

Comparison of the efficiency of schema therapy and hypnotherapy on PTSD symptom modification on sexual victims of emotional relationships

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Abstract

Objective: *The purpose of this study was to compare the effectiveness of schema therapy and hypnotherapy on the modification of PTSD symptoms on sexual victims of emotional relationships.*

Method: *Regarding the purpose, the present study was applied, considering the research method, it is semi-experimental with pre-test and post-test design with control and comparison group. The statistical population includes sexual victims of emotional relationships referring to Navid Mehr Clinic in the period from April to August 2019. Among the members of the study population, 18 were selected voluntarily and purposefully, and assigned in three groups: 6 people in schema therapy group, 6 people in hypnotherapy group, and 6 in the control group. The schema group underwent 8 sessions of schema therapy to complete the treatment protocol, and the hypnosis group underwent 8 sessions of hypnotherapy, but the control group did not receive treatment. Though, in order to observe the ethical principles of the research, the control group was treated after the completion of the research. In addition to clinical interviews, post-traumatic stress disorder was used to assess PTSD symptoms.*

Results: *The results indicated that both schema therapy and hypnotherapy are effective in modifying PTSD symptoms in sexual victims of emotional relationships. There was also no significant difference between schema therapy and hypnotherapy in modifying PTSD symptoms in sexual victims of emotional relationships.*

Conclusion: *Due to the efficiency of schema therapy and hypnotherapy, these treatments can be used as effective treatment methods in decreasing the symptoms of PTSD in clinics and counseling centers.*

Keywords: *Schema Therapy, Hypnotherapy, PTSD, Emotional Relationships, Sexual Victims*

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I. Introduction

Almost half of women who were sexually assaulted without consent at university age did not consider it rape. Most girls have sexual intercourse in a relationship because of the fear of breaking up. These women are called unwary victims because they do not understand that they have been raped (Shibley Hyde, translated by Khamseh, 2015). During sexual intercourse and the days after that, the girls who accept this relationship as they still have an emotional relationship with their partner and see marriage as the prospect of this relationship, do not show up the symptoms of post-traumatic stress disorder (PTSD), but after the emotional breakdown, they develop severe psychological symptoms (Akbari, 2011). At least a third of them will suffer from PTSD. According to a study, 9% of women who were sexually abused were threatened by their partner with breaking up (Kring et al., 2007). Physical abuse and sexual harassment are strongly associated with subsequent psychological problems. Depression, feeling guilty, self-blame, anxiety, and low self-confidence (Franklin & Hoferbury, 2000), feeling sad and unhappiness (Jellen, Carol, Tire, 2001), post-traumatic stress disorder, social adjustment problems, and feelings of insecurity (Zachman and Muscarla, 2000), avoiding Intimate relationships, isolation, and hyperactivity (Walker and Roberts, 2001), along with harassment (quoted by Zargar and Neshatdoost, 2006) are considered as its effects.

The most renowned studies in this area were conducted by Begs and Holmestron in 1974, which used the term acute traumatic reaction. The term was used for the victims who were sexually abused and referred to a psychiatric hospital. They considered anxiety and a strong fear of death as the main core of the disorder. In 1995, the concept of post-traumatic stress disorder largely replaced the traumatic rape syndrome (Burgess, 1995). Post-traumatic stress disorder is a syndrome characterized by a set of symptoms that follow life-threatening traumatic events; the individual responds to this experience with fear and helplessness, constantly imagining the event in his or her mind and at the same time trying to avoid remembering it (Hedi et al., 2007). This disorder, like other DSM disorders, is defined by a set of symptoms, but unlike other disorders, exposure to a particular type of traumatic event is a criterion for its diagnosis. A person must have experienced or seen an event that involved a real or probable death, serious injury, or threat to his/her physical integrity or that of others (Kaplan and Kaplan, 2003).

Pharmaceutical and non-pharmacological methods are used in the treatment and control of PTSD. Non-pharmacological treatment or psychological interventions like lifestyle modification, cognitive-behavioral therapy, yoga, meditation, schema therapy and hypnotherapy have been used (Kharamin et al., 2012).

In a study, Mardanizadeh, Khosravi Farsani and Barimani (2019) investigated the effectiveness of hypnotherapy on the stress acceptance of veterans with post-traumatic stress disorder, and showed that hypnotherapy is an effective way to treat stress in veterans with post-traumatic stress disorder. Hypnotism and relaxation techniques in a scientific and developed style are among the special treatments that are used in a wider range comparing to the past. Hypnotism is a condition of advanced concentration in which a person focuses on a specific stimulus and does not pay attention to other stimuli such as environmental or body stimuli (Tams, translated by Chegini, 2018).

According to Kaplan and Sadock, hypnotism is a psychotherapy method that through changing the state of consciousness and using three components of absorption (attraction), dissociation, and suggestion, puts the audience in a situation where the process of hypnotherapy can be applied to him/her (Kaplan & Kaplan, 2003). In

this particular state of consciousness, the therapist's sentences (inculcations) penetrate into the subject's subconscious mind and are recorded in the depths of her mind. This feature greatly enhances the stability of hypnotism therapy (hypnotherapy). In hypnotism, people who are more hypnotized respond more to inculcations (Kasper et al., 2008). Also, many researchers and clinical specialists have currently observed that hypnotism creates a synergistic effect in combination with other therapies (Badele et al., 2013). Additionally, in many studies, it has been proven that the use of hypnotherapy has a significant effect on the treatment of depression, as well as symptoms of stress, like insomnia, muscle tension, anxiety, etc. However, research has emphasized more on its effect on decreasing stress and anxiety (Kumar and Puri Sing, 2015).

But in schema therapy, the deepest level of cognition is addressed, and early maladaptive schemas have been examined, and by applying cognitive, experimental (emotional), and behavioral and interpersonal strategies, it helps patients overcome these schemas. The primary goal of this model of psychotherapy is to create psychological awareness and increase conscious control over schemas, and its ultimate goal is to improve schemas and coping styles (Young, Klosko, and Weishaar, 2003; translated by Hamidpour and Andooz, 2012).

In schema-based therapy, the individual's general schema that is a broad pattern of thoughts, emotions, memories, and relationships is considered; the major component of the schema is the idea that each person has a general schema and it is activated in specific situations (Young, Klosko, and Weishaar, 2003). Schemas are rooted in childhood and adolescence and they later become inconsistent because they have prevented emotional needs to be satisfied during that time (Guner, 2017). Behaviorally, the individual involves in self-injurious patterns of behavior, chooses situations and relationships, and keeps the persistence of the desired schema. In contrast, s/he avoids relationships that are likely to repair her schema. In terms of interpersonal relationships, the individual communicates with others in a way that improves to the desired schema (Salavati, Yekeh Yazdan Doost and Keyvani, 2011).

When an inconsistent schema is triggered, people usually experience high levels of emotions such as extreme anger, anxiety, sadness, or feeling guilty (Murriss, 2006). This excitement intensity is usually unpleasant, therefore, people often form automatic processes to avoid schemas. Three processes include: the cognitive avoidance process, (Automatic attempts to stop thoughts and mental images that may trigger schemas); the emotional avoidance process (Automatic or voluntary attempts to block feelings evoked by schemas); and the process of behavioral avoidance and the tendency to withdraw from real-life situations or situations that may trigger painful schemas (Anderson, Reiger, and Catserson, 2006).

Schema therapy is the result of a skilful effort to enrich therapeutic techniques and show how such patients can be helped to diagnose and alter their maladaptive patterns (Honardoust, 2015). Considering the importance of schema therapy and hypnotherapy, this paper examines the comparison of the effectiveness of schema therapy and hypnotism on the modification of PTSD symptoms on sexual victims of emotional relationships.

II. Method

Regarding the purpose, the present study was applied, and considering the research method, it was both semi-experimental and comparative with pre-test and post-test design and a control group. The statistical

population includes sexual victims of emotional relationships referring to Navid Mehr Clinic in the period from April to August 2019. Among the members of the population, 18 were selected voluntarily and purposefully, and were assigned in three groups: 7 people in schema therapy, 6 people in hypnotherapy, and 6 in control. The schema group underwent 8 sessions of schema therapy to complete the treatment protocol, and the hypnosis group underwent 8 sessions of hypnotherapy, but the control group did not receive treatment. Though, in order to observe the ethical principles of the research, the control group was treated after the completion of the research. In addition to clinical interviews, post-traumatic stress disorder was used to assess PTSD symptoms.

Post-traumatic stress disorder scale: The MTCP PTSD scale has been advanced by Kin et al. This scale is self-reporting and is used to assess the severity of post-traumatic stress disorder symptoms. The PTSD scale includes 35 items that are categorized into five groups: re-experience, avoidance, emotional numbness, overstimulation, and self-harm. Three of these cases are closely related to DSM criteria for post-traumatic stress disorder. Subjects respond to these items with a five-point scale of wrong, rarely right, sometimes right, very right, and quite right. The total score of an individual's grades will be from 35 to 175. A score of 107 and above indicates the individual's post-traumatic stress disorder. The reliability of this questionnaire is based on Cronbach's alpha coefficient from 0.86 to 0.94 and its validity is based on internal correlation, halving, retesting with one week interval and peer-to-peer (PTSD) test was obtained 0.82, 0.91, 0.92; respectively.

Table 1: Description of schema therapy sessions

Session	Explanation
First	Welcoming and acquaintance of the group members with each other- Creating motivation for treatment- Reviewing the structure of sessions, rules and regulations related to group therapy- Reviewing the general goals and logic of treatment
Second	Defining schema therapy- Defining initial incompatible schemas- Defining the features of early maladaptive schemas- Defining the evolutionary roots of schemas
Third	Introducing schematic areas and initial maladaptive schemas- Brief description of the biology of initial maladaptive schemas- Explaining schema functions
Fourth	Introducing inconsistent styles and responses that perpetuate schemas, along with examples from everyday life- Defining the concept of schema mentalities- Preparing patients to measure and change schemas

Fifth	Assessing schemas through a questionnaire, Emotional visualization, emotional mood and providing feedback to identify more schemas- Preparing them for change- Developing an educational card
Sixth	Testing the validity of schema by patients- New definition of confirming evidence for schema by patients- Assessing the pros and cons of patients' coping styles
Seventh	Introducing coping styles as important targets for change—Preparation for breaking the model of behavior- Determining specific behaviors as possible targets for change- Prioritizing the behaviors for breaking the model
Eighth	Increasing motivation for change- Learning to practice healthy behaviors through mental imagery and role-playing- Training to overcome barriers for behavior change and make significant changes in life

Table 2: Summary of hypnotherapy sessions

First	Introduction, evaluation, expression of treatment logic and implementation of progressive muscle relaxation technique
Second	Progressive muscle relaxation for relaxation, change of mind and individual control
Third	Chiasson technique, exposure, ego strengthening
Fourth	Chiasson technique, using age progression and observing the future
Fifth	Eye Fixation technique, using power seat techniques, and induction of conditioning
Sixth	Advanced muscle relaxation in order to relax, induce regression and forgiveness technique
Seventh	Eye Fixation technique, ego strengthening, exposure and testing the condition key
Eighth	Self-hypnosis training

III. Findings

Table 3: Mean, standard deviation for pre-test and post-test research variable scores

Group	Pre-test		Post-test	
	Mean	Standard Deviation	Mean	Standard Deviation
Hypnotherapy	116.66	9.13	67.16	10.12
Schema Therapy	118.50	6.53	63.83	5.19
Control	131.33	7.52	130.16	7.70

According to the information obtained in the table, the scores of PTSD symptoms in the hypnotherapy group and the schema therapy group in the post-test group have decreased compared to the pre-test.

Table 4: Lon test results to examine the assumption of variance equality

	F statistic	Degree of freedom	Degree of freedom	Level of significance
		1	2	
Pre-test	0.826	2	15	0.457
Post-test	0.880	2	15	0.435

According to the table above, the obtained F is not significant. Therefore, equality of variances is established and covariance is possible.

Table 5. Summary of covariance analysis in control and hypnotherapy groups

	sst	Degree of freedom	Mean square	F	Level of significance
Modified model	12146.914	2	6073.457	95.938	0.000
Post-test variable	30.942	1	30.942	0.489	0.502
group	239.914	1	239.914	3.790	0.083
error	4624.534	1	4624.534	73.051	0.000
	569.752	9	63.306		

Total	129538.0	12
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As can be seen in the table, there is a difference between the two groups. In other words, there is a significant difference between the post-test of the experimental group of hypnotherapy and control. In other words, hypnotherapy is effective in reducing the symptoms of PTSD.

Table 6. Summary of covariance analysis in control and schema therapy groups

	sst	Degree of freedom	Mean square	F	Level of significance
Modified model	13372.144	2	6686.072	231.569	0.000
Post-test variable	17.599	1	17.599	0.610	0.455
group	171.811	1	171.811	5.951	0.037
error	5198.181	1	5198.181	180.037	0.000
Total	259.856	9	28.873		
	12540.0	12			

As can be seen in the table, there is a difference between the two groups. In other words, there is a significant difference between the post-test of the experimental group in schema therapy and control. In other words, schema therapy is effective in decreasing the symptoms of PTSD.

Table 7. T-test comparing hypnotherapy and schema therapy

Variable	Group	F	sig	t	Degree of freedom	Level of significance	Standard error of differences
Communication with the environment	Equal variances	1.783	0.211	0.717	10	0.490	4.646
	Unequal variances				7.459	0.495	4.646

According to the results of the table, there is a significant difference in the effectiveness of the two groups of hypnotherapy and schema therapy. As a result, it can be stated that schema therapy and hypnotherapy are both

effective in reducing PTSD symptoms and there is no significant difference in their effectiveness ($p = 0/495$, $t = 0.717$).

IV. Discussion

The results of this study indicated that both schema therapy and hypnotherapy approaches are effective in reducing the symptoms of PTSD in girls who have been sexually victimized. These results are in line with the results of the research conducted by Mardanzadeh, Khosravani Farsani and Barimani (2019) and Mousavi Asl (2013). Traumatic or traumatic stress disorder in post-traumatic stress disorder is an experience that happens to the patient at any time and at any emotional level, to the extent that the mind cannot process mental and external reality (Corny et al., 2012). Post-traumatic stress disorder is a type of anxiety disorder that manifests itself after being exposed to a life-threatening accident, in the form of various psychological symptoms such as aggression, nightmares, memory reminders and anxiety symptoms, and decreased stimulation threshold. The disorder is associated with high levels of social, occupational, and physical disabilities, as well as significant economic costs and high levels of using medical facilities. Defective performance is evident in social, interpersonal, developmental, academic, physical, and occupational health. The most important problem for sex victims with post-traumatic stress disorder is reviewing the bitter memories of the past, so that they repeatedly recall the traumatic memories of the past. For explaining the reason for the effect of therapeutic hypnosis on stress reduction, it can be said that the existence of dissociation and inculcation, which are two of the three important components of hypnotic conditions, is effective. With hypnotic inculcations, the individual is dissociated from the stressful environment and her or his attention is focused on pleasant imagery; therefore, perceptions of pain are reduced, and through direct inculcations by hypnotism, the severity of stress can be reduced, so that the person feels less anxious.

In explaining the effectiveness and efficiency of schema therapy, it should be noted that schema therapy works by affecting on multi-dimensional aspects of the individual provides a context for making a change that these dimensions include cognitive, experimental, emotional and behavioral dimensions. In cognitive dimension, schema therapy by affecting on the inner voice of parents and the deepest level of cognition, ie, schemas, helps patients become aware of their roots, and bring the schema and the subconscious thoughts resulted from it into question by testing the validity of the design of the schema and finding a novel definition of the evidence confirming or rejecting the schema, and find a new perspective on themselves, the world, and the future. In reviewing their bitter memories, PTSD people highlight the information that is consistent with a schema and ignore the information that is inconsistent with it, and persist this trend at all levels of their life. Schema therapy, which is a summary of the individual's sound answers, is identifying the root of the schema and the dysfunctional thoughts, the best means to help people identify the motivated situation of the schema, is identifying negative behaviors, and the way of replacing healthy behaviors in life, which causes the individual's awareness of the schemas and provides the ground for change in the individual and consequently its impact on the interpersonal and intrapersonal relations (Moazani, Gholamrezaei and Rezaei, 2017). Experimental techniques also help the patient prepare the ground for recovery by re-organizing emotional excitement, self-examination of new learning, regulation of interpersonal emotion, and self-relaxation. On the other hand, patients can use these techniques to

test the hypotheses of the schemas, and by stimulating the schemas and relating them to current issues, the field is prepared for emotional insight and subsequent improvement of schemas that reduce the symptoms of PTSD.

The use of mental imagery causes people to recognize the original schema, to understand its evolutionary roots, and to relate these roots to their present lives. Additionally, it improves the patient's understanding and helps them to move from a rational cognition to an emotional experience. Considering that there was no significant difference in the effectiveness between schema therapy and hypnotherapy in reducing PTSD symptoms, it is recommended that these two approaches be used in counseling and psychotherapy clinics as two effective and efficient approaches. It is also recommended that in future studies, the effectiveness of schema therapy is compared with emerging therapies, especially emotional schema therapy, which are indebted to schema therapy. Along with other skills, schema therapy can also be applied as an adjunct program to decrease problems.

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