



# Evaluation of Quality of Life Therapy Effectiveness in Contrast to Psycho-Sexual Education on Sexual Self-Concept of Iranian Women

Mohammad Arash Ramezani<sup>1,2</sup>, Khodabakhsh Ahmadi<sup>1,\*</sup>, Afagh Ghaemmaghami<sup>3,4</sup>, Somayeh Zamani<sup>5</sup>, Seyed Hassan Saadat<sup>1</sup> and Seyed Peyman Rahiminejad<sup>4</sup>

<sup>1</sup>Behavioral Sciences Research Center, Baqiyatallah University of Medical Sciences, Tehran, IR Iran

<sup>2</sup>Family Research Institute, Shahid Beheshti University, Tehran, IR Iran

<sup>3</sup>Department of Counseling, Marvdasht Branch, Islamic Azad University, Marvdasht, IR Iran

<sup>4</sup>Behsa Family Clinic, Tehran, IR Iran

<sup>5</sup>Department of Psychology, Zahedan Branch, Islamic Azad University, Zahedan, IR Iran

\*Corresponding author: Behavioral Sciences Research Center, Baqiyatallah University of Medical Sciences, Tehran, IR Iran. Tel: +98-9123753252, E-mail: kh\_ahmady@yahoo.com

Received 2014 August 31; Revised 2014 September 14; Accepted 2014 October 21.

## Abstract

**Background:** Quality-of-life therapy (QOLT) is an integrative psychotherapy that was formed by adding positive psychology concepts to cognitive-behavior therapy (CBT).

**Objectives:** The aim of the current study was to evaluate the efficacy of QOLT on the sexual self-concept of Iranian women.

**Patients and Methods:** A double-blind randomized experimental study was done from February 2011 to January 2012. The study subjects were recruited from a mental health nongovernmental organization in Isfahan, Iran. They were assigned randomly to two groups. The first group was under ten sessions of QOLT, and the second, as a control group, was under psycho-sexual education (PSE). General Health Questionnaire-28 (GHQ-28), the Multidimensional Sexual Self-Concept Questionnaire, and the Female Sexual Function Index (FSFI) were completed for participants before and after the intervention. The ANCOVA model was used for analysis.

**Results:** The findings revealed no significant differences between the two groups in mental health (GHQ-28 scores) and female sexual dysfunction, but sexual self-concept changed. Two subscales of sexual self-concept, sexual monitoring (QOLT group =  $6.3 \pm 2.7$  vs PSE group =  $4.7 \pm 3.1$   $P < 0.05$ ) and sexual-problem management (QOLT group =  $15.4 \pm 3.8$  vs PSE group =  $13.7 \pm 3.9$   $P < 0.05$ ), increased significantly during QOLT.

**Conclusions:** QOLT did not impact mental health, but it could change many dimensions of sexual self-concept.

**Keywords:** Quality of Life, Psychology, Well-Being, Sexuality, Self-Concept

## 1. Background

Quality of life (QOL) as subjective well-being has been an important index in health outcome assessment in studies. QOL is a multidimensional concept that includes physical, mental, emotional, and social aspects related to a disease or its specific therapeutic approaches (1, 2). However, in recent years, improving the QOL has surged to the forefront of human interest, and people are more interested in QOL issues (3). Improving the QOL of individuals is becoming an increasing goal in health care and psychology. This increased interest has brought an attempt to make the concept of QOL a more robust construct that can encompass a wide range of interests in its definition and investigation (4). Frisch utilized this construct with a glance to quality of life and innovated a new method for psychotherapy that combines positive psychology and cognitive behavior therapy known as “quality-of-life therapy” (QOLT)

(5). According to Frisch, QOLT is a journey from cognitive therapy to positive psychology that guides people to more life satisfaction. The five-step model CASIO defines life satisfaction. CASIO stands for Circumstances or Characteristics of a definite area in QOLT; the person's Attitude about, perception, and interpretation of an area in terms of his or her well-being; a person's evaluation of fulfillment in an area based on the application of Standards of fulfillment or achievement; the value or Importance a person places on an area for overall happiness or well-being; and how these four components combine with a fifth concern of Overall satisfaction in other areas of life (5). Frisch has presumed sixteen effective items in a person's QOL. These 16 areas of life are contained in 1, health, 2, self-esteem, 3, spiritual life, 4, money, 5, work, 6, play or recreation, 7, learning, 8, creativity, 9, helping, 10, love, 11, friends, 12, children, 13, relations, 14, home, 15, neighborhood, and 16, community (5).

Self-concept, the integrity of every person, contains two components: 1, the I-self, including a) self-awareness, an appreciation for one's internal states, needs, thoughts, and emotions, b) self-agency, the sense of authorship of one's thoughts and actions, c) self-continuity, the sense that one remains the same person over time, and d) self-coherence, a stable sense of the self as a single coherent, bounded entity; 2, components of the me-self, including the "material me," the "social me," and the "spiritual me," which in contemporary models translates into new domains of the self-concept as well as global self-esteem (6).

One part of self-concept in humans is sexual self-concept. Sexual self-concept is a combination of sexual attitudes, behaviors, and feelings, as well as beliefs about one's attractiveness and self-worth (7).

QOLT concentrates on self-concept as belief, emotion, and behavior because it follows cognitive behavior therapy (CBT). CBT impresses on self-concept (8). It has many components that predict sexual behaviors and intimacy between couples. Sexual life in Iran is very ambiguous because of its socio-cultural context, and for this reason, there is not any information regarding sexual self-concept in Iran. We decided to intervene in this area through QOLT for healthy Iranian women.

## 2. Objectives

Our research question regarded the effectiveness of QOLT as a new psychotherapy for improving Iranian sexual self-concept and compared it to psychosexual education as a routine alternative method. The current study describes the results of this intervention on sexual self-concept.

## 3. Patients and Methods

### 3.1. Design

A double-blind randomized trial was conducted from February 2011 to January 2012. The study design is shown in Figure 1. The study was approved by the research council and ethical committee of Baqiyatallah University of Medical Sciences.

**Participant recruitment:** We needed a representative sample from the general population. Thus, we recruited a sample from a mental health nongovernmental organization (NGO) in Isfahan, Iran. Isfahan is in the center of Iran, and its population has homogeneity with the general Iranian population. We selected participants with a simple random sampling from all members of this NGO. Its members were representative of the Isfahan population. The sample size was calculated based on two mean comparison formulas. The variance was calculated based on previous study ( $SD^2 = 0.4$ , with  $a = 0.05$  and  $b = 0.2$ ,  $d = 0.4 SD^2$ ). The

sample size was calculated with 20 women in each group. However, 50 women were recruited for study before random allocation. Every person was selected based on the following inclusion criteria:

1) married women with active sexual issues during their life, 2) women age 20 - 60 years, and 3) willing to engage during study.

Exclusion criteria were 1) access to any unexpected stressful events like grief, accidents, and so on 2) absence from more than 2 treatment sessions, and 3, immigration from one study group to the other.

For the first step, a researcher conducted an eligibility check using the above criteria and explained the goal of the study to the participant, who then provided a written consent form.

After that, participants were allocated to two groups by using a random digit table. Only one of the researchers knew the code of allocated individuals. Interventions and evaluations were done by other investigators who were blinded regarding allocation.

### 3.2. Procedure

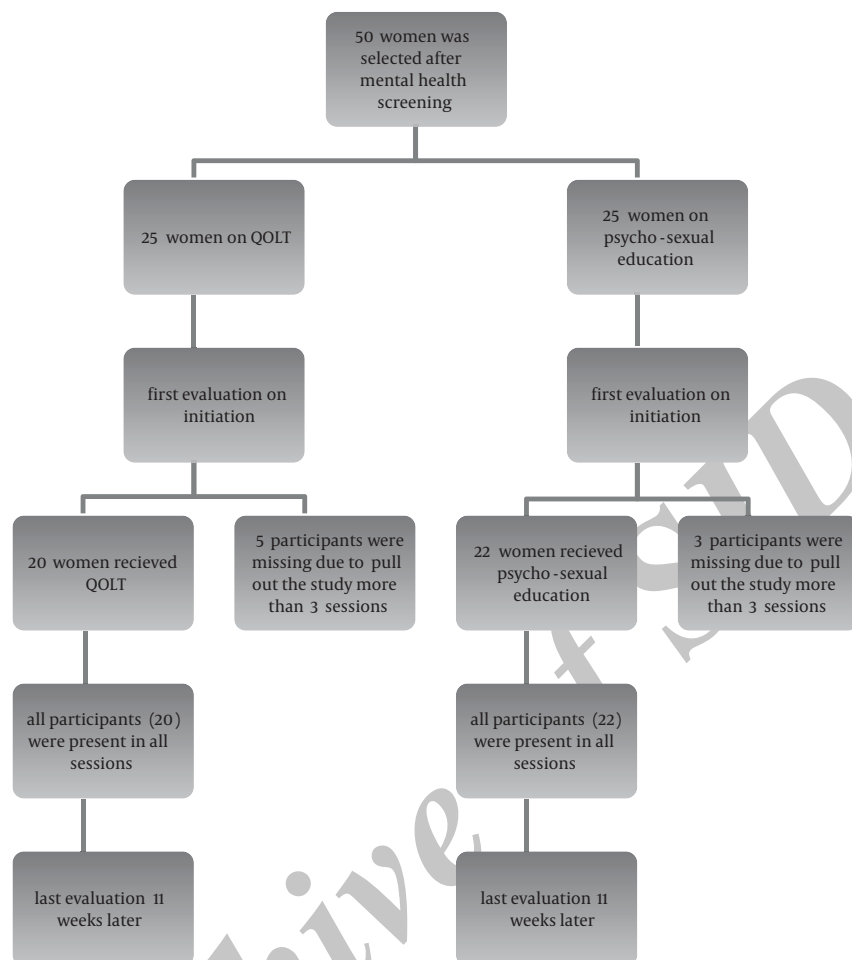
In the beginning, all participants undertook a psychiatric interview and the mental health inventory General Health Questionnaire-28 (GHQ-28), which was standardized for the Iranian population and has been used for the general population (9). After randomization, the first group underwent QOLT. Ten sessions were regulated based on Frisch's guideline and has been ordered in Table 1 (5). The participants in the other group, as a control, received psycho-sexual education based on the content of Table 2.

### 3.3. Measurement

In addition to Frisch's quality-of-life index, each participant completed the following questionnaires.

The Multidimensional Sexual Self-Concept Questionnaire (MSSCQ) is a 100-item questionnaire that provides 20 subscales, including:

1. Sexual anxiety, defined as the tendency to feel tension, discomfort, and anxiety about the sexual aspects of one's life;
2. Sexual self-efficacy, defined as the belief that one has the ability to deal effectively with the sexual aspects of oneself;
3. Sexual consciousness, defined as the tendency to think and reflect about the nature of one's own sexuality;
4. Motivation to avoid risky sex, defined as the motivation and desire to avoid unhealthy patterns of risky sexual behaviors (e.g., unprotected sexual behavior);



**Figure 1.** Schematic Diagram of Study Process

5. Chance/luck sexual control, defined as the belief that the sexual aspects of one's life are determined by chance and luck considerations;
6. Sexual preoccupation, defined as the tendency to think about sex to an excessive degree;
7. Sexual assertiveness, defined as the tendency to be assertive about the sexual aspects of one's life;
8. Sexual optimism, defined as the expectation that the sexual aspects of one's life will be positive and rewarding in the future;
9. Sexual problem self-blame, defined as the tendency to blame oneself when the sexual aspects of one's life are unhealthy, negative, or undesirable in nature;
10. Sexual monitoring, defined as the tendency to be aware of the public impression that one's sexuality makes on others;
11. Sexual motivation, defined as the motivation and desire to be involved in a sexual relationship;
12. Sexual-problem management, defined as the tendency to believe that one has the capacity/skills to effectively manage and handle any sexual problems that one might develop or encounter;
13. Sexual esteem, defined as a generalized tendency to evaluate positively one's own capacity to engage in healthy sexual behaviors and to experience one's sexuality in a satisfying and enjoyable way;
14. Sexual satisfaction, defined as the tendency to be highly satisfied with the sexual aspects of one's life;
15. Power other sexual control, defined as the belief that the sexual aspects of one's life are controlled by others

**Table 1.** Ten Sessions of Quality-of-Life Therapy in Current Study

Sessions	Contents	Exercise
1	Introduce participants. Discuss the goal of the study. Set goals. Complete questionnaires.	What subjects increase QOL.
2	Discuss goals, values, and spiritual life. Sand-timer technique.	Drive goal, objective in their life. Use sand-timer technique. Pros-versus-con technique.
3	Describe self-esteem, self-confidence, and how to increase them. Success path and log. Blessing, accomplishments, talents, traits, tenets (BAT) exercise.	BAT exercise. Success log exercise. Strengths and weaknesses exercise.
4	Describe CASIO model on health. Describe triggers, actions, consequences (TAC) of health.	TAC exercise. Relaxation.
5	Describe love triangle theory, emotion regulation, and principles of relationships.	Emotional expression with I statement. Take a letter.
6	Discuss couple relationship and family relationship.	Take a letter. Tit-for-tat exercise. Couples contract and rules. Empathy exercise.
7	Declare principle of human sexuality.	Sex games, sex positions, emotional intimacy.
8	Talk about play and recreation. Prepare list of recreations.	Prepare list of recreations with family members. Prepare plan for play.
9	What is creativity? Problem-solving creative model, in-session exercise.	Creative homework, building creation with family. Creative sexual behavior exercise.
10	Summation session and post-test questionnaire.	

**Table 2.** Ten Sessions of Psycho-Sexual Education in Current Study

Sessions	Contents	Exercise
1	Introduce participants. Discuss goal of study. Set goals. Complete questionnaires.	Free discussion for next session.
2	Discuss beliefs that boring.	Drive automatic thought.
3	Describe self-esteem, self-confidence.	Letter to herself.
4	Describe ABC.	Relaxation.
5	Free discussion about love.	Bring love map.
6	Free discussion about emotions.	Emotion expression I statements.
7	Learn human sexual anatomy.	Writing about sexual life.
8	Free discussion about time.	Prepare list of daily activity.
9	Talk about parenting and sexual training.	Discover parenting style.
10	Summation session and post-test questionnaire.	

who are more powerful and influential than oneself;

16. Sexual self-schemata, defined as a cognitive framework that organizes and guides the processing of information about the sexual-related aspects of oneself;
17. Fear of sex, defined as a fear of engaging in sexual relations with another individual;
18. Sexual-problem prevention, defined as the belief that one has the ability to prevent oneself from developing any sexual problems or disorders;
19. Sexual depression, defined as the experience of feelings of sadness, unhappiness, and depression regarding one's sex life; and

20. Internal sexual control, defined as the belief that the sexual aspects of one's life are determined by one's own personal control (10-12).

The MSSCQ was translated into Persian and normalized for the Iranian population by the authors. The reliability with Cronbach's alpha was 0.8, and the validity has been checked by factor analysis that explained 84% of the variance with 28 factors loaded (13).

The Female Sexual Function Index (FSFI) was standardized for the Iranian population with  $\alpha = 0.81$  for reliability and factor analysis for validity with five factors loaded (14).

The Index of Sexual Satisfaction was designed by Hudson in 1992 (15). It was translated by the authors, and the internal consistencies were within the acceptable point  $\alpha = 0.87$ .

The first evaluation was done at the initiation of the study to measure baseline data; the second evaluation was done a maximum of one week after the end of the study.

### 3.4. Statistical analysis

A statistical analysis was performed using SPSS for Windows (ver. 20, SPSS Inc., Chicago, IL, USA). Comparisons between groups were done by t test for means and chi-square test for nominal variable. Because of adjusting first evaluation scores, we used the ANCOVA model after attaining the presumptions. Prior to examining treatment effects, Kolmogorov-Smirnov tests were conducted to evaluate the distributional characteristics of the primary outcome measures. The primary outcome measures were found to be distributed normally, and no transformations were necessary.  $P < 0.05$  was considered statistically significant.

Ethical approval was obtained for this study by the appropriate review boards (no = 340 - 22, March 7, 2012). All subjects participated in this study voluntarily, and all responses were kept confidential. Informed consent was obtained from all study participants.

## 4. Results

Forty-two women finished the study. Five women in the QOLT group and three women in the control group were pulled from the study because of absence from more than three sessions of therapy. The demographic and mental health characteristics of these participants were no different from other subjects in the study.

The mean age of all participants was  $42.8 \pm 8.3$  years old. The demographic characteristics of the two groups of women are shown in Table 3. There were no significant differences between the two groups on any demographic variables.

The baseline measurement of pre-test scores were evaluated and were the same in both groups without significant differences. Pre-test scores are shown in Table 4.

The analysis of covariance presented no significant differences between the two groups in mental health (GHQ-28 scores), sexual satisfaction, and female sexual dysfunction. Table 5 shows the ANCOVA findings.

Additionally as shown in Table 4, there were significant differences in sexual self-concept scores as the main intervention effects. Table 4 presents the mean score of sexual self-concept for pre- and post-treatment outcome measures. Two subscales of sexual self-concept increased during QOLT: sexual monitoring and sexual-problem management.

## 5. Discussion

Data generated in this study responded to our research question. Our findings revealed that QOLT had positive influences on sexual monitoring and sexual-problem management in sexual self-concept.

Research documents regarding QOLT are very scarce. However, as Frisch previously described, QOLT is useful to improve mental health and totally in health care system (16, 17).

Grant and colleagues have used QOLT in psychotherapy of depression. They found QOL and self-efficacy improved in depressive patients and were maintained in follow-up (18). In other research, Rodrigue and co-workers suggested that QOLT offers a psychological opportunity to increase the quality of life of patients while they are awaiting lung transplantation (19). These findings were repeated for patients who were awaiting kidney transplantation. QOLT could improve QOL, psychological functioning, and social intimacy in these patients (20).

In the Iranian population, QOLT for parents of children with obsessive-compulsive disorder (OCD) has been found to decrease OCD and anxiety symptoms and increase children's satisfaction in the global, family, and environment domains, as well as increase QOL for their mothers (21).

QOLT has decreased somatization and social dysfunction in GHQ-28 questionnaire subscales. This is the finding of Ghasemi and co-workers in the Iranian population (22).

Padash and colleagues assessed QOLT on couple life satisfaction. They used the ENRICH questionnaire, which revealed QOLT was effective in marital satisfaction. In addition, QOLT was effective in idealistic distortion, marital satisfaction, communication, conflict resolution, leisure activities, and religious orientation ( $P < 0.01$ ), but there was no significant influence on financial management, sexual relationship, children and parenting, family and friends, and equalitarian roles (23). In contrast to the findings of Ghasemi (22) and Padash (23), our findings did not show any significant difference in GHQ-28 subscales and marital satisfaction.

There are many differences between the current research and previous research in Iran. The first is the design of the study. Our study was a randomized double-blind experimental study. In contrast, both of the two previous studies were quasi-experimental. The main goal of our study was to evaluate QOLT on sexual self-concept. Yet, mental health and marital satisfaction were evaluated parallel to the sexual self-concept objective. The second difference is in samples and interventions. QOLT in our study was done as group therapy. The Ghasemi and Padash studies were done as group therapy (22, 23), too, but in Padash's paper, the control group had no intervention, and in Ghasemi's research the control group was selected from

**Table 3.** Demographic Variables Distribution Separation by Two Study Groups

Variable	Group, Mean $\pm$ SD		Statistical	
	QOLT	PSE	t	P
Age	43.9 $\pm$ 8.5	41.9 $\pm$ 8.2	0.801	0.428
Offspring	2	2	NA	NA
Weight	67.4 $\pm$ 8	67.6 $\pm$ 14	0.054	0.95
Marital duration	22.2 $\pm$ 11	20.7 $\pm$ 10.2	0.439	0.656
Spousal age	51.2 $\pm$ 10.3	491 $\pm$ 8.1	0.74	0.463

**Table 4.** Mean and Standard Deviation Scores for Pre- and Post-Treatment Outcome Measures<sup>a,b</sup>

Sexual Self-concept Subscales	QOLT		PSE		P Value
	Pre	Post	Pre	Post	
Sexual anxiety	5.6 $\pm$ 5	4.7 $\pm$ 4.5	5 $\pm$ 4	5.9 $\pm$ 4.9	0.18
Sexual self-efficacy	15 $\pm$ 2.8	14.8 $\pm$ 4.2	14.7 $\pm$ 3.2	13.5 $\pm$ 4.6	0.906
Sexual consciousness	15 $\pm$ 3.5	15.1 $\pm$ 4	15 $\pm$ 2.8	15 $\pm$ 4.3	0.699
Motivation to avoid risky sex	16.4 $\pm$ 4	16.9 $\pm$ 4	18 $\pm$ 2.6	17.4 $\pm$ 3.6	0.378
Chance/luck sexual control	3.5 $\pm$ 2.4	2.6 $\pm$ 2.4	3.7 $\pm$ 3.1	3.6 $\pm$ 3.4	0.635
Sexual preoccupation	3.8 $\pm$ 3.2	4.9 $\pm$ 3.9	5.3 $\pm$ 4.3	5.1 $\pm$ 4	0.897
Sexual assertiveness	10.7 $\pm$ 3.2	12.1 $\pm$ 4.2	10.5 $\pm$ 4.6	11.8 $\pm$ 4.7	0.214
Sexual optimism	14.4 $\pm$ 3.4	14.4 $\pm$ 3.7	14.5 $\pm$ 2.8	14.7 $\pm$ 3.6	0.68
Sexual problem self-blame	8.7 $\pm$ 2.6	7.7 $\pm$ 3.5	8.7 $\pm$ 3.4	7.9 $\pm$ 4.6	0.209
Sexual monitoring	5.7 $\pm$ 3.3	6.3 $\pm$ 2.7	6.2 $\pm$ 3.5	4.7 $\pm$ 3.1	0.034
sexual motivation	12.5 $\pm$ 2.3	13.4 $\pm$ 4	12 $\pm$ 4.3	12.2 $\pm$ 5.3	0.36
Sexual-problem management	14.7 $\pm$ 2.9	15.4 $\pm$ 3.8	13.9 $\pm$ 3	13.7 $\pm$ 3.9	0.017
Sexual esteem	14.1 $\pm$ 4.8	14.2 $\pm$ 4.8	14.5 $\pm$ 4.2	13.7 $\pm$ 4.9	0.645
Sexual satisfaction	13.9 $\pm$ 4.6	13.4 $\pm$ 5.7	11.9 $\pm$ 4.6	12.7 $\pm$ 5.3	0.37
Power-other sexual control	4.4 $\pm$ 3.1	4 $\pm$ 3.3	4.5 $\pm$ 3.5	3.5 $\pm$ 3.2	0.277
Sexual self-schemata	17.8 $\pm$ 3	17.4 $\pm$ 4.2	17.3 $\pm$ 3.4	15.7 $\pm$ 6	0.596
Fear of gender	5.9 $\pm$ 4.1	7.3 $\pm$ 3.4	7.3 $\pm$ 4.5	6.9 $\pm$ 4.4	0.612
Sexual-problem prevention	16.3 $\pm$ 2.7	16.5 $\pm$ 4.1	16.3 $\pm$ 4.3	15.3 $\pm$ 4.3	0.663
Sexual depression	4.6 $\pm$ 4.3	5.3 $\pm$ 4.5	5.6 $\pm$ 4.8	4.5 $\pm$ 4.3	0.332
Internal sexual control	14.8 $\pm$ 3.4	14.3 $\pm$ 4	14 $\pm$ 2.9	13.5 $\pm$ 4.6	0.62

<sup>a</sup>ANCOVA test: F = 6.007, P = 0.034.

<sup>b</sup>ANCOVA test: F = 7.304, P = 0.017.

a waiting list. The control group in our study was with positive intervention, and we used psycho-sexual education for control. We considered ethical issues and principles for a double-blind randomized experimental study. In addition, our samples were healthy women. Nevertheless, it seems QOLT is useful for marital satisfaction and improvement of sexual self-concept. According to Frisch, when feeling satisfied, people may be more attractive to others (including potential friends and mates) who can offer them marital aid and social support. Life satisfaction and happiness also

may reflect a type of internal functioning that helps maintain external functioning by giving people the motivation (e.g., sense of purpose, energy, confidence, hope, and compassion) to persevere and to perform well in stressful, boring, or even affectively neutral situations (16, 17).

Although the current study was the first in this regard in Iran and was randomized, double blind, there were some limitations in our study. QOLT was done by the first author. He learned it from Abedi (21), and it was done exactly by the Frisch model (5). However, it was used for the



**Table 5.** Analysis of Covariance on Mental and Sexual Health Outcomes

Variables	F (ANCOVA)	P Value
GHQ-28 Score	0.57	0.816
Sexual Satisfaction	0.44	0.528
<b>Female Sexual Disorder</b>		
<b>Desire</b>		
Arousal (sensation)	0.262	0.621
Arousal (lubrication)	0.956	0.354
Arousal (cognitive)	0.109	0.12
Orgasm	0.383	0.568
Pain	0.148	0.71
Enjoyment	0.411	0.546
	0.001	0.98

first time for QOL group therapy.

We could not follow up with subjects after the end session, thus we could not evaluate the long-term effect of QOLT. CBT needs follow-up sessions for relapse prevention (5, 24).

We have many suggestions for future research. It is better to compare QOLT with other CBT methods. Outcome variables may be more, like different dimensions of life satisfaction, emotion regulation, interpersonal issues, and so on.

## Acknowledgments

We give special thanks to Mrs. Padash for giving us her information regarding QOLT. We appreciate the research committee of Baqiyatallah University of Medical Sciences for supporting us financially. This article has been derived from Mphil thesis of Mohammad Arash Ramezani in Baqiyatallah University of Medical Sciences.

## Footnote

**Funding/Support:** The research and ethical committee of Baqiyatallah University of Medical Sciences approved this research (no = 340-22, March 7, 2012).

## References

1. Khanna D, Tsevat J. Health-related quality of life—an introduction. *Am J Manag Care*. 2007;13 Suppl 9:S218–23. [PubMed: 18095785].
2. Kaplan RM. Quality of life: an outcomes perspective. *Arch Phys Med Rehabil*. 2002;83(12 Suppl 2):S44–50. doi: 10.1053/apmr.2002.36955. [PubMed: 12474171].
3. Friedman MI. *Improving the Quality of life*. 1st ed. USA: Praeger Publishers Co; 1997.

4. Massam BH. Quality of life: public planning and private living. *Progress Plan*. 2002;58(3):141–227. doi: 10.1016/S0305-9006(02)00023-5.
5. Frisch MB. *Quality of life therapy: Applying a Life Satisfaction Approach to Positive Psychology and Cognitive Therapy*. 1st ed. New Jersey: John Wiley & Sons; 2006.
6. Harter S. Self process and developmental psychopathology. *Developmental psychopathology*. 2nd ed. New Jersey: Wiley and Sons Inc; 2006.
7. Lou JH, Chen SH, Li RH, Yu HY. Relationships among sexual self-concept, sexual risk cognition and sexual communication in adolescents: a structural equation model. *J Clin Nurs*. 2011;20(11-12):1696–704. doi: 10.1111/j.1365-2702.2010.03358.x. [PubMed: 21040039].
8. Jelalian E, Sato A, Hart CN. The effect of group-based weight control intervention on adolescent psychosocial outcomes: Perceived peer rejection, social anxiety and self-concept. *Child Health Care*. 2011;40(3):197–211. doi: 10.1080/02739615.2011.590391. [PubMed: 23258948].
9. Noorbala AA, Bagheri Yazdi SA, Yasamy MT, Mohammad K. Mental health survey of the adult population in Iran. *Br J Psychiatry*. 2004;184:70–3. [PubMed: 14702230].
10. Snell WE, Fisher TD, Walters AS. The Multidimensional Sexuality questionnaire: An objective self-report measure of psychological tendencies associated with human sexuality. *Ann Sex Res*. 1989;6:27–55. doi: 10.1177/107906329300600102.
11. Snell WE. *The Multidimensional Sexual Self-Concept Questionnaire. Sexuality-related measures: A compendium*. 2nd ed. New York: Sage Pub; 1998.
12. Snell WE. *Southeast Missouri State University*. 2012. Available from: <http://www4.semo.edu/snell/vita>.
13. Ramezani MA, Ghaemmaghami A, Talakar M, Saadat SH, Zamani E, Shams J. Reliability and Validity Assessment of Multi-Dimensional Sexual Self-Concept Questionnaire in Iran. *Iran J Military Med*. 2013;14(4):249–54.
14. Fakhri A, Pakpour AH, Burri A, Morshedi H, Zeidi IM. The Female Sexual Function Index: translation and validation of an Iranian version. *J Sex Med*. 2012;9(2):514–23. doi: 10.1111/j.1743-6109.2011.02553.x. [PubMed: 22146084].
15. Hudson WW. *The WALMYR Assessment Scales Scoring Manual*. Tallahassee: WALMYR Publishing Co; 1992.
16. Frisch MB. Quality of Life Therapy and Assessment in Health Care. *Clin Psychol*. 1998;5(1):19–40. doi: 10.1111/j.1468-2850.1998.tb00132.x.
17. Frisch MB. Improving mental and physical health care through quality of life therapy and assessment. *Adv qual life theor res*. Springer; 2000. p. 207–41. doi: 10.1007/978-94-011-4291-5\_10.
18. Grant GM, Salcedo V, Hynan LS, Frisch MB, Puster K. Effectiveness of quality of life therapy for depression. *Psychol Rep*. 1995;76(3 Pt 2):1203–8. doi: 10.2466/pr0.1995.76.3c.1203. [PubMed: 7480486].
19. Rodrigue JR, Baz MA, Widows MR, Ehlers SL. A randomized evaluation of quality-of-life therapy with patients awaiting lung transplantation. *Am J Transplant*. 2005;5(10):2425–32. doi: 10.1111/j.1600-6143.2005.01038.x. [PubMed: 16162191].
20. Rodrigue JR, Mandelbrot DA, Pavlakis M. A psychological intervention to improve quality of life and reduce psychological distress in adults awaiting kidney transplantation. *Nephrol Dial Transplant*. 2011;26(2):709–15. doi: 10.1093/ndt/gfq382. [PubMed: 20603243].
21. Abedi MR, Vostanis P. Evaluation of quality of life therapy for parents of children with obsessive-compulsive disorders in Iran. *Eur Child Adolesc Psychiatry*. 2010;19(7):605–13. doi: 10.1007/s00787-010-0098-4. [PubMed: 20157835].
22. Ghasemi N, Kajbaf MB, Rabiei M. Efficacy of quality of life therapy on mental subjective well being. *Iran Clin Psychol J*. 2011;10(2):23–35.
23. Padash Z, Fatehizadeh M, Abedi M, Izadkhan Z. The effect of quality of life therapy on marital satisfaction. *J Res Beh Sci*. 2013;10(5):363–72.
24. Hawton K, Salkovskis PM, Kirk J, Clark DM. *Cognitive Behavior Therapy for Psychiatric problems: A practical guide*. 2nd ed. Oxford: Oxford University Press; 1990.