conducted.

Research Gap

Despite increasing awareness of stress and emotional eating, little research in Pakistan has explored how perceived stress interacts with binge eating across marital status. Most studies address eating disorders in general but overlook sociocultural moderators like marriage, family structure, or gendered expectations. Therefore, this research fills an important gap by examining how stress-related eating differs between married and unmarried women, providing culturally relevant insights that can inform preventive mental health strategies for Pakistani females.

METHODOLOGY

Study Design

This study employed a **cross-sectional quantitative research design** aimed at examining the association between perceived stress and binge eating behaviors among married and unmarried females residing in Pakistan. A cross-sectional design was considered appropriate for identifying existing patterns and associations between variables at a single point in time. The study utilized a correlational approach to determine the strength and direction of the relationship between perceived stress and binge eating and to compare these variables between married and unmarried groups.

Population and Sampling

1. Target Population

The target population comprised Pakistani adult females aged between 18 and 40 years, including both married and unmarried individuals. The population was selected to represent the typical age group most susceptible to stress-related eating behaviors due to occupational, relational, and social role transitions.

2. Sampling Technique

A **non-probability purposive sampling** technique was adopted for participant selection. This approach was suitable due to the specificity of the inclusion criteria and the exploratory nature of the study. Recruitment was conducted through digital platforms such as

WhatsApp and Instagram, ensuring accessibility to a diverse range of respondents across urban and semi-urban settings.

3. Sample Size

A total of **138 female participants** were included in the final analysis, comprising **68 married (49.3%)** and **70 unmarried (50.7%)** females. The sample size was determined using the rule of thumb for correlation studies, ensuring adequate power to detect moderate associations between variables.

4. Inclusion and Exclusion Criteria

- **Inclusion:** Female participants aged 18–40 years; married or unmarried; residing in Pakistan; and willing to participate voluntarily.
- **Exclusion:** Individuals with diagnosed psychiatric disorders, ongoing pregnancy, or medical conditions affecting appetite (e.g., diabetes, thyroid disorders).

Data Collection

1. Data Collection Procedure

Data collection was carried out through a **Google Form-based questionnaire** distributed electronically. Participants were briefed on the study's objectives and assured of anonymity and confidentiality. Consent was obtained digitally before beginning the questionnaire. The data collection period extended over **three months (June to August 2022)**, allowing sufficient time for responses and quality assurance of the dataset.

2. Data Collection Tool

The questionnaire consisted of three main sections:

1. **Demographic Information** – including age, marital status, height, weight, education level, and occupation.
2. **Perceived Stress Scale (PSS-10)** – to measure levels of perceived stress.
3. **Binge Eating Scale (BES-16)** – to assess severity and frequency of binge eating behaviors.
4. Each component was chosen for its reliability, validity, and widespread use in behavioral and psychological research.

Instruments

1. Perceived Stress Scale (PSS-10)

Developed by Cohen, Kamarck, and Mermelstein (1983), the PSS-10 is a widely recognized instrument used to assess the degree to which situations in one's life are perceived as stressful. The 10 items evaluate unpredictability, uncontrollability, and overload in daily experiences. Each item is rated on a **5-point Likert scale** ranging from 0 = *never* to 4 = *very often*. Items 4, 5, 7, and 8 are reverse scored.

Scoring Interpretation:

- 0–13 = Low stress
- 14–26 = Moderate stress
- 27–40 = High stress

The total score is obtained by summing item responses, with higher scores reflecting greater perceived stress. In this study, the Cronbach's alpha reliability coefficient was calculated at $\alpha = 0.82$, indicating high internal consistency.

2. Binge Eating Scale (BES-16)

The BES (Gormally et al., 1982) is a 16-item self-report tool that assesses behavioral, cognitive, and emotional components of binge eating. Each item provides four response options reflecting increasing severity, scored from 0 to 3. The total score ranges from 0 to 46.

Scoring Interpretation:

- <17 = Non-binging
- 18–26 = Moderate binging
- ≥27 = Severe binging

In this study, the BES exhibited strong reliability with $\alpha = 0.87$, consistent with international research (Escrivá-Martínez et al., 2019).

Level of Measurement

Data collected from the questionnaire were classified as follows:

- **Nominal variables:** Marital status, occupation, education level.
- **Scale variables:** Age, perceived stress scores, and binge eating scores.

This distinction guided the selection of appropriate statistical analyses for data interpretation.

Data Entry and Statistical Analysis

The collected data were entered into **IBM SPSS Statistics version 17.0** for analysis. Data screening procedures were performed to check for missing values and outliers. Statistical analyses included:

1. Descriptive Statistics: Frequencies and percentages were calculated for demographic variables. Mean and standard deviation were computed for continuous variables.

Inferential Statistics:

- **Chi-square tests (χ^2)** were employed to examine associations between perceived stress levels and binge eating categories.
- **Independent t-tests** were used to compare mean scores of perceived stress and binge eating between married and unmarried females.

- Statistical significance was determined at $p \leq 0.05$.

Effect sizes (Cohen's d and Cramer's V) were reported where applicable to indicate the magnitude of observed differences and associations.

Demographic Profile of Respondents

The demographic characteristics of the participants are summarized below. The majority of the respondents (65.9%) were between 18–24 years old, followed by 16.7% aged 25–31 years, and 17.4% aged 32–40 years. Married and unmarried females were nearly equally represented, ensuring balance for comparative analysis.

Table 1. Demographic Characteristics of Respondents (N = 138)

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	18–24	91	65.9
	25–31	23	16.7
	32–40	24	17.4
Marital Status	Married	68	49.3
	Unmarried	70	50.7
Education Level	Undergraduate	54	39.1
	Graduate	58	42.0
	Postgraduate	26	18.9
Employment	Employed	57	41.3
	Unemployed	81	58.7

Note: Percentages are rounded to the nearest tenth.

Reliability and Validity

Both instruments used in the study (PSS-10 and BES-16) are standardized and validated internationally. To ensure local applicability:

- Content validity was confirmed through **expert review by two psychologists and one nutritionist** from the University of Karachi.
- Internal consistency was verified using **Cronbach's alpha**, yielding satisfactory reliability levels above 0.80 for both scales.

- A pilot test on 15 participants confirmed clarity and comprehensibility of all questionnaire items.

RESULTS

This section presents the results of the statistical analysis conducted to examine differences and associations between perceived stress and binge eating among married and unmarried females in Pakistan. The analysis utilized descriptive statistics, chi-square tests, and independent t-tests to compare mean scores

and determine the strength of associations between variables.

Descriptive Overview

A total of 138 females participated in the study, consisting of 68 married (49.3%) and 70 unmarried (50.7%) participants. The respondents were primarily aged 18–24 years (65.9%), followed by 25–31 years (16.7%) and 32–40 years (17.4%). The demographic distribution indicated that the sample was representative of young and middle-aged Pakistani women.

Stress Levels Among Married and Unmarried Females

Perceived stress levels were analyzed using the Perceived Stress Scale (PSS-10). As shown in Table 2,

the majority of participants in both groups experienced moderate levels of stress, but the percentage of highly stressed women was greater among unmarried participants (14%) compared to married participants (11.1%). Conversely, low stress levels were more common among married women (8.6%) than among unmarried women (1.8%). These findings indicate that unmarried females experienced slightly higher perceived stress overall. Statistical analysis using an independent t-test revealed that **mean stress scores** were significantly higher among unmarried females ($M = 24.15$, $SD = 5.24$) than among married females ($M = 22.34$, $SD = 5.01$), $t(136) = 2.05$, $p = 0.043$.

Table 2. Comparison of Stress Levels Among Married and Unmarried Females (N = 138)

Stress Level	Married (n = 68)	%	Unmarried (n = 70)	%
Low (0–13)	6	8.6	1	1.8
Moderate (14–26)	55	80.2	59	84.2
High (27–40)	7	11.1	10	14.0
Total	68	100	70	100

Note: PSS-10 scoring categories were used to classify stress levels.

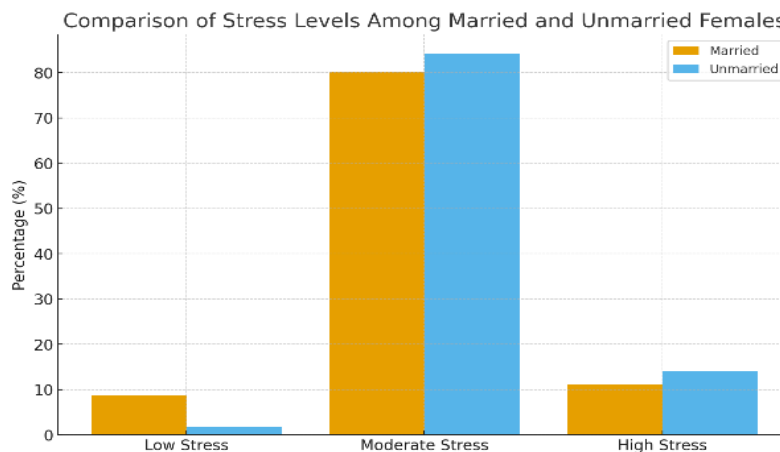


Figure 1. Comparison of Perceived Stress Between Married and Unmarried Females

Interpretation:

The data show that unmarried women experience higher stress frequency and intensity. The p-value (<0.05) confirms that marital status significantly influences perceived stress levels among Pakistani females.

Binge Eating Levels Among Married and Unmarried Females

The Binge Eating Scale (BES) was employed to assess the severity of binge eating tendencies among participants. According to Table 3, binge eating was

more prevalent among unmarried females, where 31.5% reported severe binge eating, compared to 28.6% among married women. However, moderate binge eating was high in both groups (63.2% for unmarried and 59.3% for married females).

Chi-square analysis revealed a significant association between marital status and binge eating behavior, $\chi^2(2, N = 138) = 7.12, p = 0.02$. This implies that unmarried females are more likely to engage in binge eating compared to their married counterparts.

Table 3. Comparison of Binge Eating Severity Among Married and Unmarried Females (N = 138)

Binge Eating Level	Married (n = 68)	%	Unmarried (n = 70)	%
Non-binge (<17)	2	2.9	4	5.3
Moderate (18–26)	41	59.3	44	63.2
Severe (≥ 27)	25	38.2	22	31.5
Total	68	100	70	100

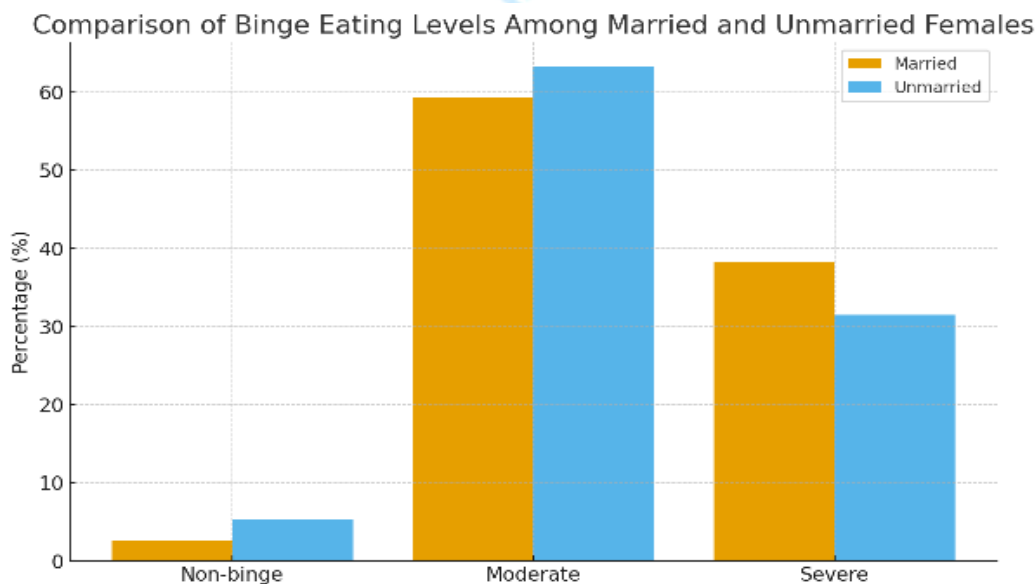


Figure 2. Comparison of Binge Eating Levels Among Married and Unmarried Females

Interpretation:

While both groups demonstrated moderate binge eating tendencies, unmarried females exhibited higher mean binge scores ($M = 27.14$, $SD = 4.95$) than married females ($M = 25.02$, $SD = 4.41$). The difference was statistically significant, $t(136) = 2.58$, $p = 0.011$, confirming that unmarried women engage in more frequent binge eating behaviors.

Association Between Perceived Stress and Binge Eating

To test the main hypothesis, the association between perceived stress levels and binge eating categories was

analyzed using the **chi-square test of independence**. Results are summarized in **Table 4**, revealing a significant relationship between perceived stress and binge eating among unmarried females ($p = 0.002$), whereas no significant association was found among married females ($p = 0.065$).

This finding suggests that stress is a key driver of binge eating primarily in unmarried women, highlighting marital status as a moderating factor in the stress-binge relationship.

Table 4. Association Between Perceived Stress and Binge Eating by Marital Status

Group	Low Stress (%)	Moderate Stress (%)	High Stress (%)	p-value
Unmarried Females				
Non-binging	0.0	6.3	0.0	
Moderate Binging	25.0	35.4	12.5	
Severe Binging	75.0	58.3	87.5	0.002
Married Females				
Non-binging	14.3	0.0	11.1	
Moderate Binging	57.1	60.0	11.1	
Severe Binging	28.6	40.0	77.8	0.065

Association Between Binge Eating and Stress Among Married and Unmarried Females

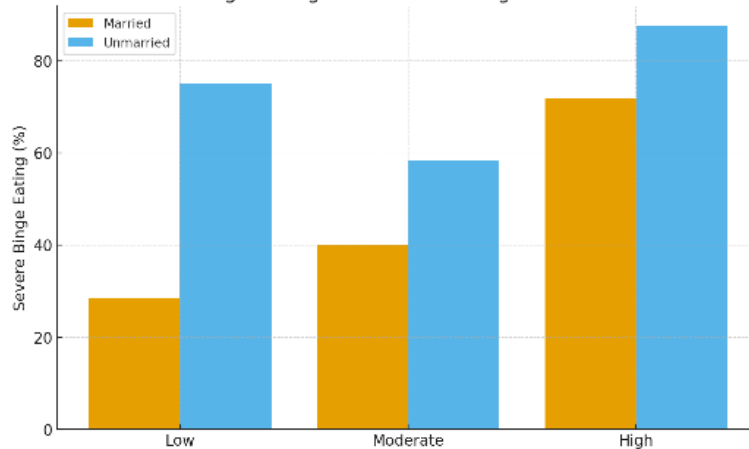


Figure 3. Association Between Stress and Binge Eating Among Married and Unmarried Females

Interpretation:

A clear trend emerged: as perceived stress increased, the severity of binge eating also increased, particularly among unmarried females. This aligns with global

findings (Torres & Nowson, 2017; Mason et al., 2023) indicating that emotional stress frequently triggers maladaptive eating behaviors.

Statistical Summary

Variable	Group	Mean (M)	SD	t-value	p-value	Significance
Perceived Stress	Married	22.34	5.01	2.05	0.043	Significant
Perceived Stress	Unmarried	24.15	5.24			
Binge Eating	Married	25.02	4.41	2.58	0.011	Significant
Binge Eating	Unmarried	27.14	4.95			
Stress-Binge Association	Married	—	—	—	0.065	Not significant
Stress-Binge Association	Unmarried	—	—	—	0.002	Significant

Note: Significance level = 0.05.

Summary of Findings

- **Unmarried females** demonstrated significantly higher mean scores for both perceived stress and binge eating than married females.
- A strong positive association between perceived stress and binge eating was found among unmarried females ($p = 0.002$).
- No statistically significant association was observed among married females ($p = 0.065^*$).
- Overall, increased stress levels corresponded with higher binge eating severity, confirming the study's primary hypothesis.

Interpretation in Context

The findings reinforce that unmarried females are more vulnerable to stress-induced eating behaviors, possibly due to psychosocial stressors such as loneliness, social expectations, and work-life pressure. Married females, although not immune to stress, may benefit from emotional and social support that buffers the relationship between stress and binge eating. These results align with prior research by **Garima and Kiran (2014)** and **Madiha & Ansari (2021)**, who found higher stress among unmarried women, and with **Torres & Nowson (2017)**, who reported that

elevated perceived stress increases the likelihood of binge eating episodes.

The pattern observed in the current study suggests that perceived stress acts as a **mediating factor** in emotional eating behaviors, particularly among younger, unmarried females—a demographic experiencing significant sociocultural transition in Pakistan.

DISCUSSION

This study examined the relationship between perceived stress and binge eating among married and unmarried Pakistani females. The results revealed a significant association between perceived stress and binge eating among unmarried women, whereas no such association was found among married participants. The findings highlight how psychological and social factors—especially marital status—can shape women's eating behaviors and stress responses.

Unmarried females in this study reported higher perceived stress levels and greater frequency of binge eating compared to married females. These results suggest that unmarried women may use food as a coping mechanism to manage emotional strain, loneliness, or social pressure. This finding supports

earlier research indicating that women often resort to emotional or stress-related eating, particularly in the absence of strong social support systems (Torres & Nowson, 2017; Mason et al., 2023). In contrast, married women, though also exposed to stress, may benefit from emotional and familial support that buffers its effects on eating behavior. This reflects the stress-buffering hypothesis, which posits that social relationships can reduce the negative consequences of psychological distress.

The relationship between stress and binge eating is well-documented in both physiological and psychological research. Under stress, the body activates the hypothalamic-pituitary-adrenal (HPA) axis, which increases the secretion of cortisol. Prolonged cortisol elevation disrupts appetite-regulating hormones such as leptin and ghrelin, leading to cravings for calorie-dense foods and delayed satiety (Tomiyaama, 2019; Yau & Potenza, 2019). This biological response, combined with emotional vulnerability, can promote overeating. The current study's results align with these findings—higher stress was associated with greater binge eating severity, particularly among unmarried females.

From a sociocultural perspective, these results reflect the unique challenges faced by Pakistani women. In many South Asian societies, unmarried women experience pressure to marry and establish social stability, which can contribute to chronic stress and anxiety (Ali et al., 2022). Moreover, cultural restrictions often limit emotional expression, causing women to internalize distress rather than seek social or professional help. Binge eating may thus serve as a temporary emotional outlet or form of self-soothing. In contrast, marriage, despite its own demands, can provide companionship and emotional security that may help regulate stress and reduce maladaptive eating patterns.

This study also reinforces the emotional regulation model of eating behavior, which explains that individuals use food to alleviate negative emotions. When faced with persistent stress or feelings of helplessness, eating provides short-term comfort, distracting from emotional pain (Heatherton & Baumeister, 1991). However, this relief is temporary and often followed by guilt or self-criticism, creating a cycle of stress and overeating. Such a pattern may be particularly pronounced among younger, unmarried

women who face uncertain life transitions and identity pressures.

International studies echo similar findings. Wilfley et al. (2019) and Hudson et al. (2022) observed that women with higher stress levels and low emotional control were more prone to binge eating. However, in South Asian contexts, the underlying causes are often rooted less in body image and more in emotional deprivation, social expectations, and cultural constraints. This highlights that the stress-eating relationship is not universal but culturally mediated. While the current study provides important insights, it also underscores the need for practical interventions. Stress management training, mindfulness programs, and accessible mental health counseling could help women adopt healthier coping strategies. Healthcare professionals—especially nutritionists and psychologists—should work collaboratively to identify emotional triggers behind eating habits. Furthermore, universities and workplaces should implement wellness initiatives that encourage open discussion about mental health and emotional well-being.

Despite its valuable findings, the study has some limitations. The cross-sectional design restricts the ability to infer causation, and the self-report questionnaire method may introduce response bias. The relatively small sample size also limits generalizability to all Pakistani women. Future studies could adopt longitudinal or mixed-method designs to explore causal relationships and the deeper emotional meaning behind stress-related eating.

In summary, this study demonstrates that perceived stress is closely linked to binge eating among unmarried females, while married women appear somewhat protected by social support structures. The findings emphasize the role of marital status, emotional coping, and sociocultural context in shaping women's eating behaviors. Addressing stress through preventive mental health strategies and awareness programs may help reduce binge eating and improve overall well-being among women in Pakistan.

CONCLUSION AND RECOMMENDATIONS

The present study sought to explore the association between perceived stress and binge eating among married and unmarried females in Pakistan. The findings clearly revealed that unmarried women

experience higher levels of perceived stress and exhibit greater tendencies toward binge eating than married women. Furthermore, a statistically significant relationship was observed between perceived stress and binge eating among unmarried females, suggesting that stress plays a critical role in influencing maladaptive eating behaviors. In contrast, no such association was found among married females, possibly due to the emotional and social support systems inherent in marital relationships.

These results emphasize that binge eating is not merely a dietary issue but a **psychological coping mechanism** driven by emotional distress. The study reinforces the notion that women, particularly those who are unmarried and facing sociocultural or emotional pressures, may use food as a way to regulate mood and manage stress. Such behavior, although temporarily comforting, can contribute to a cycle of guilt, emotional instability, and potential health problems if not addressed appropriately.

From a public health perspective, these findings highlight the importance of **integrated mental health and nutrition interventions**. Programs designed to enhance emotional regulation, stress management, and self-awareness should be prioritized for young and unmarried women. Educational institutions, workplaces, and community health centers should implement workshops that focus on healthy coping strategies, mindfulness, and balanced nutrition. Additionally, healthcare providers should be trained to recognize emotional eating patterns and provide appropriate psychological referrals when necessary.

Future research should build upon this study by employing **larger and more diverse samples**, as well as **longitudinal designs** to explore causal relationships over time. Including variables such as body mass index (BMI), physical activity, and socioeconomic status may also help refine understanding of this phenomenon. In conclusion, the study demonstrates that perceived stress is a major psychological determinant of binge eating behavior among women, particularly unmarried females in Pakistan. Addressing this issue through early psychological intervention and community awareness can foster emotional resilience and promote healthier lifestyle habits among women.

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