# Body Dysmorphic Disorder Features and Rejection Sensitivity: Attitude of University Students towards Cosmetic Surgery Acceptance

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The present research was conducted to identify the relationship between body dimorphic disorder features and rejection sensitivity: Attitude of university students towards cosmetic surgery acceptance. The study also found the relationship between body dysmorphic disorders features and rejection sensitivity. Sample comprised of 300 students from government and private universities of two cities Islamabad and Rawalpindi. For the present research Yale Brown Obsessive Compulsive Scale modified for BDD, Rejection Sensitivity Questionnaire and Acceptance of Cosmetic Surgery Scale were used for data collection. The findings indicated that features of BDD and Rejection sensitivity are correlated with acceptance of cosmetic surgery among university students. Findings showed that females were higher on personal rejection sensitivity, body dysmorphic disorder features and cosmetic acceptance as compared to the male students.

*Keywords*: Rejection sensitivity, cosmetic surgery acceptance, body dysmorphic disorder

People around the world are getting more concerned about their physical appearance. The preoccupations with their physical appearance can make them isolated and bring negativity into their thoughts. Body dysmorphic disorder is a severe psychological

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disorder or discomfort which exists all over the world. People are suffering from it because of their preoccupations with their appearance. Body dysmorphic disorder causes disturbance in a person's daily life in which he/she is preoccupied with an imagined flaw in his or her physical appearance (Crerand, Phillips, Menard, & Fay, 2005). Previous research is evident that body dysmorphic features are associated with rejection sensitivity and cosmetic surgery acceptance among individuals. Individual with symptoms of BDD can be over anxious with their body parts especially hair, skin, and nose. Body dysmorphic disorder was introduced in the third edition of Diagnostic and Statistical Manual of Mental Disorders, where it was labeled as an atypical somatoform disorder. There were two categories, included in the third edition of the Diagnostic and Statistical Manual of Mental Disorders, Revised non delusional or delusional (or delusional disorder, somatic type). It was difficult to clarify the difference between the two categories in the DSM 5, which reflects the growing consensus of the two main variations of the disorder. The mean age for this disorder is late adulthood while people are not able to identify its features in their personality in the beginning (Phillips, Menard, Fay, & Weisberg, 2005).

People with BDD features can suffer by significant distress that may cause severe depression and anxiety, which often leads him or her to anger and hostility. It makes the person isolated and feel being rejected by the society ((Phillips, 2005). It is also found in some studies that these people can be violent and aggressive to other people while some of them put efforts to undergo cosmetic treatments (Phillips, 2005). They find cosmetic surgery to be the ultimate and quick solution to get rid of this unpleasant feeling of being rejected because of the defect in their appearance. Body dysmorphic disorder (BDD) can be a long-lasting, weakening condition in which the person can have a markedly excessive concern about his/her appearance; however, he/she is physically normal (American Psychiatric Association, 2000).

Rejection Sensitivity is an emotional state in which a person over reacts against the minor comments given by others or the sake of improvement. Individual takes it negatively and presumes himself to be a loser and never acceptable and suitable for gatherings. Rejection Sensitivity predicted greater self-reported BDD symptoms and certification of cosmetic surgery for both intrapersonal and social reasons. This clarifies that cosmetic surgery acceptance is also depending upon individual differences, as women are more concerned than men, young people are more likely to go under it as compared to old ones, educated people will go for it but not the illiterate ones, people of villages are less concerned than the urban population. So, people act and react differently to situations (American Psychiatric Association, 2013).

# **Association between Study Variables**

Prior studies intended that individuals with BDD have more tendencies to go for dermatological treatment than other types of treatments, such as Phillips at el conducted survey in hospitals to examine that the ratio of BDD's adults who are more concerned with dermatological treatment. The treatment included dermatological, surgical and other medical treatment. Phillips et al. (2001) found 45.2% adults took dermatological treatment and 23.2% followed surgery. Veale et al. (1996) also found same results in their studies. In the United States the projected percentage of patients with BDD within cosmetic medical settings diverges from 5% to 15% (Veale et al., 2011).

Phillips, Dufresne, Wilkel, and Vittorio (2000) found that 12% patients had significant features of BDD in the dermatological treatments. A European study testified 9.1% prevalence rate for BDD in patients in a cosmetic surgery setting (Aouizerate et al., 2004). Three to eight percent of the patients to be suffering from BDD were found in dermatology and plastic surgery hospital by a recent Dutch study (Vulink et al., 2006). A person with BDD features feels himself to be rejected by people in his surroundings that make him rejection sensitive, and isolated. Rejection sensitivity and BDD are associated with each other (Coles et al., 2006). Rejection sensitivity is one latent contrivance by which

bodily concerns may be linked. According to Harb et al., (2002), rejection sensitivity is a sense of false judgment and misinterpretation of others point of views, which lead to lack of self-confidence to interact with people.

In the Western society the quantity of cosmetic surgeries has been raised up to an unpredictable degree. Cosmetic surgery gives a compete look to a person and is highly famous among people. It changes the shape of nose, lips, hair transplantation, contouring of body to give an attractive look, laser treatments for hair removal, Botox, skin treatments (Davis, 2003; Rohrich, 2003). Women have generally become conscious to attain physical and sexual attractiveness, and they are always focused in social settings to look perfect and appealing so they have a higher rate to undergo cosmetic surgery as compared to men. It is also said that women are mainly fanatic in respect of appearance and they pay much attention on their outlook to attain perfection and get a suitable feedback from the people they meet (Swami et al., 2008; Swami & Furnham, 2008).

Cosmetic surgery is relatively affordable, accessible and easy way to alter the features and get attractiveness, so it's becoming famous in the society. Twelve million Cosmetic surgery techniques were applied in 2008, a 63% growth since 2000 (American Society of Plastic Surgeons, 2009). The increase is due to its effective results to the people with a little effort such as Botox, the claim for cosmetic surgery is undeniable. Gender biasness is a factor that incorporates with the cosmetic surgery clinics, as 91% females undergo this painful procedure, so this issue has become internationally popular (International Society for Aesthetic Plastic Surgery, 2008). Agreeing to Phillips, Menard, Fay, and Weisberg (2005), BDD often causes rejection sensitivity but it's also true that when a person is being commented on some body part he feels rejected and can adopt BDD features. Cash, Theriault, and Annis (2004) originated that bodily dissatisfaction may bring a great change in the personalities of people with BDD features and make them consider cosmetic surgery.

People with BDD features find cosmetic surgery to be the best ever remedy from appearance based ugliness. They think that cosmetic surgery will minimize their anxiousness regarding appearance, and they would be able to survive like other normal people. Unlike normal individuals, people with BDD features can never be satisfied by any encouragement as his own perception is negative about his personality. The phenomena of dissatisfaction can make the person experience multiple surgeries, as he wants to look perfect, he just tries to find lacking in him. He points out the negative aspects of his personality which provokes him to stay away from social settings and adopt harmful procedures for altering the personality or appearance (Saykaly, 2012).

BDD features are also positively linked with motives for cosmetic surgery, emphasizing the significance of perceived social feedbacks in understanding the link between BDD symptoms and cosmetic surgery. Furthermore these are closely linked with weight concern and BDD features were positively correlated to social causes but interpersonal claims for cosmetic surgery. The results revealed that excessive body image concerns are debilitating factors of developing BDD symptoms (Crerand et al., 2005).

Interpersonal relationships are greatly affected by these features and the closed ones of the individual isolate him because they are always been victimized by the abusive and violent behavior of the person with BDD related rejection sensitivity (Kelly, Didie & Phillips, 2014). People under go various techniques to become socially acceptable for the people in his community and to get rid of this rejection and the top most way out is cosmetic surgery. Cosmetic surgery rises to an advanced method of changing appearance with operational methods and clinically approved methods that is concerned mainly with an individual's physical look through surgical and medical methods improve and enhance their beauty. Cosmetic surgery is a surgical method to change the unattractive part of the body. It can change the color, shape, structure of the unsatisfied part of the body with surgery and medications. There are various methods other than surgery that can change the functioning of the tissues without putting any cuts on

the skin, called non-surgical cosmetic treatment (Sperry, Thompson, Sarwer, & Cash, 2009). BDD usually begins during childhood or adolescence. Early onset is associated with gradual onset. Other clinical features reflecting greater morbidity were also more common in the early onset group (Bjornsson et al., 2013).

#### Rationale

The present study was conducted on University students of Islamabad and Rawalpindi. It has been observed that young people are more prone towards BDD features. They focus on their physical appearance and spend more time in grooming their physical beautification. Which even sometimes results in interference with their educational and occupational functioning. According to Phillips, McElroy, Keck, Pope, and Hudson (1993) body dysmorphic disorder (BDD) is a persistent mental disorder, in which individual is uneasy with body image, faced an extreme obsession and apprehension with a fictional fault of their physical look. Individual with BDD symptoms has obsession for their physical appearance and unable to control negative thoughts about it. Most of the patients suffering from Body Dysmorphic Disorder are obsessive with an illusory fault. Their negative thought patterns create psychological and clinical issues which also impairs their occupational and social life. It also occurs with unhappiness, nervousness, social withdrawal, and loneliness.

Harb et al., (2002) examined that rejection sensitivity has a possible link with BDD. Rejection sensitivity refers to a sense of personal inadequacy and misapprehension of the behavior of others, which underwrites to fear and uneasiness when rejection is perceived. Patients habitually pursue cosmetic surgery to increase physical look. Prior studies also showed that BDD patients are unable to satisfy from cosmetic surgeries and disappointment with their treatments (Crerand et al., 2006).

# Hypotheses

1. Personal rejection sensitivity is positively related with cosmetic surgery among university students.

2. Body Dysmorphic Disorder features is positively related with cosmetic surgery among university students.

3. Personal rejection sensitivity is positively related with Body Dysmorphic features among university students.

## Method

Sample

In the present study, sample of university students (N = 300) were taken from different universities of Rawalpindi and Islamabad. Both male (n = 150) and female students (n = 150) were part of the sample. Convenient sampling technique was used to collect the data. The instruments along with demographic sheet were randomly administered on the students. Minimum education of the students was BSc and BA. Students elder then 40 years were not taken because physical beautification seems to be common in young adults.

# Measures

**Demographic Sheet.** Demographic information included e.g., name, age, gender, socio economic status, education and parental professional information.

Yale Brown Obsessive Compulsive Scale (Modified). This scale was used to assess body dysmorphic disorder symptoms and was developed by Phillips et al. (1997). The scale contains 12 items. The reliability of the BDD-YBOCS is .78. The subscales are preoccupations and repetitive behaviors. The response is a Likert scale of 0 (strongly disagree) to 4 (strongly agree).

Rejection Sensitivity Questionnaire (Downey & Feldman, 1996). This questionnaire was used to assess an individual's levels of personal rejection sensitivity and was developed by Downey and Feldman (1996). The scale contains 18 items. The reliability of the questionnaire is .83. The response is on a Likert scale of 1 (very unconcerned) to 6 (very concerned). The next item of the questionnaire is followed by another Likert scale of 1 (very unlikely) to 6 (very likely).

Acceptance of Cosmetic Surgery Scale. This scale was used to assess an individual's attitudes about cosmetic surgery and was developed by Henderson-King and Henderson-King (2005). The scale contains 15 items. The reliability of the scale is .86. The subscales are intrapersonal, social for measuring social motivations. The response is a Likert scale of 1 (strongly disagree) to 7 (strongly disagree).

All these scales are applicable for normal population.

#### Procedure

Students were approached from different universities of Rawalpindi and Islamabad. Then informed consent was taken from all participants. Demographic information sheet and the scales, (as mentioned above) were applied on the participants. The ethical standards of research were taken into consideration as the participants were given brief explanation related to purpose of the study and were insured that information will be kept confidential. The participants were requested to read all statements and answer those according to their feelings. The Demographic information sheet and related questionnaire were administered. Results were analyzed by applying different statistical techniques such as Cronbach alpha reliability of all the scales, correlation analysis among the three major variables, regression analysis, and ANOVA.

#### Results

Table 1 shows descriptive statistics among study variables. All variables have normally distributed data and they were reliable for use. Table also shows alpha reliability coefficients for all scales used in study. All variables have satisfactory reliability and they were reliable for use. Results showed that personal rejection sensitivity has significant positive correlation with body dymorphic features (r (298) = .32, p < .01), and cosmetic surgery acceptance (r (298) = .56, p < .01). Body dimorphic features has significant positive correlation with cosmetic surgery acceptance (r (298) = .34, p < .01). Therefore, all the hypotheses of the study were supported.

**Table 1**Descriptive Statistics and Correlation for the Yale Brown Obsessive Compulsive Scale, Rejection Sensitivity Questionnaire

and Acceptance of Cosmetic Surgery Scale

Variables		М	SD	Range						
	n			Potential	Actual	a.	Skew 1	1	2	3
1. Personal rejection sensitivity	300	45.22	12.90	18-108	54-76	.76	.33		.32**	.56**
2. Body dysmorphic features	300	28.18	9.25	0-48	24-42	.82	.39			.34**
3. Cosmetic surgery acceptance	300	42.45	11.96	15-105	30-95	.74	.45			

<sup>\*\*</sup>p< .01

Table 2

Regression Analysis for Body Dysmorphic Features and Rejection Sensitivity as Predictors and Cosmetic Surgery Acceptance as an Outcome Variable among University Students

	Outcom	e: Cosmeti	c surgery	
		acceptance	e	
Predictors	β	$R^2$	F	
1. BDD features	.53**	.34	8.25**	
2. Rejection sensitivity	.35*	.31	7.35**	
44 . 01 4 . 05				

<sup>\*\*</sup>p < .01, \*p < .05

Table 2 showed multiple regression analysis among BDD features and rejection sensitivity as predictor and cosmetic surgery acceptance as outcome variable among university students. Results revealed that BDD features ( $\beta = .53$ , p < .01) and rejection sensitivity ( $\beta = .35$ , p < .05) significantly predicted cosmetic surgery acceptance among university students.

**Table 3**Gender Differences among Personal Rejection Sensitivity, Body Dysmorphic Features and Cosmetic Surgery Acceptance among University Students

	Boys $(n = 150)$		Girls $(n = 150)$				
					95% CI		
Variables	M	SD	M	SD	t(298) LL	UL	Cohen's d
Personal rejection sensitivity	42.12	11.23	46.19	12.11	2.85* .24	.63	.78
Body dysmorphic features	27.31	6.13	30.22	8.23	2.00* .45	.34	.56
Cosmetic surgery acceptance	40.10	10.56	44.56	13.21	1.96* .32	1.22	1.32

Table 3 shows gender differences among study variable. Results showed that girls were higher on personal rejection sensitivity t (298) = 2.85, p < .05, body dysmorphic features (t(298) = 2.00, p < .05) and cosmetic surgery acceptance (t(298) = 1.96, p < .05).

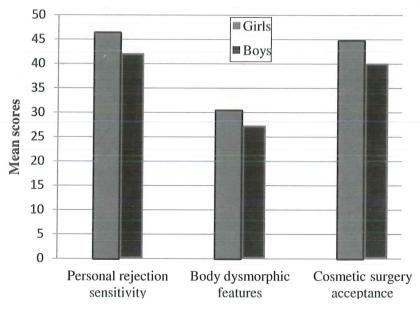


Figure 1. Gender differences in Study Variables

# Discussion

The first hypothesis of the study was personal rejection sensitivity is positively related with cosmetic surgery acceptance among university students was supported in the research. It was found that rejection sensitivity has positive association with the acceptance of cosmetic surgery. In the prediction of cosmetic surgery, the interpersonal factors that were most associated were self-perception of attractiveness and satisfaction with one's appearance (Brown et al., 2007; Didie & Sarwer, 2003). Moreover these individual may have body dysmorphic features having high level of dissatisfaction with the body image, therefore they want to improve their weaknesses by receiving cosmetic surgery (Crerand et al., 2006; Crerand, Phillips, Menard, & Fay, 2005). Delinsky (2005) reported that individual who receives cosmetic surgery may have poor self-esteem and distorted self-concept. Perception of becoming unattractive is the most powerful motivation of receiving cosmetic surgery than the desire of becoming beautiful (Henderson-King & Henderson-King, 2005).

The Second hypothesis of the study was body dysmorphic features is positively related with cosmetic surgery among university students, was verified by results. Current findings indicated that body dysmorphic features has positive association with the acceptance of cosmetic surgery. Harb et al., (2002) examined that rejection sensitivity has a possible link with BDD. Rejection sensitivity refers to a sense of personal inadequacy and misapprehension of the behavior of others, which underwrites to fear and uneasiness when rejection is perceived. Patients habitually pursue cosmetic surgery to increase physical look. Prior studies also showed that BDD patients are unable to satisfy from cosmetic surgeries and disappointment with their treatments (Vulink et al., 2006). Researchers found that patients have unhappiness with their physical image, nervousness, social withdrawal, and loneliness (Sarwer, Whitaker, Pertschuk, & Wadden, 1998).

The third hypothesis of the study was personal rejection sensitivity is positively related with body dysmorphic features among university students was supported. A person who is preoccupied with some imagined defect can be sensitive to rejection if he has already been rejected because of the flawed personality. On the other hand if a person is continuously being rejected or ignored in gatherings will later on adopt BDD features e.g. all the friends are going for a party and they didn't call on person, then later on they had a gathering in which the same person was not invited. If he comes to know it later on he will develop a sense of inferiority and will probe the reasons for being ignored by closed ones. Individuals with BDD features are likely to be isolated or experience low relationship quality (Phillips, 2002; Phillips, Menard, Fay, & Pagano, 2005).

Gender differences were also studied in the current research. Findings of the study revealed that female university students were higher on personal rejection sensitivity, body dysmorphic features and cosmetic surgery acceptance as compared to male university students. Gender differences also existed in the previous researches (Block, 1983; Brown, 1999; Crosnoe, 2000; Kuttler, et al., 1999; La Greca & Mackey, 2007). Attitude towards cosmetic surgery acceptance is related to body consciousness. Women experience more dysmorphic features consciousness (McKinley & Hyde, 1996). Women are also likely to experience higher levels of objectified body consciousness, which McKinley and Hyde (1996) define as the experience of one's own body as an object. This occurs as a result of society's tendency to objectify women's bodies. Therefore, females as compared to males are higher on personal rejection sensitivity, body dysmorphic features and cosmetic surgery acceptance.

### Conclusion

The hypotheses were supported in the study. Findings indicated that personal rejection sensitivity, body dysmorphic features and cosmetic surgery acceptance were positively associated with each other among university students. Gender differences indicated that females were higher on personal rejection sensitivity, body dysmorphic features and cosmetic surgery acceptance as compared to male university students.

## Recommendations

The current research is based on the relationship of three variables, body dysmorphic disorder features, rejection sensitivity and cosmetic surgery acceptance, which were found to be positively correlated with each other. The study was done to find this phenomenon in Pakistani students and non-clinical population. The research can be useful in future to examine more variables with these variables, such as BDD can be studied with borderline personality disorder due to comorbidity. Many researchers have found that patients of BDD are highly aggressive and can be violent and harmful to others and self if their defective personality is critically objectified by his closed ones and other people.

There is also comorbidity between BDD and OCD. The compulsive behavior is very common in both the disorders so they can be studied together in relation with cosmetic surgery acceptance. It can be linked in way that a BDD patient has compulsive behavior of doing multiple attempts to change the personality, so that they develop OCD symptoms by having anxious experience along with perceived defect in personality, and later on they undergo cosmetic surgery acceptance. The association between obsessive-compulsive disorder (OCD) and body dysmorphic disorder (BDD) is uncertain. BDD has been anticipated to be an OCD-spectrum disorder or even a type of OCD. However, few studies have directly compared these disorders' clinical features.

Rejection sensitivity can be correlated with some more somatoform disorders being afraid of being ugly. It can also be studied with different demographic details such as gender and socio-economic differences. Similarly, cosmetic surgery acceptance can be linked with gender differences as well as socio economic status and age differences as well. Cosmetic surgery acceptance can be further studied with body image, self-esteem and conformity. Personality and individual difference predictors can be a latest modification to the topic. Socio cultural difference can also be a focus of attention with rejection sensitivity. Visible

and non-visible rejection can be compared together and also correlated with BDD features.

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