Title: The Role of Early Maladaptive Schema and Perfectionism on Body Dysphoric Disorder Mediating Thought Fusion, Meta-Worry, Anxiety, And Attributes Style: A Structural Model

Authors: Mohammadreza Esmaeilnia, Yarali Dousti, Bahram Mirzaian

1 Ph.D. student, General Psychology, Department of Psychology, Sari Branch, Islamic Azad University, Sari, Iran.
2 Assistant Professor, Department of Psychology, Sari Branch, Islamic Azad University, Sari, Iran.
3 Assistant Professor, Department of Psychology, Sari Branch, Islamic Azad University, Sari, Iran.

* Corresponding author: Yarali Dousti, Department of Psychology, Sari Branch, Islamic Azad University, Sari, Iran. Email: dousti@iausari.ac.ir

To appear in: Avicenna Journal of Neuropsychophysiology Journal

Received date: 2019/07/9  
Revised date: 2019/08/16  
Accepted date: 2019/08/17

This is a “Just Accepted” manuscript, which has been examined by the peer-review process and has been accepted for publication. A “Just Accepted” manuscript is published online shortly after its acceptance, which is prior to technical editing and formatting and author proofing. Avicenna Journal of Neuropsychophysiology Journal provides “Just Accepted” as an optional and free service which allows authors to make their results available to the research community as soon as possible after acceptance. After a manuscript has been technically edited and formatted, it will be removed from the “Just Accepted” Web site and published as a published article. Please note that technical editing may introduce minor changes to the manuscript text and/or graphics which may affect the content, and all legal disclaimers that apply to the journal pertain.

Please cite this article as:
DOI: http://dx.doi.org/10.32598/ajnpp.4.3.280
Abstract

Background: Anxiety is one of the other variables that can play a role in the onset and severity of this disorder, given the nature of the body dysmorphic disorder. The purpose of this study was to determining the role of early maladaptive schema and perfectionism on body dysphoric disorder mediating thought fusion, meta-worry, anxiety, and attributes style.

Materials and Methods: The method of this research is descriptive-correlational, which was implemented using a structural equation model. The statistical population of the study included women referring to Ghaemshahr Dermatology and Dermatology Centers in the first half of 2018. Among patients referring to Ghaemshahr skin and hair treatment centers, a sample was selected based on the number of variables and for each variable 50, the sample size was 300 and the sample was selected. For data collection, a body abnormality disorder questionnaire, the short version of the initial maladaptive schema, perfectionism, anxiety test, anxiety test, documentary questionnaire, and anxiety questionnaire was used.

Results: Results showed by increasing the amount of mixed thinking variables, anxiety, meanwhile and documentary style as intermediary variables, the effect of the early maladaptive schema on disordered body disorder was (0.48) (0.44), (0.44) and (0.51) respectively (0.42), and the impact of perfectionism through the mediation of thought mixing, anxiety, metaphor, and documentary variables were (0.53), (0.48), (0.50) and (0.50), which is more than the direct relation between them (0.45).

Conclusion: It can be concluded that early maladaptive schema and perfectionism has a predictive role on body dysphoric disorder mediating thought fusion, meta-worry, anxiety, and attributes style.

Keywords: perfectionism, anxiety disorders, anxiety, thinking, models, structural.

1. Introduction

Since appearance is an important part of a person's identity in social situations and immediately manifested encountering others; therefore, the significance of this structure is obvious, and the emphasis of the community and the public media on the apparent attractiveness makes people more sensitive to this issue. On the other hand, a negative evaluation by others leads to a feeling of dissatisfaction with one's appearance and the increase and aggravation of this dissatisfaction leads to clinical disturbances (1). According to studies, almost every person does not like some aspects of his appearance, and he likes them to be different. The estimated prevalence of dysmorphic disorder varies widely from 1.9% to 11.2% in various reports. (2)

Different research findings indicate that the worry of the dysmorphic body is predictive of a tendency to plastic surgery (3). body dysmorphic disorder is a psychological condition defined by three characteristics of obsessive-compulsive disorder, stress and functional impairment (4). In order to reduce or treat a problem, the first step is to identify the factors that affect it. In this
regard, the present study seeks to provide a model to explain the direct and indirect role of early maladaptive schemes and perfectionism on body dysmorphic disorder by mediating of thought fusion, meta-worry, and anxiety and attributes style of body dysmorphic disorder. Theoretical theories show that cognitive impairments and avoidance and immune behaviors lead to the emergence and continuation of symptoms of psychiatric disorders. Hence, one of the main factors influencing body dysmorphic disorder is the early maladaptive schema (5). Individuals form schema about the social world through childhood interpersonal relationships. This schema affects the processing of the subsequent experiences and play a major role in thinking, feeling, behaving and communicating with others, and inevitably and in contradict way brings adult life into the unpleasant of childhood, often have been harmful to people (6).

The result is that the schemas and the early relationships of the individual influence on the development of his personality and later act as a filter in the interpretation of social signs. Hence, in various social situations, the incompatible scheme is activated and through a defective cycle leads to a persistent disorder of the dysmorphic body (7). In this regard, several studies have shown that there is a relationship between body dysmorphic disorder and maladaptive schemas so that the positive and significant role of the maladaptive scheme in this disorder is clear (8). Perfectionism is a personality trait and plays an important role in the pathology and continuity of psychopathology (9).

Choo & cha’s (10) research has shown that perfectionism can predict the satisfaction of individuals from their body image. Many studies show the relationship between meta-cognitive components and body dysmorphic disorder (11, 12). Explanatory attributional style theory provides a framework for examining optimism and pessimism constructs and suggests that these are the structures that utilize the concept of learning disability. Attribution theorists tend to interpret the world around them in order to be able to control more on it (13). In general, reviews have shown that attribution interpretations play a decisive role in accepting responsibility for their actions or forcing others to take responsibility (14). Fisak et al. (15) showed that people with dysmorphic disorders avoid social situations and friendship.

Anxiety is one of the other variables that can play a role in the onset and severity of this disorder, given the nature of the body dysmorphic disorder. Several studies have shown the association between physical dissatisfaction with anxiety and stress and obsessive-compulsive behaviors (16). People with body dysmorphic disorder are anxious and worried about their perceived defects in various areas of life. The onset of intrusive or unwanted images and thoughts on physical appearance has diminished the quality of life and the daily functioning of these people (17). In the study of Martens et al. (18), the sensation of a body dysmorphic disorder was associated with depression and anxiety. It can be concluded that there is a positive correlation between early maladaptive schemas, perfectionism, thought blending, meta-worry, anxiety and attributes style. However, these relationships are not explicitly mentioned in subsequent studies. In the same way, with a review of the studies, the role of the psychological factors studied in this research in the indirect state has been studied less before.

Based on these findings and based on the explanations, it seems that the relationships between the early maladaptive schemas, perfectionism, thought fusion, meta-worry, anxiety, and attributes style in direct and indirect directions are not clear. Therefore, the question of this research is considering this framework that what the relationship between perfectionism
variables, early maladaptive schema, thought fusion, meta-worry, and anxiety and attributes styles with the body dysmorphic disorder less directly? In the process of influencing maladaptive schemes and perfectionism on the symptoms of body dysmorphic disorder can consider the mediating role for the thought fusion, meta-worry, anxiety, and attributes style? In other words, does the conceptual model fit with the measured model?

2. Materials and methods
The present research regarding the subject, goals, and hypotheses is descriptive - correlation type, which was implemented using a structural equation model. The statistical population of the study included women referring to Ghaemshahr Dermatology Centers in spring and summer of 2018. A sample of 300 patients was selected from the patients referring to Ghaemshahr Dermatology Centers based on purposeful sampling and the number of variables. For each variable, 50 individuals were sampled and selected. The method of conducting the research was such that, after selecting the samples, questionnaires were provided to the subjects and they were told that they did not need to mention their names in the questionnaires for the purpose of secrecy. Participants received written consent before they started, and the results would be interpreted if desired. In this way, oral and written consent was received.

For data collection, body dysmorphic disorder questionnaire, short version of the early maladaptive schema, perfectionism, anxiety test, Thought Event Fusion, Attributional Style Questionnaire, and Anxious Thought Inventory questionnaire were used. After receiving the criteria for entering the participation of people, explaining the purpose of the research, and responding to probabilistic questions by the researcher completed the research tools. The entry criteria for this study were patients who applied for cosmetic surgery. After collecting questionnaires and extracting data, to analyze the data, descriptive indicators of dispersion and central tendency, especially mean and the standard deviation was used. On the other hand, structural equation modeling was used to analyze the data related to the research hypothesis. Accordingly, first the correlation coefficient of the studied variables was calculated and then, the measured model in the form of structural relationships between variables was investigated by structural equation modeling. In order to collect the direct data, seven research tools were used.

**Body Dysmorphic Disorder Questionnaire**
This questionnaire was developed by Phillips et al. In 1997 and has 31 questions. Its aim was to evaluate the meta-cognitive dimensions of the dysmorphic body, meta-cognitive control strategies, thought-action coalitions, or Thought Event Fusion, positive and negative metacognitive beliefs, and safety behaviors. The questionnaire is based on a Likert scale (from 1 to 5). In Rabi'i et al. ’s Research, the study of concurrent validity on 200 students showed that the dysmorphic body meta-cognition assessment questionnaire and its factors have a positive and significant correlation with the corrected Yale-Brown obsessive-compulsive scales for BDD (15). The validity and reliability of this questionnaire in this study were 0.72 and 0.70 respectively (15).

**A short version of the Young Schema Questionnaire (YSO-SF)**
This questionnaire was designed by Young & Brown in 1998 and the original form has 205 items (19). In order to make a shorter test, a short form of the questionnaire was designed. Each item is graded on a 6-degree scale. In this questionnaire, every 5 questions will measure a
schema. In the study of Colburn et al., All of the 15 subscales of the short form of the schema questionnaire had a sufficiently good internal consistency. Cronbach's alpha of all schemas was calculated from 0.76 to 0.93. Also, the reliability of the short form of the questionnaire was reciprocated using a reciprocal method of 0.44 (20). Validity and reliability of this questionnaire were 0.74 and 0.77 respectively.

**Thought Event Fusion Test**
A self-assessment test is a 14-item test that measures common beliefs about the meaning and power of thoughts. This test assesses the three categories of thought event fusion that are introduced in the meta-cognitive model. These three factors are 1. The Thought of Action Fusion (TAF), 2. The Thought of Object Fusion (TOF), and 3. The Thought Event Fusion (TEF). Answers are based on a 100-degree continuum (from zero, at all to 100, I do not believe "to 100", I totally believe) and ranked as ten. Few studies have reported the psychometric properties of the Thought Event Fusion Tests: William has reported an adequate internal consistency coefficient for this questionnaire (Cronbach's alpha = 0.89). Also, the total correlation of the items was listed in the range of 0.35 to 0.78 (21). Also, researches have shown the correlations of 0.4 to 0.7 between this test and metacognitive beliefs and Thought-Action Fusion Questionnaires (19). In order to calculate convergent validity, a revised questionnaire of thought-action Fusion was used which in terms of cognitive concept; it was most similar to this test. The correlation coefficient between the two questionnaires was 0.65 (22).

**Positive and Negative perfectionism Scale**
This scale is a 40-item test developed by Terry-Short & et al. (23). 20 items of it are positive perfectionism, and 20 other items measure the negative perfectionism and questions in 5-degree Likert scale measure the subjects perfectionism from score 1 to score 5 in two positive and negative fields. The minimum score for each of the test scales is 20 and a maximum of 100. In the Persian form of this questionnaire, Cronbach Alpha of the questions of each subscale in a sample of 212 students were 90% and 87% for all students; 91% and 88% for female students, 89% and 86% for male students, indicating the high internal consistency of the scale. (24)

**Spielberger's Anxiety Test (STAI-Y):** The maker of this tool, Spielberger, introduced the first form of the adjectival and state-of-the-art test in 1970 and introduced its revised form in 1983 (25). The reliability level for the norm group (600 people) is based on the Cronbach's alpha in the open and hidden anxiety scale, respectively, is 0.90 and 0.91, respectively, and this is 0.94 in the criterion group (130). In addition, the reliability of the test was calculated through the ratio of the variance of the actual scores to the observed variance, and its value was recorded in the normal group of 0.945 (26). Validity and reliability of this questionnaire in this study were 0.75 and 0.73 respectively.

**Anxiety Thinking Questionnaire (Meta-worry)**
This questionnaire was introduced by Wells in 1994 (27). The questionnaire consists of 22 items and aims to measure anxiety thoughts. The components of this questionnaire are health concerns, social concerns, and meta-worry. The validity of the questionnaire of anxious thoughts has been examined by its correlation method. For reliability, Cronbach's alpha coefficient of the whole questionnaire was 91% (28).

**Attributional Style Questionnaire**
This questionnaire was first made to measure personal attributes for uncontrollable events by Peterson and Seligman (1984). Attributional Style Questionnaire consists of twelve hypothetical positions (six good events and six bad events). Four questions have been raised for each event. The first question is about the most important cause of this event, although not used in grading, is necessary for the subject to respond to the following three questions as follows. These include internal or external, stable or unstable, and general or specific event s. Bridges (2001) reported Cronbach’s alpha coefficient 0.8 for the Attributional Style Questionnaire (29).

3. Results
In order to describe the data related to the variables, the central tendencies, and the distribution, especially the mean and standard deviation, have been used. The Kolmogorov-Smirnov test was applied to normalize the distribution of research data. The values for these indicators are given in Table 1.

Table 1 - Mean and standard deviation of the studied variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>The significant value of the K-S test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early maladaptive schemes</td>
<td>63.53</td>
<td>12.50</td>
<td>.07</td>
</tr>
<tr>
<td>Perfectionism</td>
<td>44.49</td>
<td>6.49</td>
<td>.06</td>
</tr>
<tr>
<td>Dysmorphic body</td>
<td>53.66</td>
<td>11.51</td>
<td>.05</td>
</tr>
<tr>
<td>Thought Fusion</td>
<td>37.80</td>
<td>9.78</td>
<td>.06</td>
</tr>
<tr>
<td>Attribution Style</td>
<td>27.31</td>
<td>5.89</td>
<td>.05</td>
</tr>
<tr>
<td>Anxiety</td>
<td>3.50</td>
<td>.50</td>
<td>.06</td>
</tr>
<tr>
<td>Anxious Thought</td>
<td>33.53</td>
<td>8.42</td>
<td>.05</td>
</tr>
</tbody>
</table>

Table 2. Relationship between early maladaptive schemas, perfectionism, with thought event fusion, meta-worry, anxiety and attributional style with Dysphoric Body

<table>
<thead>
<tr>
<th>Relationship between variables</th>
<th>Load Factor</th>
<th>T-test Statistics</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early maladaptive schemes-</td>
<td>.50</td>
<td>.50</td>
<td>.07</td>
</tr>
<tr>
<td>dysmorphic body</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>thought Fusion-</td>
<td>.49</td>
<td>.49</td>
<td>.06</td>
</tr>
<tr>
<td>dysmorphic body</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attribution style -</td>
<td>.51</td>
<td>.51</td>
<td>.05</td>
</tr>
<tr>
<td>dysmorphic body</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety-</td>
<td>.64</td>
<td>.64</td>
<td>.06</td>
</tr>
<tr>
<td>dysmorphic body</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious Thought-</td>
<td>.52</td>
<td>.52</td>
<td>.05</td>
</tr>
<tr>
<td>dysmorphic body</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3. The role of mediator variables including thought Fusion, meta-worry, anxiety, and attributional style in the relation between early maladaptive schemas with dysmorphic body

<table>
<thead>
<tr>
<th>Relationship between Variables</th>
<th>Factor load</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship between early maladaptive schemas and dysmorphic body by Mediating thought Fusion</td>
<td>.48</td>
<td>.001</td>
</tr>
<tr>
<td>Relationship between early maladaptive schemas and dysmorphic body by Attributional style</td>
<td>.51</td>
<td>.001</td>
</tr>
<tr>
<td>Relationship between early maladaptive schemas and dysmorphic body by Anxiety</td>
<td>.44</td>
<td>.001</td>
</tr>
<tr>
<td>Relationship between early maladaptive schemas and dysmorphic body by Mediating meta-worry</td>
<td>.53</td>
<td>.001</td>
</tr>
<tr>
<td>Relationship between perfectionism and dysmorphic body by Attributional style</td>
<td>.53</td>
<td>.001</td>
</tr>
<tr>
<td>Relationship between perfectionism and dysmorphic body by Anxiety</td>
<td>.50</td>
<td>.001</td>
</tr>
<tr>
<td>Relationship between Perfectionism and dysmorphic body by meta-worry</td>
<td>.48</td>
<td>.001</td>
</tr>
<tr>
<td>Relationship between Perfectionism and dysmorphic body by meta-worry</td>
<td>.50</td>
<td>.001</td>
</tr>
</tbody>
</table>

The path coefficients and significant effects of the direct effects are specified in Table 2. The results of Table 2 show that in the direct model (the study of the direct relation between predictive variables with criterion variables), in causal paths toward the dysmorphic body, early maladaptive schemes, perfectionism, thought fusion, attributional style, anxiety, and meta-worry have positive and meaningful roles. It is worth mentioning that among these factors, the load factor of thought fusion and meta-worry is more than other factors.

Path coefficients and significant indirect effects are indicated in Table 3. The results of Table 3 show that in the indirect model (investigating the indirect relationship between predictor and criterion variables with intermediary variables), in the causal paths toward the components of thought fusion, attributional style, anxiety and meta-worry with perfectionism and early maladaptive schema have a positive and meaningful relationship. In causal paths toward the dysmorphic body, the thought fusion relation, attribution style, anxiety, and meta-worry are positively and significantly related to body dysmorphic disorder.
The measured model is fitted with the theoretical model because the standard error estimate of the average standard is also less than 0.05. On the other hand, the value of goodness fitting index, the goodness of modified fitness, goodness adjusted fitness index, softened index of fitness, softness index and fitness of good index of increasing fit are higher than optimal (0.90). Therefore, it can be concluded that the structural relationships of the early maladaptive schemes and perfectionism are significant with the mediation of thought fusion, attribution style, anxiety, and meta-worry with the dysmorphic body in the form of a measured model. Therefore, thought fusion, attributional style, anxiety, and meta-worry can mediate in the relationships between early maladaptive schemas and perfectionism.

4. Discussion
In this study, the direct and indirect effects of two variables of early maladaptive schema and perfectionism with mediating of thought fusion, attributional style, anxiety, and meta-worry on body dysmorphic disorder were studied. The results of the research showed that there is an appropriate fit between the data and the model. In general, the aim of this study was to examine the cognitive, meta-cognitive and emotional processes involved in the body dysmorphic disorder. The results of the research hypotheses include the following findings.

First finding: there is a direct correlation between the degree the body dysmorphic disorder with the early maladaptive schemas. This finding is consistent with other research findings (8). In explaining this finding, it can be stated that the early maladaptive schema is associated with psychological stresses, experiences, and negative life events and these schemas, directly and indirectly, lead to the formation and chronicization of various forms of psychological disturbances.

Perfectionism directly affected the body dysmorphic disorder. This finding is consistent with other research findings (10). In explaining the results of this hypothesis, it can be assumed that people with body dysmorphic disorder tend to think and behave in a more perfectionist way than others, so based on this assumption, they even pay attention to the minor defects and sharply focus on it. In addition, when they are not able to withstand their defects, this leads to bad feelings and turmoil (30). Thought fusion directly affected the body dysmorphic disorder; this finding is consistent with other research findings (11). In explaining the findings of this hypothesis, Wells & Matthews meta-cognitive theory can be mentioned (32) which is a combination of schema theory and information processing theory and emphasizes one's beliefs about the processing system. Based on metacognitive patterns, obsessive thoughts are due to meta-cognitive beliefs about the meaning or the dangerous consequences of having such thoughts is negatively interpreted and explained.

Meta-worry directly affects the body dysmorphic disorder. This finding is consistent with other research (11). Fifth finding: Anxiety directly affects body dysmorphic disorder. This finding is consistent with other research results (33). In explaining the findings of this hypothesis, it can be concluded that patients with body dysmorphic disorder experience anxiety about how they appear. Continuous mental engagement of patients about physical appearance can cause a lot of anxiety. Given that patient experiences severe anxiety about his incomplete perception of his physical appearance, therefore, the person to avoid anxiety and stress relies on avoidance and safety behaviors. These behaviors may temporarily reduce anxiety and, on
the other hand, enhance the person's self-esteem as well as frequent use of avoidance and safety behaviors.

The attributional style directly affects body dysmorphic disorder. This finding is consistent with other research findings from the research of Dykas & Cassidy (34). Therefore, according to the findings of this hypothesis, it can be concluded that people with body dysmorphic disorder, in social situations and social interactions show a more negative interpretation and negative experiences related to appearance. They interpret their physical senses more often on the basis of the negative attributional style. Indeed, their negative experiences give rise to internal, sustained, and general factors. the early maladaptive schema indirectly affects the body dysmorphic disorder by mediating the thought fusion. This finding is consistent with other research findings. The research of Dimaggio et.al (35). In explaining the results of the present study, we can point out the findings of Cormier et.al (36) that when initial maladaptive schemas are activated, they can affect perception, reality and cognitive processing of the individual.

The early maladaptive schema indirectly affects on the body dysmorphic disorder by mediating meta-worry. In the reviews, there is no direct research in this regard. In the explanation of this hypothesis, meta-worry occurs when a person is afraid of his negative cognitive knowledge and considers them unnatural and only specify them to his mind (37). When people are afraid of their thoughts and consider them as unnatural and uncontrollable, they are more afraid of themselves; at the same time, they delete and control over their thoughts because of fear and stress (31). Therefore, in this context worry as a processing strategy may lead to the spread of disturbing thoughts. The features of the early maladaptive schema affect the body dysmorphic disorder indirectly by mediating anxiety. This finding is consistent with other research findings. Lambert et al. (38), in explaining the results of this hypothesis, it seems to be consistent with the increasing social relationships of individuals, especially women in the current society. Moreover, given that the early maladaptive schemas are the primary cornerstone of various types of mental disorders, including anxiety problems, as an activator of human behavior and as a response to various situations can lead to the anxiety of individuals.

The features of the early maladaptive schema have a direct impact on body dysmorphic disorder by mediating attributional style indirectly. In the reviews, there is no direct research in this regard. In explaining the results of this hypothesis, it can be stated that early maladaptive schema with negative evaluation experience in situations where the subject is exposed to others, and the negative attributions that a person comes up may cause the patient to be misled by the behavior of others about his or her appearance, and will provide a negative emotional-cognitive experiences.

Perfectionism has an indirect impact on body dysmorphic disorder by mediating the thought fusion. This finding is consistent with other research findings (39). Therefore, it can be concluded that the relationship between perfectionism and dysmorphic body is not a simple linear relationship, and meta-cognitive beliefs such as the thought fusion can affect this relationship. Given the fact that the problems of metacognitive beliefs and perfectionism are common features of most psychological disorders, it can also be considered in explaining the body dysmorphic disorder. Perfectionism features indirectly affect the body dysmorphic disorder through meta-worry mediation, this finding is consistent with the results of other
researches (39). The explanation of the results of this hypothesis can be found in the research findings of Molding & Kyrios (40) that beliefs such as the sense of extreme responsibility, the great concern about the importance of controlling thoughts, certainty, and idealism (perfectionism) are merely related to person’s extreme intention to the control of events and outcomes. Moreover; this leads to a more overreliance on threat assessment and is often linked to individual cognitive control over outcomes.

Perfectionism features affect body dysmorphic disorder by mediating the anxiety indirectly. This finding is consistent with other research results (41). Based on the findings of this hypothesis, we conclude that perfectionism makes a person experience extreme negative emotions, especially anxiety. This arousal causes the patient to experience more disturbing thoughts and feelings about the symptoms of body deformity. This stimulus, due to the pressure and tension that it creates, prevents a realistic assessment of disturbing thoughts and feelings in the person's mind, and unpleasant emotions and negative emotions continue. That is, these metacognitive beliefs lead to the formation of ineffective behaviors that may last for hours. Thus, in order to deal with perceived risk, the practice of safety behaviors (such as medical and various surgical procedures) is aggravated. Perfectionism features have indirect effects on the body dysmorphic disorder by mediating the attributional style. This finding is consistent with the results of other researches (42). Therefore, it can be concluded that for perfectionists the result is so important that the natural process loses the sense of life, and they press hard upon themselves extremely to reach the goal. It seems that perfectionists who have a negative attributional style interpreted unpleasant events more negatively, and on the other hand, with their stubborn criteria and the inflexibility of their underlying beliefs, they have a significant effect on the aggravation of problems related to physical appearance dissatisfaction.

**Conclusion**

It can be concluded that early maladaptive schema and perfectionism has a predictive role on body dysphoric disorder mediating thought fusion, meta-worry, anxiety, and attribution style.

**Ethical Considerations**

**Compliance with ethical guidelines**

All ethical principles were considered in this article. The participants were informed about the purpose of the research and its implementation stages and signed the informed consent; They were also assured about the confidentiality of their information; Moreover, they were allowed to leave the study whenever they wish, and if desired, the results of the research would be available to them.

**Funding**

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

**Conflict of interest**

The authors declare that they have no conflict of interests.

**References**


