

# Comparison of Early Maladaptive Schemas in Patients with Dysthymic Mood Disorder, Major Depression and Healthy Control Subjects

Mehrdad Shariatzadeh <sup>1\*</sup>, Shahram Vaziri <sup>1</sup>, Malek Mirhashemi <sup>1</sup>

*1. Department of Psychology, School of Psychology, Islamic Azad University, Roudehen Branch, Roudehen, Iran.*

## Article info:

Received: 10 Aug. 2013

Accepted: 25 Jan. 2014

## ABSTRACT

**Objective:** Early maladaptive schemas (EMSs) or fundamental beliefs that underpin stable and trait-like psychological disorders are chronic and relapsing. In, active schemas in dysthymic patients with major depression have been compared with healthy individuals. The purpose of this study was to compare early maladaptive schemas (Young, 2003, 1990) in dysthymic patients with major depression and healthy subjects.

**Methods:** For this study, 46 patients with major depression and 20 non-hospitalized patients with dysthymic during the year who referred to medical centers and clinics in Kermanshah (a city in West of Iran) were selected through structured interviews and the Beck Depression Inventory (BDI-II), and 66 patients with mild problems who referred to the clinic were considered as control group. 15 early maladaptive schemas through Young Schema Questionnaire-Short Form (YSQ-SF) were measured.

**Results:** Analysis of variance showed that maladaptive schemas was different in the three groups. Maladaptive schemas of emotional deprivation, social isolation, defectiveness/shame, and failure in patients with dysthymic, and maladaptive schemas of Self-sacrifice, and unrelenting standards/ hypercriticalness, entitlement/grandiosity, were active in patients with major depression. Healthy people were not active in any schema incompatibility. Maladaptive schemas in patients with dysthymic were more than the other two groups.

**Conclusion:** In depression group, all early maladaptive schemas except abandonment and dependence/ incompetence schemas, indicated higher scores. The evidence shows that schemas of emotional deprivation, social isolation, failure, and defectiveness/shame are specific keys for dysthymic disorder and emotional inhibition, and unrelenting standards are the keys for major depressive disorder.

## Key Words:

Early Maladaptive Schemas,  
Dysthymic mood disorder,  
Major Depression

## 1. Introduction

Mood disorders include a wide range of mental health problems. It is estimated that 20.8 percent of the general population experience a mood disorder in a part of their life (Kessler et al., 2005). As early as 1975, Seligman described major depression as the “common cold” of psychiatry (Seligman, 1975). Today, the situation

has become even worse. Depression is currently affecting about 121 million people worldwide (World Health Organization; WHO, 2001), and the incidence of depressive symptoms is increasing in all groups of age and in all Western cultures (Klerman et al., 1985; Klerman & Weissman, 1992; Sartorius, Jablensky, Gulbinat, & Ernberg, 1980). According to WHO (2001), depression is today the leading cause of disability. Also, the WHO predicts that all diseases in 2020, depression will impose the

### \* Corresponding Author:

Mehrdad Shariatzadeh, PhD Candidate

Address: School of Psychology, Islamic Azad University, Roudehen Branch, Roudehen, Iran.

Tel/Fax: +98 (833) 8214514

E-mail: mehrdad.shariatzadeh@gmail.com

second-largest burden of ill health worldwide (Murray & Lopez, 1998). The cognitive vulnerability–stress theory has been advanced to explain mood and anxiety disorders (Alloy & Riskind, 2006).

Based on Beck's (1987) cognitive theory, individuals who have negative cognitive schemas or core beliefs are at an increased risk of depression. When a stressful life event occurs, negative cognitive schemas are activated and affect the way the individual interprets the event, leading to depressive symptoms (Hankin & Abela, 2005). Considerable evidence supports the cognitive vulnerability–stress theory as applied to the mood disorders (Hankin, Abramson, Miller, & Haefel, 2004; Reardon & Williams, 2007).

Based on Beck's cognitive model, cognitive behavioral therapy (CBT) has evolved as a treatment of choice (Clark & Beck, 2010; Clark, Beck, & Alford, 1999; Newman, Leahy, Beck, Reilly-Harrington, & Gyulai, 2002). Although as a whole, CBT is quite effective for mood disorders, but some patients continue to show symptoms or experience relapses subsequent to treatment, particularly in chronic cases (Durham, Chambers, MacDonald, Power, & Major, 2003; Fournier et al., 2009).

For these patients, a different approach seems to be required. To this end, Jeffrey Young developed schema theory for patients with severe, chronic psychological problems who fail to make significant gains in traditional cognitive therapy (Young, 1990; Young, Klosko, & Weishaar, 2003). Young suggested that certain patients are poorly fit for cognitive therapy and require a more extensive treatment approach, in part because it is difficult to identify and access them, and change their cognitions and emotions (Hawke and Provencher, 2011).

Central to the schema model are early maladaptive schemas (EMSs), defined as broad, pervasive character traits that is developed during childhood in reaction to early toxic experiences (Young et al., 2003). Young et al., have identified 18 different EMSs to date, each with its own proposed origin and long-term impact. The 18 EMSs are grouped into five umbrella categories known as schema domains, bringing together the EMSs that tend to be developed together.

The current schema list comprises 18 EMSs (briefly described in the appendix) which are categorized in five domains: disconnection and rejection (abandonment/instability, mistrust/abuse, emotional deprivation, defectiveness/shame, social isolation/alienation), impaired autonomy (dependence/incompetence, vulnerability for

harm or illness, enmeshment/undeveloped self, failure), impaired limits (entitlement/grandiosity, insufficient self-control/self-discipline), other-directedness (subjugation, self-sacrifice, and approval seeking/recognition-seeking), and overvigilance and inhibition (negativity/pessimism, emotional inhibition, unrelenting standards, punitiveness).

Early maladaptive schemas have been shown to endure longitudinally (Riso et al., 2006; Stopa & Waters, 2005), with individuals who typically endorsing the same schemas over time, especially if those EMSs be of the domain disconnection and rejection (Wang, Halvorsen, Eisemann, et al., 2011). All five schema domains have been shown to being accounted for a substantial percentage of the variance in depression, as measured on the Beck depression inventory-II (Halvorsen et al., 2009). In addition, those with chronic depression tend to endorse higher rates of EMSs even after researchers statistically controlling the current depressive symptoms and negative emotions (Riso et al., 2006), and also after controlling personality disorder symptomology (Riso, Maddux, & Turini-Santorelli, 2007).

Many studies of early maladaptive schemas and depressive symptoms have been performed in hospitalized or non-hospitalized samples. In the study of Harris and Curtin (2002), a review of early maladaptive schemas, and depressive symptoms in young student's revealed that perceived parenting on the sample size (N=194), schemas of defectiveness/shame, insufficient self control, vulnerability to harm or illness, dependence/incompetence are correlated with depression syndrome and perceived parenting (Harris and Curtin, 2002).

The study of Esfarjany, Dolatshahi, Mohammadkhani and Pourshahbazi on a 116 samples comprising 58 depressed patients and 58 healthy subjects with no history of depression, by using early maladaptive schemas questionnaire and Beck depression inventory-II, showed that in all maladaptive schemas, there were significant differences between depressed and non-depressed subjects, and between patients with depressive and non-depressive, also in patients with major depressive social isolation, subjugation and failure were the most active schemas.

This study also revealed that the physical symptoms, vegetable, worthlessness, and pessimism, social isolation schema, psychological symptoms, and the schemas of dependence/incompetence are the most active schemas (Esfarjany et al., 2010).

Calvete, Estévez, López de Arroyabe, and Ruiz (2005) found that depressive symptoms among undergraduate students were predicted by defectiveness/shame, Self-sacrifice, and failure, whereas anxiety was predicted by abandonment, failure, and subjugation. Trip (2006) found that all 18 EMSs were associated with trait anxiety in a nonclinical sample, whereas only unrelenting standards/hypercriticalness and punitiveness were associated with state of anxiety. Looking at the mood–EMS relationship from different angle, Stopa and Waters (2005) compared the effect of positive and negative mood induction on EMS scores. among the 15 assessed EMSs, only defectiveness/shame was significantly higher after negative mood induction than after positive mood induction.

In the opposite sense, only entitlement/grandiosity was significantly higher after positive mood induction compared with negative mood induction. Scores on the remaining 13 EMSs were not different depending on whether the participant was in a positive or negative mood. These results suggest that the defectiveness/shame and entitlement/grandiosity EMSs may reflect mood symptoms in some degree, but supports the stability of most EMSs across mood states.

This finding has important implications because it upholds the conceptualization of EMSs as stable character traits rather than the expression of mood symptoms—at least in a nonclinical sample. One study examined EMSs in relation to parenting style in a sample of outpatients with major depressive disorder (MDD) compared with healthy controls (Shah & Waller, 2000). The scores of depressed patients were higher than controls on all EMSs, demonstrating the relevance of the schema model to MDD. Despite the global activation of all EMSs in a discriminant function analysis, only three EMSs were required to classify the participants into their respective groups. A model composed of defectiveness / shame, Self-sacrifice, and insufficient Self-control correctly classified 88% of MDD participants and 90% of controls, adding specificity to the findings.

Riso et al., (2003) examined the schema domains in chronic depression, compared to patients with non-chronic MDD and healthy controls. The scores of two depressed groups were higher than controls on all schema domains, but the scores of those with chronic depression exceeded the scores of patients with non-chronic depression. The chronically depressed group had higher scores than those with non-chronic depression on the disconnection and rejection, impaired autonomy, and overvigilance domains even when controlling for both depressive and personality disorder symptoms.

Riso et al., (2006) examined the stability of the EMSs among patients with MDD in a 2.5 to 5-year longitudinal study. Although many participants received psychotherapy during the interval between assessments, the results showed that the schemas were stable among patients with MDD. A recent series of studies by one research team has examined various aspects of the EMSs in association with depression (Halvorsen, Wang, Eiseemann, & Waterloo, 2010; Halvorsen et al., 2009; Wang, Halvorsen, Eiseemann, & Waterloo, 2010). In the first set of analyses, the scores of depressed participants were higher than non-depressed participants on most EMSs, but these scores exceeded those of previously depressed patients on only eight (social isolation, dependence/incompetence, vulnerability to harm or illness, enmeshment, failure, emotional inhibition, entitlement/grandiosity, and insufficient Self-control; Halvorsen et al.,, 2009).

However, when the current depressive symptoms were controlled, the scores of the three groups were significantly different in all EMSs. Currently, depressed participants had the highest scores, followed by previously depressed participants, and then by controls. In the 9-year follow-up study, EMSs were found to be stable over the study period (Wang et al., 2010). Lastly, the scores on the impaired limits domain at the beginning of the study made a unique contribution to the prediction of major depressive episodes 9 years later, at  $r=0.09$ , a prediction nearly as large as that provided by prior depression ( $r=0.10$ ; Halvorsen et al., 2010). This study supports the EMSs as character traits that remain stable over the time and as markers of the cognitive vulnerability to depression, even in the absence of current symptoms.

**In the present study, we have sought to test the following hypotheses**

1. Active early maladaptive schemas in dysthymic disorder and major depression are different.
2. There is not significant difference between early activated maladaptive schemas in patients with dysthymic disorder and patients with major depression and healthy.
3. Early maladaptive schemas in depressed patients are more frequent than in normal subjects.

## 2. Methods

This is a causal – comparative or ex post facto study. Research variables through the standardized questionnaire and a structured clinical interview were measured,

and the differences between the groups were analyzed by ANOVA test.

### Population and Sample

Participants in this study have been chosen from patients who referred to psychological counseling centers in Kermanshah. 46 patients with major depression, and 20 patients with dysthymic disorder, from October 2007 to the end of September 2008 were visited in health centers and 66 non-depressed patients who had clinically no impairment, were selected as controls. From this sample, 42.4% were female, and 57.6% male. In the study, the age range of participants was 20 to 40 years (and the mean age 29.68 years, and their median age 31 years). Then, structured clinical interview (SCID-I) and the Beck depression inventory second edition (BDI-II) were used to examine the patients.

### Materials

#### Beck depression inventory-second edition (BDI-II)

Beck, Steer and Brown, 1996). The Beck depression inventory-II (BDI-II; Beck, Steer, & Brown, 1996) is a 21-item self-report measure of depressive symptomology experienced over the past two weeks. Participants rate the extent to which they experience each item on a scale of 0-3, with total scores ranging from 0-63 (Beck et al., 1996). The inventory has demonstrated high internal consistency among college students and outpatients ( $P=0.93$  and  $0.92$ , respectively), as well as adequate validity and diagnostic discrimination (Beck et al., 1996 in Dozois, Dobson, & Ahnberg, 1998).

Cronbach's alpha in Anmuth et al., (2011) was 0.94. Dozois et al., (1998) performed factor analyses of both the BDI (Beck, Rush, Shaw, & Emery, 1979), and the BDI-II (Beck et al., 1996) in a sample of 511 undergraduate students. High internal consistency was found ( $P=0.91$ ), with no significant differences for males and females (Dozois et al., 1998). The results supported the use of the following cut-off scores: 0-12 (non-depressed), 13-19 (dysphoric), 20-63 (dysphoric depressed) in order to accurately reflect diagnostic criteria, and cut-off scores were used by the original inventory (Dozois et al., 1998). Iranian test-retest reliability of the results within a week was 0.94 (Keith and Mohammad Khani, 2006). Internal consistency in Iranian students was 0.87, and test-retest reliability of this scale in a week was 0.73 (Dobson and Mohammad khani, 2006). In a sample of 94 people in Fata study, Cronach's alpha coefficient 0.91 and test-

retest reliability of this scale in a week was reported 0.96 (Fata, 2003).

#### Early maladaptive schemas scale: young schema questionnaire-short form (SQ-SF, Young, 1998)

Young schema questionnaire-short form (SQ-SF, Young, 1998), assesses 15 EMSs. The scales consist of five items with the highest loadings on the 15 factors that are emerged in a factor analysis of the long-form of the SQ (Schmidt et al., 1995). EMSs are grouped in five broad domains: disconnection and rejection (abandonment, mistrust, emotional deprivation, defectiveness, social isolation), impaired autonomy and performance (dependence, vulnerability, enmeshment, failure), impaired limits (entitlement, insufficient self-control), other directness (subjugation, self-sacrifice, approval-seeking), and overvigilance and inhibition (negativity, emotional inhibition, unrelenting standards, punitiveness).

Respondents are asked to rate statements on a six-point Likert scale from "completely untrue of me" to "describe me perfectly". In Iran, Ghiyasy (2008) studied the validity of the scale, and it was reported coefficient alpha for this scale ( $\alpha=0.94$ ) and the coefficients for the subscales were between 0.60-0.90. Also, the discriminant validity and convergent validity of the YSQ-SF with dysfunctional attitudes scale were shown. In the study of Ahi (2006), the validity of this scale was between 0.62-0.90. Also, the research of Sedghi et al., (2007) confirmed that the validity of this questionnaire have been a factor.

### Procedure

Non-hospitalized depressed patients after diagnosis via structured clinical interviews and the Beck's depression inventory, completed research questionnaires. Control group were healthy subjects who referred to a counseling clinic for mild problems, and the questionnaires were completed.

## 3. Results

Data from the questionnaires were analyzed by SPSS software. The variables were tested for normality of distribution, and outliers were removed from the analysis. The descriptive parameters including mean and SD were calculated (Table 1). Cronbach's alpha reliability of the total scale method ( $\alpha=0.90$ ) was obtained, and the coefficient for the questionnaire was adequate and appropriate. The lowest alpha was for insufficient self-control subscale ( $\alpha=0.71$ ), and the highest alpha belonged to subscales of failure ( $\alpha=0.94$ ). All reliability coefficients were acceptable, and reliability coefficient

**Table 1:** Table of descriptive statistics for early maladaptive schemas in patients with dysthymic, major depression and healthy control subjects.

EMSs	Groups					
	Healthy		Dysthymic		Major depressive	
	Means	SD	Means	SD	Means	SD
Emotional deprivation	1.00	1.37	3.25	0.55	1.41	1.89
Abandonment	1.33	1.43	1.30	1.34	1.33	1.49
Mistrust/abuse	0.33	0.66	0.20	0.52	1.24	1.62
Social isolation	0.20	0.40	3.35	1.27	0.35	0.48
Defectiveness/shame	0.00	0.00	4.10	1.29	0.80	0.65
Failure to achieve	0.12	0.48	3.65	1.53	0.96	1.65
Dependence	0.77	1.32	1.15	1.27	0.413	0.50
Vulnerability to harm	0.17	0.38	0.55	0.89	1.39	1.64
Subjugation	0.82	1.18	0.80	1.15	1.50	1.22
Self-sacrifice	0.36	0.67	1.25	0.85	0.87	1.41
Emotional inhibition	1.83	1.27	1.10	0.97	2.15	1.67
Enmeshment	0.17	0.38	1.70	1.26	1.93	1.79
Unrelenting standards	1.53	1.82	1.40	1.23	2.07	1.53
Entitlement/grandiosity	0.88	0.83	0.85	1.27	2.54	1.67
Insufficient self-control	0.59	0.70	1.95	1.10	1.70	1.31
Whole schemes	10.11	5.56	26.60	7.98	20.65	10.33

PRACTICE in  
CLINICAL PSYCHOLOGY

for the total scale was sufficient. To examine demographic differences, one-way analysis of variance test (ANOVA) and t-tests were performed. ANOVA test results showed that early maladaptive schemas between single, married, and divorced, had no significant differences. It was also found that early maladaptive sche-

mas between Diploma, Bachelor, and Masters had no significant differences. The only significant difference was observed between the two genders in self-sacrifice schema ( $t=-2.35$ ;  $df=4$ ;  $P=0.021$ ). The negative values indicate more self-sacrifice schema in women rather than men.

**Table 2:** Results of ANOVA for comparison of three groups of patients with dysthymic, major depression and healthy control subjects in the early maladaptive schemas.

Schemas	F	P	Schemas	F	P
Emotional deprivation	17.4	0.00	Subjugation	7.2	0.00
Abandonment/instability	0.00	0.99	Self-sacrifice	4	0.02
Mistrust/abuse	11.3	0.00	Emotional inhibition	33.6	0.00
Social isolation/alienation	204.1	0.00	Enmeshment/undeveloped self	5	0.01
Defectiveness/shame	326.9	0.00	Unrelenting standards	1.8	0.17
Failure to achieve	67.9	0.00	Entitlement/grandiosity	26.9	0.00
Dependence/incompetence	3.4	0.04	Insufficient self-control	22.9	0.00
Vulnerability to harm or illness	18.2	0.00	Whole schemes	44.4	0.00

PRACTICE in  
CLINICAL PSYCHOLOGY



To examine the first specific hypotheses, results showed that except the abandonment schema, unrelenting standards in the three groups together were significantly different schemas (Table 2). In all schemas, except abandonment/instability schema ( $F=0.004$ ;  $DF=2,129$ ;  $P=0.996$ ), the scores of unrelenting standard schema ( $F=1.8$ ;  $df=2,129$ ;  $P=0.166$ ) were higher in patients than in healthy individuals. Post hoc analysis showed that the emotional deprivation, social isolation/alienation, defectiveness/shame and failure to achieve schemas in dysthymic patients received higher scores than the other groups, and entitlement/grandiosity schema in people with major depression received higher scores than the other groups. To test the second hypotheses of the independent, t-test was performed.

The results (Table 3) indicate that differences between individuals with chronic depression and patients with major depressive in schemas of emotional deprivation ( $t=6.024$ ;  $df=58.2$ ;  $P=0.00$ ), mistrust ( $t=-3.90$ ;  $df=60.86$ ;  $P=0.00$ ), social isolation ( $t=10.27$ ;  $df=21.42$ ;  $P=0.00$ ), defectiveness/ shame ( $t=10.80$ ;  $df=23.33$ ;  $P=0.00$ ), failure ( $t=6.24$ ;  $df=64$ ;  $P=0.00$ ), dependence ( $t=2.52$ ;  $df=21.60$ ;  $P=0.02$ ), vulnerability to harm and illness ( $t=-2.69$ ;  $df=60.76$ ;  $P=0.01$ ), undeveloped

self ( $t=-2.17$ ;  $df=64$ ;  $P=0.00$ ), self-sacrifice ( $t=-3.21$ ;  $DF=58.64$ ;  $P=0.002$ ) and entitlement/grandiosity ( $t=-4.05$ ;  $DF=64$ ;  $P=0.00$ ) were statistically significant. The results also showed that total scores of individuals in early maladaptive schemas have statistically significant difference. Thus, according to the findings of Table 3, there is sufficient evidence to confirm the second hypothesis that “the two groups have statistically significant differences in the early maladaptive schemas”.

To test the third specific hypotheses, T test was performed for patients with depression and healthy controls. Test results show (Table 4) that except the abandonment ( $t=0.06$ ;  $df=129.995$ ;  $P=0.952$ ), dependence/incompetence ( $t=0.70$ ;  $df=130$ ;  $P=0.485$ ), self-sacrifice ( $t=0.00$ ;  $df=124.792$ ;  $P=1.00$ ) and unrelenting standards ( $t=-1.16$ ;  $df=130$ ;  $P=0.248$ ) schemas, the rest of the 12 early maladaptive schemas, there were significant differences between depressed and healthy control groups. The depressed group significantly obtained higher scores than the control group in 12 schemes. The depressed group obtained higher scores compared to the healthy control group in the total. Thus, sufficient evidence has been obtained to confirm the third specific hypothesis and it can be said that early maladapt-

**Table 3:** Results of independent t-test to compare individuals with dysthymic and major depressive in EMSs.

EMSs	Groups Means		Groups STD		DF	t	P
	MD	DY	MD	DY			
Emotional deprivation	1.00	3.25	1.89	0.55	58.92	6.02	0.00
Abandonment	1.33	1.30	1.49	1.34	64	-0.07	0.95
Mistrust/abuse	0.33	0.20	1.62	0.52	60.86	-3.9	0.00
Social isolation	0.20	3.35	0.48	1.27	21.42	10.3	0.00
Defectiveness/shame	0.00	4.10	0.65	1.29	23.33	10.8	0.00
Failure to achieve	0.12	3.65	1.65	1.53	72.28	-6.4	0.00
Dependence	0.77	1.15	0.50	1.27	21.60	2.5	0.02
Vulnerability to harm	0.17	0.55	1.64	0.89	60.76	-2.7	0.01
Subjugation	0.82	1.50	1.22	1.15	64	-2.2	0.03
Self-sacrifice	0.36	1.25	1.41	0.85	57.05	1.4	0.18
Emotional inhibition	1.83	1.10	1.67	0.97	58.64	-3.2	0.00
Enmeshment	0.17	1.70	1.79	1.26	64	-53	0.60
Unrelenting standards	1.53	1.40	1.53	1.23	64	-1.7	0.09
Entitlement/grandiosity	0.88	0.85	1.67	1.27	64	-4.1	0.00
Insufficient self-control	0.59	1.95	1.31	1.10	64	0.76	0.45
Whole schemes	10.11	26.60	10.33	7.98	64	2.29	0.03

**Table 4:** Results of independent t tests to compare patients with depression and healthy subjects in the EMSs.

Schemas	Groups Means		Groups STD		df	t	P
	Depressive	Healthy	Depressive	Healthy			
Emotional deprivation	1.97	1.00	1.81	1.37	120.94	-3.465	0.001
Abandonment	1.32	1.33	1.44	1.43	129.995	0.061	0.952
Mistrust/abuse	0.92	0.33	1.46	0.66	130	-2.992	0.003
Social isolation	1.26	0.20	1.60	0.40	73.113	-5.221	0.000
Defectiveness/shame	1.80	0.00	1.76	0.00	65.00	-8.30	0.000
Failure to achieve	1.77	0.12	2.03	0.48	72.279	-6.434	0.000
Dependence	0.64	0.77	0.87	1.32	130	0.70	0.485
Vulnerability to harm	1.14	0.17	1.50	0.38	73.143	-5.103	0.000
Subjugation	1.29	0.82	1.23	1.18	98.633	-3.512	0.001
Self-sacrifice	0.99	0.36	1.27	0.67	124.792	0.000	1.00
Emotional inhibition	1.83	1.83	1.56	1.27	124.79	0.002	0.009
Enmeshment	1.86	0.167	1.64	0.38	71.761	-8.173	0.000
Unrelenting standards	1.86	1.53	1.47	1.82	130	-1.160	0.248
Entitlement	2.03	0.88	1.74	0.83	93.377	-4.86	0.000
Insufficient self-control	1.77	0.59	1.25	0.70	102.209	-6.698	0.000
Whole schemes	22.45	10.1	10.00	5.56	101.675	-8.765	0.000

PRACTICE in  
CLINICAL PSYCHOLOGY

tiveschemas in the people with depression are more than those in healthy individuals.

#### 4. Discussion

Several studies have been associated with EMSs or schema domains with the general symptoms of depression and anxiety across the psychiatric disorders or in nonclinical samples (Hawke and Provencher, 2011). Cognitive theory of depression suggests that early maladaptive schemas may be responsible for some of the negative perceptions and beliefs that lead to depression and other mental disorders. Young et al., developed cognitive theory (1990, 2003), reported that early maladaptive experiences to development of produced beliefs may be useful at a time, but when the situation be varied, they become maladaptive, and cognitive disposition can lead to problematic patterns. Young model of cognitive vulnerability by defining 18 early maladaptive schemas, which is organized in five areas, should be operational.

The cognitive vulnerability–stress theory has been advanced to explain mood and anxiety disorders (Alloy & Riskind, 2006). Based on Beck's (1987) cognitive theory, individuals who have negative cognitive schemas or core

beliefs are at an increased risk for depression. When a stressful life event occurs, negative cognitive schemas are activated and affect the way the individual interprets the event, leading to depressive symptoms (Hankin & Abela, 2005).

Findings from the first test of the hypothesis showed that early maladaptive schemas in dysthymic disorder and major depressive schemas are different. These findings are in accordance with findings of Shah and Waller (2000), Bailleux et al., (2008), Harris and Curtin (2002), Young and Brown (1994), Petrocelli et al., (2001), Halvorsen et al (2009), Colman, Gordon, Macfie (2010), Riso et al.,(2003, 2006), Esfarjany, Dolatshahi, Mohammad Khani and Pourshahbazi (2010), Wang et al., (2010), Halvorsen et al., (2010), Nilsson et al., (2010). The Results also indicated that early maladaptive schemas of dysthymic have been activated in disconnection and rejection domain, and impaired autonomy and performance domain, while early maladaptive schemas in major depression are more in the domains of over vigilance and inhibition and impaired limitations.

Findings from the second hypothesis test showed that there are significant differences between early maladapt-

tive schemas in patients with dysthymic disorder and those with major depression. These findings are fully consistent with findings of Riso et al., (2003).

In this study, there is statistically significant differences between people with chronic depression and patients with major depression in the score of emotional deprivation, mistrust, social isolation, defectiveness/shame, failure, dependence, vulnerability, underdeveloped self, self-sacrifice, entitlements schemas.

It was revealed that people with major depression and chronic depression in the domains of the disconnection, rejection, impaired autonomy and performance, other-directedness, overvigilance, inhibition and impaired limitations also showed significant differences. In addition, these two groups are different in schemas of mistrust and total score of schemas. However, mistrust schema has not been activated. It seems that early maladaptive schemas in the development of chronic depression are more effective than non-chronic depression.

The results of testing the third hypothesis showed that mean score of depressed patients in early maladaptive schemas of emotional deprivation, mistrust, social isolation, defectiveness/shame, failure, dependence, vulnerability to harm and illness, subjugation, self sacrifice, emotional inhibition, entitlement, insufficient Self-control/Self-discipline and the total score of all schemas is more than healthy subjects.

These findings are consistent with the findings of Young et al., (2003), Schmidt (1995), Calvete et al., (2005), Harris & Curtin (2002), Young & Brown (1994), Petrocelli and et al., (2001), Halvorsen & others (2009), Colman, Gordon, Macfie (2010), Renner et al., (2012), Asfarjany, Dolatshahi, Mohammadkhani and Pourshahbazi (2010), Anmuth (2011), Hankin, Abramson, Miller & Haefffel (2004), Shah & Waller (2000), Bailleux et al., (2008), Riso et al., (2003, 2006), Wang et al., (2010), Wang et al., (2010), Nilsson et al., (2010).

This research revealed that, two groups of healthy subjects and depressed, were not significantly different in the schemas of abandonment, dependency, and unrelenting standards. According to Safford et al., (2007), it may be inappropriate to suggest that the relationship between maladaptive schemas, negative life events and psychopathology is more complicated than this. Research evidence has shown that depressed patients show higher scores in the all early maladaptive schema domains, but the schemas of defectiveness/shame, and insufficient self-control are considered as specific keys

for depressive symptoms and major depression (Calvete et al., 2005; Halvorsen et al., 2009; Halvorsen et al., 2010; Harris, & Curtin, 2002, Schmidt et al., 1995; Shah & Waller, 2000; Stopa et al., 2001; Welburn et al., 2002).

The findings of the present study suggest that in the depression group, all early maladaptive schemas except abandonment and dependence/incompetence schemas, higher scores are activated. The evidences also show that schemas of emotional deprivation, social isolation, failure, and defectiveness/shame are the specific keys for dysthymic disorder and emotional inhibition, and unrelenting standards are the keys for major depressive disorder.

One of the limitation of the present study is the application of the short version of the Young schema questionnaire, and the other limitation is that the size of sample group with dysthymic (n=20) was significantly smaller than the other groups.

#### References:

- Ahi, Ghasim, (2006). Standardization of a brief version of the Young Schema Questionnaire. MSc Thesis in Psychology, Al-lameh Tabatabai University.
- Alloy, L. B., & Riskind, J. H. (Eds.). (2006). Cognitive vulnerability to emotional disorders. Mahwah, NJ: Lawrence Erlbaum Associates.
- Anmuth, Lindsay M., Haugh, Jim A. (2011). Early Maladaptive Schemas and Negative Life Events In the Prediction of Depression and Anxiety, A thesis for the degree of Master of Arts in Clinical Mental Health Counseling at Rowan University .
- Ayrdyan Asfrjany Sarah B. Dolatshahi, Mohammadkhani license, Pvrshhbaz A. (2010). The role of early maladaptive schemas and rumination in explaining depressive symptoms, MS Thesis, University of Welfare and Rehabilitation Sciences, Tehran, Iran.
- Bailleux, S., Romo, L., Kindynis, S., Radtchenko, A., & Debray, Q. (2008). Study of the bonds between early maladaptive schemas and strategies of coping (among alcohol-dependent patients and depressed patients). *Journal de Thérapie Comportementale et Cognitive*, 18(1), 19-25. <http://dx.doi.org/10.1016/j.jtcc.2008.02.004>
- Beck A.T., Rush J.A., Shaw B.F., & Emery G. (1979). *Cognitive Therapy of Depression*. New York: The Guilford Press.
- Beck, A. T. (1987). Cognitive models of depression. *Journal of Cognitive Psychotherapy*, 1(1), 5-37.
- Beck, A., Steer, R. A., & Brown, G. (1996) *Beck Depression Inventory-II Manual*. San Antonio, TX: The Psychological Corporation.
- Calvete, E., Estévez, A., López de Arroyabe, E., & Ruiz, P. (2005). The Schema Questionnaire –Short Form: Structure and relationship with automatic thoughts and symptoms of affective disorders. *European Journal of Psychological Assessment*, 21(2), 90-99. <http://dx.doi.org/10.1027/1015-5759.21.2.90>



- Colman, L. K., Gordon C.G., Macfie J. (2010), Maladaptive Schemas and Depression Severity: Support for Incremental Validity When Controlling for Cognitive Correlates of Depression.
- Clark, D. A., & Beck, A. T. (2010). *Cognitive therapy of anxiety disorders: Science and practice*. New York: The Guilford Press.
- Clark, D. A., Beck, A. T., & Alford, B. A. (1999). *Scientific foundations of cognitive theory and therapy of depression*. New York: John Wiley & Sons.
- Dobson Keith, Mohammad Khani Parvaneh. (2006). Effectiveness of interventions based on recurrent depression: a case report. *Tehran University Rehabilitation*. pp25 - 30.
- Dobson, K. S., Hopkins, J. A., Fata, L., Scherrer, M., & Allan, L. C. (2010), The prevention of depression and anxiety in a sample of high-risk adolescents: A randomized controlled trial. *Canadian Journal of School Psychology*, 25(4) 291-310.
- Dozois, D.J.A., Dobson, K.S., & Ahnberg, J.L., 1998, A psychometric evaluation of the Beck-Depression Inventory-II. *Psychological Assessment*, 10 (2), 83-89.
- Durham, R. C., Chambers, J. A., MacDonald, R. R., Power, K. G., & Major, K. (2003). Does cognitive-behavioural therapy influence the long-term outcome of generalized anxiety disorder? An 8-14 year follow-up of two clinical trials. *Psychological Medicine*, 33(3), 499-509. <http://dx.doi.org/10.1017/S0033291702007079>
- Fata Ladan, (2003), *Meaning-making structures of the emotional and cognitive processing of emotional information: comparison of two conceptual framework thesis*, Tehran University of Medical Sciences, Iran.
- Fournier, J. C., DeRubeis, R. J., Shelton, R. C., Hollon, S. D., Amsterdam, J. D., & Gallop, R. (2009). Prediction of response to medication and cognitive therapy in the treatment of moderate to severe depression. *Journal of Consulting and Clinical Psychology*, 77(4), 775-787. <http://dx.doi.org/10.1037/a0015401>.
- Ghiasi M. (2008). *Validity and reliability of Young Schema Questionary (3rd. Short-form) in patient with psychological disorder and non-patient individuals in Tehran*. Thesis for Master degree. Iran, Isfahan: University of Isfahan.
- Halvorsen, M., Wang, C. E., Eisemann, M., & Waterloo, K. (2010). Dysfunctional attitudes and early maladaptive schemas as predictors of depression: A 9-year follow-up study. *Cognitive Therapy and Research*, 34(4), 368-379. <http://dx.doi.org/10.1007/s10608-009-9259-5>
- Halvorsen, M., Wang, C. E., Richter, J., Myrland, I., Pedersen, S. K., Eisemann, M., et al., (2009). Early maladaptive, nader and character traits in clinically depressed and previously depressed subjects. *Clinical Psychology & Psychotherapy*, 16(5), 394-407. <http://dx.doi.org/10.1002/cpp.618>
- Hankin, B. L., & Abela, J. R. Z. (2005). *Development of psychopathology: A vulnerability-stress perspective*. Thousand Oaks, CA: Sage.
- Hankin, B. L., Abramson, L. Y., Miller, N., & Haeffel, G. J. (2004). Cognitive vulnerability-stress theories of depression: Examining affective specificity in the prediction of depression versus anxiety in three prospective studies. *Cognitive Therapy and Research*, 28(3), 309-345. <http://dx.doi.org/10.1023/B:COTR.0000031805.60529.0d>
- Harris, A. E., & Curtin, L. (2002). Parental perceptions, early maladaptive schemas, and depressive symptoms in young adults. *Cognitive Therapy and Research*, 26(3), 405-416. <http://dx.doi.org/10.1023/a:1016085112981>
- Hawke, L. D., & Provencher, M. D. (2011). Schema theory and schema therapy in mood and anxiety disorders: A review. *Journal of cognitive psychotherapy*, 25(4), 257-276.
- Izadyan Esfarjany Sarah B. Dolatshahi, Mohammadkhani Parvaneh, Porshahbaz Abas., (2010), The role of early maladaptive schemas and rumination in explaining depressive symptoms, MS Thesis, University of Welfare and Rehabilitation Sciences, Tehran, Iran.
- Keith Dobson, Mohammad Khani Parvaneh (2006). Psychometric properties of BDI-II, 88-82: (29); *Journal of Rehabilitation*.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 593-602. <http://dx.doi.org/10.1001/archpsyc.62.6.593>
- Klerman G. L., Lavori P. W., Rice J., Reich T., Endicott J., Andreasen N. C., Keller M. B., & Hirschfeld R. M. A. (1985). Birth-cohort trends in rates of major depressive disorder among relatives of patients with affective disorder. *Archives of General Psychiatry*, 42, 689-693.
- Klerman, G. L., & Weissman, M. M. (1992). The course, morbidity, and costs of depression. *Archives of General Psychiatry*, 49, 831-834.
- Murray, C. L., & Lopez, A. D. (1998). *The global burden of disease: A comprehensive assessment of mortality and disability from disease, injuries and risk factors in 1990 and projected to 2020*. Boston: Harvard University Press.
- Nathan, P. E., & Gorman, J. M. (Eds.). (2007). *A guide to treatments that work* (3rd ed.). New York: Oxford University Press.
- Newman, C. F., Leahy, R. L., Beck, A. T., Reilly-Harrington, N. A., & Gyulai, L. (2002). *Bipolar disorder: A cognitive therapy approach*. Washington, DC: American Psychological Association.
- Nilsson, A. K., Jørgensen, C. R., Straarup, K. N., & Licht, R. W. (2010). Severity of affective temperament and maladaptive self-schemas differentiate borderline patients, bipolar patients, and controls. *Comprehensive Psychiatry*, 51(5), 486-491. <http://dx.doi.org/10.1016/j.comppsy.2010.02.006>
- Petrocchi, J. V., Glaser, B. A., Calhoun, G. B., & Campbell, L. F. (2001). Early maladaptive schemas of personality disorder subtypes. *Journal of Personality Disorders*, 15, 546-559.
- Renner, F., Lobbestael, J., Peeters, F., Arntz, A., & Huibers, M. (2012). Early maladaptive schemas in depressed patients: Stability and relation with depressive symptoms over the course of treatment. *Journal of affective disorders*, 136(3), 581-590.
- Reardon, J. M., & Williams, N. L. (2007). The specificity of cognitive vulnerabilities to emotional disorders: Anxiety sensitivity, looming vulnerability and explanatory style. *Journal of Anxiety Disorders*, 21(5), 625-643. <http://dx.doi.org/10.1016/j.janxdis.2006.09.013>
- Riso L.P., Maddux R.E., and Turini-Santorelli N., (2007), Early Maladaptive Schemas in Chronic Depression. In L. Riso, P. duToit, D. Stein, & J. Young (Eds.). *Cognitive Schemas & Core Beliefs in Psychological Problems: A Scientist Practitioner Guide* (pp. 41-58). American Psychological Association.

- Riso, L. P., du Toit, P. L., Blandino, J. A., Penna, S., Dacey, S., Duin, J. S., et al., (2003). Cognitive aspects of chronic depression. *Journal of Abnormal Psychology, 112*(1), 72-80. <http://dx.doi.org/10.1037/0021-843x.112.1.72>
- Riso, L. P., Froman, S. E., Raouf, M., Gable, P., Maddux, R. E., Turini-Santorelli, N., et al., (2006). The long-term stability of early maladaptive schemas. *Cognitive Therapy and Research, 30*(4), 515-529. <http://dx.doi.org/10.1007/s10608-006-9015-z>
- Sadooghi, Zohreh, Vafae, Maryam, Rasolzadeh Tabatabai, Seyed Kazem, Esfahanian, Namyeh. (2007). Factor analysis of short-Young Schema Questionnaire in a non-clinical sample of Iranian, *Iranian Journal of Psychiatry and Clinical Psychology, Year 14th, No. 2, Summer 2008*.
- Safford, S.M., Alloy, L.B., Abramson, L.Y., and Crossfield, A.G. (2007). Negative cognitive style as a predictor of negative life events in depression-prone individuals: A test of the stress generation hypothesis. *Journal of Affective Disorders, 99*, 147-154. doi: 10.1016/j.jad.2006.09.003.
- Sartorius, N., Jablensky, A., Gulbinat, W., & Ernberg, G. (1980). WHO collaborative study: Assessment of depressive disorders. *Psychological Medicine, 10*, 743-749.
- Schmidt, N. B., Joiner, T. E., Jr., 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*(3), 295-321. <http://dx.doi.org/10.1007/bf02230402>
- Seligman, M. E. P. (1975). *Helplessness*. San Francisco: Freeman Pub.
- Shah, R., & Waller, G. (2000). Parental style and vulnerability to depression: The role of core beliefs. *The Journal of Nervous and Mental Disease, 188*(1), 19-25. <http://dx.doi.org/10.1097/00005053-200001000-00004>
- Stopa, L., & Waters, A. (2005). The effect of mood on responses to the Young Schema Questionnaire: Short form. *Psychology and Psychotherapy: Theory, Research and Practice, 78*(1), 45-57. <http://dx.doi.org/10.1348/147608304X21383>
- Stopa, L., & Waters, A. (2005). The effect of mood on responses to the Young Schema Questionnaire: Short form. *Psychology and Psychotherapy: Theory, Research and Practice, 78*(1), 45-57. <http://dx.doi.org/10.1348/147608304X21383>
- Stopa, L., Thorne, P., Waters, A., & Preston, J., (2001), Are the short and long forms of the Young Schema-Questionnaire comparable and how well does each version predict psychopathology scores? *Journal of Cognitive Psychotherapy, 15*, 253-272.
- The World Health Organization. (2001). *The world health report - Mental Health: New Understanding, New Hope*.
- Trip, S. (2006). The Romanian version of Young Schema Questionnaire-short form 3 (YSQ-S3). *Journal of Cognitive and Behavioral Psychotherapies, 6*(2), 173-181.
- Waller, G., Meyer, C., & Ohanian, V. (2001). Psychometric properties of the long and short versions of the Young Schema-Questionnaire: Core beliefs among bulimic and comparison women. *Cognitive Therapy and Research, 25*, 137-147.
- Wang, C. E., Halvorsen, M., Eisemann, M., & Waterloo, K. (2010). Stability of dysfunctional attitudes and early maladaptive schemas: A 9-year follow-up study of clinically depressed subjects. *Journal of Behavior Therapy and Experimental Psychiatry, 41*(4), 389-396. <http://dx.doi.org/10.1016/j.jbtep.2010.04.002>
- Wang, C. E., Halvorsen, M., Eisemann, M., & Waterloo, K. (2010). Stability of dysfunctional attitudes and early maladaptive schemas: A 9-year follow-up study of clinically depressed subjects. *Journal of Behavior Therapy and Experimental Psychiatry, 41*(4), 389-396. <http://dx.doi.org/10.1016/j.jbtep.2010.04.002>
- Welburn, Ken; Coristine, Marjorie; Dagg, Paul; Pontefract, Amanda; Jordan, Shelley // *Cognitive Therapy & Research; Aug 2002, Vol. 26 Issue 4, p519*.
- Young, J. E. (1990). *Cognitive therapy for personality disorders: A schema-focused approach*. Sarasota, FL: Professional Resource Exchange.
- Young, J. E. (1991). *Early maladaptive schemas*. Unpublished Manuscript.
- Young, J. E. (1994). *Cognitive therapy for personality disorders: A schema focused approach*. Sarasota, FL: Professional Resource Press.
- Young, J. & Brown, G. (1994). *Young Schemas Questionnaire S1*. New York, NY: Cognitive Therapy Center.
- Young, J. E. (1998). *Young Schema Questionnaire Short Form*. New York: Cognitive Therapy Center.
- Young, J. E. (1999). *Cognitive therapy for personality disorders: A schema-focused approach*. Sarasota, Florida: Professional Resource Press.
- Young, J. E. (2003). *Schema therapy for borderline & narcissistic personality disorders*. Pittsfield, MA: New England Educational Institute.