

The Relationships between Selected Psychological Antecedents and Body Image Concern among Women Seeking Plastic surgery

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Abstract

The aim of the present study was to examine the relationships of fear of negative evaluation and fear of negative appearance evaluation to body image concern among women seeking plastic surgery. The sample consisted of 180 female patients. The subjects completed 3 scales: Fear of Negative Evaluation scale (FNE), Fear of Negative Appearance Evaluation scale (FNAE) and The Body Image Concern Inventory (BICI). Data were analyzed using correlation and multiple regression analyses. Results showed that the relationships of Fear of negative evaluation and fear of negative appearance evaluation to body image concern were statistically significant. In addition, fear of negative appearance evaluation was the best predictor of body image concern among women seeking plastic surgery. The present findings highlight some recommendations for these patients that lead to positive evaluation about real body image.

Keywords: fear of negative evaluation, fear of negative appearance evaluation, body image concern, plastic surgery.

Body image concern or dysmorphic concern, is a distressing or impairing preoccupation with an imagined or slight defect in appearance and is classified as a somatoform disorder (Phillips, Didie and Menrad, 2007; Veale, De Haro and Lambrou, 2003). The current version of the Diagnostic and Statistical Manual of Mental Disorders (DSM- IV-TR; American Psychiatric Association, 2000), suggests that body image concern includes: (A) preoccupation with an imagined defect in

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appearance; if a slight physical anomaly is present, the person's concern is markedly excessive; (B) the preoccupation causes clinically significant distress or impairment in social, occupational or other important areas of functioning; and (c) the preoccupation is not better accounted for by another mental disorder (e.g., dissatisfaction with body shape and size in anorexia nervosa). To fulfill diagnostic criteria, the preoccupation should last for at least an hour a day and cause significant distress or impairment in social functioning (Bellino, Zizza, Paradiso, Rivarossa, Fulcheri and Bogetto, 2006; Cotterill, 1996). Imagined defects for this disorder typically include the head and face, for example, hair, nose, skin, eyes, lips, chin or teeth but nearly any body part is a possible defect candidate for the individual with body image concern (Phillips, McElroy, Keck, Pope and Hudson, 1993; Sarwer and Crerand, 2004).

Many of those people become fixated on mirrors. They find themselves looking in the mirror frequently, checking on their presumed ugly feature to see if any change has taken place. Mirror gazing occurs in about 80% of patients with body image concern while they tend to avoid the distress of seeing their own image and the time wasted on mirror gazing (Veale and Riley, 2001; Philips and McElroy, 2000).

Some studies have found that 73% of individuals with body image concern engage in excessive mirror checking, 63% camouflage their defect and 97% avoid social or occupational activities due to their concern about their appearance (e.g., Littleton, Axsom and Pury, 2005; Sarwer and Crerand, 2002; Sarwer, Crerand and Didie, 2003). A wide-ranging review of research literature suggests that dissatisfaction with body size and shape is a common concern for adolescents and young adults. Approximately, 60% of females and 30% of males report a desire to change their body size and shape (Ricciardelli and McCabe, 2001) and nearly 25% of adolescent females report clinically significant levels of body dissatisfaction (Stice and Whitenton, 2002).

The true prevalence rate of body dysmorphic disorder in the general population is not well known. Some studies suggest prevalence of body dysmorphic disorder in the general population is relatively common up to

2% and in psychiatric patients up to 12%. Moreover, two studies (Biby, 1998; Fills, Gibson, Redding and Dieter, 1989) reported that 60% to 70% of college students had body image concern and 28% of them were diagnosed with body dysmorphic disorder. Veale, Boocock, Gournay, Dryden, Shah, Willson and Walburn (1996) also reported that most of the individuals with body image concern demanded for cosmetic surgical or dermatological treatment and 26% had at least one surgical operation (Cansever, Uzun, Donmez and Ozsahin, 2003).

Chen, Gao and Jackson (2007) reported that body image concern or body dissatisfaction is associated with emotional distress, low sense of self-value and eating disorder. Indeed, in recent years, there has been an increasing interest in evaluating the links between bodily experiences and a number of psycho-social risks and psychiatric disorders such as suicide, personality disorders and obsessive compulsive symptoms (Anderson, Carter, McIntosh, Joyce and Bulik, 2002; Carter, Blackmore, Sutander and Woodside, 2004; Carrol, Scahill and Phillips, 2006). Many factors have been implicated in the onset and maintenance of body image problems, including biological factors (e.g., perfectionism, negative affect, low self-esteem) and sociocultural factors (e.g., family, peers and media) (Littelton and Ollenlick, 2003).

One potential variable that may serve to increase the vulnerability of individuals to body image concern is a fear of negative evaluation and fear of negative appearance evaluation by others. Generally, Lundgren, Anderson and Thompson (2004) reported that negative appearance evaluation would best predict body image concern among young adults. Most studies (Koda, Fukuyama, Nishiwaki, Ishigooka and Miura, 1994; Philips, 1996; Pertschuk, Sarwer, Wadden and Whitaker, 1998; Ozgva, Tuncali and Guler Gursu, 1998) found that individuals with body image concern or body dysmorphic problems applied more to cosmetic surgery than general population and these patients may repeatedly pursue surgical treatment for the imagined defect.

The aim of the present study was to investigate the simple and multiple relationships between two predictor variables (fear of negative evaluation

and fear of negative appearance evaluation) with body image concern among women seeking plastic surgery. The three main hypotheses of this study are:

1. There is a positive relationship between fear of negative evaluation and body image concern among women seeking plastic surgery.
2. There is a positive relationship between fear of negative appearance evaluation and body image concern among women seeking plastic surgery.
3. There is a multiple relationship between fear of negative evaluation, fear of negative appearance evaluation and body image concern among women seeking plastic surgery.

Method

Participants

Participants were 180 women who had been referred to a private plastic surgeon for the plastic surgery and were seeking to change their appearance. The participants' average age was 31.9 years (range: 18-50 years). 70% had jobs with good income and 60% were married. 16% (n=29) of the participants had sought psychiatry treatment before entering the study.

Measures

1. Demographic interview

A semistructured interview was carried out to collect data on demographic features (age, gender, level of education, type of plastic surgery and any psychiatry or relationship problems).

2. Fear of Negative Evaluation (FNE)

The Fear of Negative Evaluation (Watson and Friend, 1969) is a 30-item self-report measure developed to assess fear of negative evaluation from others.

The psychometric properties of the FNE have been supported through numerous studies. Watson and Friend (1969) showed that internal

consistency (Cronbach's $\alpha=0.94$) and criterion-related concurrent validity (through significant correlations with Taylor's Manifest Anxiety) was quite satisfactory. Some research showed that the FNE has suitable validity and reliability in Iran (Mehrabizadeh-Honarmand, Najarian and Baharloo, 1996). In the present study, internal consistency of the FNE is 0.81.

3. Fear of Negative Appearance Evaluation Scale (FNAES)

The Fear of Negative Appearance Evaluation Scale is a six-item self-report measure that assesses apprehension about appearance evaluation (Thomas, Keery, Williams and Thompson, 1998). The scale was created by modifying items from the Brief Fear of Negative Evaluation Scale (Leary, 1983). On this scale, respondents rate the degree to which each of 6 statements applies to them on a 5-point Likert scale (1= not at all, 5= extremely). Previous studies showed that the internal consistency of the FNAES was excellent (Cronbach's $\alpha=0.94$). The concurrent validity of the FNAES, as measured by the State-Trait Anxiety Inventory (STAI) was 0.50 (Lundgren et. al., 2004). In the present study, internal consistency (Cronbach's $\alpha=0.80$) and criterion validity (through correlation between FNAES and Social Anxiety is 0.73) are quite satisfactory.

4. The Body Image Concern Inventory (BICI)

The body Image Concern Inventory (Littleton, Axsom and Pury, 2005) is a 19-item self-report measure that assesses body image concern and body dysmorphic concern. On this inventory, for each item respondents were asked to rate how often they had the described feeling or performed the described behaviour on a Likert scale anchored by never=1 and always=5.

Littleton et al. (2005) reported that internal consistency of the BICI showed a Cronbach's α of 0.90, and criterion-related concurrent validity between the BICI and Dysmorphic Concern Questionnaire (Jorgensen, Castle, Roberts and Groth- Marnat, 2001) was reportedly high $r=0.83$, $p<0.01$. In the present study after translating the test and modifying

some words, results supported the internal consistency (Cronbach's alpha=0.73) and concurrent validity (correlation coefficient between the BICI and Beck's Depression Inventory is 0.41).

Procedure

Two weeks before the surgical intervention, patients were assessed with the following instruments:

A semistructured interview to collect demographic features, Fear of Negative Evaluation scale, Social Anxiety Scale, Fear of Negative Appearance Evaluation Scale, Body Image Concern Scale and Beck's Depression Inventory. All patients applied for rhinoplasty. Other plastic interventions were rare.

Results

Means and standard deviations for FNE, FNAE and BICI are presented in Table 1.

Table 1
Means and standard deviations for FNE, FNAE & BICI

Scale	Mean	SD
FNE	15.25	8.70
FNAE	21.11	6.96
BICI	58.19	9.28

Table 2
Zero- order correlation coefficients between FNE, FNAE & BICI (n=185)

Scale	1	2	3
1- FNE	-	0.65*	0.50*
2- FNAE		-	0.43*
3- BICI			-

*= P<0.001

As Table 2 shows, The BICI was significantly related to all variables. In particular, the BICI was positively related to FNE and FNAE. These results confirm the first and second hypotheses.

Table 3
FNE & FNAE predictor variables of body image concern using
stepwise multiple regressions

Predictors	MR	R²	β	F	t
FNAE	0.43	0.185	0.26	17.02	2/49*

*= P<0.001

As Table 3 shows, fear of negative appearance evaluation was the best predictor of the body image concern among these subjects.

Discussion

The results of the present study require a few comments. Our sample consists of a group of women seeking plastic surgery and it seems that women more commonly apply for cosmetic surgery. Our results for body image concern suggest that fear of negative evaluation and fear of negative appearance evaluation was related to body image concern. Fear of negative appearance, however, was the most important concern. These findings are consistent with previous studies on relationship between negative affect and concern about appearance evaluation (Ollendick et al., 2003). The results of the study show a significant relation between fear of negative evaluation, fear of negative appearance evaluation and body image concern. These findings were concordant with a previous study by Lundgren et al, (2004). It must be noted; however, that fear of negative appearance evaluation was part of the body image concern. What is particularly interesting about the results is that fear of negative appearance evaluation and body image concern is the important psychological factors among women seeking plastic surgery. These findings are consistent with most studies claiming that individuals with body image concern apply for plastic surgery more than the general population (Koda et al., 1994; Sarwer

and Crerand, 2004). These results point directly to the relation between negative appearance and body image concern in describing some high risk factors that lead people to have plastic surgery.

Taking the findings of the present study into account, psychotherapy or group therapy before plastic surgery, seems to be useful. These findings suggest that these patients, before any surgery, should be carefully assessed for body image concern and talk about body image before changing themselves.

It is also important to consider the limitations of this study. First, the sample consisted only of a female group. This sampling defect limits the generalization of the present study. Second, the present study relied on negative evaluation but further research is also needed on the relationships between personality disorder, mental disorder and body image concern on this group.

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