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The Effect of Unified Therapy on Quality of Life in Patients with Eating Disorder

Maliheh Rahmani[1], Abdollah Omidi[2], Fatemeh Rahmani[3]

[1] Department of Clinical Psychology, School of Medicine, Kashan University of Medical Sciences, Kashan, Iran
[2] Associate Professor, Department of Clinical Psychology, School of Medicine, Kashan University of Medical Sciences, Kashan, Iran
[3] MSc Student, Department of Psychology, School of Humanities, University of Kashan, Kashan, Iran

Quantitative Study

Abstract

Background: This study was designed to determine the effect of unified therapy on quality of life (QOL) in patients with eating disorder.
Methods: The study population consisted of all women diagnosed with eating disorder in Kashan, Iran. A total of 95 patients in Kashan city were screened, from among whom, 60 were randomly selected and assigned to experimental and control groups. The experimental group received 12 sessions of unified therapy, while the control group did not receive any intervention. Subjects in both groups were evaluated for health related QOL.
Results: The results of ANCOVA revealed a significant difference between the experimental and control groups in terms of QOL.
Conclusion: Unified therapy with lifestyle variation, interpersonal relationships improvement, emotion regulation strategies, distress tolerance, and mindfulness is effective on QOL.
Keywords: Unified therapy, Eating disorder, Quality of life

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Introduction

Overweight is mainly caused by imbalance between consumed calories (energy) and received calories (energy) (Kim & Popkin, 2006). Overweight can lead to social isolation, lack of attention, depression, anxiety, and other behavioral problems (Bidadian & Bahrami Ehsan, 2013). Moreover, overweight not only gives rise to debilitating diseases like diabetes and coronary heart disease (CHD), but also may cause serious issues in terms of quality of life (QOL) (Duval et al., 2006), and may increase somatoform and psychiatric disorders (Kress, Peterson, & Hartzell, 2006). For instance, it may increase the probability of eating disorder (Bruce & Agras, 1992; Spitzer et al., 1992). Eating disorder is a sort of psychological disease associated with unusual eating habits or unusual weight control behaviors. Eating disorder includes several kinds such as anorexia nervosa, bulimia nervosa, binge eating disorder (BED), and eating disorder not otherwise specified (EDNOS), among

Corresponding Author:
Abdollah Omidi
Email: abomidi20@yahoo.com

which BED is the most common. Researches have revealed that the prevalence of eating disorder increases with increase in obesity (Bruce, & Agras, 1992; Spitzer et al., 1992; Telch, Agras, & Rossiter, 1988). A negative relationship has been observed between body mass index (BMI) and QOL in obese people. QOL is a wide range of objective human needs fulfilled in relation to one's personal understanding of feeling good and well-being. The absence of diseases is not equivalent to high QOL; QOL is equal to a sense of well-being in various mental, social, and functional domains (Zhang, Wisniewski, Bauer, Sachs, & Thase, 2006). The evaluation of QOL is applied as a beneficial tool for assessing the function and disintegration of mental health (Namjoshi & Buesching, 2001). Studies have confirmed that all aspects of individual's QOL are impaired among overweight individuals who are determined to lose weight. Without the consideration of the amount of fatness, QOL is more seriously impaired in different aspects like physical pain, energy, and general health among overweight people who are determined to lose weight rather than those who do not care about their treatment (Lillis, Levin, & Hayes, 2011). One study investigated the effects of BED on QOL and its results proved that mental distress was significantly higher among overweight people suffering from BED compared with overweight people without this disorder (Rieger, Wilfley, Stein, Marino, & Crow, 2005). Moreover, it has been revealed that treating pathological eating habits before handling fatness among overweight people will bring about better results of weight loss (de Zwann, 2001). Accordingly, a treatment which considers both the individual's eating disorder and fatness is vital for successful weight loss and maintenance; such a treatment would lead to the enhancement of QOL. In this respect, a unified therapy which emphasizes emotion regulation seems a suitable choice (Barlow et al., 2010). Barlow's unified therapy protocol (Barlow, Allen, & Choate, 2004; Allen, McHugh, & Barlow, 2008) is presented for people with anxiety and mood disorders and offers a high potential usability for other emotional disorders. In order to compile this protocol, the similarities and parallel features of various emotional disorders such as transdiagnostic factors and higher level (like negative emotion, perfectionism, rumination, emotion regulation problems, worry, and insomnia) have been taken into account. Furthermore, the high rate of comorbidity between these disorders and high amount of amelioration of comorbid disorders with the main disorder under treatment have been regarded (Wilamowska, Thompson-Hollands, Fairholme, Ellard, Farchione, & Barlow, 2010). According to the conducted researches, a unified therapy would be effective in lessening the symptoms of anxiety disorders (Bakhshipour Roodsari, Mahmood Aliloo, Farnam, & Abdi, 2013; Akbari, Roshan, Shabani, Fata, Shairi, & Zarghami, 2015) and depression (Akbari et al., 2015; Zemestani & Imani, 2016) and will result in emotion regulation (Akbari et al., 2015; Zemestani, & Imani, 2016; Mohammadi, Birashk, & Gharraee, 2014; Hooman, Mehrabizadeh Honarmand, Zargar, & Davodi, 2016), social and vocational adjustment (Akbari et al., 2015) and general performance improvement (Hooman et al., 2016).

Considering the importance of eating because of its connection to health and wellbeing, and patients' dissatisfaction because of the transient effect of surgical and pharmaceutical treatments (Stallone & Stunkard, 1991; Balsiger,, Murr, Poggio, & Sarr, 2000; Fairburn, & Brownell, 2002), it seems that psychological treatments would be the most prevalent and available treatments (Wing, 2004). However, psychological methods encompass some contradictions, and pros and cons (Agras, Crow, Halmi, Mitchell, Wilson, & Kraemer, 2000; Halmi et al., 2002). Therefore, the present study investigated the effectiveness of unified therapy protocol on QOL among people suffering from eating disorders.

Methods

Participants: The participants of the study were women of a mean age of 30.22 years who suffered from eating disorders and were referred to the Specialized Nutrition Clinic in Kashan, Iran.

Inclusion criteria: Patients were included if they were diagnosed as binge eaters, were at least 20 years old, received the prescribed diet from a nutritionist and were willing to participate in the study.

Exclusion criteria: The exclusion criteria were severe physical illnesses as the main reason of obesity (e.g., diabetics who use insulin or cancer patients who undergo chemotherapy), pregnancy or lactation, history of drug abuse, and absence from more than 3 sessions.

Study design: This study was conducted using a quasi-experimental design with treatment and control groups. The diagnosis of BED was verified through structured clinical interview using the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (SCID-DSM-IV-TR) (Mohammadkhani, Jahani Tabesh, Tamannaiefar, Jokar, 2031). The participants were randomly placed into treatment and control groups. The scores of the World Health Organization Quality of Life (WHOQOL-BREF) questionnaire were evaluated before and after the study. Patients were asked not to change their lifestyle and to maintain their usual habits, exercise, diet, and medication. Their medication and diet were also recorded. They were then randomly assigned to two groups [unified therapy (n = 30) and control (n = 30)] based on a table of random numbers.

Structured clinical interview based on the 4th diagnostic and statistical manual of mental disorders: This interview is designed based on the diagnostic criteria of the SCID-DSM-IV-TR of the American Psychiatric Association to diagnose mental disorders structurally. By asking questions about the symptoms of mental disorders in this interview, the diagnosis of BED was confirmed (Mohammadkhaniet al., 2013). The validity and reliability of this scale has been examined and approved in Iran (Amini et al., 2018; Sharifi et al., 2004).

The World Health Organization Quality of Life questionnaire: In order to determine the individuals' QOL, the WHOQOL-BREF questionnaire was utilized. The WHOQOL-BREF has been designated by the World Health Organization (WHO) in 1996. This questionnaire consists of a total of 26 items. The first two items do not belong to any special domains and evaluate the overall QOL condition. The remaining 24 items measure the domains of physical health (8 items), psychological health (6 items), environment (7 items), and social relationships (3 items). The validity and reliability of this scale has been examined and approved in Iran (Nejat, Montazeri, Holakouie Naieni, Mohammad, & Majdzadeh, 2006). Higher scores in this scale are illustrative of a higher QOL.

Intervention

Unified therapy: Unified therapy, based on the transdiagnostic therapy of Barlow, was presented in 12 sessions (each lasting 60 minutes) comprising 8 modules. The modules were motivation enhancement, psycho-education or treatment logic, teaching emotion awareness, cognitive reappraisal, emotion driven behaviors, awareness and tolerance of physical emotions, interceptive and situational exposure, and relapse prevention (Barlow et al., 2010). The primary emphasis of this treatment is on the way patients with emotional disorders experience and respond to their emotions (Norton, Hayes, & Hope, 2004). Treatment sessions target treatment plans focusing on different parts of protocol. The control group participants were told to avoid psychotherapy over the 12 weeks they were on the waiting list. They were offered treatment at the end of the waiting list period.

Statistical methods and sample size: The data were analyzed according to the

intention-to-treat (ITT) principle using the Statistical Package for the Social Sciences software (Version 18, SPSS Inc., Chicago, IL, USA). To determine the effects of the treatment on QOL, ANCOVA was used to evaluate the between group differences in variables during the study. In order to examine the efficacy of the intervention, the minimum sample size was calculated using the Cohen formula (Cohen, 1992; Cohen, Cohen, West, & Aiken, 2013). The results showed that 26 people were needed in each group. With the consideration of the probability of participant withdrawal and available resources, this study was performed on 2 groups of 30 patients (total of 60 patients).

Results

Standard deviation of the investigated groups during pre-test and post-test are represented separately in table 1. In order to analyze the observed differences, ANCOVA was applied to scrutinize the differences between the two groups. The ANCOVA results of QOL of different means are represented in table 2. The results in table 2 reveal that there is a significant difference among the participants of the two groups after modifying the scores of pre-test (Partial ŋ2 = 0.715, P = 0.001, F = 132.25).

Table 1. Descriptive components of quality of life before and after the intervention in the study groups

	Treatment group (n = 30) Mean ± SD	Control group (n = 30) Mean ± SD
Pre-test	35.23 ± 3.02	36.01 ± 2.92
Post-test	41.12 ± 2.99	35.80 ± 3.75

SD: Standard deviation

Discussion

The purpose of this study was to investigate the effectiveness of unified therapy on QOL in people with eating disorder. The results of the research indicated that the unified therapy was influential in improving QOL in patients with binge eating disorder. The obtained results are in accordance with the results of previous researches (Grilo & Masheb, 2005; Telch, 1997; Kristeller & Hallett, 1999). According to the results, unified therapy can have a positive effect on QOL in different patients.

The emotion regulation model has been developed based on numerous researches considering the relationship between negative emotion and eating disorders (Arnow, Kenardy, & Agras, 1992; Polivy & Herman, 1993; Fairholme, Boisseau, Ellard, Ehrenreich, & Barlow, 2010). In fact, this model regards pathologic eating patterns as a behavioral endeavor for impressing, changing, or controlling painful emotions. In eating disorders, overeating acts as an instrument for negative reinforcement or provisional avoidance of these emotions (Arnow et al., 1992; Polivy & Herman, 1993; Fairholme et al., 2010). Accordingly, based on the logic of unified therapy, improvement and significant clinical changes in emotional disorders of patients with eating disorder may be the result of emphasizing on emotion regulation, recurrent thoughts, and negative emotions, which are considered in the modules of the protocol (Fairholme et al., 2010).

Comparing the scores of pre-test and post-test, it can be noted that unified therapy had a positive effect on patients' QOL.

Table 2. Results of ANCOVA regarding quality of life in the treatment and control groups

	Source	SS	df	MS	F	P-value.	eta
		160.34	1	160.34	195.90	0.001	0.654
	Groups	101.81	1	101.81	120.70	0.001	0.602
Quality of life	Pre-test	6.50	1	6.50	8.30	0.005	0.95
	Error	38.56	54	0.59			
	Total	1302	57				

df: Degrees of freedom

It can be declared that based on conducted researches eating is a behavior that is extremely influenced by emotional states. The central part of unified therapy is concerned with emotion regulation skills. Reducing disorder symptoms during emotion regulation has been taken into consideration in transdiagnostic programs. The reason is that in this method the behavioral element of overeating therapy focuses on stabilizing and normalizing eating habits. In addition, planning for meals and nutritious instructions are included and the individuals must stop overeating cycles. The individuals are taught to eat less amounts of food regularly. Furthermore, the cognitive element of this therapy is detecting and altering behaviors which had started the overeating cycle or caused its continuation. This desirable change occurs as a result of confronting deficient thoughts that accompany overeating. This protocol offers realistic information and induces patients to stop eating unhealthy foods. Moreover, designated behavioral methods do not lead to the loss of control over eating entirely.

This therapy helps the patients to replace their unhealthy diet and polyphagia with eating healthily and efficiently, to self-examine their behaviors, and to develop new habits. It offers simple exercises for obtaining skills to control cognitive procedures. Accordingly this therapy decreased the degree of polyphagia among obese individuals via prevention of any behavior which interferes with the therapy (for instance stopping overeating and impulsive eating, reducing appetite, craving, and preoccupation with food, and increasing tolerance against craving) and resulted in QOL improvement.

The most evocative factors of overeating are worry and negative mood (Fairholme et al., 2010). Previous researches have indicated similar results about the effect of negative mood on overeating evocation. These studies have declared that one main potential reason for people overeating at times of negative mood and emotions is that these people interpret a situation as more stressful than it actually is. There might be some deficiencies in their emotion regulation system. Since QOL is significantly correlated with stress and depression, it is believed that by performing regular mindfulness exercises, tolerating pains and distress, regulating emotions, and enhancing interpersonal relationships positive changes will occur in psychological functions and performances such as QOL.

Transdiagnostic interventions help people learn how to face their inappropriate emotions and react more suitably to their emotions. This method tries to normalize emotion regulation habits and decrease the effects of emotional habits occurrence. By doing so, the method decreases harms and increases functionality. In this approach, thoughts, behaviors, and emotions have a dynamic interaction and every one of them plays an important role in emotion experience and has an effect on it (Newman et al., 2002).

Conflict of Interests

Authors have no conflict of interests.

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References

Agras, W. S., Crow, S. J., Halmi, K. A., Mitchell, J. E., Wilson, G. T., & Kraemer, H. C. (2000). Outcome predictors for the cognitive behavior treatment of bulimia nervosa: data from a multisite study. *Am.J Psychiatry, 157*(8), 1302-1308. doi:10.1176/appi.ajp.157.8.1302 [doi]. Retrieved from PM:10910795

Akbari, M., Roshan, R., Shabani, A., Fata, L., Shairi, M. R., & Zarghami, F. (2015). The comparison of the efficacy of transdiagnostic therapy based on repetitive negative thoughts with unified transdiagnostic therapy in treatment of patients with co-occurrence anxiety and depressive disorders: A randomized clinical trial. *Iran J Psychiatry Clin Psychol*, *21*(2), 88-107.

Allen, L. B., McHugh, R. K., & Barlow, D. H. (2008). Emotional disorders: A unified protocol. In D. H. Barlow (Ed.), Clinical handbook of psychological disorders: A step-by-step treatment manual (pp. 216-249). New York, NY, US: Guilford Press.

Amini, H., Sharifi, V., Asadi, S. M., Mohammadi, M. R., Kaviani, H., Semnani, Y. et al. (2018). Validity of the Iranian version of the structured clinical interview for DSM-IV (SCID-I) in the diagnosis of psychiatric disorders. *Payesh Health Monit, 7*(1), 49-57.

Arnow, B., Kenardy, J., & Agras, W. S. (1992). Binge eating among the obese: A descriptive study. *J Behav Med, 15*(2), 155-170. Retrieved from PM:1583679

Bakhshipour Roodsari, A., Mahmood Aliloo, M., Farnam, A., & Abdi, R. (2013). Efficacy evaluation of unified transdiagnostic treatment in symptoms reduction of patients with generalized anxiety disorder and a comorbid emotional disorder. *Journal of Modern Psychological Researches, 32*(41), 47.

Balsiger, B. M., Murr, M. M., Poggio, J. L., & Sarr, M. G. (2000). Bariatric surgery. Surgery for weight control in patients with morbid obesity. *Med Clin North Am., 84*(2), 477-489. doi:S0025-7125(05)70232-7 [pii]. Retrieved from PM:10793653

Barlow, D. H., Farchione, T. J., Fairholme, C. P., Ellard, K. K., Boisseau, C. L., Allen, L. B. et al. (2010). *Unified protocol for transdiagnostic treatment of emotional disorders: Therapist guide* (1st ed.). Oxford, UK: Oxford University Press.

Barlow, D. H., Allen, L. B., & Choate, M. L. (2004). Toward a unified treatment for emotional disorders. *Behavior Therapy, 35*(2), 205-230.

Bidadian, M., & Bahrami Ehsan, H. (2013). A review on present challenges in treatment of obesity. *J Res Behav Sci, 10*(7), 757-771.

Bruce, B., & Agras, W. S. (1992). Binge eating in females: A population-based investigation. *International Journal of Eating Disorders, 12*(4), 365-373.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences.* London, UK, Routledge.

Cohen, J. (1992). Statistical power analysis. *Current Directions in Psychological Science, 1*(3), 98-101.

de Zwann, M. (2001). Binge eating disorder and obesity. *Int J Obes.Relat.Metab.Disord., 25(Suppl 1)*, S51-S55. doi:10.1038/sj.ijo.0801699 [doi]. Retrieved from PM:11466589

Duval, K., Marceau, P., Lescelleur, O., Hould, F. S., Marceau, S., Biron, S. et al. (2006). Health-related quality of life in morbid obesity. *Obes.Surg, 16*(5), 574-579. doi:10.1381/096089206776944968 [doi]. Retrieved from PM:16687024

Fairburn, C. G., & Brownell, K. D. (2002). Current pharmacological treatments for obesity. IN K. D. Brownell, & B. T Wash, *(Eds.), Eating disorders and obesity: A comprehensive handbook* (pp. 551-556). New York, NY: Guilford Press.

Fairholme, C. P., Boisseau, C. L., Ellard, K. K., Ehrenreich, J. T., & Barlow, D. H. (2010). Emotions, emotion regulation, and psychological treatment: A unified perspective. In *A. M. Kring & D. M. Sloan (Eds.), Emotion regulation and psychopathology: A transdiagnostic approach to etiology and treatment* (pp. 283-309). New York, NY, US: Guilford Press.

Grilo, C. M., & Masheb, R. M. (2005). A randomized controlled comparison of guided self-help cognitive behavioral therapy and behavioral weight loss for binge eating disorder. *Behav Res Ther, 43*(11), 1509-1525. doi:S0005-7967(05)00004-5 [pii];10.1016/j.brat.2004.11.010 [doi]. Retrieved from PM:16159592

Halmi, K. A., Agras, W. S., Mitchell, J., Wilson, G. T., Crow, S., Bryson, S. W. et al. (2002). Relapse predictors of patients with bulimia nervosa who achieved abstinence through cognitive behavioral therapy. *Arch.Gen.Psychiatry, 59*(12), 1105-1109. doi:yoa10323 [pii]. Retrieved from PM:12470126

Hooman, F., Mehrabizadeh Honarmand, M., Zargar, Y., & Davodi, I. (2016). The Effectiveness of Transdiagnostic Therapy on Anxiety, Depression, Cognitive Strategies of Emotional Regulation, and General Performance in Women with Comorbid Anxiety and Depression. *J Fasa Univ Med Sci, 5*(4), 551-563.

Kim, S., & Popkin, B. M. (2006). Commentary: Understanding the epidemiology of overweight and obesity- a real global public health concern. *International Journal of Epidemiology, 35*(1), 60-67.

Kress, A. M., Peterson, M. R., & Hartzell, M. C. (2006). Association between obesity and depressive symptoms among U.S. Military active duty service personnel, 2002. *J Psychosom.Res, 60*(3), 263-271. doi:S0022-3999(05)00330-2 [pii];10.1016/j.jpsychores.2005.08.011 [doi]. Retrieved from PM:16516658

Kristeller, J. L., & Hallett, C. B. (1999). An Exploratory Study of a Meditation-based Intervention for Binge Eating Disorder. *J Health Psychol, 4*(3), 357-363. doi:4/3/357 [pii];10.1177/135910539900400305 [doi]. Retrieved from PM:22021603

Lillis, J., Levin, M. E., & Hayes, S. C. (2011). Exploring the relationship between body mass index and health-related quality of life: a pilot study of the impact of weight self-stigma and experiential avoidance. *J Health Psychol., 16*(5), 722-727. doi:1359105310388321 [pii];10.1177/1359105310388321 [doi]. Retrieved from PM:21441358

Mohammadi, A., Birashk, B., & Gharraee, B. (2014). Comparison of the Effect of Group Transdiagnostic Treatment and Group Cognitive

Therapy on Emotion Regulation. *Iran J Psychiatry Clin Psychol*, *19*(3), 187-194.

Mohammadkhani, P. , Jahani Tabesh, O. , Tamannaiefar, S., Jokar, M. *Structured Clinical Interview for DSM-IV-TR*. Tehran, Iran: Danjeh Publications; 2013.

Namjoshi, M. A., & Buesching, D. P. (2001). A review of the health-related quality of life literature in bipolar disorder. *Quality of Life Research*, *10*(2), 105-115.

Nejat, S., Montazeri, A., Holakouie Naieni, K., Mohammad, K., & Majdzadeh, S. R. (2006). The World Health Organization quality of Life (WHOQOL-BREF) questionnaire: Translation and validation study of the Iranian version. *J Sch Public Health Inst Public Health Res*, *4*(4), 1-12.

Newman, M. G., Zuellig, A. R., Kachin, K. E., Constantino, M. J., Przeworski, A., Erickson, T. et al. (2002). Preliminary reliability and validity of the generalized anxiety disorder questionnaire-IV: A revised self-report diagnostic measure of generalized anxiety disorder. *Behavior Therapy*, *33*(2), 215-233.

Norton, P. J., Hayes, S. A., & Hope, D. A. (2004). Effects of a transdiagnostic group treatment for anxiety on secondary depression. *Depress.Anxiety.*, *20*(4), 198-202. doi:10.1002/da.20045 [doi]. Retrieved from PM:15643648

Polivy, J., & Herman, C. P. (1993). Etiology of binge eating: Psychological mechanisms. In *Binge eating: Nature, assessment, and treatment* (pp. 173-205). New York, NY, US: Guilford Press.

Rieger, E., Wilfley, D. E., Stein, R. I., Marino, V., & Crow, S. J. (2005). A comparison of quality of life in obese individuals with and without binge eating disorder. *Int J Eat.Disord.*, *37*(3), 234-240. doi:10.1002/eat.20101 [doi]. Retrieved from PM:15822089

Sharifi, V., Asadi, S. M., Mohammadi, M. R., Amini, H., Kaviani, H., Semnani, Y. et al. (2004). Reliability and Feasibility of The Persian Version of The Structured Diagnostic Interview for DSM-IV (SCID). *Adv Cogn Sci*, *6*(1), 10-22.

Spitzer, R. L., Devlin, M. J., Walsh, B. T., Hasin, D., Wing, R., Marcus, M. et al. (1992). Binge eating disorder: A multisite field trial of the diagnostic criteria. *Int J Eat Disord*, *11*(3), 191-203.

Stallone, D. D. , & Stunkard, A. J. (1991). The regulation of body weight: Evidence and clinical implications. Annals of Behavioral Medicine, 13(4), 220-230.

Telch, C. F. (1997). Skills training treatment for adaptive affect regulation in a woman with binge-eating disorder. *Int J Eat.Disord.*, *22*(1), 77-81. doi:10.1002/(SICI)1098-108X(199707)22:1<77::AID-EAT10>3.0.CO;2-F [pii]. Retrieved from PM:9140739

Telch, C. F., Agras, W. S., & Rossiter, E. M. (1988). Binge eating increases with increasing adiposity. *International Journal of Eating Disorders*, *7*(1), 115-119.

Wilamowska, Z. A., Thompson-Hollands, J., Fairholme, C. P., Ellard, K. K., Farchione, T. J., & Barlow, D. H. (2010). Conceptual background, development, and preliminary data from the unified protocol for transdiagnostic treatment of emotional disorders. *Depress.Anxiety.*, *27*(10), 882-890. doi:10.1002/da.20735 [doi]. Retrieved from PM:20886609

Wing, R. R. (2004). Behavioral approaches to the treatment of obesity. In G.A. bray & C. Bouchard (Eds.), *Handbook of obesity: Clinical applications* (2nd ed., pp. 147-167). New York, NY: Marcel Dekker, INC.

World Health Organization. (1996). *WHOQOL-BREF. Introduction, administration, scoring. and generic version of the assessment. Field trial version*. Geneva, Switzerland: WHO.

Zemestani, M., & Imani, M. (2016). Effectiveness of transdiagnostic treatment on depression/anxiety symptoms and emotion regulation. *Contemporary Psychology*, *11*(1), 21-32.

Zhang, H., Wisniewski, S. R., Bauer, M. S., Sachs, G. S., & Thase, M. E. (2006). Comparisons of perceived quality of life across clinical states in bipolar disorder: data from the first 2000 Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD) participants. *Comprehensive Psychiatry*, *47*(3), 161-168.