

The Effectiveness of Cognitive Behavioral Therapy for Managing Body Image Dissatisfaction

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The aim of study was to test effectiveness of cognitive behavioral therapy (CBT) in managing body image dissatisfaction (BID). The sample of $N = 16$ participants (Woman: $n = 10$ & Man: $n = 6$) was selected ($M = 20.0$, $SD = 2.5$) and divided into two groups; an experimental group and a waiting list control group, having 8 participants in each group. A baseline score was taken by using Body Dissatisfaction Scale (BDS; Tariq & Ijaz, 2015). Eight sessions of cognitive behavioral therapy (CBT), adapted from CBT manual for depression (Naeem, & Ayub, 2013), were conducted in an individual setting on a weekly basis. The results suggested a significant contribution of CBT in decreasing the level of dissatisfaction related to body image. The scores of pre and post testing ($p < .05$) of experimental group verified the efficacy of CBT in treating dissatisfaction associated with body image. Thus, it can be concluded that CBT is effective in treating dissatisfaction related to the body image among adolescents and adults. The study helped in drawing attention towards treatment of body image dissatisfaction (BID) in the Pakistani population and contributed to the empirical basis of effectiveness of CBT in managing body image anxiety.

Keywords: body image dissatisfaction, CBT, adolescents, adults

Body image plays an important role in an individual's life as it may affect many aspects of an individual's self-such as, emotions, thoughts, feelings, relationships, and beliefs (Cash & Pruzinsky, 1990) which are very essential elements of an individual's psychological health. Therefore, the influence of body image is immense and prominent on the personality of an individual (Cash & Smolak, 2011). Body image problems are increasing and affecting individuals of many ages. Awareness related to body image has been seen in children and adolescents even before the age of 8 years (Heron et al., 2013), which results in the desire to have thin bodies and to diet (Damiano et al., 2015). Body image dissatisfaction (BID) is defined as an individual's negative feelings and perception about their body and is affected by factors such as body size, appearance, weight, and culture (Peat et al., 2008; Phillips & de Man, 2010). These negative effects have a direct impact on individuals' living styles, physical and psychological health.

The BID leads individuals to form negative beliefs about the self, schemas related to body image and to engage in maladaptive behavior i.e avoid eating and social gatherings (Ferreiro et al., 2014). Individual with BID label their selves as incompetent as they perceive their self as unattractive. The BID is more about building a belief that a specific body part like the stomach, hands, thighs, shoulders, buttocks and feet are not attractive (Stice & Shaw, 2002). If body dissatisfaction is higher than moderate level, then people are at high risk of developing eating disorders (Stice & Shaw, 2002), anxiety and depression (Hardit & Hannum, 2012;

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Maxwell & Cole, 2012). Body image dissatisfaction is considered as a maintaining and predicting factor of disturbed eating behaviors such as starvation, binge eating, using laxatives (Fairburn et al., 2003; Midlarsky & Nitzburg, 2008), and purging, affecting physical and mental health (Stice et al., 1998).

Body image issues appear to be significant in both men and women (Ferraro et al., 2008; Pruis & Janowsky, 2010; Slevic & Tiggemann, 2011). The reasons for BID in both the genders differ. Approximately 20 % and 40 % of men reported dissatisfaction about their overall physical appearance, muscle tone and size, and weight (Frederick et al., 2014). Men feel that they can be judged on the basis of appearance and compare their appearance to others at social events (Frederick et al., 2014). On the other hand, women personalize body shame more, and are vigilant about their body (Brennan et al., 2010). It has been found that women perceive their body image as unhealthier than men's body image, but this is only a self-created perception. Some researchers claim that women are exposed to more social circumstances which cause them to feel dissatisfied with their bodies (Brennan et al., 2010). Research also indicated that BID is prevalent in adults (Allaz et al., 1998). Hence, the anxiety related to body image is prevalent in both genders, but reasons for both are different. The likelihood of seeking treatment in men is lessened by factors such as shame and being silent about their BID (Brennan et al., 2010; Burlew & Shurts, 2013). Therefore, the treatment for BID is needed for both (McCabe & Ricciardelli, 2004).

BID also results in negative consequences in Asian countries as well as Western countries. It has been reported that 60.1 % students have BID in Malaysia (Latiff et al., 2018) and have greater association with disturbed eating and low self-esteem (Franko & Striegel-Moore, 2002). Researchers have found that Pakistani and Indian women have a high rate of dissatisfaction related to their body image, size and shape (Mumford & Choudry, 2000). A study conducted in Pakistan revealed that women showed greater dissatisfaction of body shape and size (Najam & Ashfaq, 2012).

There are many treatments available for BID such as acceptance and commitment therapy, dialectic behavioral therapy, and cognitive behavioral therapy (CBT). Most of the treatments employed cognitive behavioral techniques, for example, Strachan and Cash (2002) used psycho-education, self-monitoring, and challenging dysfunctional thoughts regarding body image in their treatment approach, and results showed improvement in the satisfaction level and reduced the levels of dissatisfaction related to appearance.

BID appears to affect the lives of individuals biologically as well as psychologically, such as engagement in unhealthy eating, using steroids or other medicines, aggression, irritability and mood disorders, low self-esteem etc. It also affects relationships of people because of their negative automatic thoughts (NAT's) and negative self-schemas related to body image (Butters & Cash, 1987). Cultural standards play an important role in body image; in society being thin, and fair is considered as a beauty standard in women, whereas standards for men are muscularity and tall height (Greenberg, 2009). These standards are learned through comments from family, friends and media. These societal criteria make individuals feel pressured and they suffer from psychological distress. The BID causes disturbance and anxiety in daily life. Therefore, treatment is needed. If it is not treated on time, then it may lead to body dysmorphic disorder, or other eating related disorders.

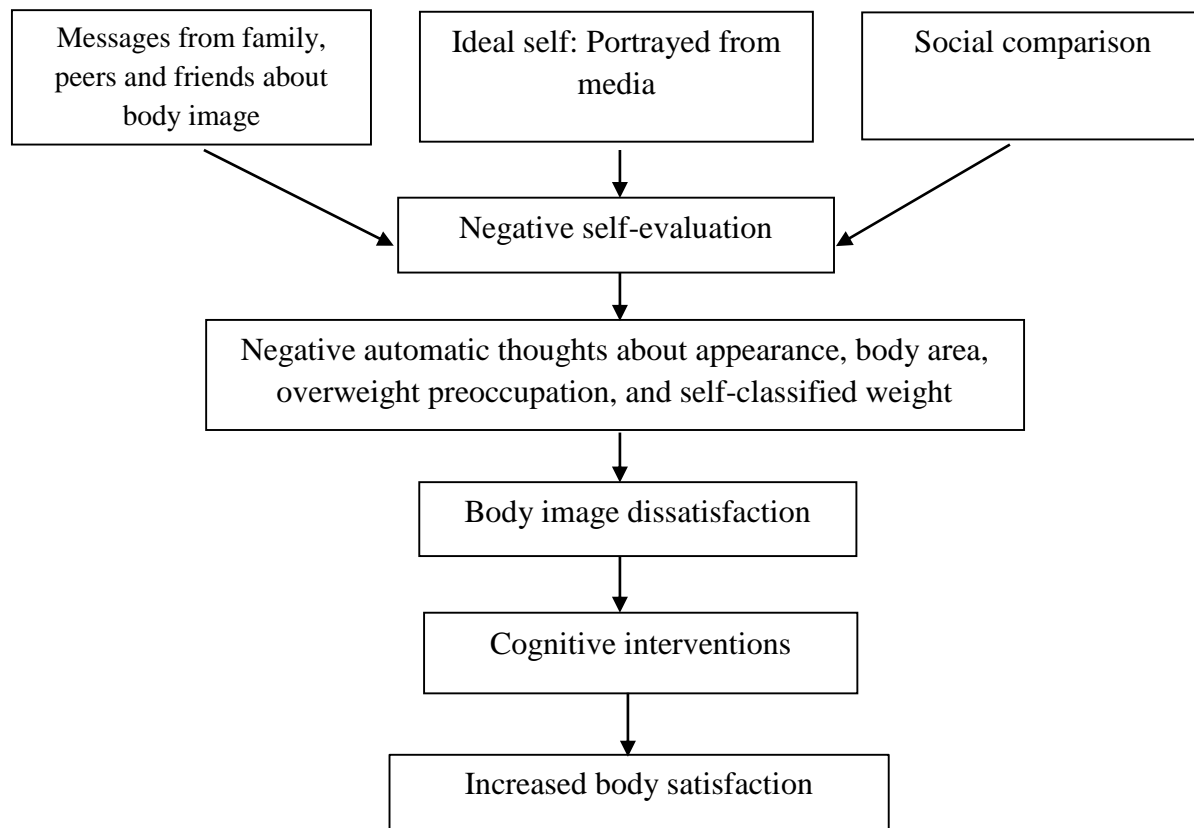
CBT is one of the effective therapeutic techniques to treat maladaptive thoughts about body image. This study provides empirical evidence for CBT in treating BID and will also create awareness related to BID in Pakistani people. Through this research, individuals will be taught

how to handle and manage these psychological problems effectively and develop rational thoughts. This research will also help in understanding the context and intention of these messages and acting in a healthy way by testing reality.

Model of Present Study

The present study is based on the Beck cognitive model, in which dysfunctional thoughts lead to BID in adolescence and early adulthood. These negative thoughts result from negative comments from family, peers, and media. As Williamson’s model of body image explains, it is internalization of socio-culturally defined ideals which leads an individual to build errors in cognition. This later leads to anxiety and other psychological problems (Williamson et al., 2004). A person in turn builds an appearance related self-schema because of the negative emotions created through cognitive errors or biases. The role of messages from family, peers and media impacts an individual’s thinking pattern and results in creating negative and unrealistic ideals for BID. Another leading factor for NAT’s is social comparison with others and sometimes these are portrayed by the media and people consider them to be ideals. These factors cause psychological distress and negative self-evaluation. To solve this psychological distress, cognitive and behavioral interventions were used such as psycho-education, thought challenging, techniques for relaxation, and Socratic dialogues which lead to reduction of dissatisfaction related to the body.

Figure 1
Pictorial Representation of Model of the Present Study



Objectives of the Study

- To find the efficacy of CBT in managing BID among adolescents and adults.
- To find out the differences between pre and post test results of experimental group after giving CBT as compared to control group.

Hypothesis of the Study

- There will be an effect of cognitive behavioral therapy in managing BID among adolescents and adults.
- There will be a difference between the pre and post test results of the experimental group compared to the control group.

Method

Research Design

The present study has applied the pre and post test quasi experimental design.

Sample

Participants were recruited using purposive sampling through advertising the study on social media. Sessions were taken in Institute of Professional Psychology, Bahria University Karachi Campus. A sample of $N = 16$ were recruited (women: $n = 10$; men: $n = 6$). Participants' age ranged between 17 to 25 ($M = 20.00$, $SD = 2.52$) and after screening they were divided into two groups: An experimental group and a waiting list control group. Each group consisted of 8 participants. The following inclusion criteria were used to select the participants for this study.

- Sample consisted of 16 participants; having mild, moderate, and severe levels of scores on Body Dissatisfaction Scale (BDS; Tariq & Ijaz, 2015)
- Their ages ranged from 17 to 25
- Participants had a minimum of matriculation level education
- Participants were willing to take therapy

Assessments and Measures

Demographic Form

After informed consent form, participants were asked to fill demographic form to gather basic demographic characteristics of the participants. The following content was included in the demographic sheet: Age, gender, education, any diagnosed eating or other psychological disorder, any drug use, satisfaction with self or body, comments from peers and family about body image and general perception about own body image.

Body Dissatisfaction Scale – Urdu Version (BDS; Tariq & Ijaz, 2015)

The Body Dissatisfaction Scale (BDS; Tariq & Ijaz, 2015) is one of the measures for identifying the satisfaction level of body image in an individual. The BDS is a 26-item measure having separate factors for both the genders. It has four factors for men, which are: Body Shape, Muscularity, Facial Features, and Hair; and three factors for women, these include: Bodyweight, Skeletal Structure, and Facial Features. It is a 5 point Likert rating scale (0 = *not at all*, 1 = *rarely*, 2 = *sometimes*, 3 = *often*, & 4 = *always*). This is available in Urdu language. It was built for the Pakistani population as it consists of those culturally relevant items which population can relate to. The validity of this scale is measured by using Multidimensional Body Self-Relation Questionnaire (MBSRQ; Brown et al., 1990) and Figure Rating Scale (FRS; Stunkard et al.,

1983). The test re-test reliability of scale was .94 for men and .89 for women which is significantly high.

Cognitive Behavioral Therapy (CBT) Manual (Naeem & Ayub, 2013)

The session plan was adapted from the manual of CBT for depression by Naeem and Ayub (2013). The main techniques which were adapted from the manual were psycho-education on cognitive triads, downward arrow technique to identify the core belief and assumptions, breathing techniques, thought diary, challenging negative automatic thoughts, psycho-education on cognitive errors, if-then questioning, and cost benefit analysis. These were the major techniques which were used to manage body image dissatisfaction as it was reported from the literature that cognitions play important role in BID.

Procedure

Prior to the implementation of the study, permission was taken from the supervisor of Bahria University, Karachi and authors of measures. After that the informed consent form and demographic form were given to each participant and they were told about the confidentiality procedures verbally as well as their written consent for participation in the study was taken. Then a pre-test was conducted by using BDS. After taking the pre-test score individuals who fell under the criteria were recruited and divided into two groups randomly: An experimental group and a waiting list control group. The experimental group was offered individual therapy sessions following a structured manual of CBT that was translated. The total program comprised eight sessions, once a week for 50 minutes. In the last session, a post-test was carried out for the experimental group in order to find the effectiveness of CBT after eight weeks of pre-test as well as for control group in order to compare the treatment effect in former.

Session Plan

Session 1. The aim of this session was the detailed assessment of the problems as well as education on BID and an introduction to CBT. The agenda was developed for the next sessions. At the end of session, the therapist had an idea about problems of the participant.

Session 2. The aim of this session was to provide information regarding BID, its possible causes, prevalence, effects on personal happiness etc. Therapist explained the differences between thoughts, feelings and behavior and relationship among them. The participant was also made to understand the cognitive errors in this session.

Session 3. Reviewed the previous sessions and participants were asked about negative thoughts. The impact of cognitive errors on negative thoughts was also discussed. They were taught how a balanced thought or alternative thought can be built. They were also briefed about keeping a thought diary.

Session 4. In this session, working on dysfunctional belief was begun. At the end of the session, an individual was able to understand the concept of unhealthy attitudes, and faulty assumptions. Core belief was identified by using downward arrow technique and if-then questioning technique. Client was also asked to ponder on his or her beliefs and ask himself the questions by using if then technique or downward arrow technique.

Session 5. The aim of this session was to understand the concept of ideal and real self. The concept of social comparison and its impact on self-evaluation was discussed. Technique of cost-benefit analysis was introduced and practiced on negative self-evaluation. Thought reconstruction was taught.

Session 6. The aim of this session was to identify the impact of social media on mental health and how an individual idealizes actors or actresses. Challenging thoughts about body including challenging the media's portrayal of the ideals, and appearance assumptions was done through reflective questioning. Relaxation techniques such as deep breathing were practiced.

Session 7. In this session, participants were briefed about routine chart. Importance of meditation was taught and visualization techniques for relaxation were done. Psycho-education on healthy life style was imparted and a routine chart made together. Emphasis was given to a healthy diet and exercise.

Session 8. The aim of this session was to educate about eating disorders and other risky behaviors, warning signs and where to seek help, nutrition and physical exercise for healthy body image. Finally, the therapist and client reviewed the progress in the program and a post-test of BID was done to check the impact of CBT.

Ethical Considerations

The study was conducted in a way the right, dignity and welfare of participants was respected. They were protected from any harm which may be involved in the study. It was ensured that participants were fully informed about the study procedures. The participants were informed that whatever information they had provided in the questionnaire and in sessions would keep confidential and the data provided in the study were respected through the anonymity of the clients. They were also informed that they have the right to withdraw from the study at any time.

Results

Table 1

Descriptive Statistics and Univariate Normality of BID

	Tests	<i>N</i>	Items	<i>M</i>	<i>SD</i>	α	<i>SK</i>	<i>K</i>
Body	Pre-test	16	26	51.06	14.91	.57	0.38	-1.43
Dissatisfaction Scale	Post-test	16	26	35.37	22.12	.91	0.85	-0.32

Note. *K* = Kurtosis; *SK* = Skewness

Table 1 shows that the mean scores of pretests are $M = 51.06$ and posttest is $M = 35.37$. This suggested that the scores of post-tests decreased after intervention which was provided to experimental group. This difference gives the idea that after interventions scores fall in moderate range. The standard deviation of pretest score is $SD = 14.91$ and posttest is $SD = 22.12$. The total item of body dissatisfaction was 26. The value of skewness is 0.38 in pretest and 0.85 in posttest, value of kurtosis is -1.43 in pretest and -0.32 in posttest. These values showed that the data is normally distributed. The Cronbach's alpha of scale in pretest was .57 and in posttest is .91, this suggests that reliability of scale falls in to the acceptable range.

Table 2*Paired Sample t-Test Showing Body Image Dissatisfaction in Experimental Group*

Variable	Pre-test		Post-test		<i>t</i> (7)	<i>p</i>	95 % CI	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Body Image Dissatisfaction	47.25	16.18	20.62	10.80	7.61	.000	[18.36, 34.88]	1.93

Note. CI=Confidence interval; UL=Upper limit; LL=Lower limit

The above-mentioned mean scores of pre-test showed that participants of the experimental group had higher levels of dissatisfaction related to body image. On the other hand, the mean score of post-test shows lower levels of BID. The *p*-value is $< .00$, this suggests that there is a significant difference between the scores of pre-test and post-test of experimental group. In the post test, participants exhibited significantly lower scores of BID in terms of shape, weight, muscularity, skeletal structure, hair and facial features which are affected by CBT. The Cohen's *d* value is greater than 0.8, which according to Calin-Jageman and Cumming (2019) suggests a large effect of CBT on BID.

Table 3*Paired Sample t-Test Showing Body Image Dissatisfaction in Experimental Group and Control Groups*

	Experimental			<i>n</i>	Control		<i>t</i> (14)	<i>p</i>	95 % CI
	<i>N</i>	<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>			
Pre-test	8	47.25	16.18	8	54.87	13.46	-1.02	.323	[-23.5, 8.33]
Post-test	8	20.62	10.80	8	50.12	20.84	-3.55	.003	[-47.3, -11.6]

Note. *N* = 16(*n*=8 in each group); CI=Confidence interval

The above findings showed the comparison of pre-test score of experimental and control group as well as post-test scores. For post-test $p < .05$, which shows significant difference in levels of dissatisfaction related to body image after giving CBT as an intervention to experimental group. The mean values of pre-test of experimental and control group (pre: $M = 47.25$; post: $M = 54.8$) indicates that the participants of both the groups had high levels of BID on self-reported questionnaire, while in the post-test scores of experimental and control group there is a significant difference. Thus, this verifies the hypothesis that there is a significant effect of CBT in managing body image dissatisfaction.

Discussion

In the light of past researches, it was hypothesized that the CBT will have an effect on BID. Previous researches have provided evidence for the efficacy of CBT with body image problems (Lewis & Devaraj, 2010), but in Pakistan it is still under researched. So, the aim of the current study was to obtain evidence of CBT to manage BID among adolescents and adults as well as to investigate the prevalence of body image problems in both genders. The present study used the CBT model by Aron Beck for understanding the role of cognition in body image and using it to manage body dissatisfaction among this population.

Most of previous researches concluded that BID is normative among women (Lewis & Devaraj, 2010; McLaren & Kuh, 2004; Tiggemann, 2001). The present study targeted both the genders as some researches provided evidence for the prevalence of BID in men as well (Hardit & Hannum, 2012; Salk & Engeln-Maddox, 2012). The present study showed that CBT is an effective treatment in treating BID as the Table 3 shows post intervention $p < .05$ (post: $p = 0.003$). This provides evidence for the effectiveness of CBT in treating BID among Pakistani population.

The second hypothesis assumed that there is a difference between the results of pre-test and post-test in experimental group. The paired sample t-test analysis showed the significant differences in the pre-intervention ($M = 47.25$, $SD = 16.18$) and post-intervention ($M = 20.62$; $SD = 10.80$) scores of experimental group, $t(7) = 7.61$, $p < .05$. Hence, providing the evidence for the hypothesis that there is a difference between the results of pre-test and post-test experimental group. This shows that the level of dissatisfaction about body image was high in individuals before the intervention in experimental group (pre: $M = 47.25$, $SD = 16.18$; post: $M = 20.62$, $SD = 10.80$). Hence, verifying that CBT is effective in treating BID. Table 3 shows the comparison of pre-test and post-test scores of control group participants, thus providing the evidence for the hypothesis that there is a difference between the scores of pre-test and post-test of experimental and waiting list control group among early adolescents and adults.

From the analysis it is also found that all the participants experience discrepancy between their ideal self-image and real self-image. They all reported that because of this they get involved in maladaptive behaviors such as excessive gyming, disordered eating, taking pills for body weight, height, injecting whitening medicines etc. as they feel anxious about their body image. Thus, consistent with the theory of self-discrepancy, an individual who faces discrepancy in ideal and real body image tends to have low levels of body satisfaction, which leads them to get involved in appearance related behaviors such as disordered eating and cosmetic surgeries (Vartanian, 2012).

Informal assessment and qualitative analysis showed that individuals before the intervention, reported high level of disturbances in their social life. Nearly all participants mentioned that they avoided attending marriages and other parties, because of excessive negative thoughts about body image. It was also found from their history that they spent most of their time watching themselves in mirror and identifying those parts which are either attractive or less attractive. After intervention, individuals of experimental group mentioned that their time decreased in scanning flaws in their selves. From the individual session it was also seen that individuals with higher levels of body dissatisfaction had low self-esteem as they perceived themselves as not capable of doing things and achieving satisfactory relationships. These observations match the previous studies on figuring out the effects of body image dissatisfaction. Among these factors most common are: low self-esteem (Stice & Shaw, 2002; Thompson et al., 1999), depression (Stice & Bearman, 2001) and overall poor quality of life (Franko & Striegel-Moore, 2002; Thompson et al., 1999). These individuals also mentioned that they felt depressed whenever they felt a discrepancy between their ideal and real self, which is also consistent with the results of previous research. All these factors lead them to build negative coping in their selves which affects their psychological, biological and social lives.

Messages and comments about body image which an individual receives from family and peers, is very important in building body satisfaction. The messages received from family and friends are internalized in by the self without questioning (Curtis & Loomans, 2014). Social comparison is also an important factor in developing body image ideals and may lead to BDI. Individuals who have higher levels of internalizing things without questioning and social

comparison tend to have an increased level of dissatisfaction related to their body, developing maladaptive eating patterns (Khan et al., 2017). Media also plays a vital role in developing ideal body image and social comparison with models. Individuals who idealized models for their body image, tend to face more dissatisfaction as it is very difficult for them to maintain their body image and also remaining physically healthy (Green & Ohrt, 2013). Messages that come from the media are also a strong contributor in developing schema of thinness and BID (Cafri et al., 2005).

All participants of the present study reported that their families and peers always have commented on their body image which had greater impact on their BID. They felt pressured and anxious whenever they commented on their body image, regardless of their intention. Most of individuals mentioned that because of these comments they got involved in maladaptive eating behavior. Participants also mentioned that the ideals portrayed by the media has an impact on their satisfaction level as they wanted to be like their media related ideals and feel discrepancy between the ideal and real self.

To manage all these negative thoughts and unrealistic ideals, CBT based treatment was used. The results of the present study verified the efficacy of CBT in decreasing body image dissatisfaction, creating realistic ideals and developing healthy behavior (i.e. exercises, healthy eating habits, and relaxation techniques). Hence, verifying the hypothesis that there was an effect of CBT in managing BID among adolescents and adults.

Conclusion

The present study aimed to investigate the efficacy of cognitive behavioral treatment for body image dissatisfaction among adolescents and adults, in an individual setting. The findings showed a statistically significant difference in the scores of pre and post-test of experimental group and also between the post-test scores of experimental and control groups. The findings indicated that the level of dissatisfaction was significantly less within the experimental group after intervention, as compared to the waiting list control group, hence supporting the second hypothesis. Moreover, it can also be concluded that CBT decreases the severity levels of BID among adolescents and adults of the Pakistan. Thus, it may be concluded that the present study supported the efficacy of CBT for treating BID.

Implications of the Study

The present study contributed in the field of clinical psychology to indigenize the concept of body image and its treatment. From the literature it is clear that BID is increasing and affecting the daily functioning of adolescents and adults. The present study helped in developing insight in to the people of Pakistan that this is a psychological problem and can be treated through the consultation with a clinical psychologist. It also contributed to the research on effectiveness of CBT in treating BID in Pakistan.

This study highlighted that adolescents and adults can be easily taught how they can alter their negative thoughts related to body and increase their satisfaction of body image by building more healthy behaviors. These CBT based techniques can be utilized by fresh psychology graduates after required training.

Limitations and Recommendations

In the light of the present study on the efficacy of CBT in managing BID, a few limitations and recommendations are suggested. The present study targeted the limited range of age of men and women. It is suggested for future research to target other age groups as well.

From the present study it is recommended that for future research, the role of self-esteem should also be focused on. It is also suggested that the number of participants can be increased targeting men in their adolescent period, as this study has a limited number of men participants.

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Contribution of Authors

Sr. No.	Author	Contribution
1.	Iqra Ramzan	Write up and analysis of the study
2.	Barerah Siddiqui	Helped in design the study, and critically reviewed