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The Relationship between Early Maladaptive Schemas and Aspects of Identity in Obesity

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Abstract

Early maladaptive schemas (EMSs) have impact on the many aspects of personality and disorders. Obesity is one of the most problematic issues and there is a high prevalence of obesity in hospital populations. This study was aimed to examine the relationship of EMSs and Aspects of Identity on individuals with obesity. Sixty patients from Weight Loss Clinic of Sina Hospital participated in this study. The participants completed the Young Schema Questionnaire-Short Form (YSQ-SF) and Aspects of Identity Questionnaire-IV (AIQ-IV). The results showed that some aspects of identity (Collective, Personal, social and Relational Identities) were positively associated with EMSs, self-sacrificing schema in particular, in obese people. Regression analysis showed that collective identity was mostly predicted by Isolation / Alienation, and Emotional Inhibition schemas while, social identity was mostly predicted by Abandonment / Instability and Unrelenting Standards / Hypercriticalness. Relational identity was predicted by Abandonment / instability and personal identity was predicted by Abandonment / Instability and Unrelenting Standards / Hypercriticalness schemas. Implications of these findings are discussed.

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1. Introduction

Obesity is a major public health problem. Not only is obesity a risk factor for a variety of potentially life threatening illnesses, it also has a devastating impact on health-related quality of life (HRQL). Although it is well documented that obesity is strongly associated with morbidity and mortality, less is known about the impact of obesity on functional status and HRQL (Fontaine, Barofsky, 2001). Overweight and obesity are associated with decreasing levels of both physical and emotional wellbeing (Doll, Petersen, Stewart-Brown, 2000). Obese people report significantly higher unhealthy days for physical and mental health (Hassan, Joshi, Madhavan, Amonkar, 2003). Previous study showed that many factors have impact on obesity. In this study our aim is investigating how Aspects of Identity and Early maladaptive schemas (EMSs) have impact on this problem.

Identity orientations refer to the relative importance that individuals place on various identity attributes or characteristics when constructing their self-definitions (cheek, 1989). Self-identity comprises a number of “self-images” that lie on a continuum, with Personalised self-schemata at one extreme and self-characteristics related to

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social categories at the other (Hagger, Anderson, Kyriakaki & Darkings, 2007). Cheek (1989) made somewhat similar distinctions between Personal, social and Collective Identity orientations and studied the importance of these identity orientations. He defined Personal Identity (PI) as private self-conceptions and subjective feelings, and Social Identity (SI) as public image and social roles and relationships. Finally, he defined Collective Identity (CI) as membership in and identification with different groups and Collectives, such as religious, national, or ethnic groups. Each of these conceptions of self, the Personal or individual, the social, and the Collective-theoretically coexists in a single individual. Within an individual, however, these different aspects would vary in their descriptiveness and importance (Carpenter, & Arakitapoglu-Aygün, 2005). Many studies have been conducted on the impact of Aspects of identity on and their relationship with other variables in different social educational contexts, sometimes with controversial findings and results (Razmjoo, 2010). Cheek and Busch (1982) found Social Identity (SI) to be positively correlated with measures of public self-consciousness, sociability, and institutional and altruistic selves. PI was positively correlated with private self-consciousness, need for uniqueness and achievement-oriented self (Cheek, & Busch, 1982). Cheek et al. (1994) reported in their study that while there were no significant differences between Asian-Americans and European-Americans with respect to Personal and social identities, Asian-Americans were significantly higher in CI than European-Americans (Cheek, Tropp, & Chen, 1994). There are many conditions and factors that have impact on individuals with obesity. For this reason current study investigated how EMSs and Aspects of Identity have impact on individuals with obesity

Schema therapy (Young, 1990) is an integrative therapy approach and theoretical framework used to treat clients with Personality disorders, characterological issues, some chronic Axis I diagnoses, and various other difficult individual and couples' problems. Schema therapy evolved from Beck's cognitive therapy to integrate aspects of cognitive therapy, behavioural therapy, object relations, Gestalt therapy, constructivism, attachment models, and psychoanalysis. Schema therapy targets the chronic and characterological aspects of a disorder rather than the acute psychiatric symptoms (Martin, & Young, 2010). In schema therapy (Young, 1999; Young, Klosko, & Weishaar, 2003), EMSs, are proposed as the core and main target for treatment of personality disorders and longstanding characterological problems. The current definition of an EMSs is "a broad, pervasive theme or pattern, comprised of memories, emotions, cognitions, and bodily sensations, regarding oneself and one's relationships with others, developed during childhood or adolescence, elaborated throughout one's lifetime and dysfunctional to a significant degree" (Thimm, 2010a). According to Young et al. (2003), EMSs arise from the frustration of psychological core needs in childhood (e.g., secure attachment, expression of valid needs, realistic limits) through ongoing patterns of adverse experiences with family members or peers, traumatisation, or inappropriate boundaries. A mismatch between parental rearing behaviour and the innate temperament of the child may also lead to the development of EMSs (Thimm, 2010b). EMSs perpetuate themselves through cognitive distortions, self-defeating life patterns, and maladaptive coping styles and lead directly or indirectly to psychological distress and to Personality disorders (Young, 1999; Young et al., 2003). Schemas are a major determinant of how individuals think, feel, behave, and interact socially (Martin, & Yuong, 2010).

EMSs operate on the deepest level of cognition, usually outside of awareness, and make the individual psychologically vulnerable to develop depression, anxiety, dysfunctional relationships, addiction, childhood trauma, social phobia, substance abuse, eating disorders, Personality disorders, panic disorder with agoraphobia and psychosomatic disorders (e.g., Thimm, 2010a, Young, 1999; Young et al., 2003; Cecero, Nelson, & Gillie, 2004; Waller, Kennerly, & Ohanian, 2007; Jovev & Jackson, 2004; Reeves, & Taylor, 2007; Hedley, Hoffart, & Sexton, 2001; Riso, Maddux, & Santorelli, 2007). The EMSs that Young distinguished can be grouped in five schema-domains: Disconnection / Rejection, Impaired Autonomy / Performance, Impaired Limits, Other-Directedness, over vigilance / Inhibition (Bosmanns, Braet, & vleirberghe, 2010). As mentioned the purpose of this study is examining the relationship between EMSs and Aspects of Identity in individuals with obesity.

2. Method

2.1. Participants

Participants of this study were 60 patients from Weight Loss Clinic of Sina Hospital. The mean age of the sample was 24.62 years (SD = 2.91); the mean age of male student was 25.71 (SD = 2.63), and for female student was 23.42 years (SD = 2.75). Age ranged between 19 and 37 years.

2.2. Measure

Schema Questionnaire–Short Form (SQ-SF): The Schema Questionnaire–Short Form (SQ-SF) measures 15 EMSs. The scales consist of five items with the highest loadings on the 15 factors that emerged in a factor analysis of the long form of the SQ (Schmidt, Joiner, Young, & Telch, 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-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 (e.g., Baranoff, Oei, Ho Cho, & Kwon, 2006; Calvete, Estevez, Lopez de Arroyabe, & Ruiz, 2005; Stopa, Thorne, Waters, & Preston, 2001; Waller, Meyer, & Ohanian, 2001; Welburn, Coristine, Dagg, Pontefract, & Jordan, 2002). In Iran, Yousefi et al. (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 0.91 and 0.86, 0.87 and 0.84, and 0.84 and 0.81 respectively. The calculated Cronbach’s Alpha for all factors was above 0.81, and it was 0.91 for the whole questionnaire. The highest and lowest Cronbach alpha was calculated for Social isolation/Alienation ($\alpha=0.91$) and Insufficient self- control/ Self-discipline ($\alpha=0.81$) 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.

Aspects of Identity questionnaire-IV (AIQ-IV): The development of the Aspects of Identity questionnaire began with the selection of items from Sampson's (1978) list of Identity characteristics that were judged to represent the domains of Personal and Social Identity (Cheek & Briggs, 1981, 1982). Subsequently, some items were reworded, others eliminated, and new items were developed to improve the reliability and content validity of the measures (Cheek, 1982/83; Cheek & Hogan, 1981; Hogan & Cheek, 1983). Because the psychometric analyses indicated that certain items originally scored in the Social identity category (e.g., “Being a part of the many generations of my family”) were tending to cluster on a third factor representing communal or Collective identity, a third scale for this domain was developed (Cheek, Underwood, & Cutler, 1985 and Cheek, Tropp, Chen, & Underwood, 1994). Neither the Social nor Collective scales focus on intimate relationships with close friends or romantic partners, so a fourth scale for relational Identity orientation (“Being a good friend to those I really care about”) was added to the AIQ-IV (Cheek, Smith, & Tropp, 2002). Therefore, in the present study, the fourth version of Cheek, Smith and Tropp's (2002) scale was used. To avoid any confusion and enhance validity, the Persian version of the questionnaire was utilized and the back translation by two experts in the field confirmed the original concepts of the translated questionnaire. The numbers of items in the form of a Likert Scale in each category are as follows:

- a. Personal Identity: 10 items
- b. Social Identity: 7 items
- c. Collective Identity: 8 items
- d. Relational Identity: 10 items
- e. Special: 10 items

Cheek, Tropp and Chen (1994) ran a factor analysis of questionnaire items and the results indicated that Personal, Social, and Collective Aspects of Identity constitute three relatively distinct categories of identity attributes with adequate psychometric characteristics. Furthermore, the alpha coefficients of reliability for each scale were: Personal (0.84), Social (0.86), and Collective (0.68). Moreover, Cheek, Smith and Tropp's (2002) psychometric analyses in a sample of 1999 college women yielded 10 items for the new relational scale. As such, the final version of the questionnaire comprises four categories. Furthermore, the researcher ran a confirmatory factor analysis of questionnaire items and the results indicated that Personal, Relational, Social, and Collective Aspects of Identity constitute four relatively distinct categories of identity attributes with adequate psychometric

characteristics. The validity of the third scale was checked by Jowkar and Latifian (2006) utilizing factor analysis on 404 Iranian girls and boys and the factor analysis of the questionnaire yielded three main factors and all the items delineated acceptable go-togetherness. As for the reliability, Jowkar and Latifian (2006) ran the Cronbach's Alpha coefficients of reliability and the indices for Personal, Social and Collective Identities were 0.63, 0.67 and 0.55, respectively. Moreover, the researcher calculated the reliability index for the 5 variables of the questionnaire using Cronbach's Alpha and the results were 0.55 (Personal Identity), 0.69 (Social Identity), 0.69 (Collective Identity), 0.79 (Relational Identity), 0.66 (Special Items) and for all the items of the questionnaire the reliability index was 0.88. Therefore, Cronbach's Alpha depicts the fact that each of the factors by itself and the combination of all factors had acceptable reliability indices (Razmjoo, 2010).

2.3. procedure

At the beginning of a lecture, patients were invited to participate in the study. It was emphasized that participation was not obliged. The patients 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

Correlation coefficients were used to examine the association of the EMSs with the Quality of Life. Table 1 describes correlations between the variables of the study. Correlational analysis showed that Abandonment/Instability ($p < 0.01$), Defectiveness ($p < 0.01$), Failure ($p < 0.01$), Subjugation ($p < 0.01$) were significantly associated with Social Identity.

To enter EMSs as predictors of Aspects of Identity, linear regression was conducted. The regression resulted in a significant overall model predicting approximately 53% of the variance in Personal Identity ($R^2 = 0.53$, $p < 0.05$). Also the regression resulted in a significant overall model predicting approximately 67% of the variance in Relational Identity ($R^2 = 0.67$, $p < 0.05$), 71% Collective Identity, 64% Social Identity. Based on schemas content, we hypothesized that the all EMSs schemas would independently predict a significant portion of Accept of Identity.

Table 1. Coefficients correlation between EMSs with Aspect of identity

	Personal Identity	Relational Identity	Social identity	Collective Identity
Emotional deprivation	0.05	-0.01	0.11	0.07
Abandonment	0.31*	-0.30*	0.31*	0.11
Mistrust	0.12	0.05	0.12	0.16
Social isolation	0.04	0.00	0.22	0.33*
Defectiveness	0.07	0.11	0.32*	0.09
Failure	-0.02	-0.03	0.32*	-0.17
Dependence	-0.05	-0.04	0.24	-0.06
Vulnerability	0.06	0.03	0.10	-0.03
Enmeshment	0.02	0.11	0.16	0.02
Subjugation	0.09	0.09	0.29*	0.06
Self-sacrifice	0.10	0.26	0.16	0.23
Emotional inhibition	0.01	-0.03	0.13	-0.34*
Unrelenting standards	-0.32*	0.10	0.37**	0.23
Entitlement	-0.06	-0.08	-0.03	-0.03
Insufficient self-control	0.18	0.13	0.23	0.00

*p<0.05

**p<0.01

4. Discussion

This study aimed at investigating the relationship between EMSs, and Aspects Identity. The results relatively confirm that Aspects of Identity are associated with the EMSs, as proposed by Young et al (2003). These findings were largely consistent with the previous researches.

To explain the findings it can be pointed to the following:

1. The results showed that Abandonment / Instability and Unrelenting standards schema predict Personal identity orientation in obese people. Personal identity orientation refers to private self-concept and person's subjective feelings. According to Young et al. (2003) patients with Unrelenting Standards schema present as perfectionist and driven. They believe that they must continually strive to meet extremely high standards. These standards are internalized. On the other hand Persons with Abandonment / Instability schema refuse to have intimate relationships with others. It seems these people foster an inner world for themselves that possibly leads to the selection of Personal identity orientation. So people with these schemas have a private world which based on that they direct their behavior. These findings are coordinated with this issue that obese people have lower self-esteem and less social relationships. Because of the stereotypes of obese people in society and since they are known as lazy and incompetent people, they withdraw from having relationship with other people. Perhaps because of these stereotypes people with obesity are distrusted towards others and cannot establish intimate communication with others and feel abandoned.
2. Results show that Mistrust / Abuse schema has the most relationship with Relational Identity Orientation. This schema, due to causing mistrusts to others and also avoidance from intimate relationship with others, can greatly affect Relational Identity. The foundation of communication with others is having confidence in them. So when someone does not trust others cannot get close to them. But in obese people this may be a little different, because others have stereotypes about obese people and underestimate their ability and so don't trust them. Therefore a bidirectional relationship between obese people distrusting others and others distrusting obese people exist.
3. The results revealed that Emotional Inhibition schema and Social Isolation schema have influence on collective Identity Orientation in people suffering obesity. Expression of feelings to others is essential for participation and involvement in collective activities. But obese people in social circumstances prevent either from feeling expression and also socialization with others, due to their tendency to be less showed off and also because they compensate their obesity by expression of their intellectual and nonspontaneous abilities. Patients with Emotional Inhibition present as emotionally constricted and are excessively inhibited about discussing and expressing their emotions. They are affectively flat rather than emotional and expressive, and self-controlled rather than spontaneous. They usually hold back expressions of warmth and caring, and often attempt to restrain their aggressive urges. Many patients with this schema value self-control above intimacy in human interactions and fear that, if they let go of their emotions at all, they might completely lose control. Ultimately, they fear being overcome with shame or bringing about some other grave consequence, such as punishment or abandonment. Often, the over control is extended to significant others in the patient's environment (the patient tries to prevent significant others from expressing both positive and negative emotions), especially when these emotions are intense. The Social Isolation/Alienation schema is the sense of being different from or not fitting into the larger Social world outside the family. Typically, patients with this schema do not feel they belong to any group or community. Avoiding emotional expression makes the person to stay away from others in social situations and hence it is possible that it affects Collective Identity Orientation.
4. The results also showed that Mistrust / Abuse and Unrelenting Standards schemas affect social identity. As the features of people having these schemas were mentioned in the above, it can be concluded that these schemes can have negative impact on a person's social identity and Cause the person not to enjoy a healthy social relationship. Existence of Unrelenting Standards and counter attack possibly represent this hypothesis that obese people with such efforts try to compensate their problem and seem capable people. Generally it can be concluded that perhaps people with obesity by choosing different methods, beliefs and

schemas that were mentioned in above, try to challenge these stereotypes of obesity but since these mechanisms are not mature they can result in incompatibilities in these people. But it should be considered that this conclusion must be looked upon as a hypothesis, therefore it is suggested that in future research this hypothesis be studied.

Despite theoretically-relevant findings some important study limitations warrant consideration. First, this study relied on self-report of schemas and self-report traits Personality. 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 Quality of Life. We suggested that longitudinal research is needed to 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 Personals. 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.

References

- Bosmanns, G., Braet, C., & vleirberghe, L. (2010). Attachment and symptoms of psychopathology: Early maladaptive schemas as a cognitive link? *Clinical Psychology and Psychotherapy*, 17, 347-385.
- Cheek, J. M. (1989). Identity orientations and self-interpretation. In D. M. Buss & N. Cantor (Eds.), *Personality psychology: Recent trends and emerging directions*. 275–285.
- Carpenter, S., arakitapoglu-Aygün, Z. (2005). *Importance and Descriptiveness of Self-Aspects: A Cross-Cultural Comparison*. *Cross-Cultural Research*, 39, 293-321.
- Cheek, J. M. & Busch, C. M. (1982). Self-monitoring and the inner-outer metaphor: Principled versus pragmatic self? Paper presented at the 53rd Annual Meeting of the Eastern Psychological Association, Baltimore, MD.
- Cheek, J. M., Tropp, L. R. and Chen, L. C. (1994). Identity orientations: Personal, social, and collective aspects of identity. *Paper presented at the meeting of the American Psychological Association, Los Angeles*.
- Cockram, D., M., Drummond, P., D., & Lee, C., W. (2010). Role and treatment of early maladaptive schmas in vietnam veteranse with PTSD. *Clinical Psychology and Pschotherapy*, 17, 165-182.
- Doll, H., A., Petersen, S., E., K., Stewart-Brown, S., L. (2000). Obesity and Physical and Emotional Well-Being: Associations between Body Mass Index, Chronic Illness, and the Physical and Mental Components of the SF-36 Questionnaire. *Obesity research*, 8 (2), 160-170.
- Fontaine, K., R., Barofsky, I. (2001). Obesity and health-related quality of life. *Obesity reviews*, 2, 173–182.
- Halvorsen, M., Wang, C. E., Richter, J., Myrland, I., Pedersen, S. K., Eisemann, M., et al. (2009). Early maladaptive schemas, temperament and character traits in clinically depressed and previously depressed subjects. *Clinical Psychology and Psychotherapy*, 16, 394-407.
- Hagger, M. S., Anderson, M., Kyriakaki, M., Darkings, S. (2007). Aspects of identity and their influence on intentional behavior: Comparing effects for three health behaviors. *Personality and Individual Differences*, 42, 355–367.
- Harris, A. E., & Curtin, L. (2002). Parental perceptions, early maladaptive schemas, and depressive symptoms in young adults. *Cognitive Therapy and Research*, 26, 405-416.
- Hassan, M., K., Joshi, A., V., Madhavan, S., S., Amonkar, M., M. (2003). Obesity and health-related quality of life: a cross-sectional analysis of the US population. *International Journal of Obesity*, 27, 1227–1232.
- Hedley, L. M., Hoffart, A., & Sexton, H. (2001). Early maladaptive schemas in patients with panic disorder with agoraphobia. *Journal of Cognitive Psychotherapy*, 15, 131-142.
- Jowkar, B. and Latifian, M. (2006). The relationship between aspects of identity and goal orientation among the pre-university students of Shiraz and Yasuj cities. *Journal of Social Sciences and Humanities, Shiraz University*, 49 (4), 27-46.
- Razmjo, S. A. (2010). Language and Identity in the Iranian Context: The Impact of Identity Aspects on EFL Learners' Achievement. *The Journal of Teaching Language Skills (JTLS)*, 2, 91-121.
- Thimm, J., C. (2010a). Personality and early maladaptive schemas: a five factor model perspective. *Journal of Behavior Therapy and Experimental Psychiatry*, 41, 1-8.

- Thimm, J., C. (2010b). relationships between early maladaptive schemas and psychological developmental task resolution. *Clinical psychology and psychotherapy*, 17, 219-230.
- Thimm, J., C. (2010c). Mediation of early maladaptive schemas between perception of parental rearing style and Personality disorder symptoms. *Journal of Behavior Therapy and Experimental Psychiatry*, 41, 52-59.
- Vleirberghe, L., v., Braet, C., Bosmans, G., Rosseel, Y., & Bogels, S. (2010). Maladaptive schemas and psychopathology in adolescence: On the utility of Young's theory in youth. *Cogn Ther Res*, 34, 316-332.
- Waller, G., Kennerly, H., & Ohanian, V. (2007). Schema-focused cognitive-behavioral therapy for eating disorders. In L. P. Riso, P. L. du Toit, D. J. Stein, & J. E. Young (Eds.), *Cognitive schemas and core beliefs in psychological problems. A scientist-practitioner guide* (pp. 139-175). Washington, DC: American Psychological Association
- Wang, C., E., A., Halverson, 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, 389-396.
- Young, J. E. (1999). *Cognitive therapy for Personality disorders: A schema-focused approach* (3rd ed.). Sarasota, FL: Professional Resource Press.
- Young, J. E., & Brown, G. (1999). Young schema questionnaire. In J. E. Young (Ed.), *Cognitive therapy for Personality disorders: A schema-focused approach* (3rd ed.). Sarasota, FL: Professional Resource Press.
- Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). *Schema therapy: A practitioner's guide*. New York: Guilford Press.
- Yousefi, N., Etemadi, A., Bahrami, F., Ahmadi, A. & Fatehizade. M. (2010). Comparing Early Maladaptive Schemas Among Divorced and Non-divorced Couples as Predictor of Divorce. *Iranian Journal of Psychiatry and Clinical Psychology*, Vol. 16, No. 1, Spring 2010, 21-33.