

WCPCG-2011

## Schema therapy and family systems theory: The relationship between early maladaptive schemas and differentiation of self

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### Abstract

This study examined the relationship between aspects of differentiation of self in Murry Bowen's family systems theory and early maladaptive schemas in Young's schema therapy theory. For this aim, two hundred (100 male, 100 female, 28 missing) students from University of Tehran were participated in this study. All participants completed two questionnaires: the Young Schema Questionnaire-Short Form (YSQ-SF) and Differentiation of Self Inventory (DSI). Correlational analyses indicated that the aspects of differentiation of self (emotional reactivity, emotional cut-off and fusion with others) were negatively associated with early maladaptive schemas. But I-position was positively associated with early maladaptive schema. Regression analyses indicated that the mistruth/abuse schema, emotional deprivation and self-sacrifice can predict I-position. Unrelenting Standards/hypercriticalness, dependence/incompetence and abandonment/instability can predict fusion with others. Emotional cut-off can predict by enmeshment/undeveloped self, abandonment/instability, emotional inhibition and unrelenting standards/hypercriticalness schemas. Implications of these findings are discussed.

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Selection and/or peer-review under responsibility of the 2nd World Conference on Psychology, Counselling and Guidance.

*Keywords:* schema therapy, early maladaptive schemas, differentiation of self.

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### 1. Introduction

In schema therapy, (Young, 1999; Young, Klosko, & Weishaar, 2003), Early Maladaptive Schemas (EMSs), are proposed as the core and main target for treatment of personality disorders and longstanding characterological problems (Thimm, 2010). EMSs refer to deeply rooted negative beliefs about oneself, others, and the world that may develop during the earliest years of life (Virgil Zeigler-Hill, Green, Arnau, Sisemore, & Myers, 2011). Young (1990) hypothesized that connectedness, autonomy, worthiness, reasonable expectations and realistic limits, are five primary objectives that the child has to fulfill in order to pursue a healthy development. When caregivers make it difficult for the child to achieve one or more of these five objectives, Young proposed that EMSs will develop (Wang, Halvorsen, Eisemann, & Waterloo, 2010). There are now 18 different EMSs grouped into 5 schema domains. The domains represent (1) needs for safety, nurture, empathy and security [e.g., Emotional deprivation (ED), Abandonment/Instability (AB), Mistrust/Abuse (MA), Social isolation/Alienation (SI), Defectiveness/Shame (DS)] (2) expectations about oneself and environment with one's ability to separate, function and survive [e.g., Dependence/Incompetence (DI), Failure (FA), Vulnerability to harm or illness (VH), Enmeshment/Undeveloped self (EM)] (3) limits [e.g., Insufficient self-control/Self-discipline (IS), Entitlement/Grandiosity (ET)] (4) an excessive focus on the desires and needs of others at the expense of personal needs [e.g., Self-sacrifice (SS), Subjugation (SB), Approval-seeking/Recognition-seeking (AS)] (5) an excessive emphasis on suppressing one's spontaneous feelings, impulses and choices, and meeting rigid, internalized rules [e.g., Emotional inhibition (EI), Unrelenting standards/Hypercriticalness (US), Negativity/Pessimism (NP), Punitiveness (PU)] (Saariaho, Saariaho, Karila, & Joukamaa, 2010).

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Another theory that has been studied in this research is Bowen Family Systems Theory. The concepts of "differentiation of self" and the "emotional system" are essential elements in Bowen theory (Skowron, Van Epps, & Cipriano, in press). Differentiation of self is the internal, psychic condition of being able to distinguish feelings from thoughts (Beebe, 2009). Also differentiation is a transferrable characteristic of family and in the (multigenerational transmission process) problem and anxieties of family home transfers from generation to generation. (Sawatzky, Hurst, & Paré, 1996). The concept of self-Differentiation has two dimensions; intra psychic and interpersonal. On an intra-psychic level, differentiation refers to the ability to distinguish emotional feelings from other intellectual processes. With the interpersonal level in mind, differentiation involves the capacity to develop a balance of autonomy while maintaining closeness with others. Intra-psychic dimensions of differentiation include Emotional Reactivity (ER) and difficulty in taking an "I" position (IP), while interpersonal dimensions include Emotional cut-off (EC) and Fusion with others (FO) [8]. According to above contents the aim of this study is the relationship between aspects of differentiation of self in Murry Bowen's theory and early maladaptive schemas in Young's theory was in Iranian sample.

## 2. Method

### 2.1. Participant

Two hundred students from university of Tehran (100 males, 100 females, 28 missing) were chosen randomly. The mean age of the sample was 24.12 years (SD = 2.88); the mean age of male students was 24.29 years (SD = 1.81), and for female students it was 23.96 years (SD = 3.67). Age ranged between 18 and 44 years.

### 2.2. Measures

**Young schema questionnaire short form (YSQ-SF).** The Schema Questionnaire–Short Form (SQ-SF) measures 15 EMSs. The scales consist of the five items with the highest loadings on the 15 factors that emerged in a factor analysis of the long form of the SQ. 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-Directedness (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 "describes me perfectly". The SQ-SF has in different studies shown adequate reliability, validity in predicting psychopathology, and factor structure. (Calvete, Estevez, Lopez de Arroyabe, & Ruiz, 2005; Riso et al., 2006; Stopa, Thorne, Waters, & Preston, 2001; Waller, Meyer, & Ohanian, 2001). In Iran, Yousefi, Etemadi, Bahrami, Ahmadi, and Fatehizade (2010) examined the validity and reliability of EMSs questionnaire on a sample of 579 people (in two stages of 394 and 185 people), and using split-half Cronbach's Alpha, the reliability for the whole sample, females and males was reported as 91% and 86%, 87% and 84%, and 84% and 81% respectively. The calculated Cronbach' Alpha for all factors was above 81%, and it was 91% for the whole questionnaire. The highest and lowest Cronbach' Alpha was calculated for Aocial isolation/ Alienation ( $\alpha=91\%$ ) and Insufficient self- control/ Self-discipline ( $\alpha=81\%$ ) respectively. Convergent validity of the total scores of questionnaire were assessed using measuring tools for psychological helplessness, positive and negative emotions, self-confidence, psychological vulnerability to depression, symptoms of personality disorders, and SCL90; reported correlation for these criteria was 0.37, 0.34, -0.40, -0.39, 0.35, 0.36, and 0.38 respectively.

**Differentiation of self inventory (DSI).** This inventory is a 43-item self-report measure that focuses on adults, their significant relationships, and their current relations with family of origin. Participants respond to items on a six-point Likert-type scale, ranging from 1 (not at all true for me) to 6 (very true for me). The DSI contains four sub-scales: emotional reactivity (ER; 12 items), I position (IP; 10 items), emotional cut-off (EC; 13 items) and fusion with others (FO; 9 items). The DSI full-scale score was calculated by reversing raw scores on all items on the ER, EC, and FO sub-scales and one item (35) on the IP sub-scale and totalling them, so that higher scores reflected greater differentiation (less emotional reactivity, less difficulty in maintaining I-positions, less emotional cut-off and less fusion). The original study reported internal consistent reliabilities (Cronbach's Alpha) as follows: DSI full-scale = 0.73, ER = 0.66, IP = 0.65, EC = 0.73 and FO = 0.60 (Skowron & Friedlander, 1998). Internal consistent reliabilities for the Persian version of the scale are reported as good: DSI full scale = 0.94, ER = 0.78, EC = 0.86, IP = 0.83 and FO = 0.88.

### 2.3. Procedure

At the beginning of a lecture, students were invited to participate in the study. It was emphasized that Participation was not obliged. The students who agreed to participate filled out an informed consent. Then the Questionnaires were administered in a random order to avoid order effects in the data.

### 3. Results

Table 1 describes the descriptive statistics. Correlation coefficients were used to examine the association of the EMSs with the aspects of differentiation of self. Table 2 describes correlations between the variables of the study. Aspects of differentiation of self (ER, EC and FO) were negatively associated with EMSs. But IP was positively associated with EMSs.

Table 1. Mean and standard deviation of EMSs and the aspects of differentiation of self

	N	Mean	SD
I-position	172	37.26	5.8
Emotional cut-off	172	35.78	5.4
Fusion with others	172	44.51	7.46
Emotional deprivation	172	36.64	6.9
Abandonment/Instability	172	11.94	5.99
Mistrust/Aabuse	172	13.11	5.93
Social isolation/Alienation	172	14.69	4.41
Defectevness/Shame	172	11.67	5.29
Failure	172	9.6	4.94
Dependence/Incompetence	172	10.27	5.21
Volnirability to harm or illness	172	8.93	4.57
Enmeshment/Undeveloped self	172	11.22	5.69
Subjugation	172	12.21	4.78
Self scirifise	172	10.7	5.22
Emotional inhibition	172	14.47	5.2

The regression resulted in a significant overall model predicting approximately 38% of the variance in IP ( $R^2 = 0.38$ ,  $p < 0.05$ ), 40% of The variance in FO ( $R^2 = 0.40$ ,  $P < 0.05$ ), 18% of the variance in ER ( $R^2 = 0.18$ ,  $P < 0.05$ ), 60% of the variance in EC ( $R^2 = 0.60$ ,  $P < 0.05$ ).The regression analyses showed that MA ( $\beta = 0.21$ ,  $t = 2.44$ ,  $P < 0.05$ ) and SS ( $\beta = 0.18$ ,  $t = 2.12$ ,  $P < 0.05$ ) and ED ( $\beta = 0.28$ ,  $t = 3.29$ ,  $P < 0.05$ ) Schemas, emerged as independent predictors of IP, AB ( $\beta = -0.51$ ,  $t = -5.65$ ,  $P < 0.05$ ), DI ( $\beta = 0.26$ ,  $t = 2.16$ ,  $P < 0.05$ ) and US ( $\beta = -0.18$ ,  $t = -2.35$ ,  $P < 0.05$ ) Schemas, emerged as independent predictors of FO and EM ( $\beta = -0.24$ ,  $t = -3.11$ ,  $P < 0.05$ ), EI ( $\beta = -0.20$ ,  $t = -2.85$ ,  $P < 0.05$ ), US ( $\beta = -0.20$ ,  $t = -3.08$ ,  $p < 0.05$ ) and AB ( $\beta = -0.27$ ,  $t = -3.68$ ,  $p < 0.05$ ) Schemas, emerged as independent predictors of EC.

Table 2. Correlation coefficients between EMSs and the aspects of differentiation of self

	<i>Emotional Reactivity</i>	<i>"I" Position</i>	<i>Emotional Cut-Off</i>	<i>Fusion With Others</i>
<i>Emotional deprivation</i>	-0.25**	0.51**	-0.41**	-0.12
<i>Abandonment/Instability</i>	-0.26**	0.31**	-0.61**	-0.53**
<i>Mistrust/Abuse</i>	-0.28**	0.41**	-0.44**	-0.34**
<i>Social isolation/Alienation</i>	-0.28**	0.43**	-0.51**	-0.22**
<i>Defectiveness/Shame</i>	-0.22**	0.39**	-0.52**	-0.27**
<i>Failure</i>	-0.24**	0.27**	-0.55**	-0.27**
<i>Dependence/Incompetence</i>	-0.14	0.29**	-0.50**	-0.19**
<i>Vulnerability to harm or illness</i>	-0.25**	0.27**	-0.55**	-0.36**
<i>Enmeshment/Undeveloped self</i>	-0.24**	0.22**	-0.60**	-0.33**
<i>Subjugation</i>	-0.23**	0.27**	-0.56**	-0.35**
<i>Self – sacrifice</i>	-0.30**	0.41**	-0.47**	-0.37**
<i>Emotional inhibition</i>	-0.21**	0.39**	-0.60**	-0.27**
<i>Unreleting</i>	-0.30**	0.27**	-0.46**	-0.32**
<i>Entitlement/Grandiosity</i>	-0.14	0.17*	-0.22**	-0.11
<i>Insufficient self-control</i>	-0.15*	0.26**	-0.34**	-0.20**

\* $p < 0.05$

\*\*  $p < 0.01$

## 4. Discussion

The purpose of this research was the relationship between aspects of differentiation of self in Murray Bowen's family systems theory and EMSs in young's theory. According to gained result, Wang, Halvorsen, Eisemann, & Waterloo (2010), indicated that these schemas may be highly state dependent and more characteristic of the depressive state rather than being a predisposing vulnerability factor (Wang, Halvorsen, Eisemann, & Waterloo, 2010). Also Tremblay, Dozois (2009), indicated that ET, MA and IS are uniquely related to trait aggressiveness was largely confirmed. ET was significantly related to all the aggression subscales with the exception of Hostility (Tremblay, & Dozois, 2009). In examining this hypothesis that EMSs are associated with personality and psychological disorders, (Saariaho, Saariaho, Karila, & Joukamaa, 2010) in a research on 271 patient with chronic pain found that More than half (58.3%) of the chronic pain patients scored EMSs as meaningful. And the patients with meaningful EMSs had significantly higher pain intensity, duration of pain and pain disability. The two most frequently occurring EMSs in male pain patients were US (36.2%) and SS (23.6%) and in female pain patients SS (40.3%) and US (27.1%) (Saariaho, Saariaho, Karila, & Joukamaa, 2010). Also studies have shown that Differentiation of self has been positively correlated with psychological well-being, ethnic belongingness, self-control, and marital adjustment and negatively correlated with chronic anxiety, psychiatric symptoms, fears of abandonment, and desire for merger (Skowron, & Friedlander, 1998, Murdock, & Gore, 2004; Tuason, & Friedlander, 2000).

The results showed that ED, SS, MA schemas have the most association with IP. These schemas can predict IP. This finding is controversial because it is unlike Bowen's theory. Based on this theory the association between these schemas should be negative because high position of IP means person's ability in intimacy combined with maintaining independence but the presence of schemas show lack of ability in intimate associations so to clarify this findings it is needed more research in the future. Also the results showed that AB, DI schemas can predict FO according to young the persons with these schemas close to others in the first reprise. But due to incorrect interpretation from others behavior takes away from them. So it can be seen a conflict between intimacy and mixing with others and tendency to getting away from others. The results indicated that EM, EI, US, AB have association with EC. This finding is consistent with both of young's and Bowen's theory. Persons with EM, EI, US and AB take away from others (young et al, 2003; martin & young, 2010).

Despite theoretically-relevant findings some important study limitations warrant consideration. First, this study relied on self-report of schemas and self-report traits Differentiation of self. Although the YSQ-SF is a well-validated measure, direct questions about schemas may not actually measure implicit aspects of cognitive processing relevant to personality traits. Second, this study used a cross-sectional design to examine the relationships between schemas and differentiation of self. Although the current study suggests that schemas may lead to particular types of differentiation of self, longitudinal research is needed establish temporal associations. Young et al. (2003) have stated that maladaptive coping strategies, such as avoidance and emotional inhibition, can maintain schemas that contribute to personality disorder severity, further research might examine the association of schemas, coping strategies, and differentiation of self. Another area for further investigation might involve examination of schema modes and the association of current contextual variables with schema activation. For instance, Stopa and Waters (2005) found that a depressed mood induction resulted in increased scores on Emotional Deprivation and Defectiveness schema scales.

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