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Comparing the Motivational Structure and Coping Strategies in Patients with Somatoform Disorder and Normal Population

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Abstract

Objective: Our study was aimed to compare the motivational structure and coping strategies in patients with the somatoform disorder and normal population.

Materials and methods: Ex-post facto method and random sampling method were used. The sample of this study included 60 persons, who were selected from all individuals referred to Erfan Hospital and a private clinic for somatoform disorder therapy. They were assigned to an experimental group (30 patients with the somatoform disorder; 12 with conversion disorder, 9 with somatization disorder and 9 with pain disorder), and the control group (30 healthy persons). The results were analyzed by MANOVA.

Result: Motivational structure and coping strategies in patients with somatoform disorder are different from those in a normal population.

Conclusion: Patients with the somatoform disorder have maladaptive motivational structure and have more focus on emotional and physical inhibitory coping strategies. As compared to normal population, they put less importance to their goals, are less hopeful in achievement and control of them, the least satisfaction from achievement or sorrow from non-achievement of goal and the least commitment to the goals. they have less freedom in selection of their goals, act very passively in the execution of their plans, and since faced a lot of failures in their life, are somehow suffering from a learned frustration and end up with this belief that effort for the achievement of their goals is in vain. When facing obstacles on their way to their goals, they abandon them and have no continuance in their way to achieve them.

Keywords: Somatoform disorders; Motivation; Coping behavior

Introduction

Among psychological disorders, the somatoform disorder can be mentioned. Somatoform disorders include a broad range of diseases, the main component of which is physical signs and symptoms. They involve interactions of body and mind, in which brain issues, in yet-to-be-known ways, different alarms, whose effect on the consciousness of the individual is the induction of the presence of serious physical problems. In addition, partial or still unknown changes in neurochemistry and neurophysiology may arise from unknown mental or cerebral mechanisms that result in the development of disease [1]. Somatoform disorders and somatic signs that are not attributable to physical causes are common in medical settings. In trying to confirm a physical diagnosis, physicians resort to expensive medical examinations or tests and even surgery. When a physician proposes the likelihood that the cause may be mental, the response of the patients is typically anger [2]. In Diagnostic and Statistical Manual of Mental

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Disorders, Fourth Edition, Text Revision (DSM-IV-TR), five specific pseudosomatic disorders are identified: (1) Somatization disorder, characterized by multiple physical complaints that are related to different systems; (2) Conversion disorder, characterized by one or two neurological complaints; (3) Hypochondriasis, characterized more by the patient's belief in having a specific disorder than focus on symptoms; (4) Body dysmorphic disorder, characterized by preoccupation with or exaggerated perception of defect in part of the body; and (5) Pain disorder, characterized by pain symptoms either related only to psychological factors or exacerbated under influence of psychological factors. DSM-IV-TR has also two residual diagnostic classes for pseudosomatic disorders: (1) Undifferentiated somatoform disorder, including pseudosomatic disorders that are not otherwise described and lasted at least for six months or more; (2) Somatoform disorder that is not otherwise specified (NOS), which is a class for those group of somatoform disorders that do not meet the criteria for the previously mentioned somatoform disorders [1].

Bener conducted a study on a sample of Qatari patients in order to investigate gender difference in prevalence of somatoform disorders and investigate the highest frequency of physical signs among them. The results of this study suggested that the prevalence of somatoform disorders was 23.9% among the screened samples and the prevalence rate was slightly higher in females (24.2%) than in males (23.7%). Mood depression was significantly higher in females than in males (p=0.003). Low back pain was the most common pain reported by the males and headache was the most common sign reported by the females [3].

The data obtained from the studies conducted by Katrin Imbierowicz and Ulrich T. Egle on the patients with the somatoform disorder, the patients with fibroma and control group suffering from a chronic pain indicated that the patients with fibroma and the patients with somatoform disorder scored higher on the stressor events of life. In addition to being sexually and physically abused, these patients had poor emotional relationships with both parents, and there were experiences of physical conflicts of the parents, addiction, and alcohol drinking problems in mothers of these children, separation and low economic condition before the end of the age 7 in this group of patients, but these factors were tangibly lower in the control group [4].

Naturally, when it comes to stress, its evaluation and copying components are immediately introduced. Lazarus and Folkman believe that presence of potential stress or stressor events in lives of the individuals does not result in their dysfunction, but ineffective coping with these stresses may be problematic [5]. An effort to decrease stress is called coping. When copying is unsuccessful and stress does not subside, the individual seeks clinical help for physical and mental problems resulted from continuous physiological arousal. There are various ways to consider coping, but the most important one is to differentiate between problem-oriented coping and emotion-oriented coping. In problem-oriented coping, the individual changes anything that makes the situation stressor, may make other plans or find a new and better way for correcting the situation. In any case, the individual tries to cope with the situation. In contrast, in emotion-oriented coping, the individual changes nothing in the situation, but instead tries to improve themselves or their feelings towards the situation [2]. According to Schroevers in addition to the method of coping, the individual's goals play an important role in their assessment and perception of the event [6].

Based on the theory of Cox and Klinger, behavior, experience and cognitive activities of human are organized based on the "pursuit of incentives" and "goals". According to this theory, a lot of factors influence the formation of disorders, which end up with a common point- i.e. motivation for the achievement of the goals. According to Cox and Klinger the process of selection and method of goal pursuit is called motivational structure. They indicated that there were two motivational structures: adaptive and maladaptive. The individuals with maladaptive motivational structure are about to provoke their emotion in an unhealthy way, so they suffer from derangement and disorder. Those with adaptive motivational structure spend their resources to pursue healthy stimuli and often seek positive goals; are highly committed to their goals; expect much joy from the achievement of their goals and sorrow if they do not achieve their goals; are optimistic about their achievements, and have the least conflict among their goals. Those with maladaptive motivational structure often seek avoidance goals and believe that achievement of goals brings little joy to them, will have slight sorrow if they are unsuccessful in the achievement of their goals, pursue the goal without thinking of successfulness or unsuccessfulness in style of goal, and have high conflict among their goals [7].

The first study that indicated the effect of conflicts among goals was conducted by Palys and Little. This study showed that there was a relationship between conflict of goals and life satisfaction [8]. Emmons and King conducted two studies on a sample of university students in order to investigate the relationship between conflict of goals and welfare. The results of these studies indicated that there was a relationship between conflict of goals and psychological and physical disorders. These studies furthermore indicated that the conflicts were associated with high levels of negative emotions, depression and psychosomatic complaints [9].

Since somatoform disorder is common in medical settings and it has not previously attracted attention in the country, it is now turned into an important axis, and need for planning and implementation of many projects in mental health is felt more than ever, and since conduction of such studies may have important implications in prevention and treatment of somatoform disorders, the present study was designed with the general aim of comparing the motivational structure and coping strategies in patients with somatoform disorders and normal population by proposing two hypotheses: 1) Motivational structure in patients with somatoform disorder is different from that in normal population, and 2) There is a difference between coping strategies of patients with somatoform disorder and those of a normal population.

Materials and Methods

Ex-post facto method and random sampling method were used. The sample of this study included all individuals referred to Erfan Hospital and a private clinic for somatoform disorder therapy and normal population, and age, sex, education and marital status variables were controlled at the time of assignment of the individuals to the two groups. The sample included 60 individuals, 30 patients with somatoform disorder and 30 normal individuals. Among 30 patients with somatoform disorder, 12 were diagnosed with conversion disorder, 9 with somatization disorder and 9 with paid disorder. In the first phase, after diagnosis by the attending physician and necessary examinations and tests, they were diagnosed with somatoform disorder by a psychologist. Then, assuring the patients that all data will be kept confidential and their names will not be disclosed in this study, they were selected for this study after organized SCID interview. Normal population was also interviewed, and they completed the questionnaire after meeting the conditions that they suffer from no special disease. After collection of data, Multivariate Analysis of Variance (MANOVA) Statistical Test was used, and the data were analyzed by SPSS Software Ver 16. Study tools included:

Personal Concern Inventory (PCI)

PCI is a modified and summarized form of Motivational Structure Questionnaire (MSQ), part of which is idiographic just like MSQ, because plans and current concerns of each individual are assessed and studied in 12 different scales [7]. In PCI, the subjects are asked to think about their goals in each life context and then score their comments on how to achieve their goals in ten dimensions. Life contexts in PCI include:

1) Home and its related affairs;
2) Job, profession, and financial and economic condition;
3) Relationships with family, spouse and relatives;
4) Relationships with friends and acquaintances;
5) Love, intimacy and sexual relationships;
6) Change, correction and personal growth;
7) Education and training;
8) Medical health and mental health;
9) Smoking (cigarette and etc.)'
10) Spirituality;
11) Pastime and hobbies;
12) Other goals.

Cox and Klinger believe that the above contexts are selected as the most important contexts because they are held in common by many people [7].

In addition, part of the inventory is nomothetic, because interpersonal comparison is made possible through classification of the goals with the aid of 10 keywords for type of activities, and in this study, the second part of the inventory is concerned.

Dimensions in PCI

1) Importance: This dimension specifies importance of the subject's goal. To what extent the goal is important for the subject that they want to achieve or accomplish it.

2) Possibility of Attainment: This dimension measures the respondent's comment on possibility of achievement of the goals in case of effort.

3) Control on Attainment Process: This dimension measures the subject's sense of control on achievement of their goals.

4) Awareness of What to Do: This dimension measures level of the subject's information and knowledge on how to achieve their goals.

5) Satisfaction (In case of attainment): This dimension measures the subject's joy from achievement of their goals.

6) Sorrow (In case of not attainment): This dimension measures the subject's sorrow if their goals are not achieved.

7) Commitment to Goal: This dimension measures determinedness of the client in achievement of their goals.

8) Length of Time for Attainment: This dimension measures the respondent's comment on probable length of time required to achieve their goals.

9) Degree of Freedom in Selection of Goal: This dimension determines whether the subject has selected the goal or others have selected the goal for him.

10) Importance of Goal for Other Goals: This dimension measures compliance or conflict of the subject's goals.

Findings indicate that PCI is of good validity. Cox and Klinger calculated internal consistency of ten PCI scales by Chronbakh's Alpha Method in a sample consisted of 182 students, with $\alpha = 0.81$ [7].

Coping Responses Inventory (CRI)

Developed by Billings and Moos (1981), this inventory has 32 scales that assess 5 types of coping strategies: coping based on problem solving (3 subscales), coping based on emotional inhibition (11 subscales), coping based on cognitive assessment (5 subscales), coping based on physical inhibition or somatization of problems (9 subscales), and coping based on attraction of social support (4 subscales). Scoring is based on a Likert scale ranged from 0 to 3.

Demographic Characteristics Inventory

After collection of data, Multivariate Analysis of Variance (MANOVA) Statistical Test was used, and the data were analyzed by SPSS Software, Ver. 16

Results

From 60 subjects participated in this study, 30 had somatoform disorder and 30 were normal population. From 30 patients with

somatoform disorder, 12 were diagnosed with conversion disorder, 9 with somatization disorder and 9 with pain disorder. Age, sex, education and marital status variables were controlled at the time of assignment of the individuals to the two groups. Age of the participants ranged between 13 and 60 years (Table 1).

Table 1: Demographics of Sample.

Variables		Frequency	Percent
Patients	Conversion Disorder	12	40
	Somitaization Disorder	9	30
	Pain Disorder	9	30
Sex	Female	44	73.3
	Male	16	26.7
Marital Status	Single	18	30
	Married	40	66.7
	Widow	2	3.3
Education	Illiterate to High School Diploma	48	80
	High School Diploma to bachelor's degree	12	20

Analysis of Results

In order to analyze results of the present study, appropriate statistical tests were used for hypotheses of the study. Hypotheses include: 1) Motivational structure in patients with somatoform disorder is different from that in normal population, and 2) There is a difference between coping strategies of patients with somatoform disorder and those of normal population. In order to analyze these hypotheses, Multivariate Analysis of Variance (MANOVA) Test was used (Table 2).

Table 2: Mauchly's Test of Sphericity for the First Hypothesis.

					Epsilon		
Statistic	Mauchly's W	Approx. Chi-Square	Df	Sig.	Greenhouse- Geisser	Huynh-Feldt	Lower-bound
Value of Statistic	0.008	265.509	44	0.000	0.491	0.546	0.111

Table 3: Results of Fourfold F Characteristics Related to MANOVA for the First Hypothesis.

Effect	Value	F	Significance Level
Pillai's Trace	0.705	11.717	0.000
Wilks' Lambda	0.295	11.717	0.000
Hotelling's Trace	2.391	11.717	0.000
Roy's Largest Root	2.391	11.717	0.000

Results of Mauchly's Test of Sphericity indicates that the obtained significance in the components is lower than significance level of 5 percent ($p<0.05$). Therefore, it can be said that the obtained f is higher than f of the table and necessary condition exists for using f Test (Table 3).

As it can be concluded from the above table, characteristic statistical value of $F=11.717$ is significant for all four characteristics at significance level of $\alpha=0.05$; i.e. with the possibility of 95%, it can be concluded that motivational structure in the patients with somatoform disorder is different form that in normal population (Table 4 & 5).

Table 4: Results of MANOVA by the Patients with Somatoform Disorder and Normal Population for the First Hypothesis.

		Sum of Squares	Degrees of Freedom	Mean Square	F	Sig.
Effect of Group	Importance	11834.036	1	11834.036	41.693	0.000
	Possibility of Attainment of Each Goal	14642.188	1	14642.188	53.895	0.000
	Extent of Control in Attainment of Goal	13022.793	1	13022.793	48.793	0.000
	Extent of Awareness of Necessary Steps and Measures	15663.565	1	15663.565	52.982	0.000
	Extent of Happiness in Case of Attainment of Each Goal	11967.548	1	11967.548	35.321	0.000
	Extent of Sorrow in Case of Failure of Each Goal	5330.215	1	5330.215	10.211	0.002
	Extent of Commitment and Diligence in Relation to Attainment of Each Goal	11644.366	1	11644.366	38.566	0.000
	Length of Time for Attainment of Each Goal	14.741	1	14.741	0.032	0.858
	Degree of Freedom of Each Individual in Selection of Their Goal	13856.321	1	13856.321	42.084	0.000
	Importance for Other Goals	8324.455	1	8324.455	16.476	0.000

Error	Importance	16462.518	58	283.837		
	Possibility of Attainment of Each Goal	15757.304	58	271.678		
	Extent of Control in Attainment of Goal	15479.976	58	266.896		
	Extent of Awareness of Necessary Steps and Measures	17147.243	58	295.642		
	Extent of Happiness in Case of Attainment of Each Goal	19651.730	58	338.823		
	Extent of Sorrow in Case of Failure of Each Goal	30275.181	58	521.986		
	Extent of Commitment and Diligence in Relation to Attainment of Each Goal	17512.212	58	301.935		
	Length of Time for Attainment of Each Goal	26324.592	58	453.872		
	Degree of Freedom of Each Individual in Selection of Their Goal	19096.578	58	329.251		
	Importance for Other Goals	29304.478	58	505.250		
Total	Importance	382719.535	60			
	Possibility of Attainment of Each Goal	256567.621	60			
	Extent of Control in Attainment of Goal	231689.449	60			
	Extent of Awareness of Necessary Steps and Measures	263584.747	60			
	Extent of Happiness in Case of Attainment of Each Goal	384034.523	60			
	Extent of Sorrow in Case of Failure of Each Goal	232412.605	60			
	Extent of Commitment and Diligence in Relation to Attainment of Each Goal	311860.028	60			
	Length of Time for Attainment of Each Goal	176863.790	60			
	Degree of Freedom of Each Individual in Selection of Their Goal	308936.894	60			
	Importance for Other Goals	294806.878	60			

Table 5: Descriptive Data for the First Hypothesis.

Index	Group	Number	Average	Standard Deviation
Importance of Each Goal	Patient	30	62.8	19.7
	Normal	30	90.9	13.4
	Total	60	76.9	21.9
Possibility of Attainment of Each Goal	Patient	30	45.8	15.2
	Normal	30	77	17.6
	Total	60	61.4	22.7
Extent of Control in Attainment of Goal	Patient	30	43.5	14.5
	Normal	30	72.9	18
	Total	60	58.2	22
Extent of Awareness of Necessary Steps and Measures	Patient	30	45.9	16.9
	Normal	30	78.2	17.5
	Total	60	62	23.6
Extent of Happiness in Case of Attainment of Each Goal	Patient	30	62.5	21.6
	Normal	30	90.8	14.5
	Total	60	76.6	23.1
Extent of Sorrow in Case of Failure of Each Goal	Patient	30	57.8	24.3
	Normal	30	66.7	21.3
	Total	60	57.3	24.6
Extent of Commitment and Diligence in Relation to Attainment of Each Goal	Patient	30	54.7	20.4
	Normal	30	82.6	13.7
	Total	60	68.6	22.2

Length of Time for Attainment of Each Goal	Patient	30	50.6	20
	Normal	30	49.6	22.5
	Total	60	50.1	21.1
Degree of Freedom of Each Individual in Selection of Their Goal	Patient	30	52.6	16.4
	Normal	30	83	19.7
	Total	60	67.8	23.6
Importance for Other Goals	Patient	30	53.7	20.5
	Normal	30	77.2	24.3
	Total	60	65.5	25.3

Results of ANOVA in Table 4 indicates that except for "Length of Time for Attainment of Goal", for which there is no significant difference between the two groups, there are significant differences between the patients with somatoform disorder and normal population for other components. As seen from the descriptive indices included in Table 5, except for "Length of Time for Attainment of Goal", average of the patients is lower than that of normal population for all components (Table 6).

Table 6: Mauchly's Test of Sphericity for the Second Hypothesis.

					Epsilon		
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	Df	Sig.	Greenhouse- Geisser	Huynh-Feldt	Lower-bound
Factor 1	0.497	39.391	9	0.000	0.743	0.802	0.250

Results of Mauchly's Test of Sphericity indicates that the obtained significance in the components is lower than significance level of 5 percent ($p<0.05$). Therefore, it can be said that the obtained f is higher than f of the table and necessary condition exists for using f Test (Table 7).

Table 7: Results of Fourfold F Characteristics Related to MANOVA for the Second Hypothesis Multivariate Tests.

Effect		Value	F	Significance Level
Group	Pillai's Trace	0.487	10.260	0.000
	Wilks' Lambda	0.513	10.260	0.000
	Hotelling's Trace	0.950	10.260	0.000
	Roy's Largest Root	0.950	10.260	0.000

As it can be concluded from the above table, characteristic statistical value of F=10.260 is significant for all four characteristics at significance level of $\alpha=0.05$; i.e. with the possibility of 95%, it can be concluded that coping strategies in the patients with somatoform disorder are different from those in normal population.

Tests of between-subjects effects

(Table 8 & 9) Results of ANOVA in Table 8 indicates that except for "Cognitive Assessment and Attraction of Social Support", for which there is no significant difference between the two groups, there are significant differences between the patients with somatoform disorder and normal population for other components. Comparison of the two groups indicates that the patients with no somatoform disorder use coping strategy based on problem solving more than those with this disorder, and the patients with somatoform disorder use coping strategies based on emotional inhibition and physical inhibition more than those without this disorder.

Table 8: Results of MANOVA by the Patients with Somatoform Disorder and Normal Population for the Second Hypothesis.

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Group	Problem Solving	25.350	1	25.350	7.014	0.010
	Emotional Inhibition	93.750	1	93.750	5.595	0.021
	Physical Inhibition	416.067	1	416.067	32.139	0.000
	Cognitive Inhibition	13.067	1	13.067	1.957	0.167
	Social Support	7.350	1	7.350	1.610	0.210
Error	Problem Solving	209.633	58	3.614		
	Emotional Inhibition	971.900	58	16.757		
	Physical Inhibition	750.867	58	12.946		
	Cognitive Inhibition	387.267	58	6.677		
	Social Support	264.833	58	4.566		
Total	Problem Solving	2061.000	60			
	Emotional Inhibition	11441.000	60			
	Physical Inhibition	6544.000	60			
	Cognitive Inhibition	6202.000	60			
	Social Support	1843.000	60			

Table 9: Descriptive Data for the Second Hypothesis Descriptive Statistics.

Group		N	Minimum	Maximum	Mean	Standard Deviation
Physical	Problem Solving	30	0	8	4.87	2.063
	Emotional Inhibition	30	7	28	14.40	4.680
	Physical Inhibition	30	1	20	12.10	4.139
	Cognitive Assessment	30	2	15	9.37	2.723
	Social Support	30	1	11	5.47	2.360
	Valid N (Listwise)	30				
Non-physical	Problem Solving	30	4	9	6.17	1.724
	Emotional Inhibition	30	5	23	11.90	3.407
	Physical Inhibition	30	3	15	6.83	2.960
	Cognitive Assessment	30	6	15	10.30	2.437
	Social Support	30	2	10	4.77	1.888
	Valid N (Listwise)	30				

Discussion

The present study was mainly aimed to compare motivational structure and coping strategies in the patients with somatoform disorder and normal population. Considering the obtained results, role of motivational structure and coping strategies seem to play an important role in etiology and development of somatoform disorder. Based on the findings, the patients with somatoform disorder have maladaptive motivational structure. As compared to normal population, they put less importance to their goals, are less hopeful in achievement of their goals, have less control and awareness of their goals, have the least satisfaction from achievement of goal or the least sorrow from non-achievement of goal, and have the least commitment to the goals and conflict of goals. As compared to normal population, they have less freedom in selection of their goals, act very passively in execution of their plans and goals, and since they faced a lot of failures and stresses in their life, they are somehow suffer from a learned frustration and end up with this belief that effort for achievement of their goals is in vain. When facing obstacles on their way to their goals, they relinquish the goals and have no continuance and diligence in their way to achieve their goals.

Generally, goal pursuit has a specific starting point- i.e. when the individual selects a motivation and forms an internal commitment to pursue that goal [10].

Commitment to a goal is important with respect to both the consequences of relinquishment of goal and numerous changes made by commitment to a goal. Firstly, commitment to a goal changes the initial effects of sudden obstacles, which means that before an individual can be committed to a goal, obstacles cause the goal to lose its attraction, but after commitment, the obstacles not only reinforce the goal but also deepen the commitment [11]. Secondly, the commitment makes change in function of the mind. Before commitment, the individual regularly estimates various options for their choice; in other words, their mindset is in an assessment status, but after commitment, the individual gains instrumental mind characterized by support of a specific goal and focus on the ways to achieve that goal. Thirdly, by beginning the commitment, a latent process is formed in the mind that makes the individual sensitive to any sign related to goal pursuit [12]. Since it was revealed in this study that the patients with somatoform disorder had less commitment to their goals than did the normal population, the most prominent characteristic of the action process- "continuance and diligence" until achievement of the concerned goal - is not seen in the patients.

The study conducted by Roberson also indicated that the people with job satisfaction had different motivational structure as compared to those with job dissatisfaction [13]. Studies of Newcomb and Harlow on the adolescents and the youth also indicated a significant correlation between addiction and having no goal and direction in life [14]. In addition, the findings of this study indicated that motivational structure of the patients with somatoform disorder is not different from that of normal population with respect to the length of time predicted by them to achieve their goals, and both groups were in similar position with respect to this variable.

According to Cox and Klinger the individuals having the least hope in achievement of goal, the least satisfaction from achievement of goal and/or the least sorrow from not achievement of goal, the least commitment to goal, low sense of control on goal and the least information about their goals have maladaptive motivational structure. On the other hand, the other characteristic of the people with maladaptive motivational structure is that they have avoidance goals instead of dispositional goals (they try to avoid from negative consequences). Therefore, according to Cox and Klinger, the finding of this study can be generalized as follows: goals of each individual are different from those of others; an individual might have selected achievement of high scientific position as his/her goal and the other one quitting his/her addiction; both goals require spending a lot of time. The patients may more often pursue avoidance goals and seek getting rid of or escaping from negative annoying goals- for example, trying to not getting sick, trying to not getting fired or trying to get rid of negative stimuli such as unsuccessful marriage. The patients predict as much time expected for achievement of their avoidance goals as the normal population consider for their dispositional goals [7]. Studies of Elliot & Church indicated that

the clients pursuing many avoidance goals in treatment process showed few changes in satisfaction from life as compared to those clients having less avoidance goals in treatment process [15]. In addition, people are different in their imagination of the objectivity of pursuing their goals. Sometimes, they only think of the final result; i.e. how they will feel when they achieve their goals- for example, thinking of a prosperous job. But if they imagine what steps are necessary for achievement of goals, they are more likely to be successful in achievement of their goals and probably pay more attention to the problems encountered on their way, especially if the goals are of high value for them [16].

In this study, it was also revealed that the patients with somatoform disorder reacted emotionally and impulsively instead of acting in a problem-based way when facing the problems, and part of their time and energy is spent for the problems arising from somatization of their mental conflicts, and consequently the opportunity to solve the problem is taken from them. Instead of solving the problem, they just transiently decrease its emotion by impulsive behaviors or somatization, while these approaches increase the individual's problems in long term. The patients with somatoform disorder acted like the patients with other disorders in using coping strategies when facing the problems, which had been confirmed by the former studies [2]. But, for using coping strategies based on social support and cognitive assessment, no difference was observed between the two groups and both groups were in similar position. Although this finding seems to be inconsistent with the initial expectation, but it can reflect the fact that the patients with somatoform disorder are like normal population with respect to reception of support and various assistances from other people. Several generalizations may be made to justify this finding of the study.

Although no significant difference was seen between the patients with somatoform disorder and normal population for coping strategies based on cognitive assessment in this study, they experienced many stressor events in their lives and considered the conditions uncontrollable when facing such events and used more emotion-based coping strategies when facing the problems as compared to normal population, so they become more predisposed to various diseases including somatoform disorder. Results of the study may have implications for prevention by veteran and trained clinical psychologists and development and exacerbation of or damages resulting from this disorder may be decreased. In initial prevention, training programs of immunity against stress, reinforcement of problem solving skills and adjustment of emotional copings and logical and healthy methods of resolving the conflicts may be provided to them by the experts, and also by using Systematic Motivational Counseling (SMC), the patients may be made aware of the processes of their maladaptive thoughts and goals, and by encouraging them to reassess their negative interactions, their awareness and knowledge may be increased so that they can benefit from the necessary opportunities to achieve their goals.

A limitation in this study was related to selection of the population, for which only a private hospital and a clinic was considered. Surely, by selection of more specialized centers such as hospitals, and private clinics and offices, the results may be better generalized. Since this disorder is common in medical settings and the patients find their problem physical but not mental, they refer to the physicians for treatment and since medical care is time-consuming and expensive for them and they attempt for psychotherapy only upon recommendation of the physician, close cooperation between the physicians and the psychologists and recruitment of veteran clinical psychologists specialized in behavioral medicine and provision of services to such patients seems necessary.

Conclusion

Patients with the somatoform disorder have maladaptive motivational structure and have more focus on emotional and physical inhibitory coping strategies. As compared to normal population, they put less importance to their goals, are less hopeful in achievement and control of them, the least satisfaction from achievement or sorrow from non-achievement of goal and the least commitment to the goals. they have less freedom in selection of their goals, act very passively in the execution of their plans, and since faced a lot of failures in their life, are somehow suffering from a learned frustration and end up with this belief that effort for the achievement of their goals is in vain. When facing obstacles on their way to their goals, they abandon them and have no continuance in their way to achieve them.

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Conflict of Interest

No conflict of interest.

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