



# Comparison of Avoidance Coping Strategies Among Female College Students with Binge Eating and Healthy Controls

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## Abstract

**Background:** Binge eating is the consumption of a large amount of food, with the feeling of loss of control. Unhealthy eating behaviors, especially binge eating disorder, may be a form of coping strategies to control the negative and unpleasant feelings.

**Objectives:** The present study was conducted to investigate the differences in avoidance coping strategies among female college students with binge eating disorder and healthy controls.

**Methods:** A cross-sectional study was conducted on 200 female students who entered Shiraz University of Medical Sciences in 2011. Data were obtained via the Binge Eating scale (BES) and Lazarus' ways of the coping questionnaire. We collected the demographic characteristics of the students, such as age, year of the entrance, living place, and mean score of the last semester from the checklist. We used descriptive statistics and independent t-test to evaluate the overeating and normal groups of collegian students.

**Results:** The mean age of the participants was  $22.94 \pm 1.94$  years. In this study, 75% of the individuals were normal, and the remainder was in the overeating group. Based on Lazarus' ways of the coping questionnaire, confronting coping ( $P < 0.02$ ) and escape-avoidance ( $P < 0.01$ ), subscales showed a significant difference between the overeating and normal groups. In both subscales, the overeating group had lower scores. In the end, the mean scores of the overeating and normal groups were significantly different ( $P < 0.001$ ).

**Conclusions:** The use of inefficient coping strategies increased the negative outcomes such as binge eating disorder in students. Avoidance coping strategy can be an essential mechanism used to reduce the pressures in stressful situations.

**Keywords:** Coping Strategy, Student, Binge Eating Disorder

## 1. Background

Binge eating is the consumption of a large amount of food, with the feeling of loss of control over eating (1). Unhealthy eating behavior has been shown as a predisposing factor in overweight in all age groups (2). However, the results of several studies indicate a difference in eating attitude and behavior among obese patients with and without binge eating disorder (BED) (3-5). Most people at risk of eating disorder are females aged 14 - 25 years. A significant amount of unhealthy eating behavior has been reported in teenagers and college students (6, 7).

Binge eating is a common feature of eating disorders associated with significant costs, such as comorbid mental and physical health problems, reduced quality of life, and poorer social functioning (8). Binge-eating disorder (BED) first appeared as an official diagnosis in the most recent edition of the diagnostic and statistical manual of mental disorders (9). The prevalence of eating disorders in differ-

ent places was as follows: South Australia (1%), across six European countries (1.12%), China (2.98%), Japan (3.32%) USA (3.50, 2.00 in women and men respectively %) (10), Latin America (3.53%), Latinas USA (1.92%) and Africa (4.45). The prevalence of binge eating had been reported 1.6% (9) in women, and in Shiraz among women with normal weight was 3.65% (11, 12).

Several studies indicate that most women with BED apply unhealthy emotion-regulation strategies (13-15). People use coping styles and strategies to control the negative and unpleasant feelings (16). Styles are constant forms of coping with stress, while strategies are specific actions depending on a special situation (17). In eating behavior disorders, it is significant to assess the coping strategies as a possible prognostic factor (18).

Coping strategies are used to categorize how individuals react to stress. The best-known classification has identified two major categories of coping strategies: problem-

focused coping and emotion-focused coping (19, 20).

People with eating disorders generally showed deficits in coping. They had more avoidance and emotion-oriented coping in comparison with the control group. The healthy control group had more active coping strategies (e.g., problem-oriented, social support-seeking) (21).

In some cases, disturbed eating behavior can be considered as a maladaptive coping behavior (e.g., binge eating or extreme food restriction as a way of coping with negative affect). Furthermore, it seems that developing healthier coping skills is an important component of the effective clinical intervention of eating disorders (22).

Since emotional eating has been found in non-clinical individuals, it is important to understand whether certain coping strategies are associated with emotional eating, or they may intensify disordered eating such as binge eating (23).

## 2. Objectives

Therefore, in this study, we attempted to investigate the differences in avoidance coping strategies among female college students with binge eating disorder and healthy controls.

## 3. Methods

This cross-sectional study was conducted at Shiraz University of Medical Sciences (SUMS) in 2011. According to the convenience sampling method, a total of 200 female students in 2011 were selected. The exclusion criteria were lacking willingness of the individuals to participate in the study, not being primarily diagnosed with a disease or mental disorder except for eating disorders and being dependent on a substance. Participants completed three questionnaires as the following:

### 3.1. Demographic Checklist

It was used to evaluate demographic characteristics such as age, year of entrance to the university, place of living, and the GPA of the last academic semester.

### 3.2. Binge Eating Scale

Binge Eating scale (BES) (24) is a self-report measure designed to assess cognitive and behavioral aspects of binge eating problems to diagnose binge eating disorder (25). According to BES scores, the patients are classified into two categories: patients who score 17 and lower are defined as "non-binge eaters", and those whose score is more than 17 are considered as "binge eaters" (24, 26). Moloodi et al. (25) used the Persian form of this questionnaire in a study on 60 individuals. Sensitivity and validity were 0.85 and 0.72, respectively (25).

### 3.3. Lazarus' Ways of Coping Questionnaire

Lazarus' ways of coping questionnaire (WOCQ) was first developed in 1980 by Lazarus and Folkman, and it was revised in 1985. Coping strategies are a set of cognitive and behavioral efforts to interpret and modify a stressful situation and reduce their sufferings. The scale evaluates a wide range of thoughts and actions that people take in internal or external stressful encounters. The questionnaire consists of 66 items. The scores of the subscales are obtained by adding the scores of related items. Cronbach's alpha coefficient for the subscales was between 0.61 - 0.79, and its validity was reported to be 0.59 - 0.83 (27).

## 4. Results

A total of 200 female students of SUMS with a mean age of  $22.94 \pm 1.94$  years participated in this study. Table 1 shows the demographic characteristics of the participants.

**Table 1.** Demographic Characteristics of Female Students<sup>a</sup>

Variable	Values	P Value
<b>Year of entrance</b>		-
2005	47 (24.5)	
2006	37 (19.3)	
2007	26 (13.5)	
2008	34 (17.7)	
2009	25 (13)	
2010	10 (5.2)	
2011	13 (6.8)	
<b>Place of living</b>		0.07
Local	85 (44.3)	
Nonlocal	107 (55.7)	
<b>Marital status</b>		0.06
Single	129 (67.18)	
Married	63 (32.81)	
Variable	mean $\pm$ SD	
<b>Age</b>		0.40
Overeating	23.38 (1.86)	
Normal	22.81 (1.95)	
<b>Score average</b>		0.03
Overeating	16.00 (0.76)	
Normal	16.56 (1.02)	

<sup>a</sup>Values are expressed as No. (%).

Due to BES's cut-off point, 75% of the individuals were normal and the remaining were in the overeating group.

The mean score of the BES questionnaire for all students was  $11.96 \pm 8.14$  (Table 2).

**Table 2.** Mean and Frequency of BES Questionnaire

Group	Mean $\pm$ SD	Frequency (%)
Overeating	$23.55 \pm 4.5$	50 (25)
Normal	$7.82 \pm 4.5$	150 (75)
Total	$11.69 \pm 8.14$	200 (100)

The groups differed significantly in terms of confronting coping, escape-avoidance, and average score. ( $P < 0.05$ ) (Table 3).

**Table 3.** Mean Differences Between the Groups<sup>a</sup>

Variables	Group	Values	P Value
Confronting coping	Overeating	$1.33 \pm 0.53$	0.024
	Normal	$1.54 \pm 0.56$	
Escape-avoidance	Overeating	$1.42 \pm .53$	0.019
	Normal	$1.62 \pm .49$	
Average score	Overeating	$16 \pm 0.76$	0.001
	Normal	$16.56 \pm 1.02$	

<sup>a</sup>Values are expressed as mean  $\pm$  SD.

## 5. Discussion

The results of this study indicated that avoidant coping styles were associated with increased binge eating in adults. There were similar findings for the relationship between avoidant coping with other disturbed eating patterns and eating disorders. Avoidant coping had a significant correlation with unhealthy eating behaviors, such as skipping meals or watching television while eating (28, 29), higher loss of control of eating (30) and increased binge eating (31).

The results of this study showed that a healthy group had a better educational status than individuals with BED. Also, in this group, the use of avoidance coping strategies in stressful situations was more than that in people with binge eating disorder.

Young and Limbers found an association between emotional eating and avoidant and emotion-focused coping styles (23). The results of Baigrie and Giraldez (22) showed that the adolescents who reported binge eating used more avoidance coping strategies than those who did not engage in this behavior.

In another study among students with an avoidance coping style, those who reported more daily stressors showed higher eating disorder attitudes and behaviors

than those with fewer daily problems (23). Becker and Grilo (32) found that avoidance personality disorder affects emotional eating. In this study, emotional eating is regarded as unhealthy behavior. One study did not provide evidence for the link between avoidance personality disorder and emotional eating (12).

In the study conducted by Gonzales et al. (cited in Czaja et al.), students with better education status were more skilled in dealing with stress and evaluating tension conditions (30), which is consistent with our study results. In the present study, all the participants were educated students and their academic achievement, based on the end of the semester GPA, was considered as a source of stress and performance. In various studies, patients with BED showed to be overeating when they experienced stressful situations (33-35). Corwin et al. showed that BED patients were anxious and worried. They ate more food in stressful conditions (36). In the students' group, exam days could disturb calmness and create anxiety.

Also, other factors, such as social support, have been shown to have a direct impact on health behaviors, especially in females (37). In Janna et al.'s (cited in Corwin et al.) study in 2002, the lack of emotional support was determined as the best predictor of stress-related support to review Stress-related eating and Body Mass Index as predictors of binge eating disorder (38).

In another study in South Africa, which was conducted to determine BED in female students, showed that BED patients were concerned with expectations others may have of them and body shape (39). Stress and anxiety affect food intake and body weight (40). Results of studies show that women with eating disorders have higher rates of anxiety disorders than non-affected peoples (36, 41-43). In our study, most BED students had higher stress than others.

Khaier et al. (44) conducted a study on 488 students in both groups of BED and non-affected. The results showed that high-stress status and lack of using stress management strategies led to academic failure (44), which is consistent with our study results. It seems that overeating is a way of coping with stress in BED patients. It is a vicious cycle causing stress and anxiety. In the present study, it seems that people with BED have turned to overeat instead of using effective coping strategies, to cope with disability in academic performance.

Coping strategies can affect the personality features and are important in the prognosis and treatment of the eating disorder (45) Results of our study showed that most participants only used confronting coping and escape-avoidance subscales of coping strategies. Most students in the BED group started overeating instead of using coping strategies to overcome stress.

Results of Martyn-Nemeth et al.'s study (29) indicated

that stress and low self-esteem were related to avoidant coping and depressive mood and that low self-esteem and avoidant coping were related to unhealthy eating behavior. Similarly, several studies have significantly reported poor quality of life and self-esteem in the BED female patients (46).

Avoidant coping style can probably be important in eating disorder symptoms. It can be interpreted as consistent with an escape theory of eating pathology. According to this theory, a person responds to perceived stress from external life stressors and the resulting distress with avoidant behaviors. Avoidant strategies, in the short term, can reduce distress by providing an emotional distance from the problem, while in the long run, it reduces compatibility (47). The present study focused on college students, and their academic achievement. Other strengths of this study were addressing the crucial subject of coping with stressful situations. The limitation of this study included the lack of attention to the role of the family and the university environment in creating stress in college students. It is suggested that people with lower education be compared with this group. Also, the effect of BED on their quality of life is recommended to be examined.

### 5.1. Conclusions

The results of this study showed that the use of inefficient coping strategies increased negative outcomes, such as binge eating disorder in students. Avoidance coping strategy could be an essential mechanism to reduce pressure in stressful situations.

### Supplementary Material

Supplementary material(s) is available [here](#) [To read supplementary materials, please refer to the journal website and open PDF/HTML].

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### Footnotes

**Authors' Contribution:** All authors participated in the study concept and design, acquisition of data, data analysis and critical revision of the manuscript for important intellectual content.

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