



# Compilation of a Structural Model of Body Image Based on the Attitude towards Eating with the Mediation of Dysfunctional Beliefs in People with Body Deformity Disorder Referring to Beauty Clinics

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## Abstract

**Background and Objective:** Body image is a multidimensional structure broadly defining the mental and internal manifestations of physical appearance and bodily experiences. It is associated with weak self-esteem, weak gender identity, and depression. Therefore, the current research aims to develop a structural model of body image based on the attitude towards eating with the mediation of dysfunctional beliefs in people with body deformity disorder referring to the beauty clinics of Mazandaran province.

**Materials and Methods:** The current research method is correlation and structural equation modeling (SEM). The statistical population of the research was made up of people who were referred to the beauty clinics of Mazandaran province (the cities of Amol, Babol, Sari, and Qaem Shahr). According to Klein's opinion, the sample size was 330 cases selected in a purposeful and random way. The data collection tools included Sotoo and Garcia's (2002) body image satisfaction scale, Connor et al.'s (1979) eating attitude scale, and Wiseman and Beck's (1982) dysfunctional beliefs scale. In this research, SPSS (version 22) and Amose (version 23) software packages were used to analyze the information obtained from structural regression equation modeling.

**Results:** The results of the research demonstrated a relationship between attitude toward eating and body image with the mediation of ineffective beliefs in people with body deformities. Moreover, the data analysis showed the appropriateness of the indicators and indicated a very good fit for the research model at a significant level.

**Conclusions:** One of the prerequisites of behavior is attitude; in other words, every behavior that comes from a person is associated with some kind of attitude. According to this point of view, any particular attitude towards a special subject or phenomenon creates a certain readiness in people to perform behavior. Many diseases, including body image disorder, are directly or indirectly caused by a person's attitude towards eating or are affected by it, or at least, a person's attitude plays a role in its aggravation and durability.

**Keywords:** Body dysmorphic disorder, Body image, Eating attitude, Perfectionism, Personality type, Sexual schemas



## Background

With the arrival of the new era, some types of appearance and physical actions have gained particular importance [1]. In psychology, the discussion of the importance of people's appearance is mostly studied in the form of a concept called body image, which is a mental image of people about their bodies [2]. In other words, body image can be a person's perceptions, thoughts, and feelings about his body and physical experiences [3].

Body image has two distinct perceptual and attitudinal aspects. The perceptual aspect refers to a person's belief about how much his competence is measured by his appearance. Nevertheless, the attitudinal aspect refers to two separate elements: orientation and evaluation. Orientation refers to the degree of importance that a person attributes to his appearance, and evaluation signifies the extent to which a person is satisfied with his/her body and

appearance [4]. Based on these two attitudinal elements, another concept related to body image, known as body deformity disorder, is proposed. Body deformity disorder is a type of mental preoccupation that makes a person extremely involved in their appearance defect, which is minor or absent from the eyes of others [5].

In the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychological Association, this disorder is a subset of obsessive-compulsive disorder defined by the criteria of mental preoccupation with one or more defects that are not clearly visible from the eyes of others or seem to be few [6]. It seems that people with body deformity disorder have a defective body image, which, according to Slad [7], is an image that a person has in his/her mind about the size, appearance, and overall shape of the body and arise feelings in him/her about these features [8]. This structure is affected by a person's perception, imagination, and bodily sensations of his/her body, which are always changing due to their psychological nature and are more affected by self-esteem [9]. In the positive dimension of this structure, a person displays behaviors that indicate body care, which includes three components: accepting the body regardless of its size, shape, weight, and other defects, respecting the body, paying attention to its needs, and protecting the body from unrealistic ideals presented in the media [10]. On the negative side, the individual spends a long time every day thinking about the perceived defect and often engages in repetitive behaviors, such as comparing, checking in the mirror, camouflage, or caregiving, which are done extremely for seeking reassurance [11].

One of the prerequisites of behavior is attitude; in other words, every behavior a person performs is associated with some kind of attitude. According to this point of view, any particular attitude towards a special topic or phenomenon creates a confident readiness in people to perform behavior. Various diseases, including obesity and overweight, are directly or indirectly caused by a person's attitude towards eating or are affected by it, or at least, a person's attitude plays a major role in its aggravation and durability [12]. The term attitude to eating is a comprehensive and broad term that has been referred to in different ways in the literature review. Attitude towards eating is the core of all eating disorders, describing unhealthy behaviors and attitudes ranging from strict dietary habits to lose or maintain an ideal weight to severe restriction and anorexia nervosa. They are usually considered eating disorders in clinical studies [13]. The attitude towards eating covers a wide spectrum, which ends

with a healthy attitude on the one hand and eating disorders on the other hand [14]. According to Festinger's theory [15], a person has an innate desire to evaluate him/herself, and based on this desire, he/she always develops standards or obtains them from the social environment to compare him/herself with others. Nonetheless, multiple individual differences are always observed in these comparisons, resulting from people's different personalities [16]. The effect of personality on social comparisons is considered reasonable since personality theory usually emphasizes the explanation of regular dispersion in people's cognition, emotion, and behavior in various situations and behavioral domains [17]. According to the big five-factor theory, personality is a hierarchical structure with five main dimensions: neuroticism, extroversion, openness to experience, agreeableness, and conscientiousness [18]. In addition, studies consider personality traits to be related to all human functions [19]. Personality can also affect all levels of dissatisfaction with body image [20]. In this regard, people with high scores in neuroticism, extroversion, openness to experience, agreeableness, and conscientiousness present a different report regarding body image compared to people with lower scores in the same dimensions [21].

It seems that one of the factors related to body image is perfectionism, which refers to having a set of high-level goals and standards for life [22]. It is generally divided into two types: positive perfectionism and negative perfectionism [24]. In positive perfectionism, despite the fact that an individual's standards for performance are at a high level, these goals are set logically and reachable. People enjoy trying to reach a goal more than the goal itself. On the way to success and progress, they are flexible and accept their personal and situational limitations.

In negative perfectionism, the goals are unrealistic and overly idealistic, and rigid and inflexible rules are established to achieve the goals. People with negative perfectionism consider mistakes to be equal to failure; consequently, they are extremely afraid of making mistakes. Blame and lack of approval from others instill great fear in them. They like to look flawless in all fields [occupational, academic, and even physical appearance] [25]; that is, they do not value average, and they have all-or-nothing thinking [26]. People with high perfectionism set higher evaluation criteria for themselves and may have an unrealistic ideal of thinness that increases the risk of body dissatisfaction [27]. By intensifying itself and turning into a pathological and obsessive form, this trait causes a person to see his body image as more unfavorable than his/her actual image [28]. On the other hand, people with body deformity disorders

often have irrational, ineffective, and overvalued beliefs about their body defects and defective body image [29]. Dysfunctional attitudes are biased assumptions and beliefs that a person has about him/herself, the surrounding world, and the future. These attitudes bias a person's perception of events, affect his/her feelings and behaviors, and make him/her prone to depression and other psychological disturbances [30]. Suppose a person has a perfectionist and inflexible view of the world when faced with a stressful situation that disrupts his/her previous views. In that case, he/she uses non-adaptive strategies, such as avoidance or denial. Therefore, it can be stated that people who inflexibly maintain these biased beliefs are more exposed to psychological damage, including addiction, when faced with a stressor. According to Beck [31], dysfunctional beliefs are inflexible and perfectionistic criteria that a person uses to judge him/herself and others, and since these beliefs are inflexible, extreme, and resistant to change, they are ineffective or infertile. Cash and Smolak [32] believe that people with body image dissatisfaction have dysfunctional beliefs and cognitive distortions in this regard. Moreover, irrational beliefs play a role in body image concerns [33]. According to the available data, a logical connection between the research variables can be clearly observed. In mediating models, it is necessary to have a relationship between the mediating variable and the output variable in the experimental and theoretical background so that it can take part in the relationship between the input variable and the output variable.

### Objectives

In light of the aforementioned issues, the present study aimed to develop a structural model of body image based on the attitude towards eating with the mediation of dysfunctional beliefs in people with body deformity disorder referring to beauty clinics in Mazandaran province.

### Materials and Methods

The current research was conducted based on a correlational cross-sectional design. Data were analyzed by structural equation modeling (SEM), specifically regression equations, and an approach based on covariance (CBSEM), which estimates path coefficient factor loadings by minimizing the difference between the sample-based covariance matrix and the model-based covariance matrix. The statistical population of this study included the people who were referred to the beauty clinics of Mazandaran province (Amol, Babol, Sari, and Qaem Shahr cities) during the six months of the second year. The selection of the statistical sample

was done in a purposeful and random way so that the people referring to the beauty clinics of Mazandaran province were screened based on the higher-than-average scores on this scale after responding to the Yale-Brown Obsession Scale. The sample size was determined by considering that the number of samples for each subscale of the variables in the data is 30 cases. By including the subscales of the variables in the data (11 in total), the sample size was estimated at 330 subjects. The inclusion criteria were: 1. female gender, 2. people referring to the beauty clinics of Mazandaran province, and 3. non-selection of people who perform cosmetic surgery due to medical problems. On the other hand, the exclusion criterion was undergoing psychotherapy during the examination.

### Research Instruments

#### Souto and Garcia Satisfaction with Body Image Scale (SWBI)

This 23-item scale which was developed in 2002 by Soeto and Garcia evaluates a person's satisfaction or dissatisfaction with his/her body. The items are rated on a five-point Likert scale, ranging from never to always. The reliability of this scale was obtained by the test-retest method in the research by Soeto and Garcia, where the correlation coefficient between two times of implementation was 0.71 [33]. In the study by Mousavi and Aghaei [34], the validity and reliability of this scale were calculated using Cronbach's alpha method of 0.91. The differential validity of the scale was also able to distinguish between the two groups of fit and obese. The factorial validity of this scale was analyzed by the varimax rotation method on 361 students, which showed that the KMO coefficient was 0.89, indicating the adequacy of sampling.

#### Corner et al.'s Eating Attitude Questionnaire (26 EAT)

The initial version of the eating attitude test was prepared in 1979 by Conner et al. with 40 statements. In subsequent studies, due to the length of the test and its validity and reliability, in 1989, a 26-item version of the test with relatively good validity and reliability was prepared by the authors. The latest version has been used in many studies and has three subscales: eating habits, hunger or desire to eat, and oral control. The scores of the above 26 statements are added together; the minimum possible score is 0, and the maximum score is 78. If the person's score on the test is higher than 20, he/she should be referred for further examination and possibly treatment [35]. In the research by Molazadeh Espizhani et al. [36], the bisecting method was used to check the reliability of the test, and its coefficient

was obtained at 0.69-0.73. In addition, to check the validity of the test, Cronbach's alpha coefficient was calculated at 0.82 for the whole scale.

### Weisman and Beck Dysfunctional Belief Scale (DAS)

The Dysfunctional Belief Scale, which was designed in 1982 by Wiseman and Beck, measures dysfunctional and negative beliefs. This 26-item scale measures the four components of perfectionism: need for others' approval, need to please others, and vulnerability to performance evaluation. The items are rated on a seven-point Likert scale, ranging from 1=completely disagree to 7=completely, and there is no reverse scoring. Moreover, the lower limit of grades is 26, and the upper limit of grades is 182. In the research by Weisman and Beck [37], the bisecting method was used to check the reliability of the test, and its coefficient was from 0.71-0.80. In the research by Ebrahimi and Mousavi [38], the internal consistency of the questions of the 26-question version of DAS was obtained through Cronbach's alpha equal to 0.92, which is very favorable and stronger than the 40-question version and compared to the alpha obtained for short versions.

This research used structural regression equation modeling to analyze the obtained information. This method is one of the main methods of analyzing complex data structures and investigating cause and effect relationships, pointing to the simultaneous effects of variables together in a theory-based structure. Through this method, the acceptability of theoretical models can be tested in certain societies using correlational, non-experimental, and experimental data. Modeling structural models is a comprehensive and powerful multivariate analysis technique from the multivariable regression family, allowing the researcher to test sets of regression equations simultaneously. Modeling is a comprehensive approach to test hypotheses about the relationships between observed and latent variables, which is sometimes called variance structural analysis or causal modeling. The data were analyzed in SPSS (version 22) and Amose (version 23) software packages.

## Results

The results pointed out that among the participants present in the research, 83 (25.15%), 75 (22.73%), 92 (27.87%), and 80 (25.24%) cases lived in Amol, Babol, Sari, and Qaem Shahr, respectively. In terms

of age, 71 (21.52%), 87 (26.36%), 95 (28.78%), and 77 (23.34%) cases aged 20-30, 30-40, 40-50, and over 50 years old, respectively.

As illustrated in Table 1, the mean scores of ineffective beliefs, body image, and attitude to eating were  $140.38 \pm 26.14$ ,  $62.25 \pm 14.24$ , and  $35.19 \pm 8.15$ , respectively. They were examined before analyzing the data related to the purpose of PJ.Hash, to ensure that the data of this research estimate the underlying assumptions of the structural equation model. For this purpose, four important assumptions of the structural equation model, including missing data, outlier data investigation, normality, and multiple collinearities, were investigated, which are stated in order.

### Missing data

In the structural equation model, if raw input data are used for analysis, these data must be complete and without missing values. There are several pre-empirical solutions to working with incomplete data. Listwise deletion, in which all scores related to missing data are deleted, and pairwise deletion, in which two-variable correlations are calculated only for cases where the data are complete and available. Another pre-experimental method for missing data is to replace these data with variable mean. In the present research, the method of data replacement with variable mean was used.

### Outlier data and multivariate normality

Outlier data are scores far away from other data and more than the expected value. There are two types of outlier data: univariate outlier data and multivariate outlier data. A subject with single-variable outlier data has a high or low score on one variable, and a subject with multivariable outlier data has high or low scores in two or more variables, or the pattern of his scores is unusual. In fact, in multivariate outlier data, the subject has a significant distance from the mean of one or more predictor variables. In the present study, Z scores of the variables were calculated to examine single-variable outlier data using the software program SPSS. The results demonstrated that the scores of no variables were two standard deviations above or below the average. Moreover, to check multivariate outlier data, the Mahalanobis distance was calculated for predictor variables. Suppose the maximum Mahalanobis distance is greater than the critical chi-square value with certain degrees of

**Table 1.** Descriptive findings related to research variables

Variable/descriptive indicators	M	SD	Minimum score	Maximum score
Dysfunctional beliefs	140.38	26.14	26	175
Body image	62.25	14.24	22	105
Attitude to eat	35.19	8.15	16	72



freedom (number of predictor variables) at  $\alpha = 0.001$  level. In that case, there is a multivariate outlier data problem. The lowest and highest values of Mahalanobis distance in the current research were obtained at 0.85 and 23.36, respectively. Considering that  $\chi^2$  of the table with 19 degrees of freedom (number of predictor variables) at the level of 0.05 is equal to 30.14 and, on the other hand, since the maximum value of the Mahalanobis distance (23.36) is less than  $\chi^2$  of the table (30.14), the presence of multivariate outliers in the collected data is not evident.

**Univariate normality**

Another important assumption of the structural equation model is the normality of the distribution of variables. When the data is not normally distributed, the Chi-square value increases, and the standard errors are lower than the actual estimate, leading to the estimated indicators being significant while not significant. The Kolmogorov-Smirnov test was used to check the normality. The criterion of the normality of the variables in this test is the non-significance of the Z score of the variables in the mentioned test. Table 2 illustrates the results of the normality test of the variables.

**Table 2.** Results of the normality test of research variables

Variable	Kolmogorov-Smirnov	
	Z	Significance
Dysfunctional beliefs	0.53	0.22
Body image	0.65	0.20
Perfectionism	0.74	0.07

As displayed in Table 2, the Z score (and significance level) was obtained at 0.53 (and 0.22) for ineffective beliefs, 0.65 (and 0.20) for body image satisfaction, and 0.74 and (0.07) for perfection. Based on this table, the research variables all have a significance level higher than 0.05, indicating that their Z score is not significant; therefore, a violation of the normality of the data is not visible.

**Multiple collinearity**

If the correlation coefficient between two

independent variables is greater than 0.7, it indicates the existence of collinearity between the independent variables, and we should have used only one of the independent variables in the analysis. Nonetheless, in the current study, the correlation coefficient between none of the predictor variables is more than 0.7, indicating that there is no co-linearity between the independent variables (Table 3).

In order to examine the fit of the factor models from chi-square indices, degree of freedom, chi-square ratio to degree of freedom ( $\chi^2/df$ ), root mean square approximation index (RMSEA), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), index Normalized fit (NFI), relative brush index (CFI), incremental fit index (IFI) and unsmoothed fit index (NNFI) were used, which were equal to 12.682, 4.2, 11.2, 0.058, 991.0, 0.988, 0.987, 0.992, 0.985, and 0.986.

In measuring the suitability of the model, the fit and validity of the tool were tested using the indices mentioned above. If the two-part chi coefficient on the numerical degree of freedom is smaller than 3, it is desirable. Moreover, when the root mean square error of approximation (RMSEA) is less than 0.1, the analysis and the model report an acceptable fit, and the closer the GFI, AGFI, NFI, CFI, and NNFI indices are to one, the better the fit of the model is. According to the indices obtained in the above table, the two-part chi index was obtained with 2.11 degrees of freedom, and the values of the GFI, AGFI, NFI, CFI, and NNFI fit indices are in the range of ninety percent to one, suggesting that these indices meet the necessary standards. Therefore, it can be stated that the model has a good fit and is confirmed.

Based on Table 4, all paths related to the proposed model are significant at the level of at least  $P \leq 0.05$ .

In this research, the indirect relationships among variables (multiple mediations) were tested through Preacher and Hayes macro. For all indirect hypotheses, the level of confidence interval was 95, and the number of bootstrap resampling was 5,000.

In Table 5, the data refers to the indirect effect in

**Table 3.** Suitability indices of the proposed model in the current research

Fitness indicators	$\chi^2$	P	Df	$\chi^2/df$	GFI	AGFI	IFI	NNFI	CFI	NFI	RMSEA
Proposed model	12.682	0.001	6	2.11	0.991	0.988	0.987	0.992	0.985	0.986	0.058

**Table 4.** Measurement parameters of direct relationships among research variables in the proposed model

Direction	Standard estimate	Non-standard estimate	standard error	Critical ratio	Significance (p)
Attitude to eat to body image	- 0.30	- 0.48	0.018	- 26.66	P=0.001
Attitudes to eat into dysfunctional beliefs	0.43	0.62	0.009	68.88	P=0.001
Unbelievably ineffective to the body image	- 0.35	- 0.51	0.013	-39.23	P=0.001

**Table 5.** Results of the indirect relationship mediation test using the Preacher and Hayes macro bootstrap method

Hypothesis	Data	Boot	Bias	Error Standard	Confidence level 0.95	
					Lower limit	Upper limit
The relationship between eating attitude and body image in people with body deformity with the mediation of dysfunctional beliefs	0.4460	0.4455	0.0005	0.049	0.3975	0.5695

**Table 6.** AMOS bootstrap results related to the simple indirect relationship in the simple mediator models of the research

	Standard estimate	Lower limit	Upper limit	Significance level (p)
The relationship between eating attitude and body image with the mediation of dysfunctional beliefs	-0.40	-0.45	-0.35	≤0.01

the main sample, and the boots mean the average estimates of the indirect effect in the bootstrap samples. In addition, in these tables, the bias shows the difference between the data and the bootstrap, and the standard error signifies the standard deviation of the estimates of the indirect effects in the bootstrap samples.

There is a relationship between eating attitude and body image with the mediation of dysfunctional beliefs in people with body dysmorphic disorder. According to Table 6, the lower limit of the confidence interval for the ineffective beliefs variable as a mediating variable between eating attitude and body image is -0.45 and its upper limit is -0.35. The confidence level for this confidence interval is 95. Considering that zero is outside this confidence interval and  $\beta = -0.40$  is significant at the significance level of  $P \geq 0.01$ , it can be stated that this relationship is a significant intermediary, and this hypothesis is confirmed.

## Discussion

The present study aimed to develop a structural model of body image based on the attitude to eating with the mediation of dysfunctional beliefs in people with body deformity disorder referring to beauty clinics in Mazandaran province. The obtained results pointed out that there is a relationship between an attitude towards eating and body image with the mediation of ineffective beliefs in people with body deformity disorder. The findings are in line with those reported by Ribing, Marquiardet et al. [37], and Rohan Gupta et al. In explaining the above findings, it can be stated that the main factor in causing body image disorders is the attitude towards eating. The occurrence of a disease aggravates the severity of the problem in one's attitude; therefore, they feel exposed to infection and threat, which leads to a series of health issues and measures.

According to this article, the more a person's attitude toward the complications and problems that weight gain brings, the greater his tendency to perform healthy eating behaviors will be. The concept of eating healthy food is a predictor of healthy eating behavior, and this concept is mostly

affected by attitude, behavioral control, and internal norms. Those with a positive attitude towards healthy eating and nutrition prefer the taste of healthy foods, feel good about themselves, tolerate giving up the foods they like eating, and lose weight. Like many other behaviors that are affected by attitude, food behaviors are controlled and formed by people's attitudes toward eating [39]. According to the results of this research, it seems that food control, which implies not eating meals when hungry and controlling the amount consumed during meals, is associated with body image disorder. Nevertheless, it seems that in some subjects, this attempt to control eating habits is done frequently and is related to a lack of control behaviors and behavioral patterns that can lead to weight gain in the long run. Moreover, a person's beliefs about him/herself, including his/her body image, generally affect all other his/her beliefs, emotions, and behaviors [11].

For example, in his research, Fernin [40] concluded that increasing body image satisfaction can reduce irrational beliefs. In addition, less and more negative body image satisfaction is correlated with higher irrational thoughts. Beliefs can be logical or irrational. Logical beliefs are beliefs that are desirable, useful, and flexible. These beliefs are based on reality and have been confirmed in practice. Irrational beliefs are thoughts and opinions that are not compatible with reality and are formed based on suspicion and personal opinions. These beliefs are associated with compulsion, commitment, and absolutism. Irrational beliefs include the need for approval and support from others, high expectations of oneself, tendency to blame oneself, reaction to failure, emotional irresponsibility, excessive preoccupation with anxiety, avoidance of issues, dependence, despair towards change, and perfectionism. Such beliefs in dealing with external events and stimuli create emotional consequences, such as fear, anxiety, anger, guilt, sadness, hostility, and depression. A person's beliefs determine the type, state, and intensity of his/her emotions and behavior [17].

On the other hand, the expansion of social networks all over the world and the ease of access

to these networks has turned people's attention to their body shape and appearance. However, due to the observation of different body shapes in these networks, people's dissatisfaction with their body image increases over time [41]. Negative feelings, inappropriate behaviors, and cognitive processes about the body image and appearance of the person lead to the distortion of the body image and negative self-concept. The term "beliefs about appearance" is a cognitive construct that includes dysfunctional attitudes regarding a person's appearance in their daily life [42]. Researchers are of the opinion that a wrong understanding of body image can cause numerous physical and psychological problems for a person, including depression, low self-esteem, smoking, and unhealthy weight control behaviors [43]. It can be stated that if people form ineffective beliefs about their physical appearance for any reason, such as unreasonable expectations about their physical appearance or comparing their physical appearance with others, their self-esteem may be negatively affected by these ineffective beliefs. This is despite the fact that, according to existing research results, weak self-esteem, lack of self-efficacy, and lack of ability to express oneself in social situations can provide grounds for dissatisfaction with body image [44].

### Limitations

Among the notable limitations of the present study, we can refer to the large number of items in the questionnaires, the geographical scope of this research, which is limited to people who refer to the beauty clinics of Mazandaran province (the cities of Amol, Babol, Sari, and Qaemshahr), and the lack of usage of other methods to collect information, such as observation and interview. It is suggested to use holistic approaches in order to more accurately identify the factors that threaten sexual and mental health and to identify the moderating factors. It is also suggested that similar studies be conducted in the regions of the country with regard to different cultures. In addition to the questionnaire, interviews or other data collection methods should also be used to test the samples. It is recommended to use the results of the present research in individual and group counseling sessions.

### Conclusion

One of the prerequisites of behavior is attitude; in other words, every behavior a person performs is associated with some kind of attitude. According to this point of view, any special attitude towards a special subject or phenomenon creates a certain readiness in people to perform behavior. Many

diseases, including body image disorder, are directly or indirectly caused by a person's attitude towards eating or are influenced by it, or at least, a person's attitude plays a role in its aggravation and durability.

### Compliance with ethical guidelines

The study participants first read the written informed consent form and completed it if they were willing to participate in the study. In addition, the study protocol was approved and registered by the Research Ethics Committee.

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This article obtained the code of ethics IR.IAU. TON.REC.1401.039 and informed consent from all participants in the study. Moreover, explaining the implementation method and purpose of the research and answering the participants' questions were among the ethical considerations in this research.

### Authors' contributions

All the authors participated in the initial writing of the article and its revision, and all accepted the responsibility for accuracy.

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### Conflicts of Interest

The authors reported no conflict of interest.

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