**Correlation between coping styles and body dysmorphic concern among student**

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**Abstract**

Concern about physical appearance is a psychiatric disorder. This mental preoccupation about physical appearance is a major concern of female students. The present study aimed to determine the relationship between coping styles and body dysmorphic concern in female students of Shahid Chamran University in Ahwaz. In this study, 141 female students were randomly selected from students living in dormitories, and they completed Coping Styles for Stressful Situations questionnaire and Dysmorphic Concerns Questionnaire. Data obtained were analyzed using statistical Pearson’s correlation and stepwise regression analysis tests in SPSS-16 software. Pearson’s correlation test results showed a significant correlation between coping styles of emotion-oriented, distraction, and preoccupation with body dysmorphic concern. Also, stepwise regression test indicated that coping styles of emotion-oriented and distraction are considered the strongest predictors of dysmorphic concern, respectively. Results obtained in this study revealed that coping styles can be important predicting factors of body dysmorphic concern. Hence, teaching students effective coping skills can help them to enhance their mental health.

**Keywords:** Students, Coping, Body Dysmorphic

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**Introduction**

Mankind internalizes an image of his own body during his life, and various biological, environmental, and psychological factors have a role in shaping this body image [1]. Some people are constantly preoccupied with their physical appearance, and despite having normal or nearly normal physical appearance, they report excessive and worrying fear of being ugly or unattractive [2]. Because of the importance of physical image in social and interpersonal relationships, psychologists have conducted several studies in this area, and their findings indicate that some people have a constant mental preoccupation with their physical appearance [2,3]. Psychological and psychopathological literature refers to this feature as body dysmorphic disorder [4]. This disorder involves excessive and intense fear of physical appearance with a perceived defect in the physical features (especially the face, hair, and genitals) [5]. Findings of studies reveal that those with body dysmorphic concern have two sets
of obsessive symptoms (such as: size of the face, thinning of hair, and facial hair), and compulsive symptoms (such as: avoiding the mirror, inspection of different body parts in the mirror, compulsive repetitive cosmetic behavior, and covering the face) associated with physical appearance [6]. Prevalence of body dysmorphic concern or fear of body image among the general public is about 2%, and in psychiatric populations about 12% [7]. Results of a comprehensive study has shown that 70% of university students are dissatisfied with their physical appearance and frightened of their body image, also, of this group, 28% suffer body dysmorphic disorder [7]. Use of coping styles can influence social performance and interpersonal relationships. In this context, results of a study indicate that there is a relationship between coping styles and sensitivity of interpersonal relationship, and coping styles are an important predictor of interpersonal sensitivity. Therefore, these people are more sensitive in their mutual social relationships and display more fears of their physical appearance and judgment of others. An outstanding point in studies related to body image is people’s challenges to cope with psychological distress due to body image [8]. Coping style is a mechanism defined as a person’s reaction to the environment in an attempt to reduce physical and emotional damages [9]. People select various cognitive and behavioral strategies to cope with thoughts, emotions, and disturbing situations [10]. Many healthy people try to find suitable cognitive and behavioral strategies to cope with their worrying thoughts and emotions associated with body image even though some of these strategies may not be suitable, leading to worsening the situation [8]. Generally, coping is defined as people’s reaction to stressful situations. These strategies are all used to lessen the burden of psychological distress in people. Coping styles have many types, including: 1) task-oriented, in which the individual focuses on the problem or the issue and tries to solve it in a logical way, 2) emotion-oriented, in which the person deals with the problem through control of emotions and affection reaction, and often is involved in the problem, 3) avoidance, in which the individual tries to escape from stressful situation through seeking social support or any solution for the problem [11]. People who use task-oriented strategies are mentally healthier, less confused, more control the situation, and better able to adjust with the circumstances [12]. In the long-term, task-oriented coping style is more effective than emotion-oriented coping style, and it preserves the person’s health against stresses [13]. Results of a study in this area revealed that emotion-oriented coping, avoidance and distraction have a positive relationship with psychological distress [14]. Physical appearance, personality dimensions, and some coping styles like emotion-oriented have higher relationship with fear of body image [15]. Findings of a study show that people with dysmorphic concern use emotion-oriented and avoidance coping styles [16]. Thus, it seems emotion-oriented coping is an important risk factor in incidence of body dysmorphic concern. Therefore, many studies (such as those mentioned) have tried to somehow determine and explain the relationship between two variables of body dysmorphic concern and coping styles. The outstanding point in these studies is lack of attention to gender separation and lack of attention to women’s group. Body dysmorphic concern is a disorder that is more prevalent among women, and this makes further research and attention to different aspects of the problem highly necessary [4]. Also, domestic studies despite examining the relationship between coping styles and body dysmorphic concern, seldom explained the gender factor. Given the higher prevalence of body dysmorphic disorder among women, this study attempts to determine the correlation between coping styles and body dysmorphic concern among female students of Chamran University in Ahwaz.
Method
This was a descriptive correlational research. Statistical population included all female students resident in Shahid Chamran University dormitories from 2009-2010. The required sample size for correlational studies was calculated (sample size for correlational research in psychology and educational studies is 50 people [16]). In this study, using dormitory residing students’ file list based on previous studies, 200 students were randomly selected from a total of 2,000. Coping Inventory for Stressful Situations questionnaires (CISS) and Dysmorphic Concerns Questionnaire (DCQ) were issued to the selected students, and finally due to the drop in number of participants, 141 completed questionnaires were collected.

For collection of data, DCQ and CISS were used. DCQ was developed by Littleton, Axom, and Pury in 2005 to assess people’s evaluation of their body image. This is a self-reporting questionnaire consisting of 19 items, with answers ranging from 1 (never) to 5 (always). The total score of DCQ is also calculated by summing up scores of all items. In fact, this questionnaire assesses subjects’ level of satisfaction with their body. Reliability of this test using Cronbach’s alpha was 0.93 and total correlation coefficient of all items was found between 0.32 and 0.73 [17]. Reliability of this questionnaire for the present study using Cronbach’s alpha was found 0.85.

CISS was developed by Andler & Parker in 1988 to assess coping styles. This is a self-reporting test and has been normalized in Iran. The above questionnaire has adults and adolescents forms and contains 48 items. Scoring in each question is in a 5-point scale (from never=1 to very much=5). Each coping style is measured by 16 items. The coping style of avoidance is divided into sub-scales of distraction and social diversion with 8 and 5 items, respectively. It should be explained that if more than 5 items are not answered, the score for that style is not calculated, and with less than 5 items unanswered, the researcher can mark option number 3 for those questions. Previous studies have found reliability of sub-scales of task-oriented, emotion-oriented, and avoidance for girl and boy groups was 0.9 and 0.92, 0.85 and 0.82, 0.82 and 0.85, respectively. In a study conducted in Iran, reliability of sub-scales of task-oriented, emotion-oriented, and avoidance in the criminal group and normal group were 0.92 and 0.85, 0.85 and 0.68, 0.85 and 0.82, respectively [18]. Reliability of the above scale in Iran was found using correlation between coping styles and identity styles of Benyun & Adamse. In this study, it has been shown that there is a correlation between task-oriented coping styles and confused identity (r=0.22), and between emotion-oriented coping style and confused identity (r=0.34) [19]. In this study, reliability of this questionnaire was found 0.81 using Cronbach’s alpha. Data collected were analyzed using SPSS-16 software, descriptive statistical methods of mean and standard deviation, statistical tests of correlation coefficient and stepwise regression.

Results
Table 1 presents descriptive indices of the variables including mean and standard deviation, age, body dysmorphic concern, and coping with stressful situations.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>21.5</td>
<td>2.65</td>
</tr>
<tr>
<td>Body dysmorphic concern</td>
<td>39.83</td>
<td>1.28</td>
</tr>
<tr>
<td>Coping with stressful situations</td>
<td>8.9</td>
<td>1.9</td>
</tr>
</tbody>
</table>

To determine the relationship between coping styles and body dysmorphic concern Pearson’s correlation method was used. Table 2 presents simple correlation coefficients between different coping styles and body dysmorphic concern.
Table 2 **Simple correlation coefficient between different coping styles and body dysmorphic concern**

<table>
<thead>
<tr>
<th>Index</th>
<th>P</th>
<th>N</th>
<th>Task-oriented</th>
<th>Emotion-oriented</th>
<th>Distraction</th>
<th>Preoccupation</th>
<th>Body dysmorphic concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task-oriented</td>
<td>0.72</td>
<td>141</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotion-oriented</td>
<td>0.001</td>
<td>141</td>
<td>0.005</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distraction</td>
<td>0.01</td>
<td>141</td>
<td>0.11</td>
<td>0.019</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preoccupation</td>
<td>0.5</td>
<td>141</td>
<td>0.27</td>
<td>0.21</td>
<td>0.014</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Body dysmorphic concern</td>
<td>0.023</td>
<td>141</td>
<td>0.31</td>
<td>0.46</td>
<td>0.28</td>
<td>0.16</td>
<td>1</td>
</tr>
</tbody>
</table>

It can be seen from Table 2 that according to results of correlation analysis, there is a significant correlation between coping styles of emotion-oriented, distraction, and preoccupation with body dysmorphic concern, with correlation coefficients of 0.46, 0.28, and 0.16, respectively. Also, to predict body dysmorphic concern from coping styles, stepwise regression method was used. Table 3 shows stepwise regression results to determine share of each coping style in predicting body dysmorphic concern.

Table 3 **Summary of stepwise regression results to determine share of each variables of coping styles in predicting body dysmorphic concern**

<table>
<thead>
<tr>
<th>coping style</th>
<th>R2</th>
<th>R2D</th>
<th>s±D</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion-oriented</td>
<td>0.21</td>
<td>0.21</td>
<td>9.26</td>
<td>0.001</td>
</tr>
<tr>
<td>Distraction</td>
<td>0.28</td>
<td>0.273</td>
<td>4.53</td>
<td>0.014</td>
</tr>
</tbody>
</table>

It can be seen from Table 3 that coping styles of emotion-oriented and distraction show R²=0.21 and R²=28.0 of body dysmorphic variance, respectively, and emotion-oriented coping style was the most important predictor of body dysmorphic concern among university students. Hence, emotion-oriented and distraction coping styles are the most important styles in predicting body dysmorphic concern.

**Discussion**

The aim of the study was to determine the relationship between coping styles and body dysmorphic concern in female university students. Results indicated that there is a significant correlation between coping styles and body dysmorphic concern. Also, results of regression analysis showed that emotion-oriented and distraction coping styles are the most important coping styles in predicting body dysmorphic concern. Results of the present study are in agreement with those obtained by Cash, Santos & Williams (2005), and Basaknejad&Ghafari (2007). To explain this finding it can be said that non-adaptive coping styles in people could predict method of dealing with concerns about body appearance because people with body dysmorphic concern often have distorted and incorrect perception of their physical appearance. Therefore, one of the cognitive factors in body dysmorphic concern is the means of dealing with false perceptions. Also, people with body dysmorphic concern less tend toward rational thought and this leads to reduced use of task-oriented coping style. People who use effective coping styles can amend negative emotions and illogical beliefs about their physical appearance [14]. In general, it can be argued that strategy chosen by students has a specific relationship with body dysmorphic concern, and this explains their dealing method with stressful situations. This stress in turn affects other aspects of students’ psychological health. Some people have a constant preoccupation with their physical appearance, and despite normal appearance, express extreme and worrying fear of their physical appearance. This intense fear could turn into a feeling of an imaginary defect.
in the body, and many of such people turn to cosmetic surgeries to alter their appearance. Results indicate that a high percentage of university students are not happy with their physical appearance, and are interested in changing their appearance, and some of them have body dysmorphic or image concern. Body dysmorphic concern is influenced by various factors such as biological, social, and cultural factors and it is part of the problems in today’s society that many students have to deal with [8]. Body dysmorphic concern seems to be influenced by social and cultural factors because in modern societies, having a pretty appearance and body, especially in women, is considered desirable, and tendency toward cosmetic surgery in these societies is high, and mass plays important role in this respect. Given the increasing role of the media worldwide and also in developing and underdeveloped countries, many advertisements in the media contain messages that present slim as attractive. Thus, many of the media that introduce slim as beautiful through their messages encourage the tendency in people (especially women with university education or at least aware of these advertisements) toward sliming. In recent years, this feature of the media has become more prominent and level of extensive advertisements in the media to attract people toward competing for beauty is increasing daily. A large group of people are influenced by these advertisements and the media and perform various surgeries for being more beautiful. The intensity of the media influence is to such a degree that many people experience huge psychological distress to deal with their appearance while compared to the general public, these people have no serious defect in their appearance. Some studies reveal that many students are dissatisfied with their body and physical appearance. Unfortunately, female students are no exception and have a higher percentage of cosmetic surgeries and have more body dysmorphic concern compared to male students. Many of these students use coping styles to overcome stressful factors due to body dysmorphic concern. Often, this intense and worrying fear of physical appearance is associated with inappropriate use of coping styles and type of coping that people use to deal with psychological distress is significantly correlated with body dysmorphic concern [3].

Conclusion
The present study was conducted with the aim to explain the relationship between coping styles and body dysmorphic concern in students. Results revealed that there is a relationship between coping styles and body dysmorphic concern, and people with emotion-oriented, distraction, and occupation coping styles have more fear of body dysmorphic. Present study also faced some limitations. This study was conducted on female students. Thus care must be taken in generalizing the results to other populations. Also, reduction in number of questionnaires collected was another limitation in this study. In line with the results, it is recommended that students should be taught necessary skills for coping with fear of body image, since the need for teaching effective coping styles are felt more than ever before [8]. So, efforts must be made to improve the overall students’ beliefs about pretty body and to overcome stereotypes associated with body image. Also, providing training during education as study units to increase efficacy of students in coping with psychological distress is also recommended.

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Contributions
Study design: SH
Data collection and analysis: SH, MV
Manuscript preparation: SH, MV, MM

Conflict of interest
"The authors declare that they have no competing interest."

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