

Original Article

The effectiveness of behavioral activation training on sexual satisfaction and sexual assertiveness of women suffering from sexual problems

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Abstract

A suitable and healthy sexual function is one of the signs of the physical and mental health and it makes common pleasure sense between couples. Regarding the importance of women's sexual and psychological processes, this research was done to investigate the effectiveness of behavioral activation training on sexual satisfaction and sexual assertiveness of women suffering from sexual problems. The method of this study was quasi-experimental with pre-test, post-test design with control group. The population included all the women who were in 25-40 age range who suffered from sexual problems and referred to psychotherapy centers for sexual disorders in Ardabil city. In 2022, 30 people were selected by convenience sampling and they were assigned randomly in the experimental and control groups, every group included 15 people. Data collection was done by using women's sexual disorders questionnaire (Isidori et al., 2010), Hudson's sexual satisfaction questionnaire (Hudson et al., 1981) and Hulbert index of sexual assertiveness (1992). The behavioral activation training was presented to the experimental group in eight sessions and every session lasted 75 minutes (Dimidjian et al., 2014). Data analysis was done by multivariate analysis of covariance test (MANCOVA) with SPSS 20 software. Based on the results, there was a significant difference between two experimental and control groups on sexual satisfaction and sexual assertiveness and behavioral activation increased sexual satisfaction ($F=742.88$, $p < 0.01$) and sexual assertiveness ($F=2279.08$, $p < 0.01$) among women suffering from sexual problems. It can be concluded that behavioral activation training can increase sexual satisfaction and sexual assertiveness in women who suffering from sexual problems. Therefore, the counselors and therapists can use the mentioned therapy method in order to increase sexual satisfaction and sexual assertiveness in women suffering from sexual problems.

Keywords

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Introduction

Family is a main and an important structure in community, and having healthy and proper relationship for its members is the most important factor for family health and stability. This structure is organized by marriage and its continuity and survival depend to continuity and survival of marriage bond (Shafiee et al, 2022). One of the most serious problems that threatens the survival of this structure or organ, is couple's sexual problems (Çömez et al, 2019; Bilal and Rasool, 2020). Research has indicated that sexual problems are among

the main reasons of couple's problems and they have high prevalence (Yekeh-Fallah and Goudarzi, 2009; Nasehi et al, 2017; Asefa et al, 2019). In effect, the sexual desire has always been the center of human attention, interest and curiosity and it affects undeniably on quality of person's life and his or her sexual pattern of life. Sexual intercourse is one of the most important factors affecting being good luck in marital life, while if not convincing, leads to having failure feeling, deprivation and lack of security feeling (Susan, 2016). Sexual function includes psychological response and the person indicates it when he or she is sexually aroused and this response is called

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sexual response. These responses consists of 4 phases: sexual desire, motivation, orgasm and subjugation (Zarei and Tariferdi, 2017). The reported problems in women in relation to sexual function, are remarkably more than men (Lew-Starowicz and Czajkowska, 2022, Ashrafi et al, 2022; Wettergren et al, 2022).

The motivation and sexual desire, like other basic motivations of mankind, forms an integral part of his or her biological, psychological and social nature and it is clear that quality of satisfying this motivation plays an important role in individual's health and social life and also at achieving relaxation and sexual satisfaction and even overall satisfaction from life (Rodrigo et al, 2020; Stefanidou et al, 2020). So, sexual satisfaction not only means physical pleasure but also includes remainder emotions after positive and negative aspects of sexual intercourse. In addition, sexual satisfaction includes individual satisfaction from his or her own activation at achieving orgasm (Byers & Macneil, 2006). Sexual intercourse cannot be explained in terms of psychological satisfaction. Sexual intercourse cannot be perceived by itself, because it has been a powerful bond between two human beings for long years (Sánchez-Fuentes et al., 2014). Sexual satisfaction refers to person's pleasant feeling about his or her sexual relations (Pascoal et al., 2014). It seems that people's knowledge plays an important role in sexual satisfaction in relation to issues that are in relation to expressing the sexual activity. So, it can lead to better expressing or, in other words, it can lead to sexual assertiveness. Sexual assertiveness is known as a social-psychological feeling that has been defined by person's explanation about the quality of expressing his or her feelings in marital relations (Powell, 2013).

Sexual feelings and desires are the best way to recognize the partner's sexual desire and perfecting couple's sexual information, and it presents the best fortune to couple to have joyful sexual relationship. The sexual assertiveness plays an important role in couple's sexual function and satisfaction (Lopez-Alvarado et al., 2020). In relation to this matter, a study by ZareNejad et al. (2019) indicated that there is a positive and significant correlation between low sexual assertiveness and sexual dissatisfaction. In effect, if couples cannot achieve sexual satisfaction in their marital relationship, they will experience many problems in their life because of dissatisfaction (Courtois et al., 2017). Based on this study, it seems that learning sexual issues in correct way, prevents occurrence of sexual disorders and helps people to have suitable behavior when they encounter sexual issues (Salmanpour et al., 2023), (Abdolghaderi et al., 2021). Based on what reviewed above, it is too important to present interventions and sexual trainings for informing, training and treatment. In this regard, one of the remarkable psychological treatments is the behavioral activation therapy. The behavioral activation is one of the many therapy methods that has derived psychotherapy third wave (Russo et al., 2018) and it uses the cognitive-behavioral therapy framework for treatment (Moshier and Otto, 2017). This therapy method is one of the therapy

method that is solution-focused therapy and structured that increases the behaviors that cause improvement (Balan et al., 2016). The behavioral activation therapy learns person to identify his or her avoidance patterns and to use adaptive coping strategies (Walsh et al., 2019). The avoidance, in short time, leads to quick comfort and relaxation, but in long time, it causes person's enforcement resources to be cut off. Therefore, behavioral activation therapy teaches person to use alternative and adaptive coping patterns instead of avoidance (Predescu et al., 2018), also decreasing in avoidance behaviors cause increase in sexual assertiveness of women (Bouchard and Humphreys, 2019). Also, behavioral activation therapy is a structured therapy process that causes increase in behaviors that more increases person's contact with environmental reinforcement connections (Chartier and Provencher, 2013) and the relation between behavioral activation and increase in self-efficacy has been indicated (Baker et al., 2017). In this regard, the research results of Jangi et al. (2023) indicated that cognitive behavioral therapy and sexual health education are effective in improving sexual assertiveness and sexual satisfaction of women recently married.

The research results of Karimi et al. (2022) indicated that behavioral activation therapy affected depression and sexual satisfaction. AfsiehZadeh et al. (2021) expressed a relationship between behavioral activation and increase in sexual assertiveness, too. Also Eisanezhad et al (2018) expressed in their research that behavioral activation therapy had a significant effect on marital intimacy and sexual satisfaction of women. Also Santos et al. (2021) expressed that behavioral activating education is an effective behavioral therapy on sexual problems and it is able to improve sexual functions in couples who are suffering from sexual problems. The research by Adl, Shaf and Piran (2017) indicated that behavioral activation therapy significantly affected improving the sexual intimacy. Kardan-Souraki et al. (2016) in their research concluded that psychotherapy third wave interventions (like behavioral activation) effected significantly on improvement of overall intimacy and intimacy aspects like emotional, psychological, physical, sexual, communicative, social and recreational aspects. Also Bonita (2015) in his research results has reported that behavioral activation education improves the sexual functions and increases sexual satisfaction in women. according to importance of sexual issues in marital life and since from one hand, less attention has been paid to these issues, because of cultural taboos, and according to recent researches that have been done, from other hand, it was indicated that there are a few researches about efficacy of behavioral activation training method about research variables, there for, considering the fact that there is a research gap in this direction, doing such research can help strengthen the foundation of family life by helping sexual satisfaction and sexual assertiveness in women who suffering from sexual problems, and by this means, make a context to reduce communicative hurts that deriving from couple's sexual problems in

community. Based on this matter, this research was done to study effectiveness of behavioral activation education on sexual satisfaction and sexual assertiveness in women suffering from sexual problems.

Method

Participants

The method of this research was quasi-experimental that was done with a multi-group pre-test, post-test design. The population included all women in the age range of 25-40 years suffering from sexual problems who had referred to psychotherapy centers for sexual disorders in Ardabil city in 2022. The number of sample was 30 people from the mentioned population, that they were selected by convenience sampling method, and they were placed randomly in two groups of behavioral activation training (15 people) and control group (15 people). The inclusion criteria were: filling out the consent form of taking part in educational program, not suffering from chronic psychological and physical problems (based on people's own report and initial evaluation of the research therapist), the minimum duration of marriage was 3 years, the minimum education was middle high school in order to be able to answer to questions of questionnaire. The exclusion criteria were: having disclamation to take part in programs and being absent continuously in two sessions of therapy session.

Procedure

After obtaining permissions, to collect data, they referred to centers of sexual disorders psychotherapy in Ardabil city. Then a statistical sample was selected in coordination with the officials of these centers. it should be mentioned in order to identify people who suffering from sexual disorders more accurately, in addition to psychologist's diagnosis in centers, the sexual disorders questionnaire of women (FSFI-6) was used too (Isidori and coworkers, 2010). In order to comply with ethical considerations, all participants' information was remained confidential, permission was received to attend psychotherapy centers from Islamic Azad University, Ardabil Unit, and the Welfare Organization. A written consent form was received from participants. In addition, the mentioned therapy was held compactly for control group after the research ended. Also this research has ethics code IR.IAV.ARDABIL.REC.1400.088 approved by committee of University of Medical Sciences. Analyzing the collected data was done by using descriptive statistics method and also the multivariate analysis of covariance test (MANCOVA) was used. Analyzing data was done with SPSS 20 software. In the following specifications of data collection tools and training method has been presented.

Instrument

Sexual satisfaction questionnaire (ISS):

The Hudson's sexual satisfaction questionnaire in year of 1981 was made by Hudson, Harrison and Crosscut to evaluate couple's satisfaction level, it consists of 25 questions that are self-reporting. The subject's answer to any test item, is determined on seven-point scale between 0 and 6 and in total, the subject's score in the whole test fluctuates between 0 and 150, a high score on this scale reflects greater sexual satisfaction. Also some of the scale items have reverse scoring. The internal consistency of this scale was calculated by designers and its Cornbrash's Alpha was 0.11. The scale validity was calculated with re-test method after one week and it was equal to 0.93. The scale validity was calculated through discriminant validity, results indicated that the scale was able to recognize if couples are suffering from sexual problems or not (Hudson et al., 1981). In research of Talaizadeh and Bakhtiarpour (2016) Cornbrash's Alpha which it was equal 0.93 was used for whole questionnaire, to determine the reliability of sexual satisfaction questionnaire.

Hulbert index of sexual assertiveness (HISA):

This questionnaire has been made by Hulbert (1992) to study couple's sexual assertiveness and it has been used in many international researches. This index consists of 25 questions and the five-point Likert scale (5=always; 1=never) has been used in selecting its options. This questionnaire measures the degree of sexual desire of the subject. The questions of sexual desire questionnaire are used in clinical affairs by therapists to measure the sexual problems and marital problems and it also is used widely in scientific researches (Hulbert, 1992). Hulbert index of sexual assertiveness or Hulbert sexual desire is used individually and in groups and time limitation. Each question scoring there is from always=0 to never=4 according to the chosen option. the questions 3,4,5,7,12,15,16,17,18,21,22, and 23 are scored reversely (4=always, 0=never). After scoring and summing up the scores, the subject's sexual assertiveness is determined. The test scores range is from 0 to 100 which means that high score indicates high sexual assertiveness and low score indicates low assertiveness (Hulbert, 1992). Hulbert has reported that test-pre-test validity is equal to 0/86 (Hulbert, 1992). In Iran Yousefi et al. (2014) studied the validity of this questionnaire, they reported the reliability coefficient of this index by using Cornbrash's Alpha equal to 0.92 and by using Guttman's method of halving (split half method) 0.78 . Also they reported that the convergent and concurrent validity of this index (0.68) is confirmed.

Behavioral activation protocol:

In this research, the behavioral activation training was based on behavioral activation therapy of Desmidian, Martell, Addis and Herman-Dunn (2008) and included 8 training sessions that were held in 8 sessions weekly and every session lasted 75 minutes. The sessions were held according to following phases:

Table 1. the abbreviation of behavioral activation sessions of Dimidjian et al (2014)

Session	Sessions
First	Introduction, making good relationship, expressing the importance and goal of behavioral activation and simple behavioral conflicts
Second	Presenting the behavioral activation model: behavioral activation was presented focusing on relationship between person and environment based on these principles: silence, forming, elimination, mental review, periodical distraction, procedural skills and training.
Third	Learning the skill of working from outside to inside: in third session the healing process including 4 issues, was studied, the issues were: counseling about general context of problem, selecting a therapy method that is suitable for person's situation, motivational matters, and making relationship with other people and learning from their experience.
Fourth	Training the quick style skill: in fourth session, using positive verbal reinforcement was trained by expressing positive and hopeful sentences.
Fifth	In fifth session, using metaphor was discussed for positive verbal reinforcement.
Sixth	In sixth session such issues were presented: Cognitive reconstruction, psych-social dimensions of the problem, coping skills, assertiveness and problem solving skills.
Seventh	In seven session the problem solving skills were trained included: problem definition, recognizing the factors preventing problem solution, problem solution process, commit to implementing the solution, planning for implementing the best solution and implementing the best solution.
Eighth	In eighth session it was discussed about summing up, summarizing and training preventive solutions.

Results

Based on the results, the average age and standard deviation of the control group was 34.13±4.94 and for behavioral activation training groups equaled to 34.27±4.51. In addition, according to results, in both groups, the lowest frequency had educational degree from lower than diploma and diploma and doctorate degree in common, and in both groups, the frequency

had bachelor's degree in common. Also in both groups, the lowest frequency had two children or more than two children in common and in all three groups, the most frequency had one child in common. Also in both groups, the lowest frequency with a marriage period of 10 years and more in common. And in all three groups, the most frequency with a marriage period of 4-6 years in common.

Table 2. The average and standard deviation of women's sexual assertiveness in study groups and results of Shapiro-Wilk test

Variable	Group	Test	Statistics		Situation	S-W	P
			Mean	SD			
Sexual assertiveness	Behavioral activation	Pre-test	55.13	2.31	Pre-test	0.973	0.452
		Post-test	70.06	3.83	Pre-test	0.914	0.1888
	Control	Pre-test	55.53	2.64	Post-test	0.917	0.148
		Post-test	55.93	2.25	Post-test	0.989	0.853
Sexual satisfaction	Behavioral activation	Pre-test	51.86	2.915	Post-test	0.918	0.363
		Post-test	67.10	3.84	Post-test	0.975	0.145
	Control	Pre-test	51.86	2.35	Pre-test	0.805	0.031
		Post-test	52.73	2.57	Post-test	0.899	0.088

In Table 2, the average of sexual assertiveness variables and sexual satisfaction in pre-test and post-test phases has been reported for the experimental group and control group. Also, the Shapiro-Wilk test was used to study this assumption that distribution of research components was normal. This test's results in Table 2 indicated that distribution of research variables in pre-test and post-test was normal. Thus, it is assumed that variables distribution is normal. Based on that, the parametric analysis can be used.

The results of the regression slope homogeneity hypothesis showed that the F statistic is for sexual satisfaction (F=.234) and for sexual satisfaction (F=.215) (p > 0.05). Therefore, this assumption is

confirmed. Also, Levene's test for comparing two groups' variances was used to study the homogeneity of variance of experimental group and control group in post-tests of sexual satisfaction and sexual assertiveness and the results indicated that dependent variable variances were equal in the experimental group and control group (P=0.830, F=0.188, sexual satisfaction: P=0.296, F=1.135, sexual assertiveness). Also the results of assumption of homogeneity of variance covariance matrixes (M-Box test) indicating no difference between variances (P=0.609, F=0.608, M-Box=1.977), there for, there is no obstacle for analysis to continue

Table 3. The results related to validity indexes of multivariate covariance analysis of research variables

Effectiveness	Validity indexes	V	F	Hdf	Edf	P	Eta	Op
group	Pillais Trace	.604	974.224	2	25	.000	.604	.970
	Wilks' Lambda	.006	974.224	2	25	.000	.604	.970
	Hotelling's Trace	107.938	974.224	2	25	.000	.604	.970
	Roy's Largest Root	107.938	974.224	2	25	.000	.604	.970

The results related to validity indexes of multivariate covariance analysis, indicated that group effectiveness on study components are significant (Wilk's Lambda=0.60, $F=974/22$, $p < 0.01$). Based on that, Eta squared indicates that according to dependent variable

components there is overall, a significant difference between two groups, and this difference scale is 0.60 for research variables with group composition based on Wilk's Lambda.

Table 4. Test results of multivariate covariance analysis of sexual satisfaction and sexual assertiveness

Resource	Variable	SS	Df	Ms	F	P	Eta	Op
Model	Sexual satisfaction	1585.831	3	528.610	254.346	.000	.967	1.000
	Sexual assertiveness	1524.112	3	508.037	1095.756	.000	.992	1.000
Group	Sexual satisfaction	1550.178	1	1550.178	745.885	.000	.882	.990
	Sexual assertiveness	1473.954	1	1473.954	2279.086	.000	.901	1.000
Error	Sexual satisfaction	54.036	26	2.078				
	Sexual assertiveness	16.550	26	.646				

According to the results of Table 4, there is a significant difference between experimental group and control group about sexual satisfaction variable and sexual assertiveness variable. Eta squared indicates that the difference between two groups is respectively ($p < 0.001$, $F=742.885$) for sexual satisfaction, and ($p < 0.001$, $F=2279.08$) for sexual assertiveness. It means that behavioral activation education had a significant effect on sexual satisfaction and sexual assertiveness of women who suffering from sexual problems and it has increased these variables in the experimental group ($p < 0.001$).

Discussion

This research was done to study the effectiveness of behavioral activation training on sexual satisfaction and sexual assertiveness of women were suffering from sexual problems. The results indicated that there is a significant difference between the experimental group and control group about sexual satisfaction. It means that the experimental conditions have affected the increase of sexual satisfaction in women who were suffering from sexual problems. This result was aligned with research results of [Eisanezhad and Dasht Bozorgi \(2018\)](#), [Bonita \(2015\)](#) and [Karimi et al. \(2022\)](#) that was based on the effectiveness of behavioral activation training on reinforcement of sexual function and sexual satisfaction. Based on [Farchione et al. \(2017\)](#), it can be said that behavioral activation increases behaviors that cause an increase in person's communication with environmental reinforcements. Also, it is said that training based on behavioral activation uses the strategy of breaking difficult tasks into simpler tasks and factors. As a result, people achieve activities in a progressive way with the help of this strategy that facilitates the context for positive reinforcement and finally leads to positive reinforcement. In this method, these women learn to identify their avoidance patterns and use alternative coping method to approach and engage with issues, so that these factors increase sexual satisfaction in sexual intercourse by means of improving communication with spouse.

Based on behavioral theories, one of the reasons of

disorders, for instance sexual disorder is distribution of order in daily routines and activities that behavioral activation therapy leads to order and discipline in daily routines and activities (like the training that were presented in fourth and fifth sessions).

For instance, this therapy method regulates sleep and wakefulness and increases participation in social activities, and this affair reduces negative psychological characteristics (such as stress, anxiety and so on) and increases positive psychological characteristic (like self-esteem and etc.) and finally, it increases people's positive perception about sexual relationship and consequently increases sexual satisfaction. The other part of research results indicated that there is a significant difference between experimental group and control group about sexual assertiveness. It means that experimental conditions have effected on incensement of sexual assertiveness in women were suffering from sexual problems. this finding was connected and aligned with research results of [Ade et al. \(2017\)](#) and [Santos \(2021\)](#). Also, these results were aligned with research result of [AfsiehZadeh et al. \(2021\)](#) that was indicating behavioral activation increasing sexual assertiveness through follow-up, social exchange style, fairness and individualism. in the same direction, it can be said that behavioral activation training leads to incensement in receiving positive feedback and people feel lack of motivation and enervation in regarding their special problems (their own sexual problems) and this therapy method has increased their energy and positive thinking (such as third session's trainings) had focused on motivational subjects and in these situations, they be able to perform activities that they had already ignored them or they were not able to do them. Therefore, increasing positive thoughts and positive thinking cause people to evaluate themselves better and it prevents automatic negative thoughts and feelings of guilt and these factors can affect people to have more positive perception about their sexual intercourse and finally, it can affect their context of sexual feeling and sexual assertiveness in general. In the same direction, [MirShamshiri et al. \(2015\)](#) indicated that reducing the sexual assertiveness

has aimed at marriage bond heart and it reduces the effective relationship and sexual intercourse between couples. Also ZareNejad et al. (2019) concluded that sexual assertiveness decrease leads to increasing conflicts degree. And women may recognize that the reasons of couple's conflicts, are other issues no sexual assertiveness. And they may conceal the main reason because of cultural-educational reasons. Therefore, in order to explain findings of this research based on theory of Dimidjian et al. (2014) it can be said that behavioral activation therapy is effective because it leads to positive reinforcement increase. And goal of behavioral activation is increasing behaviors that probably lead to receiving reward for patient and these rewards can be internal (like pleasure or success sense) or external (like social attention). From other hand, behavioral activation is often described with tendency behaviors, and based on this matter, people are more ready to look for reward and new situations (Xie et al., 2021) and increasing rewards first leads to improvement in patient's mood and behavior and improvement in sexual relationships and marital intimacy and finally, it leads to sexual assertiveness. In addition, based on present researcher's theory, it can be said that when these women were trained behavioral activation, based on behavioral activation model (it was presented in second session), women reduced many of their sexual negative behaviors like sexual taboos, the behaviors that they were thinking they are ugly, by using positive behavior reinforcement methods and silence principle, and through this method, they increased changes context in their sexual expression and consequently, they have increased their sexual assertiveness, and this factor has effected on their sexual satisfaction.

One of the limitations that this research encountered was the participants who were single-sex. Also, using convenience sampling can influence generalizability of the results. Therefore, it is suggested that next researchers pay attention to these limitations in their studies to increase the precision of their results. In addition, since women play a sensitive role in the family, therefore, they should be helped in the context of sexual and psychological health, because this help is in fact a help and service to family and community. Therefore, it is suggested that this educational method be used in psychotherapy and counseling centers (sexual psychotherapy clinics) to increase sexual health of women who are suffering from sexual problems.

Conclusion

Overall, the results indicated that the behavioral activation training can increase sexual satisfaction and sexual assertiveness in women who are suffering from sexual problems. So this method can be used to reinforce the sexual satisfaction and sexual assertiveness.

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References

- Abdolghaderi M, Kafie M, Khosromoradi T.(2021).The effectiveness of assertiveness training on social anxiety and coping with stress among high school female students. *Journal of Research in Psychopathology*. . 2(4):23 – 29. doi:10.22098/jrp.2021.1198.
- Adl, HA., Shaf, A., & Piran, Z. (2017). The effectiveness of group therapy based on quality of life on marital intimacy in infertile women. *Arak Med Univ J Sci* 2017, 19(10): 59-71 dor:20.1001.1.20084331.1395.10.3.3.7
- Afsiehzadeh, M., Forghdani, A., & Shaterian Mohammadi, F. (2021). Studying the effects of mediating role of social exchange styles in behavioral inhibition relationships and sexual assertiveness in married women. *Academic journal of social-psychology researches*, 11(43), 67-88. doi:10.22034/spr.2021.287257.1651
- Asefa, A., Nigussie, T., Henok, A. & Mamo, Y. (2019). Prevalence of sexual dysfunction and related factors among diabetes mellitus patients in Southwest Ethiopia. *BMC Endocrine Disorders*, 19, 141-150. [https:// com/articles/10.1186/s12902-019-0473-1](https://com/articles/10.1186/s12902-019-0473-1).
- Ashrafi, M., Jahangiri, N., Jahanian Sadatmahalleh, S., Mirzaei, N., Gharagozloo Hesari, N., Rostami, F. & Zeinaloo, M. (2022). Does prevalence of sexual dysfunction differ among the most common causes of infertility? A cross-sectional study. *BMC Women's Health*, 22(1), 1-8. doi:10.1186/s12905-022-01708-y.
- Baker, D. F., Larson, L. M., & Seipel, M.T. (2017). Relation of reinforcement sensitivity on vocational interest and self-efficacy, *Journal of Career Assessment*, 27(2), 230-245. doi:10.1177/1069072717748956
- Balan, I. C., Lejuez, C. W., Hoffer, M., & Blanco, C. (2016). Integrating motivational interviewing and brief behavioral activation therapy: Theoretical and practical considerations. *Cognitive and behavioral practice*, 23(2), 205-220. doi:10.1016/j.cbpra.2015.07.001
- Bilal, A. & Rasool, S. (2020). Marital Satisfaction and Satisfaction with Life: Mediating Role of Sexual Satisfaction in Married Women. *Journal of Psychosexual Health*, 2(1), 364-372. doi:10.1177/2631831820912873.
- Bonita, A.G. (2021). Computerized behavioral activation treatment for major disorder and the effects on sexual desire. *Western Michigan*

- University.
<https://scholarworks.wmich.edu/dissertations/191/>.
- Bouchard, L., & Humphreys, T. (2019). Asserting sexual (dis) interest: How do women's capabilities differ? *The Canadian Journal of Human Sexuality*, 28(2), 1-16. doi:10.3138/cjhs.2019-0012
- Byers, S. A., & Macneil, S. (2006). Further validation of the interpersonal exchange model of sexual satisfaction. *Journal of Sex and Marital Therapy*, 32, 53-69. doi:10.1080/00926230500232917
- Chartier, I. S., & Provencher, M. D. (2013). Behavioural activation for depression: Efficacy, effectiveness and dissemination. *Journal of affective disorders*, 145(3), 292-299. doi:10.1016/j.jad.2012.07.023
- Çömez, İ., Coşansu, G., Giray, G. & Özel, B. (2019). The Relationship of Marital Adjustment and Sexual Satisfaction with Depressive Symptoms in Women. *Sexuality and Disability*, 38(20), 247-260. doi:10.1007/s11195-019-09590-7.
- Courtois F, Alexander M, McLain ABJ. (2017). Women's Sexual Health and Reproductive Function after SCI. *Top Spinal Cord Inj Rehabil*, 23(1), 20-30. doi:10.1310/sci2301-20
- Dimidjian, S., Martell, C. R., Herman-Dunn, R., & Hubble, S. (2014). Behavioral activation for depression. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders: A step-by-step treatment manual* (pp. 353–393). The Guilford Press. <https://psycnet.apa.org/record/2014-05860-011>
- Eisanezhad, S., & DashtBozorgi, Z. (2018). Effectiveness of Behavioral Activation Treatment on Marital Intimacy and Sexual Satisfaction of Women During Premenopause. *Iranian Journal of Health Education and Health Promotion*, 6 (1), 63-71. <http://journal.ihepsa.ir/article-1-843-en.html>.
- Farchione, T.J., Boswell, J.F., & Wilner, J.G. (2017). Behavioral activation strategies for major depression in trans diagnostic cognitive-behavioral therapy: An evidence-based case study. *Psychotherapy*; 54(3): 225-230. doi:10.1037/pst0000121
- Hudson, W.W. (1992). The WALMYR assessment scales scoring manual. WALMYR Publishing company. <https://www.worldcat.org/title/38452763>
- Hulbert, T.V. (1992) Congenital Malaria in the United States: Report of a Case and Review. *Clinical Infectious Diseases*, 14, 922-926. doi:10.1093/clinids/14.4.922
- Isidori, A., Pozza, C., Esposito, K., Ciotola, M., Giugliano, D., Morano, S., & Jannini, E. A. (2006). Development and validation of a 6-item version of the female sexual function index (FSFI) as a diagnostic tool for female sexual dysfunction. *Journal of Endocrinological Investigation*, 29(8), 22-32. doi:10.1111/j.1743-6109.2009.01635.x
- Jangi, S., Nourizadeh, R., Sattarzadeh-Jahdi, N., Farvareshi, M., & Mehrabi, E. (2023). The effect of cognitive-behavioral therapy and sexual health education on sexual assertiveness of newly married women. *BMC psychiatry*, 23(1), 1-10. doi:10.1186/s12888-023-04708-w.
- Kardan-Souraki, M., Hamzehgardeshi, Z., Asadpour, I., Mohammadpour, R. A., & Khani, S. (2016). A review of marital intimacy-enhancing interventions among married individuals. *Global journal of health science*, 8(8), 74-84. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5016345/>
- Karimi, M.; Sudani, M., Gholamzadeh, M., and Asgari, P. (2022). Effectiveness of behavioral activation therapy on depression and sexual satisfaction in patients who suffering from type 2 diabetes. *Journal of excellence in psychology and counseling*, 10-1, (41), 11-20. doi:10.1001.1.25382799.1401.11.41.1.8
- Lew-Starowicz, Z., & Czajkowska, K. (2022). Prevalence of sexual dysfunctions and associated risk factors in Poland. *Archives of Medical Science: AMS*, 18(4), 1031. doi:10.5114/aoms.2019.86794
- Lopez-Alvarado, S., VanParys, H., Cevallos-Neira, A, & Enzlin, P. (2020). Latin American Women's Beliefs, Views and Ideas about Sexual Assertiveness: A Focus Group Study in Cuenca (Ecuador). *Journal of Sex Res*, 57(3):307-321. doi:10.1080/00224499.2019.1615031
- Mirshamshiri, M., Salehi, M., Madhi, F., & Kianmehr, MR. (2015). Relationship between Sexual Assertiveness and Marital Conflicts of a sample of women in Zarrin shahr. *Journal of Research in Behavioural Sciences*, 13(2), 343-352. <http://rbs.mui.ac.ir/article-1-408-en.html>.
- Moshier, SJ, & Otto, MW. (2017). Behavioral activation treatment for major depression: a randomized trial of the efficacy of augmentation with cognitive control training. *J Affec Disor*; 210, 265-271. doi:10.1016/j.jad.2017.01.003
- Nasehi, A.A., Raisi, F., Ghaeli, P., Amini, M., & Yahyavi, S.T. (2017). Prevalence of Sexual Dysfunction among General Population of Iran: A Systematic Review. *Iran J Psychiatry Behav Sci*, 11(4):43- 50. <https://sid.ir/paper/312172/en>
- Pascoal, P. M., Narciso, I.D.S.B., & Pereira, N. M. (2014). What is sexual satisfaction? Thematic analysis of lay people's definitions. *Journal of sex research*, 51(1), 22-30. doi:10.1080/00224499.2013.815149
- Powell, E. (2013) Talking Back to Sexual Pressure. Available here and here. Originally published as: Talking Back to Sexual Pressure. CompCare: Minneapolis. <https://www.amazon.com/Talking-Sexual-Pressure-Elizabeth-Powell-ebook/dp/B00B5KFSL0>
- Predescu, I., Tran, D., Cassidy-Eagle, E., & Dunn, L. (2018). Poster number: EI 69 behavioral activation therapy for older adults with depression: A systematic review of effectiveness. *The American Journal of Geriatric Psychiatry*; 26(3): 132-135. doi:10.1016/j.jagp.2018.01.160
- Rodrigo, J.C., Noelia, F.R., Andrés, A.F., & Martínez-Álvarez, J.L. (2020). Association between Sexual Satisfaction and Depression and Anxiety in Adolescents and Young Adults. *Int J Environ Res*

- Public Health, 17(3), 841-852. doi:10.3390/ijerph17030841
- Russo, G. B., Tirrell, E., Busch, A., & Carpenter, L. L. (2018). Behavioral activation therapy during transcranial magnetic stimulation for major depressive disorder. *Journal of affective disorders*, 236, 101-104. doi:10.1016/j.jad.2018.04.108
- Salmanpour, H., Khademi, A., Shaker, A., & Issazadegan, A. (2023). Evaluation of the effectiveness of education based on sexual intelligence on sexual assertiveness and sexual self-expression of male couples. *RJMS*; 30 (2), 145-158. <http://rjms.iuums.ac.ir/article-1-7271-fa.html>
- Sánchez-Fuentes, M. d. M., Santos-Iglesias, P., & Sierra, J. C. (2014). A systematic review of sexual satisfaction. *International Journal of Clinical and Health Psychology*, 14(1), 67–75. doi:10.1016/S1697-2600(14)70038-9
- Santos, M. M., Puspitasari, A. J., Nagy, G. A., & Kanter, J. W. (2021). Behavioral activation. In A. Wenzel (Ed.), *Handbook of cognitive behavioral therapy: Overview and approaches* (pp. 235–273). American Psychological Association. doi:10.1037/0000218-009
- Shafiee, E., Dayariyan, M M., & Rezaei Jamalouei, H. (2022). Investigating the Fit Pattern of Family Function and Relationship Beliefs mediated by Differentiation of Self with Social Interest. *Iranian Journal of Educational Sociology*; 5(1):150-159. <http://iase-idje.ir/article-1-1125-en.html>.
- Stefanidou, T., Hughes, E., Kester, K., Edmondson, A., Majeed-Ariss. R., & Smith, C. (2020). The identification and treatment of mental health and substance misuse problems in sexual assault services: A systematic review. *PLoS ONE*, 15(4), 13-23. doi:10.1371/journal.pone.0231260
- Susan AO. (2016). *Essentials of Maternity, newborn, women health nursing*. 4th ed. Philadelphia: Wolters Kluwer. <https://Womens-Nursing/dp/1451193998>.
- TalaiZadeh, F., & Bakhtiarpour, S. (2016). Relationship between marital satisfaction and sexual satisfaction with mental health of couple's health. *Thought and behavior in clinical psychology (thought and behavior)*, (practical psychology), 10(40), 37-46. https://jtbcpr.riau.ac.ir/article_939_en.html
- Walsh, E.C., Eisenlohr-Moul, T. A., Minkel, J., Bizzell, J., Petty, C., Crowther, A., & Dichter, G.S. (2019). Pretreatment brain connectivity during positive emotion upregulation predicts decreased anhedonia following behavioral activation therapy for depression. *Journal of affective disorders*, 243, 188-192. doi:10.1016/j.jad.2018.09.065
- Wettergren, L., Eriksson, L. E., Bergström, C., Hedman, C., Ahlgren, J., Smedby, K. E., & Lampic, C. (2022). Prevalence and risk factors for sexual dysfunction in young women following a cancer diagnosis—a population-based study. *Acta Oncologica*, 61(10), 1165-1172. doi:10.1080/0284186X.2022.2112283
- Xie, J., Fang, P., Zhang, Z., Luo, R., & Dai B. (2021). Behavioral inhibition/activation systems and depression among females with substance use disorder: The mediating role of intolerance of uncertainty and anhedonia. *Frontiers Psychiatry*, 12, 1-10. doi:10.3389/fpsy.2021.644882
- YekehFallah, L., & Goudarzi, M. (2009). prevalence of the sexual disorders and effective factors creating them in married women and men in Qazvin city. *academic journal of Qazvin University of Medical Science*, 31(50), 49-55. <http://journal.qums.ac.ir/article-1-798-en.html>.
- Yousefi, N., Farsani, Z., Shakiba, A., Hemmati, S., & Nabavi Hesar, J. (2014). Validity of Hulbert sexual desire questionnaire. *Clinical and personality psychology*, 20(9), 107-116. https://cpap.shahed.ac.ir/article_2696.html?lang=en
- Zarei, J., Tarafdari, A., Pourhossein, R., & Habibi Asgarabadi, M. (2017). The relationship between gender schemas and the sexual health of postmenopausal women. *Journal of Psychological Development*; 6(3), 212-191. <http://frooyesh.ir/article-1-171-en.html>.
- ZareNejad, H., Houseini, R., & Seyyed Mohammadreza, A. (2019). The relationship between sexual assertiveness and sexual dissatisfaction with marital conflicts: mediating role of marital conflicts .counseling and family psychotherapy, 1(9), 216-197. https://fcp.uok.ac.ir/article_61300.html?lang=en