



## **Examining the self-esteem of individuals who decided to undergo obesity operation (bariatric surgery)**

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### **Abstract**

Low self-esteem and depression are generally observed in obese individuals. The aim of this study is to examine the individuals who decide to undergo bariatric surgery in terms of self-esteem and depressive affect as well as various other factors. A total of 132 subjects (106 females and 26 males) with the age range of 18 to 60 years, who decided to have sleeve gastrectomy after applying to a clinic in Istanbul between February 1st and June 30th 2018, were included in the study. According to the results of the study, it was concluded that the self-esteem and the self-continuity of the individuals, who decided to have bariatric surgery, were high; they had medium level of trust to people and they were very sensitive to criticism. Moreover, it was found that the participants experienced a low level of depressive affect (depression) and low level of psychosomatic symptoms, had a low level of imagination and low level of participation in discussions, perceived a high level of threat in interpersonal relations, received a high level of parental interest, had moderate level relationship with their father and no psychical isolation.

**Key words:** Obesity, Bariatric Surgery, Self, Self Esteem.

### **Introduction**

At times in history adiposity was used in the meaning of praise, abundance and wealth while after the industrial revolution it started to mean unhealthy, squalidity, unwieldiness; nowadays it is used as a disease that can cause additional diseases, the morbidity and mortality of which are very high (Orhan and Bozboru, 2008). There are different opinions as to when obesity first occurred and whether it existed in the old times but the general opinion is that obesity has been increasing since the 1950s. However, there are experts who claim that this disease dates back to earlier centuries (Antipatis and Gill, 2001).

### **Obesity**

Although the two concepts, “over-weight” and “obesity”, are used interchangeably in everyday life and in literature, these two words are not the same. According to Field (2003) being overweight is “to be heavier than standard according to one’s height and age”; and obesity is “to have extreme amount of body fat”. According to World Health Organization (2018) obesity is “An abnormal and excessive accumulation of fat in adipose tissues, which may impair health.” Overweight and obesity are chronic disorders affecting most of the population. Excess weight and obesity, which damage the quality of life as well as leading to other diseases and reducing life expectancy, has become an important public health problem that affects everyone regardless of their age (Kaner, 2013; Krause and Lampert, 2015).

According to the World Health Organization (2018), obesity, a disease that requires long-term treatment, can affect people of all ages as well as different income brackets and is spreading globally. More than 1 billion people in the world are overweight, and a minimum of 300 million of them are diagnosed with obesity; and obesity is forming a basis for permanent diseases (WHO, 2018). According to Buruk, Bulca, Çiloğlu and Peker (2000), obesity is a disease seen in all ages and may

vary according to the structure and cultural characteristics of societies. In that respect, the eating habits individuals gain in a community, the environment that they live in, business life and hereditary factors are all closely related to the extent to which a disease will become widespread. For a person to be fully healthy, energy intake and expenditure should be balanced (Kiess, Wales and Reich, 2001). The socio-cultural impact of the developed countries, the increase in urbanization, the globalization of the food industry, eating disorders being on the rise and people's "effort to be thin" are all considered effective in the incidence of obesity (Yılmaz, 2002). In literature, obesity is considered to be a "multifactorial problem" (Kulie et al., 2011). The factors that form a basis for obesity include the change in the food habits, having a quick bite of convenience food such as "fast food", junk food, unhealthy snacks, constantly eating outside, the easy access to these food and wrong eating habits such as eating very fast (Memiş, 2004). In addition to eating habits, physical activity is also effective in causing obesity (Ogden, 2016). According to Ayyıldız and Demirli, (2015) the time spent in front of television and computers as well as electronic/virtual games made individuals inactive and all of the above-mentioned are risk factors for obesity. Inactive life is also called "sedentary lifestyle". In a sedentary lifestyle, there is either irregular physical activity or no physical activity at all; this lifestyle is common and often occurs in developed and developing countries. It is also called "lazy life" in colloquial speech (Keskin and Çalışkan, 2017).

### **Obesity Related Factors**

There are variable results between the socioeconomic level of a person and obesity: the children in families with high income and good social conditions are overweight because they eat too much; the children in families with low income and bad social conditions are overweight because of malnutrition (Köksal, 2008; Alvani, Seyed, Hosseini, Seyed, Parvin and Kimura, 2012). Weight gain and obesity that it brings about are also associated with the side effects of drugs (Bağrıaçık et al., 2003). Some of the antidepressants increase weight gain. This was first observed in tricyclic antidepressants (TCA) such as amitriptyline; and mood stabilizers such as valproic acid, carbamazepine and lithium also trigger weight gain (Balcioglu and Baser, 2008). In obesity, where genetic factors also play a major role, studies on the Body Mass Index (BMI) reveal that 40% of obesity is hereditary (Anderson and Butcher, 2006; Çıtak, Özmen and Besler, 2007). One of the most important factors in the etiology of obesity is the parent being an obese person (Bozbora, 2002). A child with two obese parents has an 80 percent chance of being obese; a child with one obese parent has a 40 percent chance of obesity and a child with no obese parent has a 7 percent chance of obesity (Semerci, 2004). It is also observed that identical twins, even if raised in different families and environments, weigh more or less the same (Collaku, Rankinen, Rice, Leon, Rao, Skinner and Bouchard, 2004). The studies also revealed that the rate of obesity generally increases with age (Çayır, Atak & Köse, 2011; Doğan, 2012). Looking at the studies on obesity in Turkey, it is observed that obesity is higher in women than men (Nature, Earth and Iron, 2011, Yellow, 2009; Demirel, 2011, Turan, 2014). According to a study carried out by TÜİK (Turkish Statistical Institute) in 2017, women have higher levels of obesity than men.

Different psychological behavior changes such as depression, anxiety disorder and stress can change the eating habits of a person and affect the nervous system; leading to obesity (Doğan, 2012). A psychoanalytic research revealed the significant psychological differences between obese and non-obese subjects (Sullivan, 2001). According to some emotional control theories, obese individuals eat to reduce their negative emotions and eating, therefore reducing the negative emotions, is a method of coping for them (Kaplan and Kaplan, 1957; Christensen, 1993; Macht and Simons, 2000). The factors such as the amount of food, the frequency of eating and the choice of food are also related with the psychological condition of the person. The eating behavior, which may change depending on emotions, is expressed as "emotional eating" and it is associated with weight (Balcioglu and Başer, 2008). In addition, stress alone is a factor that triggers obesity. Tensions and depressions caused by economic and social problems drive the person to easily accessible and quickly consumable food, and this affects the eating habits of people quite negatively and causes obesity (Bağrıaçık et al., 2003).

### **The Concepts of Self and Self-Esteem**

Bem and McConnel (1970) define the concept of self as the sum of the ideas and opinions one has of one's own personality, one recognizing and understanding oneself and one's evaluation of the judgements about oneself; while Rosenberg (1989) explains it through the concepts of "extant self", which is how one sees oneself; "desired self", which is how one wants to see oneself; "presenting self", which is how one wants to present oneself to others. Consistency between "the ideal self" and "the real self" is important for the full self-consciousness of a person (İşleroğlu, 2012). The ideal self is "how an individual should be" whereas the real self is how a person actually is (Yazgan and Yelikaya, 2015). When the ideal and true selves coincide with each other, people start to perceive themselves in a positive way and this leads to "higher self-esteem" in the future (Kariman, 2005). Self-esteem, which is conceptualized under the context of self in general, is a term arising from one's relationship with "the self-focus and trust" (Castand Burke, 2002). Rosenberg (1989), on the other hand, sees self-esteem equivalent to an individual's harmony with themselves and their contentment with their own actions. Legendre (2006) defines self-esteem as the value one gives to oneself and the confidence one has in oneself thanks to the attributes and actions one perceives as positive. Strong abilities and characteristics are not necessary for an individual to have self-esteem and self-respect (Polat, 2007). Self-esteem is permanent, even if one's self-assessment changes. However, discussions and researches about self-esteem are still carried out (Mannarini, 2010). Individuals make judgments depending on their own physical or social credibility, and they need to get approval from a mechanism other than themselves to look good from the outside (Duclos, 2010; Saygın, 2008).

Factors such as negative feelings, self-contempt, feeling like an outcast or unhappy, and depression have a negative impact on the self-esteem level of obese individuals (Değirmenci, 2006). Although the meaning given to the physical appearance changes from culture to culture, today 'being skinny' is associated with 'being healthy' (Polat, 2007). Haspolat and Kağan (2017) state that low self-esteem and body perception act as triggers for social phobia in young people with weight problems. In a study conducted by Armağan (2013), it was found that "there was a positive relationship between self-esteem and body image in obese women and this relationship strengthened as the body mass index (BMI) decreased".

### **Methodology**

This research is a descriptive study. The descriptive survey model is a research approach which aims to describe the past or the present state as it exists (Karasar, 2005). This research can also be considered as a study with a quantitative pattern. Quantitative research is a research that aims to test hypotheses via numerical values. The advantage of quantitative research is to be able to provide a general description by determining the current situation (Shaughnessy, Zechmeister and Zechmeister, 2016). During this study, self-esteem of individuals who decided to undergo bariatric surgery, self-continuity, trust in people, sensitivity to criticism, depressive affect, fancifulness, psychosomatic symptoms, threat perception in interpersonal relations, participation in discussions, parental interest, relationship with father and psychic isolation levels were examined.

### **The Focus Group**

An easily accessible sample was chosen for the study (Shaughnessy, Zechmeister ve Zechmeister, 2016). A total of 132 subjects (106 females and 26 males) with the age range of 18 to 60 years, who decided to have sleeve gastrectomy after applying to a clinic in Istanbul between February 1st and June 30th 2018, were chosen as the focus group. The data of the focus group is presented in Table 1.

Table 1.  
*Personal Information of Individuals Who Decide to Have Bariatric Surgery*

Variables	Groups	f	%
Sex	Female	106	80.3
	Male	26	19.7
Age	18-21	14	10.6
	22-30	33	25.0
	31-40	42	31.8
	41-60	43	32.6
Education	Elementary School	15	11.4
	Secondary School	7	5.3
	Highschool	60	45.5
	Graduate	42	31.8
	Postgraduate	8	6.1
Marrital Status	Married	82	62.1
	Single	41	31.1
	Divorced	9	6.8
Employment Status	Yes	79	59.8
	No	53	40.2
Parental Status	Yes	84	63.6
	No	48	36.4
Satisfied with Their Sex Life	Yes	29	22.0
	No	103	78.0
Received Psychological Support	Yes	29	22.0
	No	103	78.0
Total		132	100

When Table 1 is examined, it is observed that 80.3 percent of the individuals who decide to have bariatric surgery are female and 19.7 percent are male. When the age distribution of the individuals is examined, it is noted that 32.6 percent of them are between 41 and 60 years old; 31.8 percent are between 31 and 40 years old; 25 percent are between 22 and 30 years old and 10.6 percent are between 18 and 21 years old. When it comes to the education level of the individuals, it is observed that 45.5 percent are high-school graduates; 31.8 percent are bachelors; 11.4 percent are primary school graduates; 6.1 percent are master's graduates while 5.3 percent are secondary school graduates. As for the marital status, 62.1 percent are married, 31.1 percent are single and 6.8 percent are divorced. It is also examined that 59.8 percent of the individuals are working and 40.2 percent are

not; 63.6 percent have children and 36.4 percent do not; 78 percent are not satisfied with their sexual life and 22 percent are; 78 percent never received any psychological support and 22 percent did.

### Data Collection Tools

“Personal Information Form”, which consists of questions aiming to determine the demographic status of the participants, was used in the study. In order to determine the self-esteem levels of participants, the scale that was used is the “Rosenberg Self-Esteem Scale”, which is established by Rosenberg (1965) and which has 63 categories and 12 sub-scales. The correlation was between .82 and .88, and the internal consistency was between .77 and .88. It is a valid and reliable scale that measures self-esteem and is global. The validity and reliability study of the scale was conducted by Çuhadaroğlu (1896). The test-retest reliability of the scale adapted to Turkish was .89, and its validity was .71. The reliability and validity study of Dereboy, Dereboy, Coşkun and Coşkun (1994) shows that the internal validity of the Turkish version of the scale is quite high. The sub-scale “self-esteem” has 10 questions in 6 categories. The other sub-scales include topics such as self-continuity, trust in people, sensitivity to criticism, depressive affect, fancifulness, psychosomatic symptoms, threat perception in interpersonal relations, participation in discussions, parental interest, relationship with father and psychic isolation; an answer key is used in the process of evaluation and one point is given for each answer; thus, the levels of each subject is specified.

### Data Analysis

In the analysis of the quantitative data obtained from the study, the program called SPSS 17 was used and descriptive statistics were applied.

### Findings

The findings of the study are shown in Table 2.

Table 2.

*The Frequency, Percentage, Arithmetic Mean and Standard Deviation Results of the Individuals, Who Decided to Undergo Bariatric Surgery, According to the RSES Sub-scales*

Sub-Scales	Level	f	%	$\bar{x}$	Ss
Self-Esteem	High	75	56.8	1.84	1.72
	Moderate	41	31		
	Low	16	12.1		
Self-Continuity	High	108	81.8	1.71	1.09
	Low	24	18.2		
Trust in People	High	15	11.4	2.56	.95
	Moderate	105	79.6		
	Low	12	9		
Sensitivity to Criticism	High	94	71.2	2.00	1.08
	Low	38	28.8		
Depressive Affect	High	33	25	2.78	1.95
	Moderate	27	20.5		
	Low	60	45.4		
	None	12	9.1		
Fancifulness	High	13	9.8	1.28	1.28
	Moderate	26	19.7		
	Low	93	70.5		

PsychosomaticSymptoms	High	46	34.9	3.51	2.09
	Moderate	35	26.5		
	Low	51	38.6		
Threat Perception in Interpersonal Relations	High	46	34.8	1.75	1.10
	Moderate	30	22.7		
	Low	34	25.8		
	None	22	16.7		
Participation in Discussions	High	29	22	.71	.80
	Moderate	36	27.3		
	Low	67	50.8		
Parental Interest	High	92	69.7	1.83	1.85
	Moderate	24	18.2		
	Low	16	12.1		
The Relationship with the Father	High	39	29.5	3.14	1.94
	Moderate	48	36.3		
	Low	45	34.2		
Psychic Isolation	High	14	10.6	.50	.68
	Low	38	28.8		
	None	80	60.6		

When Table 2 is examined, it is seen that the mean of RSES sub-scale “psychosomatic symptoms” is the highest ( $3.51 \pm 2.09$ ) in individuals who decide to have bariatric surgery. The means of other sub-scales are as follows: “relationship with the father” ( $3.14 \pm 1.94$ ); “depressive affect” ( $2.78 \pm 1.95$ ); “trust in people” ( $2.56 \pm .95$ ); “sensitivity to criticism” ( $2.00 \pm 1.08$ ); “self-esteem” ( $1.84 \pm 1.72$ ); “parental interest” ( $1.83 \pm 1.85$ ); “threat perception in interpersonal relations” ( $1.75 \pm 1.10$ ); “self-continuity” ( $1.71 \pm 1.09$ ); “fancifulness” ( $1.28 \pm 1.28$ ); “participation in discussions” ( $0.71 \pm 0.80$ ) as well as “psychic isolation” ( $.50 \pm .68$ ).

### Discussion and Conclusion

Obesity is one of the important public health issues of the twenty-first century. It continues to be an important issue in spite of the social influence that encourages people to be thin and in spite of the progress in the field of diet-weight loss. In obesity and such diseases, low self-esteem is an important risk factor and obesity is one of the symptoms of low self-esteem (Pınar, 2002). In the literature, it was found that obese individuals had low self-esteem and low self-esteem was an important risk factor for eating disorders (Erol, Toprak ve Yazıcı, 2002; Pınar, 2002; Tezcan, 2009). It is stated that obese individuals have lower self-esteem; thus, psychopathological conditions, especially clinical depression, personality disorders and psycho-social factors, are more observed in obese individuals (Yücel, 2008; Çetin, 2001).

As a result of the study it was found that the self-esteem levels of individuals who decided to undergo bariatric surgery were as follows: 58.8 percent had “high” self-esteem; 31 percent had “moderate” self-esteem; 12.1 percent had “low” self-esteem. One study that supported this research about bariatric surgery candidates has been found in the literature and this source confirms the finding that the self-esteem of the individuals who decide to undergo an operation is high (Wile ve Peterson, 2010; Erbay, Akyüz, Şahin, Evren, Kayaalp ve Karlıdağ, 2018). No other study has been found to support the findings regarding the high self-esteem of the individuals who decided to have bariatric surgery. It was concluded that 81.8 percent of the participants, who decided to have bariatric surgery, had “high” self-continuity and 18.2 percent had less. As for the sub-scale of “trust in people”, it was observed that 79.6 percent of the individuals, who decided to have the surgery, had moderate trust in people whereas 11.4 percent had high trust and 9

percent had low. Under the sub-scale of “sensitivity to criticism” it was seen that 71.2 percent of the individuals, who decided to undergo this surgery, were more sensitive to criticism and 28.8 percent were less sensitive to criticism. The “depressive affect” sub-scale shows that 45.4 percent of the surgery candidates had mild depression; 25 percent had severe; 20.5 percent had moderate and 9.1 percent had no depressive affect. In the literature, it is reported that the incidence of depression in obese patients is high (Ganley, 1989; Sullivan et al., 1993; Yanovski, Nelson, Dubbert and Spitzer 1993; Çetin, 2001; Yücel, 2008; Aydemir, 2010; Annagür, Orhan, Özer, Tamam and Erhan, 2012; Burcu, 2013). However, these studies were not performed among obese individuals who decided to undergo a surgery. In most of the studies that focus on obese individuals, who decided to have bariatric surgery, the findings are in line with the findings of this study and support the conclusion that depression levels on these individuals are low (Azmi, Alam, Ammori, Soran and Rayaz, 2015; Sevinçer, Bozkurt, Akin, Köse, 2016; Sevinçer, Konuk, İpekçioğlu, Crosby, Cao, Coşkun and Mitchell, 2017). As for the sub-scale “fancifulness”, it is seen that 70.5 percent of the bariatric surgery candidates were not dreaming at all while 19.7 percent had moderate fancifulness and 9.8 percent were highly fanciful. “Psychosomatic symptoms” sub-scale indicates that 38.6 percent of the individuals, who decided to undergo bariatric surgery, showed less psychosomatic symptoms; 34.9 percent showed very much while 26.5 percent showed moderate amount. While some studies in the literature (Deveci, Demet, Özmen, Özmen and Hekimsoy, 2005; Sevinçer, Bozkurt, Akin and Köse, 2016) are in parallel with the findings of this study, other studies in the literature do not show parallelism with the findings of this study (Black, Goldstein, Mason, 1992; Sullivan et al., 1993; Burcu, 2013; Wallis and Hetherington, 2014). When it comes to the sub-scale titled “threat perception in interpersonal relations”, it is observed that 34.8 percent of the participants have a high level of threat perception in interpersonal relationships while 25.8 percent have low level; 22.7 percent have a moderate level of threat perception and 16.7 percent have none. It was concluded that 50.8 percent of the individuals, who decided to undergo bariatric surgery, were able to participate in discussions at a low level; 27.3 percent of them at a moderate level and 22 percent had a high level of participation in discussions. It was also concluded that 69.7 percent of these individuals had high level of parental interest; 18.2 percent had moderate while 12.1 percent had low level of parental interest. In the “relationship with the father” sub-scale, it was indicated that 36.3 percent of these bariatric surgery candidates had a moderate relationship with their father; 34.2 percent had low level of relationship whereas 29.5 percent had a high level of relationship with their father. In the “psychic isolation” sub-scale, 60.6 percent of the individuals, who decided to undergo this operation, showed no psychic isolation, 28.8 percent showed low level of isolation and 10.6 percent showed high level of isolation.

In Turkey, interest in studies on the psychosocial and psycho-educational aspects of obesity is increasing. General surgeons and psychiatrists who perform this surgery underline the importance of providing psychological support before and after the surgery. They state that especially this group of patients should be studied with a multidisciplinary approach and should be given pre-and-post operative psycho-education (Sevinçer, Coşkun, Konuk and Bozkurt, 2014; Gündüz, 2016). Although there are studies on prevention of obesity, they still do not give results. Surgical operation and psycho-education are seen as solutions in the fight against obesity. It is recommended to increase the studies in this field. Obesity is a disease with physical and psychological consequences of which are not easy. In particular, psychological supports and interventions have become an integral part of the treatment of obesity. Therefore, when the entire obesity treatment process is handled in a multidisciplinary approach, the patient will be physiologically, biologically and spiritually empowered (Collins and Bentz, 2009; Gündüz, 2016). The multidimensional structure of obesity necessitates handling obese individuals in both psychological and social aspect. It is not sufficient to fight obesity by taking obesity only with its physical aspect or by directing obese patients to dietitians and organizing eating programs focused on weight loss. Especially the physicians working in the primary care departments will be more effective and successful in preventing, treating and monitoring obesity while taking care of the psychological and social problems the patients are experiencing due to obesity.

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