

Original Article

The impact of the sexual cognitive reconstruction education on the sexual satisfaction and sexual self-esteem in women with sexual problems

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Abstract

The goal of this research was to study the impact of the sexual cognitive reconstruction education on the sexual satisfaction and sexual self-esteem in women with sexual problems. The research method was quasi-experimental done with pre-test post-test multi-group design. The population included all the women in the age range of 25 to 40 with sexual problems who had referred to the Psychotherapy Centers for Sexual Disorders in Ardabil City in 2022. The sample contained 30 people who were selected by convenience sampling and placed into two groups of sexual cognitive reconstruction (15 people) randomly and control group (15 people) in simple random way. Data collection was done using the questionnaire of female sexual function index (Rosen & et al., 2000), the questionnaire of sexual satisfaction (Hudson & et al., 1981) and female sexual self-esteem index (Zeanah & Schwarz, 1996). The cognitive reconstruction education was presented to the experimental group in eight sessions lasting 75 minutes. Data analysis was done by the multivariate analysis of covariance following SPSS₂₀ software. The results indicated that sexual cognitive reconstruction education effects on incensement of the sexual satisfaction ($P < 0.001$, $F = 708.50$) and sexual self-esteem ($P < 0.001$, $F = 139.45$) in experimental group. Therefore, it can be said that the sexual cognitive reconstruction education can increase the amount of sexual satisfaction and sexual self-esteem in women with sexual problems.

Keywords

Sexual cognitive reconstruction education
Sexual satisfaction
Sexual self-esteem
Women with sexual problems

Received: 2024/10/03

Accepted: 2024/11/04

Available Online: 2025/08/12

Introduction

Sexual activity and resulting satisfaction, is one of the most basic aspects of human life and lack of sexual knowledge and skills and sexual communication among couples, leads to many sexual dysfunctions in couples (Holt & et al., 2020). From the other hand, in terms of importance, the sexual issues are among the first-class issues of marital life (Bilal & Rasool, 2020). The basic function of marital sex, is the feeling of shared pleasure that increases intimacy, makes it deeper and it works in dealing with the pressures of life and marriage as a tension reducer, basically, it creates a special marital bond and it gives enthusiasm to the couple's relationship with each other. In fact, the women's mental and physical health plays an important role in strengthening the foundation of the family and regarding this, women's sexual function plays an important role (Tabatabaei & et al., 2017). However, the problems related to sexual issues

are known as the most common causes of differences between couples (Mallory & et al., 2019; Asefa & et al., 2019; Galati & et al., 2023). In addition, the results of a recent systematic review in Iran showed that sexual problems and satisfaction have been effective factors in the occurrence or application of formal divorce or emotional divorce. Also, it showed that weakness in sexual performance, sexual dysfunction, orgasm problems and pain are some of the problems of people who are on the verge of divorce (Daneshfar & Karamat, 2023); this indicates that this issue requires more attention. In fact, the sexual function includes the physiological reactions that person shows after feeling sexual stimulation and it is called sexual responses, these responses are in the four stages of sexual desire, motivation, orgasm and depression (Zare Nejhad & et al., 2019). like other basic human motivations, the sexual motivation and desire form an integral part of one's (his or her) biological, psychological and social nature and it

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is clear that the quality of satisfying this motivation plays a very important role in the health of the individual and the community and achieving peace and sexual satisfaction and even overall satisfaction with life (Rodrigo, Noelia, Andrés & Martínez-Álvarez, 2020; Stefanidou & et al., 2020). Because the sexual satisfaction does not only mean physical pleasure, but also, it includes the feelings left after the positive and negative aspects of sexual intercourse. In addition, the sexual satisfaction includes a person's satisfaction with their activities until reaching orgasm (Seftel, 2014). Sexual intercourse cannot be explained in the form of physiological satisfaction, sexual communication cannot be understood alone, because for many years, it has been a symbol of very powerful connections between two human beings (Sánchez-Fuentes, Santos-Iglesias & Sierra, 2014). The sexual satisfaction refers to one's pleasantness from his sexual relationship (Pascoal, Narciso & Pereira, 2014).

In addition, regarding sexual issues, the comment is that it is necessary to have a good psychological feelings in couples of the general initiative or in other words, self-esteem. In fact, the sexual self-esteem has been defined as a general tendency of the person, to positively evaluate one's capacity to engage in healthy sexual behaviors and experiences sex in a pleasurable and fulfilling's way, so that it has influence on sexual behavior and includes emotional responses to thoughts, feelings and sexual behavior (Visser, Pozzebon, Bogaert & Ashton, 2010). When sexual self-esteem is damaged, the person's opinion is disturbed about himself or herself, satisfaction from life, the ability to experience pleasure, mutual relationships with others, and the ability to create intimate relationships with others (Torres-Obregon and et al., 2019) and this factor can increase the sexual problems. Therefore, it seems that learning sexual issues in correct way, prevents from sexual disorders and help to have an appropriate behavior encountering sexual issues (Khademi, 2020). These learnings cause couples to be more sensitive and aware in their interpersonal relationships and this affair will eventually lead to create more intimacy and more pleasure in their marital issues and marital life (KhodaKarami & Ali-Gholi, 2011). especially that the researches about sexual issues are done a little and presenting sexual training in our society is not much and many of couples are ashamed and feeling guilty to talk about their sexual issues and problems, so they show their problems in form of anxiety, depression, sleep disorder or genital system problems and diseases (Banker, Kaestle & Katherine, 2015). Therefore, presenting the interventions and sexual education is very important in order to make awareness. In this regard, one of the psychological education is considered to be sexual cognitive reconstruction education. Cognitive regeneration means making change in incorrect intellectual patterns and changing them into logical and adaptive intellectual patterns (Evii, 2020).

In this sexual cognitive reconstruction, first, it puts emphasis on the role of thoughts for emotions and then on the change of thought patterns. Cognitive distortions

in thought patterns as a result of incorrect processing of information, is questioned, discussed, and examined in order to be changed into correct thought (mental) patterns, and eventually, they can create positive emotions and behaviors in relation to sexual behaviors in a person (Kazae, 2011). Therefore, this type of treatment is a treatment that its goal is changing the dysfunctional cognitions about sexual issues and other problems by using the cognitive interventions (Esere, 2010). In this regard, the results of researches of Alexandra, Karla, Roanne and Yonah (2020) indicated that the sexual issues education based on cognitive concepts had meaningful influence on decreasing the sexual dysfunction in study women. Also, the result of researches of Sasanpour and et al. (2020) indicated that the sexual cognitive reconstruction therapy had influence on decreasing the sexual attitude. In addition, the results of research of Abbasi, GhadamPour and Hojjati (2020) indicated that the sexual cognitive reconstruction therapy had influence on the correction of negative body image, incensement of self-esteem. also, the results of research of Anjali, Abby, Ellen & Jesse (2020) indicated that the cognitive sex education had meaningful influence on self-efficacy and sexual attitude. In addition, the results of research of Salehi and et al. (2023) indicated that the sexual cognitive reconstruction therapy had influence on the sexual self-efficacy and sexual assertiveness of women with sexual problems.

Considering the impressments and the importance of sexual issues in marital life. and the significant share of problems and sexual conflicts in predicting divorce and failure of life, doing research interventions are very important to reduce these problems, especially, these issues have not received enough attention by researchers because of cultural taboos, the research vacuum is very evident in this direction. Therefore, in this regard, the present research studies the issue of whether sexual cognitive reconstruction education has an impact on sexual satisfaction and sexual self-esteem of women with sexual problems?

Method

Participants

This research was quasi-experimental done with pretest/posttest multi-group design. The population included all women in the age range of 25 to 40 with sexual problems referred to the Psychotherapy Centers for Sexual Disorders in Ardabil City in 2022. The sample included 30 people selected by convenience sampling and randomly placed into two groups of experimental education (15 people) and control group (15 people) in simple random way.

Instrument

Female Sexual Function Index (FSFI):

This questionnaire has been designed by Rosen and et al. (2000) and it is a six-dimensional questionnaire that examines women's sexual function by 13 questions in the dimensions of sexuality, arousal or sexual

stimulation, vaginal moisture, orgasm, sexual satisfaction and pain. the scores are considered for each question of the sexual group (1-5 points) and for dimensions of sexual stimulation or arousal, vaginal moisture, orgasm, sexual satisfaction,(zero to 5 points). The scope of the scores of the sexual intermetallic city is between the 1/2 to 6 points and the other dimensions are zero to 1 (Rosen & et al., 2000). The range of the score of the entire sexual dysfunction is between 1/2 to 36. Earning less score shows the sexual problems of the research unit. The cutting point for the entire sexual index was 21 (Rosen & et al., 2000). In the study of Mozhdeh and Zeighami Mohammadi (2013), the reliability coefficient of this tool was determined from the re-decision-retest method, which for this purpose was a questionnaire in two stages with 10 days of 10 days, and the correlation of two tests for the sexual index of women was 0.81.

Sexual satisfaction questionnaire (ISS):

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.

Sexual self-esteem index for woman-short form (SSEI-W-SF):

This questionnaire has been designed by Zeanah and Schwarz (1996) and it consists of 81 questions and it has a six-part-time spectrum for answering. The short form of this scale has 32 questions. The questions are answered at a six-degree Likert scale from 1 to 6 (completely opposed to fully agree). The range of scores of this questionnaire is from 32 to 192, which is higher than the higher score of the self-esteem (Zeanah & Schwarz, 1996). The reliability of this index for the total scale 0. 92 was reported by its builders by using Cronbach's Alphabet

(Zeanah & Schwarz, 1996). In Iran, Farrokhi and Shareh (1393), the internal coefficient of the injection of the projects was 0. 88 and the correlation coefficients between each of the scale of the scale with the total score of the scale between 0. 54 to 0. 72 (in all cases: $p < 0.001$). In the exploratory factor analysis, five factors of experience and skills, control, charm, moral judgment and adaptation were obtained, which explained the suffering of 50.37 of the variance. The reliability coefficient for the total scale was 0.91 and for its five subscales was in the range of 0.82 to 0.94.

Sexual Cognitive Reconstruction Education Protocol:

Sexual recovery education in this research based on sexual reconstruction of Azizi and et al. (2014), Sasanpour and et al. (2014) and Sasanpour (2015), included eight sessions and they were held weekly and every session lasted 75 minutes. The sessions were carried out according to the following steps.

Procedure

The entry criteria were: completing the consent form of participating in education program, not suffering from chronic psychological and physical problems (based on the self-report of the subjects and the initial assessment of the research therapist), minimum duration of marriage to be 3 years and having at least the literacy of the guidance in order to answer the questions of the questionnaires. The exit criteria were: unwillingness to participate during the program and absence of two consecutive sessions at the therapeutic sessions. After obtaining the necessary permits, in order to collect data, it was referred to the Psychotherapy Centers for Sexual Disorders in Ardabil City. Then, after coordinating with the officials of these centers, the statistical sample was selected. It should be noted that in order to identify the precisely sexually transmitted individuals, in addition to the psychologist diagnosis of centers, the women's sexual indicator index (FSFI) (Rosen & et al., 2000) was also used. In order to comply with ethical considerations, all participants' information remained confidential, from Islamic Azad University, Ardabil and the Welfare Administration was submitted in order to be participated in psychotherapy centers. The written consent was received from the participants. In addition, after the completion of the study, the education was compressed for the control group. Also, the present research has an IR. IAU. ARDABIL. Rec. 2022. 088 ethics identifiers from the University of Medical Sciences Committee. In addition to descriptive statistics, MANCOVA covariance analysis was used for analyzing the collected data. The data was analyzed with SPSS₂₀ software.

Table 1. Summary of sexual cognitive reconstruction education sessions

sessions	Session titles, objectives and method
First session	(Acquaintance and introduction): Purpose: establishing communication. Explaining the method and objectives of the meetings - conducting the pre-test.
Second session	(The role of cognitive factors in marital relations):

	Purpose: identifying unrealistic beliefs and expectations of couples. Education A-B-C principles. Method: Examining the expectations, beliefs and perceptions of couples about marital intimacy and compatibility. Showing the influence of beliefs on feelings and behaviors.
Third session	(Irrational thoughts and inconsistent knowledge sexual): Sexuality. Familiarity with types of illogical sexual thoughts. Explanation of goals and realistic expectations. Method: explanation of cognitive errors. Types of illogical thoughts and incompatible cognitions. Getting to know each other's expectations and paying attention to each other's positive characteristics.
Forth session	(cognitive reframing education): Method: solving misunderstandings caused by wrong or different perceptions of each other. Methods of dealing with irrational beliefs, education the argument method to correct irrational beliefs.
Fifth session	(communication skills): Objective: To develop empathic understanding and listening skills. Method: Evaluation of communication patterns and barriers of couples. Practice and education of efficient communication skills.
Sixth session	(intimacy training): Purpose: education skills to increase intimacy. Method: Definition of intimacy and its dimensions, education how to establish intimacy, practice methods intimacy.
Seventh session	(Training to improve sexual relations - familiarity with disorders common sex and ways to treat it): Objective: Familiarity with sexual physiology and sexual behavior. Anatomy of male and female reproductive system. Getting to know the sexual response cycle of women and men. Method: Expressing the importance of sex - Getting to know the stages of growth, puberty and sexual development. Getting to know familiarity with sexual disorders of women and men and ways to treat them. (Cognitive reconstruction education of sexual dysfunctional thoughts couples, correction of sexual beliefs): Purpose: reducing sexual problems. Method: Preventing factors of correct sexual intercourse, detection of false sexual myths – eliminated. Removing negative beliefs and myths about sex getting to know the right and wrong attitudes of the couple about sexual issues. Explaining the effect of negative thoughts and attitudes on the stabilization of sexual relations. reconstruction cognitive dysfunctional sexual thoughts of couples.
Eighth session	(education the correct techniques of sexual relations): Purpose: How to establish sexual intimacy and education the correct techniques of sexual relations. Method: education how to establish sexual intimacy. Education the sexual art of talking. Acquaintance with the prerequisites of sexual behavior, examination of sexual cycle and sexual behavior. Familiarity with the correct techniques of sexual relations and the benefits of using each technique. Familiarity with health sexual. Answering questions. Feedback on education. Doing post-test.

Results

Based on the results, the average age and standard deviation of the cognitive reconstruction group is 33. 66±4. 16 and for the control group, it is 34. 13±4. 94. In addition, in both groups, the least frequent commonly involved under the diploma and the doctorate and in both groups the most frequently is associated with bachelor's education. In

addition, in both groups, the least frequent commonly had more than two children and in both groups, the most frequent has a child. In addition, in both groups, the least frequent commonly used with marriage period of 10 years and older and in both groups is the most frequently with 4-6 years of marriage. In the following the mean and the deviation of the research variables are presented (table 1).

Table 2. The mean and deviation of sexual satisfaction and sexual self-esteem in women in the studied groups and the results of the Shapiro- Wilk's test

variable	group	test	M	SD	status	s-w	p
sexual satisfaction	sexual cognitive reconstruction education	Pre-test	51.73	2.74	Pre-test	0.94	0.08
		Post-test	67.06	3.76	Post-test	0.93	0.15
	control	Pre-test	51.86	2.35	Pre-test	0.80	0.03
		Post-test	52.73	2.57	Post-test	0.90	0.09
sexual self-esteem	sexual cognitive reconstruction education	Pre-test	58.93	3.98	Pre-test	0.92	0.27
		Post-test	76.26	5.02	Post-test	0.82	0.05
	control	Pre-test	60.05	3.65	Pre-test	0.94	0.11
		Post-test	60.46	4.10	Post-test	0.92	0.12

In table 2, the mean of sexual satisfaction variables and sexual self-esteem were reported in the pretest and posttest for the experimental and control group. Also, the Shapiro-Wilk's test was used to examine the normalization of the distribution of the components of

the research. The results of this test in table 2 indicated the normalization of the distribution of the variables in the pretest and posttest. Therefore, the assumption of the normalization of variables is established. For this basic, parametric analysis can be used.

Table 3. The assumption of homogeneity of regression slope of pretest and posttest of sexual satisfaction and sexual self-esteem, in two experimental and control group

variable	SS	df	MS	F	p
sexual satisfaction	7.433	1	7.43	2.09	0.16
sexual self-esteem	16.22	1	16.22	0.60	0.45

The F test was used to study the assumption of the homogeneity of regression slope of pretest and posttest of sexual satisfaction and sexual self-esteem, in experimental and control groups. This test results were reported in table 3. As it is observed, the F statistics is not meaningful ($p > 0.05$). also, the Levin Test was used to study the homogeneity of variances of experimental and control groups, in posttests of sexual satisfaction and sexual self-esteem, to compare the variances of two

groups and the results indicated that the dependent variable variances were equal in experimental and control groups (sexual satisfaction: $F=2.09$, $p=0.16$, sexual self-esteem: $F=0.60$, $p=0.45$). Also, the results of the assumption of homogeneity of variance-covariance matrices (MBOX Test) indicates no difference between the variances ($F=2.11$, $p=0.06$, $MBOX=7.07$), therefore, there is no obstacle to continue the analysis.

Table 4. The results related to credit indexes of multivariate analysis of covariance of variables of sexual satisfaction and sexual self-esteem

source	validity indexes	V	F	Hdf	Edf	P	Eta	Op
group	PillaisTrace	0.87	307.61	2	25	0.001	0.87	1.000
	Wilk's Lambda	0.03	307.61	2	25	0.001	0.87	1.000
	Hotelling's Trace	28.61	307.61	2	25	0.001	0.87	1.000
	Roy's Largest Root	28.61	307.61	2	25	0.001	0.87	1.000

The results related to credit indexes of multivariate covariance analysis indicated that the effect of the group is significant on the composition of the study components (Wilk's Lambda=0.87, $F=307.61$, $p<0.01$). Therefore, the Eta coefficient shows that considering

dependent variables, the difference between the two groups is significant and the difference scale for research variables, as a combination of the group, according to the Wilk's Lambda test is 0.87.

Table 5. Results of multivariate covariance analysis test of sexual satisfaction and sexual self-esteem

source	variables	SS	df	MS	F	P	Eta	Op
pretest	sexual satisfaction	1.73	1	1.73	0.80	0.38	0.038	0.139
	sexual self-esteem	36.58	1	36.58	1.94	0.18	0.07	0.268
group	sexual satisfaction	1531.77	1	1531.77	708.50	0.001	0.96	1.000
	sexual self-esteem	2631.81	1	2631.81	139.45	0.001	0.84	1.000
error	sexual satisfaction	56.21	26	2.16				
	sexual self-esteem	490.71	26	18.87				

According to the results of table 5, there is a significant difference between two experimental and control groups about variable of sexual satisfaction and sexual self-esteem. The Eta coefficient indicates that the difference between two groups, for the sexual satisfaction is ($p<0.001$, $F=708.50$) and sexual self-esteem is ($p<0.001$, $F=139.45$). It means that the sexual cognitive reconstruction education effected significantly on the sexual satisfaction and sexual self-esteem of women with sexual problems and increased number of them in experimental group.

Discussion

The present study was conducted to examine the impacts of the sexual cognitive reconstruction education on the sexual satisfaction and sexual self-esteem in women with sexual problems. The results indicated that there is a significant difference between two experimental and control groups about sexual satisfaction. It means that the experimental conditions have effected on the incensement of sexual satisfaction of women with sexual problems. This finding was in line to study results of [Sasanpour and et al. \(2016\)](#),

[Alexandra and et al. \(2020\)](#) and [Lee and et al. \(2020\)](#), because they expressed that the sexual cognitive reconstruction therapy effected on increasing the sexual satisfaction and function. To describe this finding, it can be said that the sexual cognitive reconstruction education lets individual to show his or her emotions and talk about his or her emotions freedom, so that this easy and free communication usually reduces anxiety (like as education of third session that explained these issues). Cognitive errors- a variety of irrational thinking and sexual compatibility cognition- familiarity with a variety of sexual irrational thinking explaining the realistic goals and expectations- familiarity with interactions and paying attention to the positive features of each other) and facilitate any person's feelings in relation ([Sasanpour and et al., 2014](#)). Destroying the feeling of sin or unconscious fear of composing and pleasure, replacing the correct cognition instead of inhibitory and false cognitive, can justify the effects of therapeutic intervention (justifying the effect of education program of sexual cognitive reconstruction). In addition, this training is so that the person initiating the necessary motive and ability to accept and expressed

sexual interests (such as the eight session that pays the education of the correct sexual techniques of the equalization) in a comfortable condition without the previous sexual tensions.

Also, it can be said that based on the cognitive reconstruction approach, these events are not events that make upset the person, but this is a person's thinking that is the result of his beliefs, his schemas and attitude and affects the processing of information and causes our emotions and reactions (Trip & et al., 2007). So it seems that the beliefs and thinking type of couples, form their type and severity of their reactions. So it is reasonable to be able to promote the principles of this approach to promote the way of thinking and non-social beliefs of couples and eventually promoting their marital satisfaction. When people were exposed to sexual cognitive reconstruction therapy, they were able to change their views and attitude towards their sexual satisfaction based on education sessions: irrational thoughts and sexual compatibility cognitions and forth session: education of cognitive reframing so that this factor caused them to have more sexual satisfaction after receiving education.

Also, the results indicated that there was a significant difference between two experimental and control groups about sexual self-esteem. It means that the experimental conditions had influence on incensement of women's sexual self-esteem. This finding was in line to researches results of Abbasi and et al. (2020) and Anjali and et al. (2020) and all of them expresses that the sexual cognitive reconstruction therapy effects on improvement of self-esteem and sexual attitude. to describe his finding, it can be said that the sexual cognitive reconstruction education can correct the sexual beliefs (the issues that are provided at the seventh education session, the cognitive reconstruction of the inefficient sexual thoughts of couples, the correction of sexual beliefs), and this approach can justify the effect of sexual education in the sexual intermediate program, by replacing the correct cognitions instead of incorrect and obstacle and preventing cognitions. the present research findings are the implementation of the impact of sexual cognitive reconstruction on sexual sexual satisfaction and sexual self-esteem based on education sessions, including the change of beliefs and misunderstandings caused by incorrect perceptions and confronting irrational beliefs based on the fourth session (the teaching of the cognitive framework), with the results of the study of Abbasi and et al. (2020), is in line. In addition, it can be said that in the cognitive reconstruction, the origin of validity of the specific beliefs is examined and the basic rules that cause the automatic negative thoughts, change, therefore, irrational thoughts give way to more logical beliefs. In this way, through teaching to people, the irrational thoughts of them on sexual issues, can be changed, and consequently, in order to increase sexual abilities, their sexual self-esteem should be provided. As the result of the study of Sadri and et al. (2021) indicated that there was a correlation between sexual

self-esteem and psychological and cognitive abilities. Also, in another explanation based on the definition of Lia and Rigo (2012) about the cognitive reconstruction, it can be said that the cognitive reconstruction is a multi-stage process that includes logical responses to these automated thoughts. On the other hand, Travis and White (2000) believe that women are enable in their right sexual self-esteem. One of the reasons to this problem is the wrong beliefs that have been presented to women; they think that the need of men, need to be prioritized, and so they should behave so that they provide their sexual partnership satisfaction. Accordingly, when women are exposed to such a process, they show demonstrations and negative emotions about the request, and by eliminating false distortions in their automated thoughts, they increase the sexual self-esteem.

Conclusion

In general, the results of this study indicated that the sexual cognitive reconstruction education had influence on increasing sexual satisfaction and sexual self-esteem of sexual problems. Therefore, the use of this psychotherapy intervention can be considered for improving sexual problems with double emphasis on the consent and satisfaction variables by psychologists and advisers of psychotherapy centers. Among the limitations of the present study, the impossibility of the follow-up phase was examined so that the effect of the education method in the long run was investigated. Also, due to the single sex of the research subjects in generalizing its findings to men and other cultures, we must respect the caution. Accordingly, the above restrictions should be considered by the next researchers to increase the ability to generalize the results.

Acknowledgment

We express our sincere gratitude to all individuals who assisted us in conducting this research.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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