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### Original Article

# The efficacy of eye movement desensitization technique (EMDR) on worry, anxiety and annoying memories in women of Alanan Association of Gorgan city, 2016

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## Abstract

**Introduction:** Addiction is one of the special issues for clinical psychologists and psychiatrists because it has many negative consequences for communities. The present study examined the teaching of EMDR technique on annoying memories and anxiety and worry in women members of Alanan Association of Gorgan city.

**Materials and Methods:** In this clinical study, 30 women of Alanan Association of Gorgan (2016) were selected by convenient method and divided into control and experimental groups. Data were collected using Raymond Bernard Cattle's Anxiety Inventory (CAQ), Pennsylvania Worrying (PSWQ) and Brequette's Annoying Memories. Data were analyzed through descriptive and inferential statistics.

**Results:** Findings showed that EMDR was effective on anxiety and worry among women of Alanan Association ( $P < 0.05$ ) while it had not significant impact on annoying memories.

**Conclusion:** The results of the study revealed that EMDR technique can impact on anxiety and worry among addict women.

**Keywords:** Anxiety, Eye movement desensitization technique, Memories, Substance abuse, Worry

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## Introduction

Substance addiction is one of the special topics of attention of clinical psychologists and psychiatrists because this issue has many negative consequences and effects on societies, and on the other hand, many of these addicted people also have personality disorders (1). Moreover, in some studies, it has been seen that there is a relationship between substance abuse

and psychological diseases (2). Worry is a cognitive process in that people anticipate threatening events and outcomes and gradually becomes a strategy to discover and deal with imminent threats (3). Considering the existence of a relationship between substance abuse and psychiatric and psychological illness in addicted people, the possible importance of eye movement desensitization and information reprocessing

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(EMDR) training on anxiety, worry, and disturbing memories in people can be considered. Addict realized (5,4). There is evidence that EMDR is effective in helping people overcome the guilt, fear, distress, faulty thinking, and anxiety that typically result from traumatic experiences (6-9). Eye movements seem to be the informants of stereotyped responses, that is, the complex physiological responses that alcoholics suffer from. This data processing prepares for intentional processing (10). Anticipated threats resulting from worry are naturally very improbable, and the innate human ability to plan by thinking about the future causes anxiety and tension (11). Therefore, several researches have been conducted in this field, including Shahnnavazi et al., who investigated the effect of eye movement desensitization and reprocessing on the anxiety of adolescents with thalassemia and that this method is effective in reducing the anxiety of adolescents with thalassemia (12). It can be seen that there is a possible relationship between worry and anxiety. On the other hand, considering that disturbing memories are bitter and unfortunate memories from the past that have occupied people's minds voluntarily or involuntarily, it can be considered as a variable that has adverse effects on people's future actions and probably with worry and anxiety in It is related (13) and also considering that the practical necessity of the current research is that if the findings show that desensitization training is practical on any of the variables of disturbing memories, anxiety, and worry of people, it can be informed and experienced psychologists in this The context called for using these techniques to take a step to improve the conditions of addicted people in order to have a healthy society and free from psychological problems related to these people. Also, the importance of women as current and future mothers shows the necessity of the current research.

## Materials and Methods

The present research consists of pre-test and post-test, with two groups: a test group and a control group. This study included 30 non-random and accessible women members of the Elanan Association of Gorgan in 1995. Selection and information was collected using Raymond Bernard Kettle's anxiety questionnaires, Pennsylvania anxiety and Berkowitz's disturbing memories.

### Research instruments

*A) Pennsylvania Worry Questionnaire (PSWQ):* It is a 16-item self-report scale that measures excessive and uncontrollable worry. Eleven questions are scored positively, and five questions are scored negatively; in Iran, standardization has been done by Deshhiri and colleagues (14).

*B) Kettle Anxiety Questionnaire (CAQ):* It was created by Raymond Bernard Kettle. This scale contains 40 questions that comprise the anxiety scale of the 16-factor Kettle personality test. The first 20 questions measure covert anxiety (attribute), and the second 20 measure overt anxiety (state). This scale can be used for men and women after 14 in most cultures. This questionnaire was standardized on student samples by the prosecutor in 2014, and general anxiety was shown with a correlation index of 72%. Overt anxiety correlates 51%, 65%, and 43% with Purcell Taylor and Madeline scale (15).

*C) Questionnaire of Disturbing Memories of Berkowitz:* This scale has 30 questions. It is made for measuring and controlling anger, which measures five dimensions on a Likert scale from one (not confirmed) to five (entirely accurate). For example, Cronbach's alpha was calculated at 88% in the Persian version of Basharat (16).

## Results

The following table shows the statistical indicators of the leading research variables.

**Table 1.** Statistical indicators of research variables in the experimental group

Variable	Phase	M ± SD	Variance
Anxiety	Pre-test	50.06 ± 8.20	67.35
	Post-test	44.00 ± 7.30	53.42
Worrying	Pre-test	39.00 ± 8.01	63.28
	Post-test	27.93 ± 3.10	9.63
Annoying memories	Pre-test	50.60 ± 5.67	32.25
	Post-test	50.93 ± 2.52	6.35

The above table shows that, except for the annoying memories variable, the average of all pre-tests was higher than the post-tests.

In general, there is no significant difference between the average disturbing memories of the groups in the pre-test and post-test, and in both cases, the average in the post-test was higher than the average in the pre-test. Therefore, EMDR training has no significant effect on the disturbing memories of women members of the Elanan Association in Gorgan city ( $P < 0.05$ ).

The average of the two groups was close to each other in the pre-test, but in the post-test, the average of the experimental group was lower, which indicates the effect of the training course on reducing anxiety in the experimental group ( $P = 0.015$ ). In general, it can be said that EMDR training does not significantly affect the disturbing memories of women who are members of the Elanan Association in Gorgan ( $P = 0.945$ ).

### Discussion

This study showed that EMDR training is not practical in disturbing memories of women members of the Elanan Association in Gorgan. Therefore, this method cannot be used to change and improve it. The results of Jandaghi, van den Hout et al., and Schabert et al. studies are inconsistent with this finding of the present research (17-19). This research investigated the effect of eye movement desensitization training and EMDR information reprocessing on disturbing memories and found that eye movement desensitization training and EMDR information reprocessing has a positive effect on disturbing memories and improves it. In explaining this finding, which was inconsistent with previous research findings, we can point to the difference in the sample and their particular conditions.

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Jandaghi's research sample consisted of divorced women. In the other two cases, the research was conducted on people with variable disorders, so the difference in the findings of the current research with the previous findings can be attributed to the difference in the sample, and their conditions as a population that has special conditions and deals with addiction and addicts are attributed. Finally, regarding the possible process of desensitization with eye movements and reprocessing of EMDR information on disturbing memories, it can be seen that this process could not have significant effects on disturbing memories. Therefore, it is expected that other educational methods will be effective in disturbing memories. Also, in the continuation of the research results, it was shown that EMDR training on the anxiety of women members of Elanan Association in Gorgan at a significant level of 0.99%.

Furthermore, the average of the test group in the post-test was lower than the control group. This finding means that desensitization training with eye movements and reprocessing of EMDR information influenced the anxiety of women members of the Elanan Association in Gorgan. The results of studies by Narimani and Rajabi, Eshairi et al., Mohammad Tahrani et al., Behnam Moghadam et al., Shahnavaizi et al., Friedberg, Arbia, et al. (12,26-20) confirm this finding of the present research. Therefore, this research investigated the effect of eye movement desensitization training and EMDR information reprocessing on anxiety.

### Conclusion

The present research findings showed that EMDR is effective on the anxiety of addicted women, while it does not have a significant effect on the disturbing memories of this group.

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