



Research paper

## The Effectiveness of Schema Therapy on Stress, Social Adaptation and Psychological Cohesion of Women with Cancer

Rezapouriyan, Narjes <sup>1</sup>; Haroon Rashidi, Homayoon <sup>\*2</sup>

1. M.A. Department of Psychology, Dezful Branch, Islamic Azad University, Dezful, Iran. [rezapornarges0@gmail.com](mailto:rezapornarges0@gmail.com)
2. Corresponding Author: Assistant Professor Department of Psychology, Dezful Branch, Islamic Azad University, Dezful, Iran [Haroon\\_rashidi2003@yahoo.com](mailto:Haroon_rashidi2003@yahoo.com)

### Abstract

This research was conducted with the aim of determining the effectiveness of schema therapy on stress, social adjustment and psychological cohesion of women with cancer. The research method was semi-experimental study. The statistical population of the study included all women with cancer in Dezful city of Iran and the sample included 30 of these women who were selected by the available sampling method. The experimental group received eight 90-minute weekly sessions intervention of the schema therapy. The tools were perceived stress questionnaires, social adjustment questionnaire and sense of coherence questionnaire in three stages (before, after and two months after the implementation of schema therapy). Data were analyzed by mixed analysis of variance. The findings showed that there was a significant difference between the experimental and control groups in terms of stress, social adaptation and psychological cohesion in women with cancer.

**Keywords:** Cancer, psychological cohesion, schema therapy, social adaptation, stress.

### Introduction

Cancer is a general term to describe a large group of diseases characterized by uncontrolled growth of body cells and local tissue invasion and systemic metastasis (Wu, et al., 2021). Crises caused by cancer cause imbalance and disharmony of the body and mind of the affected person, which will increase the feeling of hopelessness and severe stress in the patient (Sevi, et al., 2020). Considering the increasing importance of social adaptation and psychological cohesion and considering that cancer is associated with stress and negative emotions, the identification and application of psychological treatments can be effective in preventing, improving stress and psychological problems in people with cancer. Among the interventions that can be effective is schema therapy. Also, since in Iran, no research has been done on the effectiveness of schema therapy on stress, social adaptation and psychological cohesion of women with cancer, and it is hoped to improve psychosocial health in dealing with cancer and its complications through the use of schema therapy. The cognitive awareness of these patients has been increased so that, in this way, along with biological and medical treatments, they can smooth the path to health. Also, failure to identify and treat emotional disorders on time causes prolonged hospitalization, reduced chances and duration of survival, disruption in medical treatments, non-acceptance of medical treatments and non-acceptance and reduction of compliance to treatment in these patients. Therefore, the hypotheses of this study are that:

- Schema therapy is effective in reducing the stress of women with cancer.

- Schema therapy is effective in increasing the social adaptation of women with cancer
- Schema therapy is effective in increasing the psychological coherence of women with cancer.

## Method

In this research, a semi-experimental research design of pre-test-post-test type with control group and follow-up study was used. The statistical population of this research was made up of women suffering from cancer in Dezful city in Iran. 30 people who were eligible to enter the study and also willing to cooperate were selected as available and were randomly divided into two experimental (15 people) and control (15 people) groups. Mixed variance analysis was used to analyze the data.

## Tools

**Perceived Stress Scale (PSS):** This scale is a self-report instrument consisting of 14 items and was developed by Cohen, et al. (1983). The internal consistency coefficients of the total score of the scale are 0.85. In this study, the reliability of the whole scale was obtained by Cronbach's alpha method of 0.81.

**Adjustment Inventory (BAI):** This test, compiled by Bell (1962), has 140 items and four subscales of family, health, emotional, and social adjustment. Each subscale contains 35 items. In this research, the 35-item subscale of social adjustment was used. The reliability coefficient of the social adjustment subscale is 0.88. In this research, the reliability of the entire list was obtained using Cronbach's alpha method of 0.80.

**Sense of Coherence Scale (SCS):** This scale was created by Antonovsky (1993), it has 29 items. The alpha obtained for the questionnaire was between 0.70 and 0.95. In this research, the reliability of the whole scale was obtained with Cronbach's alpha method of 0.84.

## Results

The contents of Table 1 show that the two research groups did not have significant differences in the variables of stress, social adaptation and psychological cohesion in the pre-test stage; Because the average and standard deviation of the groups were almost close to each other, but in the post-test and follow-up phase, the average and standard deviation of the experimental group had noticeable changes in the variables of stress, social adaptation and psychological cohesion.

**Table 1: Descriptive information about stress, social adaptation and psychological cohesion of the two groups in three stages**

Variables	Experimental			Control		
	Pre-test M(SD)	Post-test M(SD)	follow up M(SD)	Pre-test M(SD)	Post-test M(SD)	follow up M(SD)
<b>Stress</b>	30.81 (4.77)	24.82 (4.69)	23.79 (4.45)	30.62 (5.12)	30.70 (5.91)	<b>30.67</b> <b>(5.43)</b>
<b>Social Adaptation</b>	17.10 (4.65)	11.26 (3.66)	9.98 (2.23)	17.51 (4.73)	17.52 (4.71)	<b>17.76</b> <b>(4.65)</b>

<b>Psychological Cohesion</b>	36.61 (5.92)	40.23 (6.20)	40.89 (6.27)	36.71 (5.61)	36.82 (5.43)	<b>39.98</b> <b>(5.67)</b>
-------------------------------	-----------------	-----------------	-----------------	-----------------	-----------------	-------------------------------

The results of the mixed variance test showed that the time factor, grouping factor (schema therapy) and the interaction effect of grouping and time factor had a significant effect on the stress score, social adjustment and psychological cohesion of women with cancer ( $p < 0.001$ ).

**Table 2: Table1. Results of mixed analysis of variance with repeated measures**

Variable	Source	SS	df	MS	F	Sig	Eta
<b>Stress</b>	Time	289.28	2	144.64	46.70	0.001	0.591
	group	421.72	1	421.72	17.45	0.001	0.423
	Time * group	232.5	1	232.5	68.67	0.001	0.674
<b>Social Adaptation</b>	Time	250.21	2	125.10	33.81	0.001	0.530
	group	324.12	1	324.12	27.74	0.001	0.401
	Time * group	226.18	1	226.18	40.76	0.001	0.542
<b>Psychological Cohesion</b>	Time	452.12	2	226.06	29.67	0.001	0.412
	group	546.19	1	546.19	24.65	0.001	0.346
	Time * group	343.41	1	343.41	33.76	0.001	0.531

## Discussion and Conclusion

The results showed that the intervention has a significant effect on reducing stress and increasing social adaptation and psychological cohesion. In the explanation of this finding, it can be said that by using this model, people can see their initial incompatible schemas as discordant, thus, by being aware of their existence, they will find more motivation to get rid of problems. Therefore, schema therapy techniques help to provide cancer patients with emotional reorganization, new self-learning investigations, interpersonal emotion regulation, and self-relaxation to improve schemas. Schema therapy provides a context for change by working on the multifaceted dimensions of a person, which include cognitive, experiential and behavioral dimensions. In the cognitive dimension, schema therapy, by working on schemas, helps people understand the reasons for their reduced adaptation caused by their thoughts, and by testing the validity of the schema and finding a new definition of the evidence that confirms or rejects the schema, the resulting schema question it and find a more optimistic view of people and the world. Forming an optimistic view towards people and the world can also lead to an increase in social adaptation and psychological coherence and stress reduction. Therefore, this treatment method can be used to improve and reduce perceived stress and increase social adaptation and psychological cohesion in women with cancer. The most important limitations of this study were the lack of specification and separation of cancer types. It is suggested that specialists and therapists pay attention to the schema therapy approach in working with women suffering from cancer and developing treatment plans for these people.

## References

- Antonovsky, A. (1993). The structure and properties of the sense of coherence scale. *Social Science and Medicine*, 36(5), 725-733. [https://doi.org/10.1016/0277-9536\(93\)90033](https://doi.org/10.1016/0277-9536(93)90033)
- Bell, H. M. (1962). *Adjustment Inventory Manual*. Palo Alto, Calif: Consulting Psychologists Press.
- Cohen S, Kamarck T, & Mermelstein R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24: 385–396. <https://doi.org/10.2307/2136404>
- Nikcevic, A. V., Marino, C., Kolubinski, D. C., Leach, D. & Spada, M. M. (2021). Modelling the contribution of the Big Five personality traits, health anxiety, and COVID-19 psychological distress to generalised anxiety and depressive symptoms during the COVID-19 pandemic. *Journal of Affective Disorders*, 279: 578-584. DOI: [10.1016/j.jad.2020.10.053](https://doi.org/10.1016/j.jad.2020.10.053)
- Sevi, B., Urganci, B., & Sakman, E. (2020). Who cheats? An examination of light and dark personality traits as predictors of infidelity. *Personality and Individual Differences*, 164, 110126. <https://doi.org/10.1016/j.paid.2020.110126>
- Wu, H. S., Davis, J. E., & Chen, L. (2021). Bright light shows promise in improving sleep, depression, and quality of life in women with breast cancer during chemotherapy: findings of a pilot study. *Chronobiology International*, 38(5): 694-704. DOI: [10.1080/07420528.2021.1871914](https://doi.org/10.1080/07420528.2021.1871914)

## Acknowledgments

We thank all the people who participated in this study.

## Funding

All financial resources and the cost of research and publication of the article are entirely the responsibility of the authors and no financial support has been received.

## Conflict of Interests

The authors declared no conflict of interest



This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution-Noncommercial 4.0 International (CC BYNC4.0 license) (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

---