

## The Relationship between Eating Disorders with Body Dissatisfaction and the Quality of Life among Normal and Affected Females in Mahabad, Iran

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**Abstract:** Eating disorders are syndromes characterized by severe disturbances in eating and excessive concern about body shape or weight. This field study was performed on a 200-member sample containing an equal number of women both with eating disorders and normal, selected based on convenience sampling method. The short form-36 (SF-36) questionnaire and the Eating disorder inventory (EDI) were applied to measure the research variables. The data was analyzed through Pearson's correlation coefficient. It was indicated that increased eating disorders contribute to higher body dissatisfaction and poorer quality of life. Separate studies on normal and affected women, also, indicated that eating disorders in affected women had a positive significant relationship with body dissatisfaction ( $r= 0/382$ ) and an inverse relationship with their quality of life ( $r= - 0/263$ ). In normal women, there was a positive significant relationship between eating disorder and body dissatisfaction ( $r= 0/534$ ); however, no significant relationship was found between eating disorders and the quality of life ( $r= - 0/053$ ).

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### Introduction

Eating disorders are illnesses in which the victims suffer severe disturbances in their eating behaviors and related thoughts and emotions. Those suffering from eating disorders typically become obsessed with food and their body weight as well. Eating disorders affect some several million people at any given time, most often women between the ages of 12 and 35. There are two main types of eating disorders, anorexia nervosa and bulimia nervosa. People with anorexia nervosa and bulimia nervosa tend to be perfectionists who suffer from low self-esteem and are extremely critical of themselves and their bodies. They usually "feel fat" and see themselves as overweight, sometimes even despite life-threatening semi-starvation (or malnutrition). An intense fear of gaining weight and of being fat may become all pervasive. In early stages of these disorders, patients often deny that they have a problem. (American Psychiatric Association, 2005; National Institute of Mental Health, 2011).

There is no easy treatment for eating disorders and the consequences of unsuccessful treatment are substantial. For example, individuals with anorexia suffer from the highest overall mortality rate of all psychiatric disorders (Agras, Hammer, McNicholas and Kraemer, 2004 ) and a 57 fold greater risk of suicide than their peers without eating disorders (Keel, Dorer, Eddy, Franko, Charatan and Herzog, 2003 ).

One possible predictor of eating disturbances is body image. Body image is a multidimensional phenomenon whereby the main focus is on body appearance in modern societies (Cash & Pruzinsky, 2002). Negative body image consists of two components: one evaluative (body dissatisfaction) and one investment (importance) (Cash, Melnyk & Hrabosky, 2004 ).

Body dissatisfaction is " negative subjective evaluation of one's physical body, such as figure, weight, stomach and hips (Stice & Shaw, 2002 ) that often defined and measured as the discrepancy between a woman's perception of her own body, and her perceptions of her ideal body ( Tiggemann & Ruutel,2001; Tiggemann, Verri & Scaravaggi,2005; Williamson, Gleaves, Watkins & Schlundt, 1993 ) with decreased self-esteem ( Tiggemann, 1997 ), excessive dieting (Stic, Mazotti, Krebs & Martin, 1998 ), and increased chance of development of eating disorders ( Leonn, Fulkerson, Perry & Cudeck, 1993; Thompson, Heinberg, Altabe & Tantleff-Dunn, 1999 )

Extensive research has investigated body dissatisfaction in relation to body change attitudes and behaviours (McCabe & Ricciardelli, 2004; Ricciardelli & McCabe, 2003). Body dissatisfaction has been identified as a prominent factor in the development of clinical eating disorders and in sub-clinical problematic eating ( Cooley & Toray, 2001b).

A core component of body dissatisfaction is appearance-based social comparisons. That is, an observer becomes dissatisfied with her body when she unfavorably compares her own body with other people's bodies ( Joseph & Maggie, 2011 ).

Body dissatisfaction correlates to general eating disorder symptoms, including those of restraint eating and symptoms of bulimia. In particular, body dissatisfaction correlates more strongly to eating disorder symptoms in general than to restraint eating, and substantially less to symptoms of bulimia ( Jonstang, 2009 ).

Also, insecure attachment appears to be a consistent correlate of negative body image evaluations in women with either anorexia nervosa or bulimia nervosa ( Troisi, Di Lorenzo, Alcini, Nanni, Di Pasquale & Siracusano, 2006 ).

Up to now, many studies have been done on eating disorders which have indicated the decrease of life quality in this group of patients, significantly.

According World Health Organization explanation, the quality of life is individuals understanding of their own situation in life, and in cultural texture and system of values which they live with, and their purposes, expectations, standards, and priorities. The concept is totally intellectual and isn't observable by others and also it is based on individuals understanding of different aspects of life (World Health Organization, 1996).

Researchers have pointed out that eating disorders have a significant influence on life quality. It was reported that individuals with eating disorders have worse life quality in all areas of physical and mental health in comparison with healthy individuals (Grylli, Wagner, Gattermayer, Schober & Karwautz, 2005 DeJong, Oldershaw, Sternheim, Samarawickrema, Kenyon, Broadbent, Lavender, Startup, Treasure & Schmidt, 2013).

Leung, Ma & Russell, 2013 Baiano, Salvo, Righetti, Cereser, Baldissera, Camponogara & Balestrieri, 2014 that, sometimes have effect on mental dimension of the life quality related to health dimensions The low life quality can be appeared by eating disorder, intensity, depression and anxiety behaviors ( Leung, Ma & Russell, 2013 ), In another study on under treatment individuals and patients with eating disorders, it was indicated that the duration of eating disorders treatment is related to the life quality improvement. Also, the life quality can be more desirable with the progress of the recovery processes (Adair, Marcoux, Cram, Ewashen, Chafe, Cassin, Pinzon, Gusella, Geller, Scattolon, Fergusson, Styles, and Brown, 2007).

The conducted studies results on women highlighted that there was a relationship between body dissatisfaction and impressive disorder in the life

quality aspects related to mental health and psychosocial function and some physical health aspects at least (Mond, Mitchison, Latner, Hay, Owen & Rodgers, 2013 ).

According to the researcher's results, the effect of body image on the life quality in eating disorder individuals is more negative than the nonclinical samples. Body image in the life quality is negatively correlated with relevant and specific variables of eating disorder patients more than other psychological and psychopathology variables of them ( Lobera & Rios, 2011 ).

### Methodology

This research was a descriptive-correlation study. The statistical population was included the referring infected women with eating disorder to Anahid and Molodi klinik in the Mahabad city, Iran that 100 individuals of them were selected during the diagnostic interview (according to the criteria of statistical diagnostic manual, fourth version).

Data were collected as field method which was selected by convenience sampling method. This study was performed in a manner that participants were explained about overall objective. Afterwards, the clinical interview was performed based on DSM-IV-TR diagnostic criteria. Three questionnaires were used to conclude information of responders including Garner and et al. the eating disorders questionnaire and life quality questionnaire based on the Var and sherbon pattern.

### Questionnaire

**The Eating Disorder Inventory (EDI):** The Eating Disorder Inventory is a 64-item scale for measuring psychological characteristics and symptoms of anorexia nervosa and bulimia nervosa, which was provided by Garner, Olmsted and Polivy (1983).

This questionnaire is one of the most important self-descriptive tools which are used for eating disorders. It has 6 option (from always until never) with the range of 0 to 3 score. This questionnaire had 8 subscales that in present study were used eating disorder symptoms subscale, only. This subscale includes weight loss tendency, bulimia and body image dissatisfaction.

Garner and et al (1983) reported that internal correlation range of the subscales was 0.30- 0.058. Cronbach's alpha was calculated by Garner et al. 0.08. In fact, calculated Cronbach's alpha in the Iranian version is 0.76. (Shayeghian, 2008).

**Health-Related QOL standard questionnaire SF-36:** The SF-36 has eight subscales including: Physical function, Role limitations due to physical health, and Role limitations due to emotional problems, Energy/fatigue, Emotional wellbeing, social functioning, Pain and General health. Final translation

and determination of standard questionnaire SF-36 for people with 15 ages and over 15 ages have been done in Iran. Reported a coefficient for the eight subscales are in range of 65% to 90% which shows good inner persistency of these subscales. Other measuring such as getting the validity was considered which verified suitability of the tool in Iran society (Montazeri, Ghastasbi, Vahdani niya, 2005).

After collecting questionnaires, raw data were analyzed by SPSS-16 software and by conducting correlation and regression analyses' tests.

### Results

In this study, 200 individuals were participated including women with eating disorders and normal women (at equal numbers). Descriptive results were showed for each variable in table 1.

**Table 1.** Summary of the descriptive results obtained from SF-36 questionnaire and EDI questionnaire of Normal and Affected Females separately.

Variables	Individuals	Mean	SD
Anorexia	Affected Females	9.80	5.847
	Normal Females	6.14	5.284
	total	7.97	5.853
Bulimia	Affected Females	2.68	3.722
	Normal Females	2.25	3.151
	total	2.47	3.446
Body dissatisfaction	Affected Females	11.15	6.858
	Normal Females	7	6.186
	total	9.08	6.838
Eating disorder	Affected Females	12.48	7.642
	Normal Females	8.39	6.932
	total	10.44	7.561
Quality of life	Affected Females	62.24	15.647
	Normal Females	66.47	16.062
	total	64.35	15.957

To investigate the relationship between the eating disorders, body dissatisfaction and life quality was used Pearson correlation significance test. As shown in table 2, eating disorders has significant negative

correlation with body dissatisfaction ( $r=0.496$  and  $P<0.000$ ). It has significant negative correlation with quality of life ( $r=0.190$  and  $P<0.007$ ), as well.

**Table2.** Results summary of pierson correlative significant test

		Body dissatisfaction	Quality of life
Eating disorder	Pierson correlation	0.496**	-0.190**
	Significant level	0.000	0.007

.\*\*Correlation is significant at the 0.01 level.

.\*Correlation is significant at the 0.05 level.

In a separate investigation to infected women with eating disorders, the relationship among eating disorders, body dissatisfaction and life quality were

examined. Pearson correlation significant test was used to analysis that result was illustrated in table 3.

**Table3.** Results summary of Pierson correlation significance test among women with eating disorders

		Body dissatisfaction	Quality of life
Eating disorder	Pierson correlation	0.382**	-0.263**
	Significant level	0.000	0.008

.\*\*Correlation is significant at the 0.01 level.

.\*Correlation is significant at the 0.05 level.

According table 3, there was a significant positive correlation between eating disorders and body dissatisfaction ( $r=0.382$  and  $P<0.000$ ) while, was significant negative correlation between the eating disorders and life quality ( $r=0.263$  and  $P<0.008$ ) in women with eating disorders.

The same study was conducted on normal women that the results were showed in table 4. As can be seen, eating disorders had significant positive correlation with body dissatisfaction ( $r= 0.534$  and  $P < 0.000$ ). There was no correlation between eating disorders and life quality ( $r= 0.053$  and  $P< 0.602$ ).

**Table 4.** Results summary of Pierson correlation significance test among normal women

Eating disorder	Body dissatisfaction		Quality of life
	Pierson correlation	0.534**	-0.053
Significant level	0.000	0.602	

\*\*Correlation is significant at the 0.01 level.

\*Correlation is significant at the 0.05 level.

### Discussion And Conclusion

The results indicated that there was a significant positive relationship between eating disorders and body dissatisfaction. Also, there was a significant negative relationship between eating disorders and life quality. In other words, with the appearance eating disorders symptoms were started body dissatisfaction. There was more body dissatisfaction while, disorder intensity to be higher. On the other hand, individuals experience a worse life quality with more severe eating disorders.

Different studies on normal and infected women showed that eating disorders is associated with body dissatisfaction and lower life quality. As, with increasing eating disorders, body dissatisfaction to be more. Eventually, this is lead to defective life quality in these people. Whereas, only body dissatisfaction is increased in normal women. Therefore, can be concluded from above findings that body dissatisfaction is increased in women with eating disorders and life quality process is weaker. This subject can be true, particularly more severe, for infected women to eating disorders.

According to Jonstang (2009) findings, body dissatisfaction is correlated with common eating disorders symptoms such as avoidance eating and binge eating symptoms. Especially, body dissatisfaction more correlated with eating disorders symptoms than avoidance eating symptoms. This correlation was less with symptoms binge eating.

Cooley and Toray (2001) studies also highlighted that body dissatisfaction is one of the noticeable factor in development of clinical eating disorders.

In Grylli et al (2005) research on diabetic juvenile type 1, that subjects were divided into two groups with eating disorders and without eating disorders and Leong et al. (2013) in a study about eating disorders and healthy individuals, have pointed

out that eating disorders people have lower psychological and physical life quality than other groups.

In other interesting studies, Adair et al (2007) and Leung, Ma and Russell (2013) studied the eating disorders and healthy individuals. They found that the duration of the eating disorders treatment was correlated with life quality improvement. Furthermore, life quality can be more desirable with the progress of the recovery processes. These improvements were occurred in the life quality, eating disorder psychopathology, depression intensity, anxiety and motivational processes.

DeJong et al. (2013) and Baiano et al. (2014) highlighted that lower life quality can be appeared with eating disorder behaviors, symptoms intensity, depression and anxiety which sometimes mental dimension of the life quality related to health is the most affected dimension.

According to the Lobera and Rios (2011) results, the effect of body image on life quality in eating disorder individuals was more negative than the nonclinical samples. Body image in the life quality is negatively correlated with relevant and specific variables of eating disorder patients more than other psychological and psychopathology variables of them. The conducted study on women by Mond et. al (2013) clarified that body dissatisfaction has relationship with impressive disorder in the life quality aspects related to mental health and psychosocial function and some physical health aspects at least.

The result of current study is in line with the other researcher findings therefore, it can be said that there is weaker relationship between eating disorders, increasing body dissatisfaction and life quality.

**References**

1. Adair, C. E., Marcoux, G. C., Cram, B. S., Ewashen, C. J., Chafe, J., Cassin, S. E., Pinzon, J., Gusella, J. L., Geller, J., Scattolon, Y., Fergusson, P., Styles, L., and Brown, K. E. 2007. Development and multi-site validation of a new condition-specific quality of life measure for eating disorders. *Health and Quality of Life Outcomes*, 5-23.
2. Agras WS, Hammer LD, McNicholas F, Kraemer HC. 2004. Risk factors for childhood overweight: a prospective study from birth to 9.5 years. *J Pediatr*. 145(1):20-5.
3. American Psychiatric Association. 2005. Let's Talk Facts About Eating Disorders: Healthy Minds, Healthy Lives. Arlington, Va.: American Psychiatric Publishing.
4. Baiano M, Salvo P, Righetti P, Cereser L, Baldissera E, Camponogara I, Balestrieri M. 2014. Exploring health-related quality of life in eating disorders by a cross-sectional study and a comprehensive review. *BMC Psychiatry*; 14:165.
5. Cash, T. F., & Pruzinsky, T. (Eds.). 2002. *Body image: A handbook of theory, research, and clinical practice*. New York: Guilford.
6. Cash, T. F., Melnyk, S. E., & Hrabosky, J. I. 2004. The assessment of body image investment: An extensive revision of the Appearance Schemas Inventory. *International Journal of Eating Disorders*, 35, 305–316.
7. Cooley, E., & Toray, T. 2001a. Body image and personality predictors of eating disorder symptoms during the college years. *International Journal of Eating Disorders*, 30, 28– 36.
8. DeJong H, Oldershaw A, Sternheim L, Samarawickrema N, Kenyon MD, Broadbent H, Lavender A, Startup H, Treasure J, Schmidt U. 2013. Quality of life in anorexia nervosa, bulimia nervosa and eating disorder not- otherwise-specified. *Journal of Eating Disorders*; 1:43.
9. Garner, D. M, Olmsted Ph. D & Polivy M. A. J, (1983). Development and Validation of a Multidimensional Eating Disorder Inventory For Anorexia Nervosa and Bulimia, *International journal Eating Disorders*, Vo. 2 No. 2. xxx–xxx.
10. Grylli, V., Wagner, G., Hafferl-Gattermayer, A., Schober, E., and Karwautz, A. 2005. Disturbed eating attitudes, coping styles, and subjective quality of life in adolescents with Type 1 diabetes. *Journal of Psychosomatic Research*, 59, 65– 72.
11. Jonstang, IC. 2009. The effect of body dissatisfaction on eating disorder symptomatology: Mediating effects of depression and low self-esteem. Master of Philosophy in Psychology, Department of Psychology, Universitetet i Oslo.
12. Joseph, Ch & Maggie Sh. 2011. Do Observers' Negative Self-Evaluations of Their Own Bodies Mediate Their Visual Attention Towards Other Bodies? *Vision Sciences Society*; 2.
13. Keel PK, Dorer DJ, Eddy KT, Franko D, Charatan DL, Herzog DB. 2003. Predictors of mortality in eating disorders. *Arch Gen Psychiatry*. 60(2):179-83.
14. Leon, G. R., Fulkerson, J. A., Perry, C. L., & Cudeck, R. (1993). Personality and Behavioural Vulnerabilities Associated With Risk Status for Eating Disorders in Adolescent Girls. *Journal of Abnormal Psychology*, 102,438-444.
15. Leung SF, Ma JLC, Russell J. 2013. Enhancing quality of life in people with disordered eating using an online self-help programme. *Journal of Eating Disorders*; 1:9.
16. Lobera, I. J., & Rios, P. B. 2011. Body image quality of life in eating disorders. *Journal Patient Preference and Adherence*, 109–116.
17. McCabe, M. P., & Ricciardelli, L. A. 2004. Body image dissatisfaction among males across the lifespan: A review of past literature. *Journal of Psychosomatic Research*, 56, 675–685.
18. Mond J, Mitchison D, Latner J, Hay Ph, Owen C, Rodgers B. 2013. Quality of life impairment associated with body dissatisfaction in a general population sample of women. *BMC Public Health*, 13:920.
19. Montazeri A, Goshtassbi A, Vahdaninia MS, 2005. Translate, signification stability & justifiability form Persian questionnaire SF-36. Tehran: Payesh press (5):49-56(Persian).
20. National Institute of Mental Health 2011.. *Eating Disorders*. U. S. Department of Health and Human Services, national institutes of Health, NIMH publication no. 11 -4901.
21. Ricciardelli, L. A., & McCabe, M. P. 2003. Sociocultural and individual influences on muscle gain and weight loss strategies among adolescent boys and girls. *Psychology in the Schools*, 40, 209-224.
22. Shayeghian Z, 2008. Explore the relationship between parental bonding, early maladaptive beliefs, beliefs eating disorder, eating disorder symptoms. Dissertation. Tehran: TMU ( Persian ).
23. Stice, E., Mazotti, L., Krebs, M., & Martin, S. 1998. Predictors of adolescent dieting behaviours: A Longitudinal study. *Psychology of Addictive Behaviours*.12,195-205.
24. Stice, E., & Shaw, H. E. 2002. Role of body dissatisfaction in the onset and maintenance of eating pathology: A synthesis of research

- findings. *Journal of Psychosomatic Research*. 53, 985-993.
25. Thompson, K. J., Heinberg, L., Altabe, M., & Tantleff-Dunn, S. 1999. *Exacting beauty: Theory, assessment, and treatment of body image disturbance*. Washington, DC: American Psychological Association.
  26. Tiggemann, M. 1997. Dieting in moderation: The role of dietary restraint in the relationship between body dissatisfaction and psychological well-being. *Journal of Health Psychology*, 2, 501-507.
  27. Tiggemann, M., Verri, A., & Scaravaggi, S. 2005. Body Dissatisfaction, disordered eating, Fashion magazines, and clothes: A cross-cultural comparison between Australian and Italian young women. *International Journal of Eating Disorders*, 40, 293-302.
  28. Tiggemann, M., & Ruutel, E. 2001. A cross-Cultural comparison of body dissatisfaction in Estonian and Australian young adults and its relationship with media exposure. *Journal of Cross-Cultural Psychology*, 32, 736-742.
  29. Troisi, A., Di Lorenzo, G., Alcini, S., Nanni, RC., Di Pasquale, C., Siracusano, A. 2006. Body dissatisfaction in women with eating disorders: relationship to early separation anxiety and insecure attachment. *Psychosom Med*. 2006 May-Jun;68(3):449-53.
  30. WHO Quality of Life Group. 1996. WHOQOL-BREF Introduction, Administration and scoring, Field Trial version. World Health Organization, Geneva.
  31. Williamson, D. A., Gleaves, D. H., Watkins, P. C., & Schlundt, D. G. 1993. Validation of the self-ideal body size discrepancy as a measure of body dissatisfaction. *Journal of psychopathology and Behavioral Assessment*, 15, 57-68.

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