

The Role of Perfectionism and Eating Attitude in Predicting Body Image Concerns in University Female Students

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Abstract

Introduction: The aim of this research was to study the role of perfectionism and eating attitude in predicting body image concerns in university students.

Methods: The statistical population included all Azad university students in the academic year of 2019-2020 in Golestan province. The research sample consisted of 500 university students who were selected through Cluster sampling method. Body image concern questionnaire (Littleton et al, 2005), perfectionism questionnaire (Ahwaz, 1378) and eating attitude (Garner et al. 1982) were used to gather data. The Data were analyzed by stepwise regression analyses.

Results: The results of stepwise regression analyses indicated that there is a correlation coefficient (0.332) between perfectionism and body image concerns, which is significant at the level ($P < 0.01$) and there is a correlation coefficient (0.273) between eating attitudes and body image concern, which is significant at the level ($P < 0.01$). Perfectionism and eating attitudes can predict 14% of body image concerns.

Conclusion: The findings of the study confirm the role of perfectionism and eating attitudes in predicting body image concerns, which can facilitate the explanation and etiology of this variable.

Keywords: body image concern, eating attitudes, perfectionism

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Introduction:

Since the 1980s, research in Western societies has shown that the prevalence of dissatisfaction with physical appearance and body image is increasing in adolescents, young people, and adults (1). Women considered slimming and thin limbs to be ideal, and men considered muscular bodies to be appropriate, and these images were constantly promoted by the media, and as a result, the dissatisfaction with body image increased. Today, physical dissatisfaction has increased among young men, but research still indicates a high prevalence of this disorder in women, and the volume of research has been much higher among women than men (2). The pressures of society, culture and various media propaganda on the beauty and fitness of girls and women force them to accept certain criteria. In this situation, the ideal body shape, clothing and different fashions change day by day, and as a result, it seems that the person is constantly evaluating his appearance and fitness, and sufficient satisfaction with his ideal body and image. Compared to the ideal body and fit that society has imposed on him (3). Body image is a multifaceted structure, consisting of cognitive and emotional components (for example, how people think and feel about their body), perceptual (for example, how people perceive the size and shape of their body and parts of their body) And behavior (for example, the behaviors that people do to inspect, care for, change, or hide their bodies). In the case of severe body image concern, mental preoccupation occurs with an imaginary defect in a person's appearance that causes great discomfort and disruption in important areas of function. In this case, if there is a small physical abnormality, the person's concern about it is excessive and annoying. The basis of this disorder is the patient's strong belief or fear of not having an attractive appearance. Severe anxiety about negative evaluation by others has caused severe dissatisfaction with body image, the continuation of this dissatisfaction also leads to depression and low self-esteem (4). Women are significantly ahead of men in terms of body image concern and facial dissatisfaction, and social labels are strong predictors of body image concern and facial dissatisfaction (5). There is a direct relationship between body image concerns of mothers and their daughters. The thoughts and behaviors of girls and mothers in the field of body image are similar to each other, meaning that these two groups act similarly in both cognitive and behavioral dimensions and the role of mothers in creating Concerns about body image are significant in their daughters (6). People's dissatisfaction with their body image under the influence of personal and environmental factors can lead to incorrect assessments, negative thoughts and emotions in them. Also, this dissatisfaction is related to irrational beliefs and mental health in general and negatively, each as negative body image and irrational beliefs increase, mental health decreases. People with negative body image or low self-esteem feel less valued and more likely to feel inadequate. When people compare and contrast their appearance with some irrational beliefs, they rely on minor or imaginary flaws in their appearance and ignore the positive features. These people have negative self-concept and low self-esteem and irrational attitudes and beliefs about their appearance, which in addition to poor mental health can lead to disorders such as depression and anxiety (7). Also, personality traits and body image play an important role in psychological health and well-being, and neurotic people are more dissatisfied with their body image and are more inclined to have cosmetic surgery. People who have less emotional stability and more talent for experience. They have unpleasant feelings, they evaluate their appearance more negatively (8,9). Following the feeling of dissatisfaction with the body image, a person tends to change this image so that he can bring his true body image closer to his ideal image, from using difficult diets to buying cosmetics and hard exercise and taking medicine, and finally Cosmetic surgery (10). According

to research by Mousavizadeh et al., 30% of people who undergo cosmetic surgery are dissatisfied with the operation and then complain. In addition to the risks and side effects, these surgeries have become a social value. Considering the time required for postoperative recovery (at least 1 to 3 months) as well as its heavy costs, the annual demand of more than 10,000 Iranian women for cosmetic surgery is thought-provoking (11). Various studies have shown that women and girls are highly sensitive and vulnerable to body image and are increasingly prone to losing weight and reducing body size. As a result, dissatisfaction with body image and unhealthy eating habits and eating disorders has increased. Also, according to research, nutritional functions are more influenced by culture, beliefs than by nutritional awareness. , Eating attitudes, mass media and fashion (12). Various studies have shown that women and girls are very sensitive and vulnerable to body image and are increasingly prone to weight loss and body size reduction. As a result, dissatisfaction with body image and unhealthy eating habits and eating disorders have increased. Also, according to research, nutritional practices are influenced by culture and beliefs more than the effect of nutrition awareness. , Eating attitudes, mass media and fashion (12). Eating attitudes include a person's beliefs, thoughts, feelings, behaviors, and relationships with food, and many studies have also used the term attitude to describe thoughts, feelings, and beliefs related to eating (13). Abnormal attitudes to eating include abnormal attitudes and views about current and ideal weight, mental image of the body and behavior, mental engagement with the contents of foods and their metabolism in the body, and the use of special methods to It is the excretion of food from the body (14). One study reported impaired eating attitudes in 10-20% of schoolgirls, which included concerns about weight, fear of obesity, behaviors that lead to severe weight loss, and loss of control over overeating (15). What makes it even more important to study eating attitudes is that the percentage of adolescents with eating disorders is much higher than adolescents with eating disorders, with girls more likely than boys to have erroneous attitudes. And eating disorders (16). There is a significant negative relationship between body image and inappropriate eating behaviors with women's quality of life. The negative effect of inappropriate body image of women on reducing their quality of life causes that even the most relaxation at the moment of eating, loses its effect on increasing the quality of life and reduces its power (17). On the other hand, people with eating disorders have higher scores on self-centered perfectionism (in which a person tends to set high standards for performance). Perfectionism seems to cause depressive symptoms, eating problems, and obsessive-compulsive symptoms in people with anorexia nervosa (18). Perfectionism is the setting of very strict criteria that are self-imposed and the intense and ruthless effort to achieve them despite the problems they create for the individual. Also, the perfectionist determines his sense of worth almost exclusively on the basis of the extent to which he pursues and achieves these criteria (19). From the point of view of psychological-behavioral model, it seems that patients who are concerned about body image also have a kind of perfectionist thinking and have irrational beliefs about attractiveness (20). Perfectionism plays an important role in the etiology, preservation, and direction of psychological trauma and is associated with mechanisms such as extreme criteria that lead to inflexible rules of action (21). According to Elliott, perfectionism can be divided into two types of positive perfectionism and negative perfectionism. In positive perfectionism, the person has high personal standards, a desire to perform well, positive adaptation, realism and acceptance of personal limitations, but in people with negative perfectionism, many mistakes occur. There is a lot of doubt and self-criticism. And these are the factors that predict negative psychological consequences such as anxiety, depression and low self-esteem. People with negative

perfectionism set high and unattainable standards for themselves. These people tend to do things in the best possible way and are often dissatisfied with the results of their work, which is why they are usually dissatisfied with themselves (22). According to Emad, Atashpour and Zakerfard, the positive dimension of perfectionism is a positive and significant predictor of psychological well-being. Is. The higher prevalence of anxiety and worry in girls due to background and cultural issues can be a factor in a negative and stronger relationship between psychological well-being and the overall score of perfectionism compared to boys (23). Previous studies have examined some variables of this study. In Iran, Jamshidi and Hashemi concluded in their study that there is an inverse relationship between perfectionism and depression with body image, ie the higher the perfectionism and depression in the subjects. They will have a weaker body image and the variables of perfectionism and depression will be able to predict body image (24). Ebrahimzadeh et al. In their research showed that eating disorders and body dysmorphic disorders are related to each other (25). People with eating disorder symptoms also get high scores in body dysmorphic disorder and vice versa. Saravani and Shirazi in their research showed the sub-components of perfectionism (worry about mistakes, doubt about actions), behaviors, parental expectations, criticism Parents, individual standard and total score of perfectionism) have a positive and significant relationship with body image concerns (26). In their research, Poundehnejad, Attari and Hossein showed that there was a negative and significant relationship between body image and eating behaviors with quality of life (17). Arji also showed in his research that the more perfectionist a person is, the more negative his body image will be and the more likely he is to develop a deformed body (27). Nigar and Naqvi in a study on physical dissatisfaction and perfectionism showed that in perfectionists there is less physical satisfaction and young women compared to men of the same age in physical dissatisfaction and perfectionism and self-esteem scores They gained higher (28). Krebs, Quinn, and Jassi in their study of perfectionism and body dysmorphic disorder showed that there is a positive and significant relationship between perfectionism and physical deformity disorder, and perfectionists have a higher risk of developing this disorder (29). Women in this study have a higher incidence of physical deformity disorder. Hugo and Miller found in a study of young girls that girls who interacted with relatives and peers on social media were more likely to be judged and compared, and were more concerned about their body image and appearance. Ideal and perfect images of women in cyberspace encourage negative body image (30). Girls are an important and crucial part of a society, because each of them is a future wife and mother, addressing the mental health and well-being of girls is doubly important. Many women spend a lot of time, effort and money to achieve the ideal body image. When the cultural context of society emphasizes the value of physical attractiveness, especially for women, there is a gradual concern for body image (31). Previous research has shown the need to examine the factors associated with body image anxiety. In Iran, little research has been done on body image anxiety and related factors, and a study that has examined all three of these variables in young girls not found. Therefore, since one of the most important aspects of adolescent and young girls' self-esteem is their physical appearance and body image, and this image and perception, if negative or positive, can affect various aspects of a person's life and behavior. According to research, social pressures on weight loss and widespread views on body structure have led to dissatisfaction with the body and a negative body image in society, especially among women. Be common (32). The purpose of this study was to investigate the role of two factors, namely attitudes toward eating and perfectionism in predicting body image concern.

Method:

This research is a descriptive correlational study. The statistical population of this study included all first year female students of Golestan Province Azad Universities who were studying in the 98-99 academic year and there were 4352 students. According to the Kerch-Morgan table, 350 samples are sufficient for this study (33). Taking into account the occurrence of some problems in the process of completing the questionnaire, the number of samples was considered to be 500 people. Finally, 456 questionnaires were collected (44 questionnaires were discarded due to defective or incomplete). Sampling was done using cluster sampling method; In this method, a region (west of the province) was randomly selected and out of seven units and centers in this region, three units were selected as a sample, then two faculties were randomly selected in each unit and Questionnaires were randomly presented and completed in several classes in each faculty. Research tools include the following:

Littleton et al. Body Image Concern Questionnaire : This Questionnaire contains 19 questions, each question has five options that are scored from 1 (never) to 5 (always). This tool has two factors, the first of which includes dissatisfaction and embarrassment of one's appearance, checking and hiding perceived defects, and the second factor shows the degree of interference of anxiety about appearance in their social performance. Littleton et al. Evaluated the reliability of this questionnaire by internal consistency method and obtained Cronbach's alpha coefficient of 0.93. The correlation coefficient of each question with the total score of the questionnaire was from 0.32 to 0.72 with an average of 0.62. Also, Cronbach's alpha coefficient of the first and second factors was 0.92 and 0.76, respectively, and the correlation coefficient between the two factors was 0.69 (34). To get the total score of the questionnaire, the total score of all questions is calculated together. This score will range from 19 to 95. If the score is between 19 and 38, the level of fear of the image of your appearance and body is low. If the score is between 38 and 57, the fear of the image of one's appearance and body is moderate, and if the score is higher than 57, the fear of the image of one's appearance and body is high. In Iran, Basakonejad and Ghaffari (2007) reported 95% validity of this test based on internal consistency by Cronbach's alpha method (35). In the present study, the reliability of the questionnaires was calculated using Cronbach's alpha, the calculated alpha for the whole scale was estimated to be 0.89.

Ahwaz Perfectionism Scale: is a 27-item scale that was created by carpenters, perfumers and goldsmiths in 1999 with the aim of measuring perfectionism. Each item on this scale has four options: never, rarely, sometimes, often. In this scale, with the exception of Articles 11, 16, 17 and 22, which are scored in reverse, and the rest of the items are scored from "1" to "4", respectively, based on the scale of values. Finally, the sum of the scores shows the degree of perfectionism of the individual. The scores of the above 27 phrases are added together. The minimum possible score will be 27 and the maximum 108. A score between 27 and 54 indicates a low degree of perfectionism. A score between 54 and 68 is the average degree of perfectionism. A score above 68 is a high degree of perfectionism. Najarian et al. (1999) used Cronbach's alpha coefficients to measure the internal consistency of perfectionism. For the results, the alpha coefficient for the whole sample is 0.90, for the female subject is 0.90 and for the male subject is 0.89 (37). In the present study, the reliability of the questionnaire was calculated using Cronbach's alpha, the calculated alpha for the whole scale was 0.87.

Eating Attitude Questionnaire (EAT-26) Carner et al.: The initial version of the Nutrition Attitude Test was developed in 1979 by Connor et al. With 40 items. In subsequent studies, due to the length of the test and its validity and validity in 1989, a 26-item version of the test with relatively good validity and validity was prepared by the authors. The latest version has been used in many studies and has three subscales of eating habits, type or desire to eat and oral control. The scores of the above 26 phrases are added together, the minimum possible score will be 0 and the maximum 78. If a person scores above 20 on the test, he or she should seek further examination and possibly treatment (37). In the study, Mollazadeh Esfanjani et al. Used the halving method to evaluate the reliability of the test, which had a coefficient of 0.69 to 0.73. Also, to evaluate the validity of the test, Cronbach's alpha coefficient was used, which was 0.82 for the whole scale (38). In the present study, the reliability of the questionnaire was calculated using Cronbach's alpha, the calculated alpha value for the whole scale was 0.84.

Results:

Findings obtained from the analysis of demographic characteristics of the sample group in the present study showed that all students had an input of 98-99, all were under 22 years old and their mean age was 19.89 and standard deviation was 1.82. 265 students, equivalent to 58% of the participants from the faculties of humanities, 68 students - 15% - from the Department of Basic Sciences and Agriculture, 63 students - 14% - Engineering and 60 students - about 13% - from the medical and nursing sciences. In order to use regression analysis, its hypotheses were first examined and the findings in Table (1) showed that since the amount of skewness and elongation is between (2- to 2 +), it indicates that between the distribution There is no significant difference or deviation from the normal distribution of the data; Also, the results of regression hypotheses showed that the data distribution is in the center and along the zero point.

Table1. Description of research variables

kurtosis	Skewness	Max	least	Standard deviation	mean	متغيرها
- 0.484	0.281	78	16	12.2	41.3	Bodyimage concern
0.076	0.181	100	42	9.2	70	Perfectionism
1.8	1.28	56	0	10.6	12.9	eating Attitude

Stepwise regression analysis was used to predict body image concern based on perfectionism and eating attitudes toward nutrition. As can be seen in Table (2), there is a correlation coefficient (0.332) between perfectionism and body image concern, which is significant at the level (P <0.01), as well as between attitudes toward nutrition and body image concern. There is a correlation coefficient (0.273) which is significant at the level (P <0.01). In stepwise multivariate regression analysis, the first variable of perfectionism was included, which explained 11% of the changes in body image concern (P <0.001, 454 = 56.107, 1 F). Then the attitude towards nutrition was introduced which explained another 3% (P <0.001, 454 = 164.734, 1 F). The summary of the results of regression analysis is presented in Table (3). These findings show that the variables of perfectionism and attitude toward nutrition can significantly predict body image anxiety and the strength of this prediction is about 14%. Examination of alignment indices for the predictor variables of perfectionism and attitude to nutrition, which is equal to (0.903) shows that the predictor variables have good independence and also the VIF value for these variables less than 2 indicates the reliability of regression results. Is. The regression equation for this study is as follows.

Body image concern= 215 (EatingAttitude) + (Perfectionism) 0.361 + 13/215

Table2. Mean and standard deviation and cross-correlation for body image concern and predictor variables of perfectionism and eating attitude among female students

eating attitude	perfectionism	Body image concern	Standard deviation	mean	variable
		1	12.2	41.3	Body image concern
	1	0.332 **	9.2	70	perfectionism
1	0.312 **	0.273 **	10.6	12.9	eating attitude
P< 0.05 *	P <0.01**				N =456

Table3. Summary of stepwise multivariate regression analysis to predict students' body image concern based on perfectionism and eating attitude among female students

VIF	Tolerance	significance	t	beta	standard error B	B	R ²	R	variable
1.108	0.903	0.0001	5.965	0.273	0.061	0.368	0.11	0.332	perfectionism
1.108	0.903	0.0001	4.091	0.187	0.053	0.215	0.142	0.376	eating attitude

Discussion:

The results of this study showed that perfectionism and eating attitudes can predict body image concern. The weaker the attitude to eating and the greater the perfectionism, the greater the concern for body image. According to the findings, these two variables predict up to 14% of body image concerns. In line with the results of this study, Jamshidi and Hashemi in their study showed that participants who scored higher in perfectionism and depression, had higher body image concern, and both of these variables are able to predict body image concern (24). Ebrahimzadeh et al. Also found in their research that eating problems and disorders can predict physical deformity disorder, if there are symptoms of eating disorder, the symptoms of malnutrition should be examined (25). Saravani and Shirazi found that body image concern has a positive and significant relationship with perfectionism and all its subscales. People who have high criteria for their appearance experience more dissatisfaction. In fact, these people choose unattainable criteria. They feel frustrated, which is one of the important factors causing concern in appearance (26). Nigar and Naqvi in a study on physical dissatisfaction and perfectionism showed that the media are involved in the relationship between these two variables by inducing definitions of beauty, and among adolescent girls and boys participating in this study, girls are less satisfied with the image. They had bodies and were less physically satisfied in perfectionist participants (28). Also, in line with the present study, Krebs, Quinn and Jassi in their research among 14 to 16 year-old school students found that there is a positive and significant relationship between perfectionism and physical deformity symptoms (29). Arji also showed in his research that perfectionism indirectly affects the symptoms of physical deformity through body image (27). In examining the body image of 53 mothers and daughters, Gillario et al found that there was a direct relationship between the body image concerns of mothers and

their daughters. They act similarly to each other and the role of mothers in causing physical image concern in their daughters is significant (6). The influential role of family and parents in initiating body image and eating disorders and perfectionism seems to have been discussed in the past. For example, attachment theory examines the contribution of various factors involved in eating disorder in a complete framework for understanding eating disorders. Slowly, Balby believes that if a child receives messages of incompetence and lovability from important people (in the child's life) who feel inadequate, the child's sense of security is essential to discovering the environment, and this awareness The child finds that there is a safe haven to return to in times of danger. The findings suggest that parents with perfectionism with excessive control and emotionally inaccessible who do not support their children's independence, more than others, They have children with eating disorders, in which case the child may divert attention from internal distress to the outside as a solution to the problem (39). According to the results, the perfectionism variable was able to explain 11% of the changes in body image concern. In examining the relationship between perfectionism and body image, one can refer to the theory of self-inconsistency, proposed by Higgins in 1987, who believes that people compare what they are or their real selves with what they like or are ideal. According to Higgins, if there is a discrepancy between the perception of the real body image and our ideal image, it will cause us dissatisfaction and failure. Deviation from the norms can lead to negative emotional states and increase emotional helplessness. This helplessness affects the individual to approach the standards (26). Perfectionists believe that they should have perfect performance, and if their performance is below perfection, this will cause them dissatisfaction. They are always dissatisfied with their performance and believe that they can not do what they want. reach. These people sometimes try to punish themselves by magnifying the negative results, as Gambos and Johnson showed in a study that people with body image anxiety scored higher on negative perfectionism and neurotic behavior than the control group, and on mistakes and weaknesses Their performance was more anxious (40). According to the findings, attitudes toward eating and body image concern are also positively and significantly correlated, and attitude toward eating can predict 3% of body image concern. Ebrahimzadeh et al. concluded that the comorbidity of eating disorders and physical deformity is so high that neglecting any of them, both in the discussion of evaluation and diagnosis and in the discussion of therapeutic interventions may lead to inadequate therapeutic diagnosis and intervention (25). A limited number of theoretical models for eating disorders are assumed, one of which is the three-factor influence model, which states that the three primary influencing factors, including peers, family, and the media, shape the development of disorders such as eating and body image. Peers can initiate eating disorders and body image concerns through behaviors such as ridicule and Family members and television programs can trigger eating disorders and body image concerns with behaviors related to weight and eating and the content of magazines and television programs (41). Given the effective role of peers and friends in accepting the imposed standards of beauty of the media, it is likely that female students will be more inclined to include themselves in the beauty criteria of friends and the present society by entering the university, which has new and different conditions and environment than the school. Research has shown that comparisons with the appearance of others and ideals are the most common reason for starting diets in adolescent girls (42). Factors such as family and social factors that compare girls to others seem to have a significant impact on the onset of different attitudes toward girls' eating behaviors, and harmful attitudes, if not corrected, can lead to eating disorders and increased body image anxiety. Finally, according to this study, body image

anxiety can be predicted through perfectionism and eating attitudes. Based on the above theoretical issues and considering that the concern about body image in female students, who are not only the human capital of society, but also have a serious responsibility to be mothers in the future, indicates the existence of challenges in mental and physical health of this group.

Application of research:

The application of this study is to use these methods to help investigate the image anxiety and screening of girls and also to adopt methods to reduce dissatisfaction with the body and increase their mental health. Since it seems that many indicators of image anxiety physically, they originate from cultural beliefs, so it is suggested that future research consider the role of cultural issues and other psychological components in the study of this factor.

Ethical considerations:

In accordance with the ethical considerations of each study, in the present study, the participation of individuals was completely voluntary and their privacy was taken into account.

Research Limitations:

Since humanities research is always limited, the present study was no exception and had some limitations, including that the research was conducted in a student population and in a limited geography, so to generalize the results to other communities and age groups. And transformation must be approached with caution. There is no conflict of interest for this study.

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