Effectiveness of schema therapy on body-image, self-concept, maladaptive schemas in patients with body dysmorphic disorder

Ayeh Pondehnezhadan (1)
Reza Johari Fard (2)

(1) Department of Clinical Psychology, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran
(2) Department of Psychology, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran

Corresponding Author:
Reza Johari Fard
Department of Psychology, Ahvaz Branch, Islamic Azad University,
Ahvaz, Iran
Email: rjoharifard@gmail.com

Abstract

This study aimed to evaluate the effectiveness of schema therapy on body-image, self-concept, and maladaptive schemas in patients with body dysmorphic disorder. This is a quasi-experimental study, with pretest-posttest research plan and follow-up services. The research population comprised all patients with body dysmorphic disorder in Ahwaz city. The sample consisted of 10 people from this population having dysmorphic disorder whose selection was done randomly and when chosen, they were divided into two groups of experimental and control. Instruments used in this research are satisfaction with body-image questionnaire (Soutu and Garcia, 2002), self-concept questionnaire (Beck et al., 1990), body dysmorphic disorder questionnaire (Rabie et al., 1390) and the Young Schema Questionnaire (shortened form) (Schmidt, Joiner, Young and Telch, 1995; as quoted from Hamidpour, Dolatshahi, Poorshahbaz, Dadkhah, 1389). In this study, after the position of baseline, the intervention began and after 20 sessions of schema therapy for these participants was carried out, there was a follow up after the interval of one month. To analyze the data, multivariate analysis of covariance (MANCOVA) was used. The results of data analysis showed that schema therapy leads to an increase in satisfaction with body-image, elevation of self-concept and reduction of body maladaptive schemata in the patients with deformity in the experimental group, compared to the control group.

Key words: schema therapy, body-image, self-concept, maladaptive schemata, body dysmorphic disorder

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Introduction

In order to achieve a healthy and satisfactory life and to comply with our own needs and those of others, having a realistic and appropriate self-image is a necessity. That is, if a person has a satisfactory feeling toward their own physical appearance, it is more likely for them to have a positive body-image. However, tension and anxiety, self-critical view, and low self-worth affect negatively the way a person feels about their body and leads them to change their appearance by various surgeries and other methods (Stewart, 2006; as cited in Hosseini, Ghasemi, Molaei Gonbadi & Rezaei, 1389). Body-image is a complex phenomenon which has recently been in the center of various experts' attentions, though it lacks a well-established definition. It is the mental representation of one's physical appearance (Cash, 2004). In effect, it is a mental image which embraces one's body-related beliefs as well as conscious and unconscious feelings (Omidi, Ghafrani pour Hosseini, 2006). Mental body-image is the way a person thinks about their physical appearance and each part of body mind. It is a multifaceted phenomenon, made up of tactile, optical and emotional aspects or feelings of people about themselves (Garousi, Nematollahi, & Rafsanjani, 1392). Body-image is usually defined as a degree of a a person's satisfaction with their physical body and encompasses negative and positive feelings of a person about their body form and size. Negative self-image can lead to dissatisfaction with the body and having the feeling of being unattractive which means being too preoccupied with the physical appearance and brings about performance disorder (Keivan ara, Haghighian, & Kavezadeh, 1391). Satisfaction with body-image may include appearance evaluation which is the person's general evaluation about being physically attractive and the sense of being satisfied with their own appearance. Appearance orientation is how much a person invests in their own appearance and it includes a person's behavior frequency with the goal of physical appearance upkeep or improvement. Satisfaction with body organs is the same as satisfaction with specifics of body areas such as face, hair, muscles and so on. Overweight preoccupation is

defined as too much worry about being fat, caring about being overweight, going on a diet, and limiting the amount of food intake (Dehghani et al, 1390).Each individual has an image of themself in their mind. In other words, general evaluation of an individual of theirpersonality is called self-concept or self-image. This evaluation is a kind of mental evaluation that a person makes about their behavioral qualities and, as a result, self-concept might be positive or negative (Taghizadeh, 1379). Self-concept was firstly put forth as a dynamic organization by Laki (1998). To him, people;s behavior is a display and motif with the purpose of self-stabilization in unstable conditions. In short, we can say that self-concept is a well-known frame by which we organize what we know about ourselves and, according to which, we process what is associated with ourselves. This generalized other includes specific components which act as personality tendencies. Three items of such components are individual difference in self-evaluation, belief in oneself in order to achieve desirable ends, and showing interest with the purpose of being influential on others by closely watching one's own behavior (Taghizadeh, 1379). In recent years, recognition therapy theory, in a narrow sense, and behavioral cognitive therapies, in a broader sense, have made a new destiny for mental therapies. One major component of the cognitive model is called "schema". Schema is not a new structure in cognitive sciences as Beck, when forming cognitive theory, made use of this concept to justify the mechanism of emotional-cognitive process (Rizzo, Tweet, Austin, Young, 2007, as translated by Moloudi and Ahmadi, 1390). Schema therapy, which was introduced by Young and colleagues (Young, 1990 & 1999, translated by Hamidpour and Andouz, 1386), is a modern and integrated treatment mainly based on concept development and classic behavioral-cognitive therapies. Schema therapy has combined the principles of behavioral-cognitive schools, attachment, Gestalt, object relationships, constructivism, and psychoanalysis into one conceptual model being the basis for a valuable type of therapy. Young emphasizes on the deepest level of cognition i.e., Early maladaptive schema.

The Early maladaptive schema is the oldest component of cognitive, beliefs, and unconditional feelings about oneself and is developed in childhood and adolescence, stemming from an interplay between the child's innate temperament, and the child's ongoing damaging experiences with parents, siblings, or peers. The development and high intensity of schema is the result of high distortion level and chronically damaging patterns throughout a person's whole life. Maladaptive schema is formed due to dissatisfaction with the conditions of basic emotional needs in childhood. Such needs involve safe attachment to others (including the need for security, stability, affection and acceptance), autonomy, self-sufficiency and identity, freedom in expressing the healthy needs and passions, self-excitation and entertainment, realistic limitations, and self-control. Young divided 18 schemata based on an individual's five emotional needs and called them schema domains. The first domain is Disconnection and Rejection, including abandonment/ Instability, Mistrust/Abuse, Emotional Deprivation, Defectiveness/shame, Social isolation/ Alienation. The second domain is Impaired Autonomy and Performance, including Dependence/Incompetence, Vulnerability to harm or Illness, Enmeshment/Undeveloped Self, and Failure. The third domain is impaired limits, including Entitlement/Grandiosity and Insufficient Self-control/ Self- discipline. The fourth domain is others' directedness, including Approval- seeking/ Recognition-seeking, Subjugation, and Self-Sacrifice. The fifth domain is over vigilance/Inhibition, including negativity/ Pessimism, Emotional Inhibition, Unrelenting standards/ Hypocriticalness, and Punitiveness.

Research questions

Is schema therapy influential on body-image, self-concept and maladaptive schemata of the patients suffering from body dysmorphic disorder?

Research hypothesis

Hypothesis 1: Schema therapy influences on body-image, self-concept and maladaptive schemata of the patients suffering from body dysmorphic disorder.
Hypothesis 2: Schema therapy influences on body-image of the patients suffering from body dysmorphic disorder.
Hypothesis 3: Schema therapy influences on self-concept of the patients suffering from body dysmorphic disorder.
Hypothesis 4: Schema therapy influences on maladaptive schemata of the patients suffering from body dysmorphic disorder.
Hypothesis 5: Schema therapy influences on body-image, self-concept and maladaptive schemata of the patients suffering from body dysmorphic disorder, when investigated in a one-month follow up stage.

Procedure

The statistical population of the current research consists of all clients with body dysmorphic disorder who have referred to Ahvaz skin care Clinic. Ten patients, who according to the DSM-5 criteria were considered as having body dysmorphic order, were selected using convenience (availability) sampling, and then were divided into two groups of experimental and control. In this research, experimental method using a pretest and a posttest with a follow up stage on two experimental and control groups was exploited. Experimental and control groups were randomly made equal. Before the start of the experiment, a pretest and after the end of experiment, a posttest were run, after one month which, a follow-up was taken. Follow-up's aim was to explore the prolonged impact of the 3-month schema therapy on body-image, self-concept and maladaptive schemata of the patients with body dysmorphic disorder. That means, the schema therapy was considered as the independent variable of the study so that its influence on the dependent variables including body-image, self-concept and maladaptive schemata of the patients with body dysmorphic disorder is determined. The type of present study is experimental where a pretest and a posttest with follow-up are run on the experimental group.

Measurement instruments

1. Satisfaction with body-image questionnaire (Soutu & Garcia, 2002)

Satisfaction with body-image (SWBI) questionnaire has 22 items and evaluates satisfaction or dissatisfaction of a person with their body. This questionnaire was firstly developed by Soutu and Garcia in 2002. It is scored following a five-point Likert Scale which was ranged from never to always. In Akhondzadeh's research (1391), the reliability of this questionnaire was guaranteed. Also, validity of it was reported to be acceptable. The questionnaire was analyzed by SPSS software and it was found that body-image is 74% positively related to marital satisfaction. In current research, alpha Cronbach method was used to determine the validity of the questionnaire and it was found to be 93% for the whole questionnaire which is acceptable.

2. Self-concept test (Beck et al, 1990)

Self-concept is the way we perceive ourselves. In other words, self-concept is an objective point of view that a person has of their own skills, characteristics, and abilities. There are several methods and questionnaires to evaluate self-concept, one of which is Beck's self-concept test (BSCT). This test, which was primarily developed in 1978 by Beck and Steer is based on Beck's cognitive theory, and has 25 items. Beck and colleagues (1985) reported the validity of 88% and 65% for this test; retests were done in one week and three months. Also, internal consistency coefficient for this scale is reported to be 80%. Reliability of this test when compared with the Rosenberg ego questionnaire is reported to be 55%. Furthermore, validity of this test is, using Cronbach alpha, said to be 80% for depressed men, 76% for depressed women, 78% for anxious men, and 78% for anxious women. In Iran, Mohammadi (1372) has reported the validity of this test, using Cronbach alpha, as 65% and 68%, respectively. Additionally, Dibajnia (1383) has obtained the figure of 79% Cronbach alpha for this test.

3. Young schema questionnaire (shortened form)

(Schmidt, Joiner, Young & Telch, 1995; as cited in Hamidpour, Dolatshahi, Pourshahbaz, & Dadkhah, 1389). This questionnaire has 75 items and was constructed by Young (1998) in order to evaluate 15 early maladaptive schemata including abandonment/instability, mistrust / abuse, social isolation / alienation, defectiveness/shame, emotional deprivation, dependence/incompetence, vulnerability to harm and illness, undeveloped self/ enmeshment, entitlement/grandiosity, insufficient self-control/ subjugation, self-sacrifice, emotional inhabitance, unrelenting standards/ hyper criticalness. Each question is rated based on a 6-point scale (1 for completely false and 6 for completely true). In this questionnaire, every five questions evaluate one schema. Reliability and validity of this instrument has been confirmed through various research (e.g. John Baranoff & T.P.S. Oei, 2007). Normalization of this questionnaire was done in Iran by Aahi (1384) in Tehran University. Internal consistency was, using Cronbach alpha, found to be 97% in females and 98% in males.

4. Body dysmorphic disorder test

Evaluating metacognition aspects of body deformity, metacognition control strategies, thought or action coordination or mix of both, positive and negative metacognition beliefs, and safe behavior. In Rabie and colleagues' research (1390) where this questionnaire's reliability was studied on 200 students, it was found that body dysmorphic metacognition evaluation questionnaire and its components are positively and significantly related to the modified scale of obsessive compulsive disorder developed by Yale-Brown for BDD.

Findings

Mean and standard deviation of body-image variable in experimental group in pretest were 31.20 and 1.64, respectively. These were 67.40 and 6.73 in posttest and 35.80 and 5.67 in follow up.

Mean and standard deviation of self-concept was 38.20 and 6.42 in pretest; 47.80 and 5.97 in posttest; and 50.20 and 6.37 in follow up.

Mean and standard deviation of maladaptive schemata in experimental group in pretest was 337.40 and 41.24; in posttest, 301.40 and 36.01 and in follow up, 283.40 and 26.63.

Mean and standard deviation of body-image in control group in pretest was 30.20 and 1.64; in posttest was 28.20 and 1.64 and in follow-up was 37 and 2.91.

Mean and standard deviation of self-concept in control group in pretest was 40.40 and 2.96; in posttest was 38 and 20.96 and in follow-up was 36.80 and 3.49.

Mean and standard deviation of maladaptive schemata of control group in pretest was 27.93 and 4.65; in posttest, 28.13 and 4.62; in follow-up, 28.0 and 4.56.

Table 1: Equal assumptions variance error for body-image, self-concept, and maladaptive schemata

Variable	Levin	F	Df1	Df2	Sig.
Body image	0.189	0.926	1	8	0.685
Self-concept	2.714	0.417	1	8	0.137
Maladaptive schemata	1.019	1.95	1	8	0.342

As can be seen from the table above, sig. value of body-image is 0.685, sig. value of self-concept is 0.138, and sig. value of maladaptive schemata is 0.342, all of which are greater than alpha level of 0.05. That is, F test value is not statistically significant and with 95% confidence, we can say that assumption of equality of variance error holds true.

Table 2. Kolmogorov-Smirnov test to assess the data distribution normality

variable		Body image	Self-concept	Maladaptive schemata
Number		10	10	10
Normal parameter	Mean	30.70	39.30	352.40
	Standard deviation	1.63	5.20	35.65
Kolmogorov-Smirnov value		0.840	0.802	0.453
Significance level		0.481	0.542	0.986

Results of Kolmogorov-Smirnov test, exploring the normality of data distribution, indicates that significance value of data distribution is greater than 0.05. That is, null hypothesis expressing the normality of data distribution is confirmed. That is, with 95% confidence, we have tested the research hypotheses, based on the parametric test assumptions.

Table 3: Box test results to determine covariance and variance matrix

index	Box value	F value	Df1	Df2	Sig. value
value	5.730	0.555	6	463.69	0.766

As can be seen from the table, sig. value is 0.766 which is greater than 0.05 and, as a result, with 95% confidence we can say that covariance homogeneity assumption is satisfied.

Table 4. The assumption for body-image, self-concept and maladaptive schema regression slope

variable	Ss	Df	Ms	F	Sig. value
Independent variable and body-image pre test	5.789	1	5.789	4.576	0.085
Independent variable and self-concept pretest	61.752	1	61.572	7.745	0.039
Independent variable and maladaptive schemata pretest	267.126	1	267.126	4.361	0.091

Since sig. value of the interaction between independent variable and body-image pretest, the one between independent variable and self-concept pretest, and the one between variable and maladaptive schemata pretest is greater than the alpha value of 0.05, the test calculated value is not statistically significant. That is, with 95% confidence we can say that regression slope homogeneity assumption is met.

Table 5: Multivariate analysis of covariance (MANCOVA) on the posttest rates' mean of body-image, self-concept, and maladaptive schemata

Test names	value	df hypothesis	df error	F	Eta square	Sig.	power
Pillai trace	0.998	3	3	441.03	0.998	0.000	1
Wilks' Lambda trace	0.002	3	3	441.03	0.998	0.000	1
Hotelling's trace	441.03	3	3	441.03	0.998	0.000	1
Roy's greatest root	441.03	3	3	441.03	0.998	0.000	1

As can be seen from the table, when controlling pretest, significance level of all tests demonstrates that there is a significant difference among body-image, self-concept and maladaptive schemata. To see which variables are different in the experimental group, when they are compared to the control group, two one-way covariance analyses in MANCOVA context were done, the result of which is shown in Table 5. The impact or the difference value is 0.998. In other words, 0.998% individual difference in posttests scores of body-image, self-concept and maladaptive schemata is due to the effectiveness of schema therapy.

Table 6: Results of one-way covariance analysis in MANCOVA context on the posttest score means of body-image, self-concept, and maladaptive schemata in patients with body dysmorphic order

variable	group	Sum of square	df	Squares mean	F	Sig.	Eta square
Body-image	pretest	43.11	1	43.11	4.73	0.081	0.486
	group	3571.22	1	3571.22	3571.28	0.000	0.987
	error	45.51	5	9.104			
Self-concept	Pretest	28.66	1	28.66	1.631	0.258	0.246
	Group	268.95	1	286.95	15.30	0.011	0.754
	Error	87.88	5	87.88			
Maladaptive schemata	Pretest	1932.16	1	1932.16	25.851	0.004	0.020
	Group	5754.336	1	5754.336	76.989	0.000	0.29
	Error	74.743	5	74.743			

As it can be seen from the table above, when posttest is controlled for both the experimental and the control groups of body dysmorphic patients, a significant difference between two groups with regard to the body-image, self-concept and maladaptive schemata variables can be observed. Thus, hypotheses 1, 2, 3, and 4 of the research are approved. In other words, schema therapy was tested with respect to the body-image, self-concept and decrease of maladaptive schema. The impact or the differences of body-image is 0.987 and it can be claimed 0.987 of individual differences in the posttest scores of self-image were due to the schema therapy. Furthermore, the impact or the difference of self-concept is 0.754 and it can be claimed that 0.754 individual differences in posttest scores of self-concept is due to schema therapy. Additionally, the impact or the difference for maladaptive schemata is 0.29 which shows that 0.29 percent of the individual difference in posttest scores of maladaptive schemata is due to the schema therapy.

Table 7: Results of multivariate analysis of covariance (MANCOVA) on the body-image, self-concept and maladaptive schemata's follow-up scores means among the patients suffering from body dysmorphic disorder

Tests name	value	df hypothesis	df error	F	Eta square	Sig.	power
Pillai trace	0.999	3	3	676.306	0.999	0.000	1
Wilks' Lambda trace	0.001	3	3	676.306	0.999	0.000	1
Hotelling's trace	676.306	3	3	676.306	0.999	0.000	1
Roy's greatest root	676.306	3	3	676.306	0.999	0.000	1

As can be observed from the table above, in follow-up stage where the posttest significance level is controlled, patients with body dysmorphic disorder in the experimental and control groups were significantly different with respect to the dependable variables (body-image, self-concept, and maladaptive schemata). To see which variable is different in the two groups, two one-way covariance analysis in MANCOVA context was done the results are depicted in Table 7. The impact strength or difference is 0.999. In other words, 0.999% of the individual difference in body-image, self-concept, and maladaptive schemata's follow-up scores was due to the influence of schema therapy. Statistical power is 1 and we can say that the occurrence of type II error was not probable.

Table 8: Results of one-way covariance analysis in MANCOVA context on the posttest scores mean of body-image, self-concept, and maladaptive schemata in patients with body dysmorphic order

variable	group	Sum of squares	df	Squares mean	F	Sig.	Eta square
Body-image	pretest	6.43	1	6.43	0.24	0.64	0.046
	group	1912.57	1	1912.57	71.93	0.000	0.935
	error	132.94	5	26.08			
Self-concept	Pretest	0.719	1	0.719	0.023	0.088	0.005
	Group	486.31	1	486.31	71.93	0.000	0.935
	Error	155.31	5	31.06			
Maladaptive schemata	Pretest	988.17	1	988.17	9.46	0.28	0.654
	Group	14700.88	5	14700.88	140.85	0.000	0.966
	Error	521.85	5	104.37			

As is clear from Table 8, when pretest is controlled, follow-up and control groups of patients with dysmorphic disorder are significantly different respecting body-image, self-concept, and maladaptive schemata. By way of explanation, schema therapy, when the self-image mean of experimental group's patients with body dysmorphic disorder in follow-up stage (one month later) with that of control group are compared, has raised the level of satisfaction with body-image in patients. Also, schema therapy, when we compare the self-concept mean of body dysmorphic disorder patients in the experimental group with that of the control group patients in follow-up stage (one moth), has reduced maladaptive schemata of the patients. Statistical power of the experiment was 1 that means type II error was unlikely to occur, confirming Hypothesis 5 of the research.

In the current research, the influences of schema therapy on body-image, self-concept and maladaptive schemata in patients with body dysmorphic disorder was investigated. One finding showed that there is a significant different between body-image, self-concept and maladaptive schemata of patients in the experimental group and those of patients in the control group.

Based on these, the main hypothesis of the research was corroborated. The findings of this research is in line with the previous studies (Nordahl, Helth, & Hogan, 2005; Kalwit et al, 2005), Kaziona (2004; Mohammad sadegh Montazeri et al., 1392; Masoome Ahmadian 1387; Mehrangiz Mohamadnejad, 1389; Rener et al., 2012; Jamalmohammadi, 1382; Salman Lotfabadi, 1389). Nourishing schema-related memories, emotional activation of schema, strengthening body sensation and cognitive maladaptiveness of schema lead to the improvement of schema and some positive behavioral changes in a way that patients learned to replace maladaptive confrontation styles with adaptive confrontation styles. Thus, the healing process involves cognitive, emotional and behavioral intervention. As the schema improves, the strength and frequency of its activation decreases significantly. So, if the schema is activated, the patient experiences less distortion and soon gets back to normal condition. Schema therapy provides a new psychotherapy system which specifically suits the patients with persistent and chronic psychological disorders (Young, 1990; Young & Tamara, 2007). That is to say, with the help of schema therapy, maladaptive schemata and their components can be drastically controlled in most people (Ironson, 2007). Also, schema therapy improved the body-image and self-concept of the patients with body dysmorphic disorder.

Other findings of the current study is that with the control of pretest for the patients with body dysmorphic disorder, satisfaction with body-image was significantly different ($p> 0.005$, $f= 3571/28$) in experimental and control groups. Results of this study, in addition to confirming some other previous research (Hill, Green, Anwar, Seymour, & Mayer, 2010; Mohammadsadegh Montazeri, 1391; Rener et al, 2012), is in line with the research of Jamalmohammadi (1382) and that of Salaman Lotfabadi (1389). Specifically, Gidens (1991) says that the body becomes a place to create dreams and wishes. Mary Douglas (1996), also, refers to two physical and social bodies of every human being. She considers physical body as a small world which is closely linked to the social pressures (Gidens, 1991; Mary Douglas, 1996, as cited in Tavasoli & Modiri, 1391). Some say that the development of body-image is instinctive. Some others say that the society and social factors influence on it. That is, each individual faces various expectations in the process of socialization (Azadarmaki & Chavoshian, 1381). Some researchers consider body and preoccupation with it as an important modern life obsession which threatens individuals' and society's health. An individual's attitude toward life facts, ethics, desire and willingness is dependent on the image they have of themself, i.e. the value they set on themself (Khajenoori, Roohani, & Hashemi, 1390). Body dysmorphic disorder refers to preoccupation with one or more imagined or trivial defects in appearance which are not visible by others or are considered minor by them. When the person suffers, they have certain repetitive behaviors (such as checking themself in the mirror, putting on too much make up, excoriation, seeking certainty) or mental preoccupations (such as comparing themself with others) to alleviate the worries about their appearance (Ganji, 1395).

In people suffering from body dysmorphia, body-image is so weak or inappropriate which results in social and interpersonal problems and a fall in self-esteem. Low self-esteem is the feeling of being inefficient and the sufferers have the sense of being of no value. Experimental interventions and behavioral interventions, schema therapy interpersonal intervention, and cognitive interventions improved the body-image of the patients with body dysmorphic disorder and led to the elevation of self-esteem.

Other findings of the study is that when the pretest among the patients of both experimental and control groups was controlled, the self-concept was significantly different for the two groups. Results of this study, in addition to supporting some other previous research (Hill, Green, Anwar, Seymour, & Mayer, 2010; Mohammadsadegh Montazeri, 1391; Rener et al, 2012) is in line with the research of Jamalmohammadi (1382) and Salaman Lotfabadi (1389). A reason for such findings might be that the motif for all different behaviors is to protect and boost the perceived ego of oneself. Each part of an experiment is perceived based on the interaction with ego and certain behaviors are the result of such perception. In this case, we might say that only one motif prevails and that is inner personal motif which triggers every act of a human being from time to time in every situation and place. As Cambaz say, people are always incited and not one can be found not incited. This is an advantage for a trainer because this motivation stems from inside every learner (W et al, 1378, p.24). The main reason for such self-concept can be found in the critical period of childhood and adolescence. Development of self-concept is dependent on the reaction of others toward an individual and specifically a child. One theory says that in order to see oneself, we watch

the present reactions. Many researchers have found that the concept of a person about oneself relies on the image others have about that person because they can evaluate others' image of themselves and change it. Parents are one source of forming self-concept and the feeling of being valuable in children and adolescents. Personality development and its core are dynamic in a way that personality development is considered as a process not a product or a goal. Hence, the growth and accomplishment is an endless road and never rests inside a human. There is always a movement toward "becoming" or "a necessity" while the path is difficult and painful. The environmental conditions are sometimes so poor that the person cannot ascend and barriers are raised before their eyes (Taghizadeh, 1379, p.24). Schema is the result of a human attempt to achieve stability and power while it is known for people, despite being dreadful. It is easy and available and generally seems right. It seems that people are affected by the actions that activate their schemas and this is one reason for the influence of such schemas on later experiences. The way the patients think, their feelings and actions, and the way they interact with others play crucial roles and adults unconsciously imitate their childhood's harmful experiences. Schemas start developing from the beginning of childhood and adolescence as profiles, based on the reality of childhood environment. The defective nature of the schemas is always more obvious in later life stages when the patients repeat their schema confronting and interacting with other people. Schema is an old structure in the area of cognitive sciences, so Beck, at the very beginning of developing cognitive theory, used this concept to explain the emotional-cognitive process system of mental phenomena (Rizzo, Tweet, Austin, & Young, 2007; as translated by Moloudi & Ahmadi, 1390). Schema therapy, using cognitive, behavioral, experimental and interpersonal techniques, greatly aids the patients with body dysmorphic disorder to improve their positive self-concept.

Another finding of the current research is that when pretest is controlled, there was a significant difference between the control and experimental groups of the patients with body dysmorphic disorder. This finding is in line with Mehrangiz Mohammadnejad (1389), Sogol Yadollahi Bastani et al (1392), Asgharjafari et al (1392), Kalwit et al (2005), and Kaziona (2004). To justify such a finding we can say that the early life experience, including being annoyed as a child, having misadventures in childhood, personal values, and characteristics, and exaggerated tendency toward aesthetics are among the reasons leading to body dysmorphic disorder. Such negative aspects in childhood result in the development of conditional beliefs and thoughts which remarkably affect the cognitive, emotional and interpersonal areas of an individual performance. With bearing in mind the findings of this research about the effect of schema therapy on the patients with body dysmorphic disorder, it can be said that schema therapy, including using experimental techniques which rehabilitates cognition of childhood and childhood's memories, aids the various emotions, and especially suppressed ones, which has led to the emotional self-censorship and difficulty in expressing one's emotions, to be expressed. Combining four cognitive, experimental, behavioral and interpersonal techniques, schema therapy approach, in addition to questioning maladaptive schemas which is the main reason for inefficient and unreasonable thought development in patients with body dysmorphic disorder, makes the buried negative emotions and senses, including anger resulting from being annoyed as a child and childhood misadventure, come out.

Other findings of the research is that when the pretest was controlled, there was a significant difference between body-image, self-concept and maladaptive variables of the two, control and experimental, groups. To justify such a finding, it can be said that the improvement of schema requires a strong willingness to fight with schema and such willingness needs a lot of effort and good discipline. Schemata are hardly changed, because they are deeply interrelated with the person's beliefs about themself and the environment around them. Though they might be harmful for the patient, schemata are all the patients know and they bring about safety and predictability for them. Patients resist losing their schemata, because the schemata form their personality core. The therapist and the patients associate in order to defeat the schema. This goal is usually an impossible ideal one, because most schemata are not completely treated and the memories attached to them cannot be thoroughly destroyed. However, when schemata improve, their activation frequency as well as patient's attachment to them decline and the time they are activated in the patient's mind is shortened. When the schemata improve, the patient reacts perfectly to the schemata stimulators. Thus, they select more ideal friends and maintain a more positive attitude toward themself.

References

- Atkinson, Rital, and colleagues. (1378). Hilgard's introduction to psychology, V. 1, translated by the translator group under the supervision of Mohammad Taghi Barahani, Tehran: Roshd Publication.
- Azadramaki, T. & Chavoshian, H. (1381). Body as a medium, Iran's Sociology Magazine. 4 (4), pp. 57-75.
- Cash, T. F. (1388). A Guidance to body-image. Translated by Niloofar Rayegan. Tehran. Danjeh Publication.
- Cash, TF. Jakatdar, TA. Fleming Williams, E. (2004). The body-image Quality of Life Inventory: further validation with college men and women. Bodyimage; 1 (3), 279-284.
- Cash, TF. Mikulka, P. J., Brown, T. A. (1990). Attitudinal body-image, Body-Self Relations Questionnaire. Journal of assessment: Factor analysis of the personality Assessment, 55; 135-144.
- Dehghani, M. and colleagues. (1390). The level of body-image satisfaction in Rasht City high school female students. Comprehensive nursing and midwifery. 21 (66). Pp. 7-12.
- Ganji, Mohammad. (1383). An explanation to the Isfahan University students' religiosity status. A thesis submitted in partial fulfillment of M. A degree. Isfahan University.

- Gray, J. A. (1994). Three fundamental emotion systems. In P. Ekman & R. J. Davidson (Eds.), the nature of emotion (pp. 243-247). New York: Oxford University Press.
- Gromel, K. etal, (2000). Measurements of body-image in clinical weight loss participants with and without binge-eating traits. Eating Behaviors; 1,191.
- Hamidpour, Hasan. (1388). A Comparison between cognitive therapy and schema therapy in healing the female patients suffering from generalized anxiety disorder: a fall in symptoms, performance improvement, a change in mediator and the process of symptom changing. A thesis submitted in partial fulfillment of Clinical Psychology Ph.d degree (not published). University of social welfare and rehabilitation sciences.
- Huler, O. S. & Genc, O Z, T, I. (2005). The effect of religiousness on marital satisfaction: Testing the mediator role of marital problem solving between religiousness and marital satisfaction. Contemporary family therapy, 27(1), 123-136.
- Kaplan, B. H. (1992). Social health and the forgiving heart: The Type B story. Journal of Behavior Medicine, 15, 3-14.
- Kaplan, H. I and Sadock, B. I. (1991). Comprehensive glossary of Psychiatry and Psychology .New York: Williams and Wilkins.
- Keivan Ara, M., Haghighian. M. & Kavehzadeh. A. (1391). Effective social factors in the development of body-image. Case study of Isfahan women, applied sociology. 23 (4). 48.
- Khaje Noori, B. Roohani, A. & Hashemi, S (1390). The relationship between lifestyle and body-image. Case study: Shiraz city Women. Cultural researches seasonal magazine. 4 (1). Pp. 79-103.
- Lang, P. J., Bradley, M. M., & Cuthbert, B. N. (1990). Emotion, attention, and the startle reflex. Psychological Bulletin, 97, 377-395.
- Mehdi Ganji. (1395). Pathology based in DSM. Salavan Publication.
- Mohammadi, Masood. (1382). Effective factors on individual tolerance of drug abuse risk. A thesis submitted in partial fulfillment of Ph. D degree. Tehran: University of welfare and rehabilitation sciences.
- Montazeri, Mohammad Sadegh and colleagues. (1392). Schema therapy effectiveness on improving depression and obsessive-compulsive disorder symptoms. Clinical psychology magazine. 5 (1). Pp. 35-45.
- Non-Persian references:
- Nordahl HM, Nysæter TE. Schema therapy for patients with borderline personality disorder: a single case series. [doi: DOI: 10.1016/j.jbtep.2005.05.007]. Journal of Behavior Therapy and Experimental Psychiatry. 2005; 36(3): 254-264.
- North, T. (1987). Wrongdoing and forgiveness. Philosophy 62: 499-508.
- Philips, K. A. (2000). Quality of life for patients with body dysmorphic disorder. Journal of Nervous and mental Disease, 188, 70-175
- Philips, K. A. (2009). Understanding Body Dysmorphic Disorder. Oxford press.
- Plutchik, R. (1994). The psychology and biology of emotion. New York: Harper Collins. Psychotherapy retention in a randomized clinical trial. [doi: DOI: 10. 1016/ J. comp psych.
- Rabie, Mehdi. (1388). the effectiveness of intervention and cognition on the symptoms of body dysmorphic disorder. A thesis submitted in partial fulfillment of M.A degree of clinical psychology. Isfahan University.
- Rabie, Mehdi. Salahian, Afshin. bahrami, Fatemeh., & Palahang, Hasan. (1390). Development and validation of body dysmorphic cognitive evaluation. Mazandaran medical Sciences University (43-52).
- Rainey, C. A. (2008). Are individual forgiveness interventions for adults more effective than group interventions? A Meta-Analysis. Dissertation for the degree of Doctor of Philosophy, Degree Awarded: Spring Semester.
- Schmidt, N. B., Joiner, T. E., Young, J. E., & Telch, M. J. (1995). The Schema Questionnaire: Investigation of psychometric properties and the hierarchical structure of a measure of maladaptive schemas. Cognitive Therapy and Research, 19; Translated by Hamidpour, Dolatshahi, Poorshahbaz, Dadkhah, 1389.
- Smith, Philip Daniel. (1964). “An introduction to the cultural theory”. Translated by Hasan Pouyan, Tehran: Cultural Research Offices: Center.
- Taghizadeh, M. (1379). Adolescence’s sleepless wind. Isfahan. P. 21.
- Tirgari, A. Asgharnejad, A. A., Bayanzadeh, S. A. & Abedin. A. R. (1385). A comparison between emotional Intelligence and marital satisfaction and their structural relationship in Sari Town’s conformable and unconformable couples. Medical Sciences Magazine. Mazandaran. 16 (55).
- Williams, R. (1989). The trusting heart. NY: Times Books.
- Yang, Ke-ping, Mao, Xiu-ying, 2007, A study of nurses spiritual intelligence: A cross-sectional questionnaire survey, International journal of Nursing studies 44, 999-1010.
- Yinger, J. Milton. (1996). A structural examination of religion, journal for the scientific study of religion, VOL.8, pp.88-990.
- Young, Jeffery. Klosko, Janet, & Weishaar, Marjorie. (1386). Schema therapy: A Practitioner’s guide for the clinicians. Translated by Hasan Hamidpour and Zahra Andouz. Tehran: Arjmand Publication.