

## Effectiveness of self-efficacy group therapy on problem solving skill and sexual self-efficacy in addicted women

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### Abstract

**Objective:** This study investigated the impact of self-efficacy group therapy on problem solving skill and sexual self-efficacy in addicted women of Qazvin city (one of Iran's cities).

**Methods:** This study examined two groups of 15 addicted women during the same treatment period in Qazvin city. The women were selected by sequential sampling. To collect data, we used a problem solving skill scale (D'zurilla & Nezu, 1990), and Reynolds' sexual self-efficacy scale. 8 sessions of group therapy were performed by experts. In the control group, no therapy was applied. After intervention, both groups were tested. Descriptive and inferential statistics were used to analyze the data.

**Results:** The results showed that training significantly improved sexual self-efficacy and problem solving skill in addicted women of Qazvin city. Scores in the experimental and control groups were significant ( $p < 0.05$ ).

**Conclusion:** Self-efficacy group therapy empowers people to actualize their knowledge, attitudes and values and enables motivation for healthy behavior which will have a significant impact on their sexual function and problem solving skill.

### Keywords

self-efficacy group therapy, sexual self-efficacy, problem solving skill

Addiction is a chronic and relapsing disease with several genetic, mental, social and environmental factors that interact to initiate and continue it. Like other mental illnesses, addiction is rooted in several factors. Each person may have a special group of confounding factors, and if only one of these factors is considered in addiction treatment and other factors are not, assuming positive effects of that factor, other parameters can reduce the effect of the chosen factor.

Therefore, current methods of treatment do not have adequate efficacy and, even in the best treatments, success rates have only been 30-50% even after yearlong treatment (Brien & McLellan, 2006), in treatment considering all factors is essential.

Problem solving skill is one of the factors which is very important in etiology and treatment of addiction (Wig et al, 2006) but is often forgotten in the treatment process. Addicted people, as part of a vulnerable community, face psychological emotional, social and economic problems which have negative impacts on their sexual self-efficacy and problem solving skill and keep them from daily activities (Chen, Yeh & Lee, 2009; Elliot et al, 2006).

Carmack (2000) offers a simple explanation of problem solving skill as an oriented cognitive process to reach a goal that seemed have no solution. Problem solving skill consistently affects compatibility with others in emotional and mental health issues (D'zurilla & Nezu, 2007). Thus, problem solving skill is an important factor to influence and control stressful situations (Heppner & Witt, 2004). Determined individuals have a positive attitude toward solving problems, and often negative individuals have a negative attitude towards problems (Maddux, 2002). *Is this a direct quote from the source as the sentence needs clarification but I don't want to do so without your permission?* This attitude can lead him/her to an unsuitable solution, such as addiction, which in turn can have damaging effects on his/her life and interfere in sexual performance (Duits et al, 2009).

The National Institutes of Health has defined erection malfunctions as the inability to make or maintain an erection sufficient penis (as satisfactory sexual activity); this disorder can be progressive (National Institute of Health, 1993). This is the most common sexual dysfunction among couples and can result in a traumatic relationship.

Poor erection function can also affect an individual's self-image, both emotionally and physically, and his/her relationship with their partner. This can be associated with some social-psychological issues, such as depression, anxiety about sexual performance, denial of sign, refusing sex, relationship distress, and disruption in problem solving skill (Feldman, Goldstein and Hatzichristou, 2005).

In recent years, treatment and prevention of addiction has been attempted through understanding the factors of it and the use of the scientific method has expanded. The best method of prevention does not consist of one but several strategies that must be used at the same time. Three strategies that often can be used in the world include: legal and protection strategies, training-educational strategies, and therapy. In the field of educational strategies, under which this research falls, knowledge can be given to individuals about their ability to quit addiction. On the other hand, Bolton (2004) believes that a high percentage of addict therapies have been focused on drugs with only a small percentage of them focused on the mental health aspect. Research about addicted people shows that according to physical, psychological and social conditions, they will need specialized training treatments. Researches such as Carroll et al. (2009) and Mandel, et al. (2008) showed that training strategies are effective in improving physical and mental health of addicts. Research also shows that training interventions can be effective in addicted people to enhance sexual performance, increase the performance of their immune system, and increase hopefulness (De Leon, 2006).

Self-efficacy group therapy is one of the appropriate interventions. Albert Bandura (1997) stated that self-efficacy beliefs affect people's sexual and emotional reactions. Bandura's cognitive-behavioral approach for increasing self efficacy is based on four principles (Sholts and Sholts, 2002):

1. Face people with successful experiences by arranging an achievable goal which will increase success performance.
2. Face people with good models that have been successful in a particular field, which improves the succession of successful experiences.
3. Verbal Persuasion, which leads people to believe they are capable of successful operation.
4. Create physical arousal through diet, stress reduction, and exercise programs that increase ability to cope with problems.

Bandura (1977) notes that successful performance increases self-efficacy. Sexual self-efficacy and problem-solving skill are essential for social and marital adjustment in addicts. This study is trying to answer this question; is self-efficacy group therapy effective on problem solving skills and sexual self-efficacy in addicted women?

### Method

This research utilized a mixed methods experimental design and was conducted in 2012.

### Participants

The study sample included two groups, one experimental and one control, each of 15 addicted women in Qazvin City (one of Iran's cities). ( $N = 30$ )

All participants (in control and experiment group) were aged between 22 to 55 years. The control group did not receive any intervention and data were taken pre-test and post-test.

**Inclusion criteria:** satisfaction of person to participate in intervention, at least third grade secondary education, married.

**Exclusion criteria:** illiteracy, physical and psychological disorders

### Measures

1. **Family problem solving skill questionnaire (D'zurilla & Nezu, 1990):** The responses to this questionnaire used the 5-level Likert scale: 1 = never, 2 = seldom, 3 = sometimes, 4 = very often, 5 = always. Ahmadi et al (2010) calculated its reliability 0.91 and validity 0.81 in Iran.
2. **Sexual self-efficacy scale-erectile functioning:** This scale is based on reviews of the Bandura, Adams and Beyer (1977) sexual treatment questionnaire (Lobitz and Baker, 1979) and Erectile Difficulty Questionnaire (Reynolds, 1978).

Libman, Rothenberg, Fichten and Amsel (1985) showed by split-half reliability for sexual efficacy scale in men and women respectively (0.88, 0.94). In Iran, Rajabi et al, (2012) with the use of factor analysis obtained Cronbach's Alpha in total 0.95 and for five factors was in range (0.91-0.82). Subscales include: pleasurable sexual intercourse without fear or anxiety, maintaining of erection during sexual intercourse, get a sexual encounter, to reach orgasm, re-sexual desire.

**Table 1.** Content of sessions and homework related to self-efficacy group therapy

Session	Content of sessions	Homework
1	<ul style="list-style-type: none"> <li>To introduce rules of participation in meetings and conditions for achieving awards to encourage better performance in meetings.</li> <li>To define self-efficacy and to describe some of the characteristics of individuals with high and low self-efficacy.</li> </ul>	<ol style="list-style-type: none"> <li>Write individual understands of the self-efficacy concept.</li> <li>Describe some of the characteristics of individuals with high and low self-efficacy based on the discussion in class.</li> </ol>
2	<ul style="list-style-type: none"> <li>To review assignments from the previous meeting and provide feedback</li> <li>To describe other characteristics of individuals with high and low self-efficacy, discuss them, and give feedback.</li> <li>To give feedback about goals which members want to achieve but feel that they cannot, the reasons for this perception, and feedback from other members about the accuracy of this perception.</li> <li>To give detailed explanation of the logic of applied relaxation, to associate it with self-efficacy, and to explain the requirements for its effectiveness.</li> </ul>	<ol style="list-style-type: none"> <li>Answer this question: have you ever thought you could not achieve something, only to find out you could? If so, have you thought that you knew what to do before you did it?</li> <li>Describe two or three distressful situations in this week, drastically scaled from zero to 100; describe the symptoms of physical, cognitive and emotional impact.</li> </ol>
3	<ul style="list-style-type: none"> <li>To review reports from individual members about homework and discuss them in detail.</li> <li>To implement Verbal Persuasion</li> <li>To allow members to report on homework of detecting early signs of anxiety and progressive relaxation training</li> </ul>	<ol style="list-style-type: none"> <li>Ask about a statement that the person feels unable to reach and interview a person who has achieved it</li> <li>Ask another member about doing homework 1.</li> <li>Progressive relaxation exercises, twice a day, and record the results.</li> </ol>
4	<ul style="list-style-type: none"> <li>To review reports by members about homework and discuss them in detail</li> <li>To suggest diet, stress reduction, and exercise programs for physical arousal and explain its association with self-efficacy</li> <li>To present the report about progressive relaxation methods, discuss it, and to train and practice relaxation techniques without stress</li> </ul>	<ol style="list-style-type: none"> <li>Ask about a statement that a person feels unable to reach and interview a person who has achieved it</li> <li>To ask another member about doing homework 1.</li> <li>Progressive relaxation exercises, twice a day, and record the results.</li> </ol>
5	<ul style="list-style-type: none"> <li>To review reports by members about homework, discuss them in detail, and give feedback.</li> <li>To explain how to recognize feelings of self-efficacy and performance in various aspects of life.</li> <li>To review reports about relaxation techniques without stress homework; training and practice of relaxation techniques to control the symptoms</li> </ul>	<ol style="list-style-type: none"> <li>Detailed report on the first steps to take in order to achieve the goal</li> <li>Practice relaxation of control signals twice a day and record the results.</li> </ol>
6	<ul style="list-style-type: none"> <li>To review reports by members about homework, discuss them in detail, and give feedback.</li> <li>To define self-regulation and explain its connection to self-efficacy; to suggest conditions of maximum effectiveness of alternative observation on individuals' self-efficacy.</li> </ul>	<ol style="list-style-type: none"> <li>Ask about a statement that the person feels unable to reach and interview a person who has achieved it</li> <li>Answer this question: when you have taken the first step toward achieving the goal, what obstacles have arisen and, for each of them, what kinds of solutions were found?</li> </ol>
7	<ul style="list-style-type: none"> <li>To review reports by individual members about homework and discuss them in detail.</li> <li>To lecture about a successful person's life, the obstacles and problems they faced when trying to achieve their goals, and the ways to solve each of these problems and obstacles</li> <li>Reports on relaxation homework, training and practice of the fast relaxation method</li> </ul>	<ol style="list-style-type: none"> <li>Answer this question: does the person in the past week trying to reach a goal feel doubt or despair, and have they decided to give up? If they are, what caused it, and if she is determined to reach her goal, what is the cause?</li> <li>Collect all the certificates, awards, medals, look at them, and describe how they make you feel.</li> <li>Do quick relaxation practice about 15 minutes per day and record the result.</li> </ol>
8	<ul style="list-style-type: none"> <li>To review reports on homework, expression of feelings, and the decision of the person regarding continuing efforts to achieve the goal and discuss</li> <li>To lecture about a successful person's life, the obstacles and problems they faced when trying to achieve their goals, and the ways to solve each of these problems and obstacles</li> <li>To review reports of application of specific relaxation homework, short assignments and discussions over whole session</li> </ul>	<ol style="list-style-type: none"> <li>The one-year program is designed to achieve its objective; provide detailed description of the program and the five required steps for it.</li> <li>Express obstacles and problems to describe each step and explain ways to overcome these obstacles and solve problems.</li> <li>Do specific relaxation practice twice a day and record the results.</li> </ol>

**Table 2.** Results of Shapiro–Wilk test for evaluation of normality of data

Variable	Group	Shapiro–Wilk test		
		sig	df	F
Pleasurable sexual intercourse without fear or anxiety	Test group	0.175	15	0.917
	Control group	0.385	15	0.940
Maintaining of erection during sexual intercourse	Test group	0.086	15	0.897
	Control group	0.067	15	0.884
Get a sexual encounter	Test group	0.069	15	0.889
	Control group	0.065	15	0.893
To reach orgasm	Test group	0.335	15	0.885
	Control group	0.073	15	0.896
Re-sexual desire	Test group	0.076	15	0.881
	Control group	0.082	15	0.959
Problem solving skill	Test group	0.673	15	0.961
	Control group	0.702	15	0.963

**Table 3.** Result of Levene's test for homogeneity of intergroup variance of data

Variable	Levene's test			
	F	df <sub>1</sub>	df <sub>2</sub>	sig.
Pleasurable sexual intercourse without fear or anxiety	2.279	1	28	0.106
Maintaining of erection during sexual intercourse	0.495	1	28	0.488
Get a sexual encounter	1.001	1	28	0.326
To reach orgasm	0.269	1	28	0.608
Re-sexual desire.	0.063	1	28	0.804
Problem solving skill	0.088	1	28	0.769

### Procedure

After final sample selection, women who were in the same treatment period in health centers of Qazvin city were divided into an experimental group and a control group. The experimental group was asked to participate in self-efficacy group therapy that was held in the health center of Qazvin City and were promised that, by regular and active participation in this group, their health care costs would be discounted. Participants were required to attend at least 8 sessions of 120 minutes. Two months after the training, the questionnaires were carried out again. Data were analyzed by using SPSS software, version 18 and the Covariance test, Shapiro Wilk test, and Levene test.

**Note:** In order to comply with the ethical principles, upon the completion of the study a self-efficacy group therapy session was conducted for the control group.

Table 1 shows the content of the sessions and the homework related to the self-efficacy group therapy program.

### Results

Covariance analysis was used to evaluate data normality and covariance, and homogeneity of pretest scores between the two groups. In order to examine the normality data, the Shapiro Wilk test was used. The Levine test was used to evaluate homogeneity of variance within groups. According to the data in Table 2 and Table 3, the findings were not significant ( $\alpha = .05$  level). Assumptions were inferred about normality and homogeneity of data covariance and regression slope, and the use of covariance was permitted for evaluation of assumptions with homogeneity of covariance.

According to Table 3, the results show significance ( $\alpha = 0.05$ ), and therefore it can be concluded that group therapy based on self-efficacy was effective in sexual self-efficacy and problem solving skill in addicted women.

### Conclusion

Addicted people, as a vulnerable community, face psychological emotional, social and economic problems in addition to physical consequences of addiction, all of which will have a negative impact on their marital satisfaction and sexual self-efficacy and keep them from their daily activities.

**Table 4.** Results of covariance analysis in evaluation of self-efficacy group therapy on sexual self-efficacy and problem solving skill in addicted women

Index sources variation	Type III sum of squares	df	Mean square	F	sig.	Partial eta squared	
Pleasurable sexual intercourse without fear or anxiety	907.500	1-28	907.500	530.850	0.021	0.873	
Maintaining of erection during sexual intercourse	208.033	1-28	208.033	301.290	0.031	0.819	
Group effect	Get a sexual encounter	213.323	1-28	213.323	228.571	0.001	0.734
	To reach orgasm	288.033	1-28	288.033	356.135	0.001	0.846
	Re-sexual desire.	381.633	1-28	381.633	316.771	0.010	0.704
	Problem solving skill	328.533	1-28	328.533	44.956	0.001	0.616

Research suggests that mental health care is one of the most basic needs of addicts and can reduce their relapsing (Young, 2005).

The most important source of judgment about efficacy is success function. Previous successful experiences which provide direct indication about the level of an individual's competency reinforce their self-efficacy by demonstrating their abilities (Sholts & Sholts, 2002). Experiences and research in clinical psychology and positive psychology suggest that creating a path of success is the most effective way to increase self-efficacy and self-esteem (Schunk & Gun, 2006).

Moving in a path of success helps a person to overcome any sense of defeat or weak morale by gaining competence in important aspects of life and the ability to plan for failure in these aspects by practicing tasks which are related to life (Frank and Frank, 1993; Kaley & Cloutier, 2004).

Looking closely at their feelings awards and describing how the awards make them feel; providing a report about the first steps towards achieving a goal; and finally designing an annual program for attracting the attention of participants to previous successes helps them plan for success in important aspects of life.

Implementing strategies such as lecturing participants about successful peoples' lives, the obstacles and problems that are faced when trying to achieve goals, and the ways which were used to solve each of these problems and obstacles; interviewing people who have had similar experiences and overcome addiction despite their initial impression about it and who have now reached their own desires; exploring thinking processes and strategies that have led to their success; and group discussion about these strategies and practices, have a positive relationship with increasing participants' sense of competence and the appropriate strategies and ways to deal with difficult situations.

According to Bandura's beliefs, Verbal Persuasion can increase self-efficacy. Verbal Persuasion in a group meeting comes from comments made by the facilitator and group members about negative thoughts to the individual in case of failure to fulfill this purpose.

In fact, past research suggests that training interventions such as self-efficacy group therapy can

improve problem-solving skill in patients, and enhance their immune function and life expectancy (De Leon, 2006). This method (self-efficacy group therapy) provides a space for the group to feel safe and overcome their fears and also facilitates individual awareness. In addition to relaxation practices (Dean, 2000), exercise (Stringer, 2006) and proper nutrition (Keller, 2004), positive measures to promote physical and mental health in women addicts are included.

Although the impact of these factors can be identified long-term, the results of this study demonstrate the effectiveness of these agents as a whole. On the other hand, according to results, the intervention program could improve problem solving skills in women addicts and also had positive effects on sexual function and sexual self-efficacy, resulting in increased life expectancy and tolerance to harsh issues of life which can prevent the occurrence of risky behavior among them. This program provides required knowledge in the field of addiction and also teaches proper practices for individual sexual self-efficacy among the sample group. Although sampling of the population is one of the limitations of this study, due to the effectiveness of the treatment program, promotion and development of this intervention is recommended to other therapists and researchers. Finally, it is proposed to evaluate the impact of this intervention on a group of men.

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