

# Body Satisfaction and Management in Iranian Students

Saeide Garousi<sup>1</sup>, Behshid Garrusi<sup>2</sup>, Fatemeh Divsalar<sup>3</sup>, Kouros Divsalar<sup>4</sup>

Social Sciences Department, Human Sciences School, Shaheed Bahonar University, Kerman, Iran (I.R.)<sup>1</sup>

Clinic of psychiatry, Neuroscience research center, Department of community medicine, Afzallipour Medical School,

Kerman University of Medical Sciences, Kerman, Iran (I.R.)<sup>2</sup>

Kerman University of Medical Sciences, Kerman, Iran (I.R.)<sup>3</sup>

Neuroscience research center, Kerman University of Medical Sciences, Kerman, Iran (I.R.)<sup>4</sup>

Corresponding author: prof. Behshid Garrusi, MD. PhD. Neuroscience research center, Department of community medicine, Afzallipour Medical School, Kerman University of Medical Sciences, Kerman, Iran (I.R). P.O. Box:444. Tel :+98-341-3224613. Fax:+98-341-3221671. E-mail: BGarrusi@kmu.ac.ir,behshidgarrusi@gmail.com

## ORIGINAL PAPER

### SUMMARY

**Purpose:** Despite the importance of body satisfaction on self concept and well being, there is little study about it or its consequences in Iranian populations, a part of Asian culture. **The aim** of this study was the assessment of body satisfaction and body management strategies in Iranian university students. **Work method:** This survey was performed based on a self-administrated questionnaire in 535 university and post graduate students. **Work results:** About 2/3rd of the students had moderate to severe body dissatisfaction and 40% of the students were using body management methods. Rhinoplasty and heavy exercise were the most frequent body management methods in women and men, respectively.

**Conclusion:** Widespread research on body satisfaction prevalence and its management behaviors in the general population can be effective in reducing the negative health, social and economic consequences of harmful behaviors.

**Key words:** Body satisfaction, Body management, students, Iran (I.R).

## 1. INTRODUCTION

Body image refers to a self perception about physical appearance, or the subject concept of one's physical appearance, based on self-observation and reactions of others (1). Self concept theories suggest that dissatisfaction in a particular domain, will influence global dissatisfaction (2). Body image is an important concern, throughout in the life span, particularly in adolescence (2, 3), for example, appearance. In women and adolescents, the effects of appearance on self-esteem are greater than in men (3). Over concern regarding body shape and attractiveness can be considered normative, but can result in body dysmorphic disorder and other related problems such as eating disorders (4).

In the last 20 years, there has been an increase in the frequency of body image disturbances, related behavior and disorders in children and adolescents (5). Many socio-cultural factors affect body satisfaction, such as family, peers and especially media images (6). The ideal body that is advertised in the media, is thinness for women and thinness, leanness or muscularity for men (7, 8, 9). This attractive appearance cannot be achieved easily, and this

gap between body perception and an ideal body that are advertised by the media and culture leads to a body dysmorphic problem and practicing maladaptive body management strategies such as heavy dieting, extreme exercise and cosmetic surgery (8, 10).

People with a negative body image have greater risk of developing an eating disorder and more psychiatric problems such as depression and anxiety (4, 11, 12). Body dissatisfaction will cause eating disorders that can be fatal.

Although, the ideal and attractive body image and cultural values are affected by advertising media images that build standards of beauty, health and social success, but in the cultural context the effects of peer group especially in adolescence and early adulthood should be considered (7, 13).

Previous studies, were focused on dissatisfaction in western women, but this matter is important in other societies and for both genders of any age (14). In the past decades of Asian cultures, obesity was known as health and wealth and thin people were considered as sick or poor (15). But recent studies find that Asian women are pressured by their community and media to achieve the ideal and thin body

(15). They are afraid, if they cannot obtain this ideal body, their life might be negatively affected by it (12, 14).

Although, the frequency of body dissatisfaction in females is greater than in males, some studies show that the body dissatisfaction, in men is about 50–70% (16).

In Iran, there are few studies about body satisfaction and related problems such as eating disorders or cosmetic surgery. In one study, body dissatisfaction and desire to be thin were shown to be common in Iranian adolescents and the lifetime prevalence of anorexia nervosa, bulimia nervosa and partial syndrome were, respectively 0.9%, 3.2% and 6.6% (1). Another study showed that about 6% of female high school students had some kinds of eating disorders (18). The aim of this study was to assess the body dissatisfaction and body management strategies in university students in Iran, an eastern, Islamic country.

## 2. METHOD

The study was done in Kerman, the largest province in Iran (I.R) and was approved by the Medical Thesis Committee of the Kerman Medical Sciences University.

### Participants

Number of 535 students were recruited from the medical, dentistry and pharmacy schools of the Kerman Medical Sciences University. These students included: 319 medical students, 50 medical residents, 60 dentistry students, 91 pharmacy students, and 15 post graduate students. These participants were selected by quota sampling.

### Measures

At the time of the survey, there was no questionnaire available in Persian for the assessment of psychometric properties. For this reason researchers made a questionnaire based on reliable questionnaires, such as the Body Image Disturbance Questionnaire; Body Image Dysphoria; Self Evaluation Questionnaire and Body Shape Satisfaction Questionnaire. The face validity of this instrument was assessed by expert opinion. Reliability was assessed by the computation of  $\alpha$ -chronbach ( $\alpha = 0.96$ ). The questions were divided into 3 parts:

- a) demographic variables (age, sex, education course, grade, parental education, growing-up and residency place)
- b) perception and attitude regarding body shape included 20 questions with Likert scoring (1 = absolutely disagree, 5 = absolutely agree). The mean score <50 was considered as mild body image disturbance, 50-74, moderate body image disturbance and >75, severe body image disturbance.
- c) body image management strategies were methods such as heavy exercise, severe diet, cosmetic surgery and drug or steroid use.

The self-directed questionnaire was completed in confidentiality and formal consent was taken from all the participants. The questionnaire was designed based on gender.

### Statistical analysis

Statistical comparisons were made using the chi-square, t-test and ANOVA and Pearson correlation test. Data were analyzed using the SPSS-15 statistical package software.

## 3. RESULTS

The response rate in this survey was 100%. The mean age of the participants was  $18.02 \pm 4.17$ . The mean years of education at university was  $3.78 \pm 2.09$  (for residents and postgraduate students, this was calculated based on residency or postgraduate period). The characteristics of the students are shown in Table 1. About 38% of the participants had mild body image disturbance (<50) and 27% and 35% orderly, had moderate (50-74) and severe(>75) body image disturbance.

GENDER	N	%
Female	314	58.7
Male	221	41.3
AGE		
<20	148	27.8
20–25	285	53.6
26–30	66	12.4
>30	33	6.2
MAJOR		
Medicine	319	59.6
Pharmacy	91	17
Dentistry	60	11.2
Post graduate	14	2.6
Resident	51	9.5
MATERNAL EDUCATION (496)		
Illiterate Elementary	61	12.3
High school	189	38.2
University	246	49.6

Table 1. Characteristics of the respondents.

The mean score of body image perception had no significant difference in terms of sex ( $p > 0.5$ ). The mean score of body satisfaction had a positive relation with living in a city, especially, big cities and maternal educational grade. The major of study had no relation with body image dissatisfaction. These results were summarized in Table 2.

	Mild dissatisfaction	Moderate dissatisfaction	Severe dissatisfaction
Maternal Education	0.002	0.003	0.003
Paternal Education	NS	NS	NS
Place of residence	NS	0.01	0.007
Body management methods	NS	0.004	0.003

Table 2. Relation between students' characteristics and body satisfaction.

BODY MANAGEMENT METHODS	FEMALE		MALE	
	N(148)	%	N(66)	%
Drug (stimulants, creatine, Botox )	20	13	22	33
Steroid use	0	0	22	33
Rhinoplasty	119	80	9	13.6
Surgery (liposuction and breast augmentation..)	0		0	0
Severe exercise	48	32	53	80
Heavy dieting	45	30	8	12

Table 3. Frequency of body management methods in students (some of the students used more than one method).

Forty percent of the students were using body manage-

ment methods. Body image satisfaction and body management strategies showed a significant relation when the persons with low body image satisfaction used invasive methods. The usage of body management methods was different in gender (0.004) and living place (0.006). The most frequent ways for being more attractive were rhinoplasty in women and heavy exercises in men. Use of steroids for body building had the lowest frequency. Some of the methods that were used by students are shown in Table 3 (some of the respondents used more than one method).

#### 4. DISCUSSION

In this survey, about 2/3rd of the students had body image dissatisfaction, which were confirmed by other limited researches on this subject in Iran (19). Other studies have also emphasized on the high frequency of body dissatisfaction among university students (20). Bohne (2003) showed, in about three-quarters of the American students, physical appearance is important and 1/3rd of them had serious preoccupation with body shape and 23% of the students compulsively checked their image in a mirror (21). Among the Asian studies on the topic, 74.8% of the Emirate students were dissatisfied with their current body size (22). In another research, 40.0% of the men in comparison with 65.5% of the women were dissatisfied about their body (3). It seems that the focus on body shape and ideal body standards is the same as in the western countries.

Review of historical data shows that the concept of the ideal body has changed radically during the 20th century, especially for women. The slim body became an ideal for women from the 1960s (9), but masculinity has been an ideal body for men (8).

Although, previous studies have focused on the gender differences in the image of one's body and the associated dissatisfaction (6, 24), in our study there is no such difference. This gender difference in perception may be caused by socio-cultural pressure, especially, media images, that can change it (8, 9).

The main concerns about body shape occur in adolescence and early adulthood (5, 9), but because of the narrative age spectrum in this study, we could not observe the differences in body dissatisfaction with age. Although, some studies show that body concerns in a single person is more than in a married person, in this survey, there is no difference between the single and married participants. Tom et al. (2005) assessed the discrepancy between body image perception and the ideal body (desired) for married and single people. Their results indicate that although body image dissatisfaction exists in both married and single people, married people have shown lesser body dissatisfaction (25).

Body image dissatisfaction was high among the medical students (26). In Iran also, body dissatisfaction in single and medical students is higher than the others (19).

When considering, that body image development forms at childhood and early adolescence regardless of socio-cultural influences, parents have a critical role to play (27). The parents, especially mothers, have an important role in the transmission of social and cultural values to the next

generation (28). Mothers are social reinforcing sources and role models for eating attitude and behavior in their daughters. Sons who receive positive messages from their mothers, have more body satisfaction. But the role of the fathers in this aspect is less known (29). Therefore, it is not surprising that daughters of mothers with higher education have more body satisfaction.

Social and peer pressure can make people want to be similar to the observed media images. For this reason, people try to change their appearance by safe or unsafe methods, such as heavy diet, exercise, use of stimulants, steroids or cosmetic surgery.

Youth Risk Behavior Surveillance System (2005) reported that 62% of adolescent girls try to lose their weight, while many of them need not lose weight (BMI < 85th percentile) (30).

The rate of plastic surgery has increased in recent years (27). According to the American Society of Plastic Surgeons (ASPS), in 1992, over 400,000 Americans underwent cosmetic surgery, an increase of 1600%. In 2008, about 12.1 million cosmetic surgeries were done. Common procedures such as breast augmentation and rhinoplasty have increased by more than 700% in the past 10 years (31). Although, in Iran exact statistics about cosmetic surgery and non-surgical treatment is available, rhinoplasty seems to be the most frequent cosmetic surgery that has increased over time.

Transition from traditional culture to western culture and exposure of media images about ideal shape will induce an increase in these procedures (32). There was a positive association between the perception of being overweight and dieting behavior and stimulant use in both male and female according to a study (33).

Adolescent male who wish to be masculine, attempt to use anabolic steroids. Some of the nutritional supplements, that are used, especially by athletes, are creatine, ephedrine and human growth hormone-releasing compounds. The usage of these components can cause severe damages to health (33).

Regarding high prevalence of body dissatisfaction and eating disorder among students in western and non-western countries, attempts should be made to bring awareness to improve the body image and its consequences. Most preventive interventions involve educational approaches such as cognitive-behavioral intervention (34). In a meta analytic review, the effectiveness of eating disorder prevention programs for females over 15 years was shown.

Other interventional programs, that could target the general self-esteem are the peers' effect and relations, for an effective improvement in body satisfaction and a decrease in the use of harmful body management strategies. All intervention programs should be addressed to associo-environmental (family functioning, weight-related behaviors of family and peers) as well as personal factors (34, 35).

The present study, has some limitations: 1) the survey was done among university students and cannot be generalized to represent the national population, and 2) assessment of related factors that affect body dissatisfaction, such as media effects, socio-cultural pressures could provide better results.

*Acknowledgment*

*This study was done with the financial support of the Neuroscience Research Center of the Kerman University Medical Sciences.*

**Conflict of interest: none declared.**

## REFERENCES

1. The American Heritage, Stedman's Medical Dictionary 2007, by Houghton Mifflin Company.
2. Tiggemann M. Body dissatisfaction and adolescent self-esteem: Prospective findings. *Body Image*. 2005; 2( 2) : 129-135.
3. Robins RW, Trzesniewski KH, Tracy JL, Gosling SD, Potter J. Global self-esteem across the life span. *Psychol Aging*. 2002; 17(3): 423-434.
4. American Psychiatric Association 2000. Diagnostic and statistical manual of mental disorders (Revised 4th ed.). Washington, DC.
5. Littleton HL, Ollendick T. Negative body image and disordered eating behavior in children and adolescents: What places youth at risk and how can these problems be prevented. *Clin Child Fam Psychol Rev*. 2003; 6(1): 51-66.
6. Jackson T, Chen H. Sociocultural Influences on Body Image Concerns of Young Chinese Males. *J Adolesc Res*. 2008; 23(2): 154-171.
7. Fallon EA, Hausenblas HA. Media images of the "ideal" female body: Can acute exercise moderate their psychological impact? *Body Image*. 2005;2(1): 62-73.
8. McCreary D, Sasse DK. An exploration of the drive for muscularity in adolescent boys and girls. *J Am Coll Health*. 2000; 48(6): 297-304.
9. Storvoll EE, Strandbu A, Wichstrom L. A cross-sectional study of changes in Norwegian adolescents' body image from 1992 to 2002. *Body Image*. 2005; 2(1): 5-18.
10. Liechty JM. Body Image Distortion and Three Types of Weight Loss Behaviors Among Nonoverweight Girls in the United States. *J Adolesc Health*. 2010; 47(2): 176-182.
11. Chisuwa N, O'Dea JA. Body image and eating disorders amongst Japanese adolescents. A review of the literature. *Appetite*. 2010; 54(1): 5-15.
12. Ivarsson T, Svalander P, Litlere O, Nevenon L. Weight concerns, body image, depression and anxiety in Swedish adolescents. *Eat Behav*. 2006; 7(2): 161-175.
13. Ricciardelli LA, McCabe MP, Banfield S. Body image and body change methods in adolescent boys: Role of parents, friends and the media. *J Psychosom Res*. 2000; 49(3): 189-197.
14. Gunewardene A, Huon GF, Zheng R. Exposure to westernization and dieting: a cross-cultural study. *Int J Eat Disord* 2001; 29(3): 289-293.
15. Luo Y, Parish WL, Laumann EO. A population-based study of body image concerns among urban Chinese adults. *Body Image*. 2005; 2(4): 333-345.
16. Furnham A, Nordling R. Cross-cultural differences in preferences for specific male and female body shapes. *Pers Individ Dif*. 1998; 25(4): 635-648.
17. Nobakht M., Dezhkam M. An epidemiological study of eating disorders in Iran. *Int J Eat Disord*. 2000; 28(3): 265-71.
18. Shamsaddine Saeed N, Aziz Zade Forooze M, Mohammadalizade S, Haghdoost A, Garrusi B. Relationship between body image and eating disorders. *Iranian Journal of Nursing Research*. 2009; 15(4): 33-43. [in Persian]
19. Akbarbegloo M, Habibpur Z, Motaaref HI. Perception of Body Image in Students and Related Factors. *The Social Sciences*. 2010; 5(4): 368-372.
20. Cook-Cottone C, Phelps L. Body dissatisfaction in college women: Identification of risk and protective factors to guide college counseling practices. *Journal of College Counseling*. 2003; 6(1): 80-89.
21. Bohne A, Wilhelm S, Keuthen NJ, Florin I, Baer L, Jenike MA. Prevalence of body dysmorphic disorder in a German college student sample. *Psychiatry Res*. 2002; 109(1): 101-104.
22. Thomas J, Khan S, Abdulrahman AA. Eating attitudes and body image concerns among female university students in the United Arab Emirates. *Appetite*. 2010; 54(3): 595-598.
23. Shih MY, Kubo C. Body shape preference and body satisfaction in Taiwanese college students. *Psychiatry Res*. 2002; 111(2-3): 215-228.
24. Feingold A, Mazzella R. Gender differences in body image are increasing. *Psychological Science*. 1998; 9(3): 190-195.
25. Tom G, Chen A, Liao H, Shao J. Body image, relationships and time. *J Psychol*. 2005; 139(5): 458-468.
26. Taqui, AM, Shaikh M, Gowani SA, Shahid F, Khan A. Body dysmorphic disorder: Gender differences and prevalence in a Pakistani medical student population. *BMC Psychiatry*. 2008; 8: 20-20.
27. Zuckerman D, Abraham A. Teenagers and Cosmetic Surgery: Focus on Breast Augmentation and Liposuction. *J Adolesc Health*. 2008; 43(4): 318-324.
28. Hill AJ, Franklin JA. Mothers, daughters and dieting: investigating the transmission of weight control. *Br J Clin Psychol*. 1998; 37(Pt 1): 3-13.
29. Keel PK, Heatherton TF, Harnden JL, Hornig CD, Mothers, fathers and daughters: dieting and disordered eating. *Eating Disord*. 1997; 5(30): 216-228.
30. Eaton DK, Kann L, Kinchen S, et al. Youth risk behavior surveillance - United States, 2005. *MMWR. CDC Surveillance Summaries*, 2006 / 55(SS05); 1-108.
31. ASPS. American Society of Plastic Surgeons. National clearinghouse of plastic surgery statistics. 2003; Arlington Heights, IL.
32. Markey CN, Markey PM. A correlational and experimental examination of reality television viewing and interest in cosmetic surgery. *Body Image*. 2010; 7(2): 165-171.
33. Parkes SA, Saewyc E M, Cox DN, MacKay LJ. Relationship Between Body Image and Stimulant Use Among Canadian Adolescents. *J Adolesc Health*. 2008; 43(6): 616-618.
34. Stice E, Shaw H. Eating disorder prevention programs: A meta-analytic review. *Psychol Bull*. 2004;130(2) : 206-227.
35. O'Dea JA, Abraham S. Improving the body image eating attitudes, and behaviors of young males and female adolescents: A new education approach that focuses on self-esteem. *Int J Eat Disord*. 2000; 28(1): 43-57.