MAHDI ABDOLAHZADEH RAFI, NARGES ADIBSERESHKI* & MARYAM HASANZADEH AVAL

THE MEDIATING ROLE OF EARLY MALADAPTIVE SCHEMAS IN RELATIONSHIPS OF EMOTIONAL MALTREATMENT AND EMOTIONAL DISORDERS**

(Received: 13 September 2016; accepted: 2 April 2017)

Although the consequences of emotional maltreatment have not been extensively investigated, experiences of emotional maltreatment or abuse have been associated with powerful and enduring psychological problems. The purpose of this study was to explore the extent to which emotional maltreatment contributed to emotional disorders, and the role of Early Maladaptive Schemas (EMS) in relationships of emotional maltreatment and emotional disorders in pre-adolescents. This study used the correlation-modelling design. A total of 492 junior high students participated in the study. The emotional abuse or maltreatment questionnaire made by NOROUZI (2012), the Achenbach self-report emotional disorders questionnaire preadolescence form (ACHENBACH & RESCORLA 2001), and the Early Maladaptive Schemas questionnaire (RIJKEBOER DE BOO 2010) were used to measure and analyse emotional maltreatment and EMS in the students. The findings indicated that emotional maltreatment can directly lead to emotional disorders (anxiety, affective disorder) and schemas such as loneliness, submission and vulnerability. Emotional maltreatment was a significant predictor of emotional disorders. Findings of this study can inform parents and those who treat children in negative ways (maltreatment) of their impact on children's emotions and of the negative outcomes.

Keywords: emotional maltreatment or abuse, early maladaptive schemas, emotional disorders, anxiety, affective disorder

* Acknowledgment: Thanks to University of Allameh Tabatabai, Education administration, students, personnel and teachers of schools who helped us in this study.

^{*} Corresponding author: Narges Adibsereshki, Faculty of University of Social Welfare and Rehabilitation Sciences & Pediatric Neurorehabilitation Research Center, Evin, Daneshjoo BLV. Kodakyar Street, Tehran, Iran; n.adib@hotmail.com.

Die Mittlerrolle früher maladaptiver Schemata in Beziehungen mit emotionalem Missbrauch und bei emotionalen Störungen: Obwohl die Folgen emotionaler Misshandlung noch nicht eingehend untersucht wurden, konnten Zusammenhänge zwischen dem Erleben emotionaler Misshandlung oder emotionalen Missbrauchs und ausgeprägten und andauernden psychischen Problemen hergestellt werden. Mit der Studie sollte das Ausmaß ermittelt werden, in dem emotionale Misshandlungen zur Entstehung emotionaler Störungen beigetragen haben, und festgestellt werden, welche Rolle frühe maladaptive Schemata (EMS) hinsichtlich der Beziehung zwischen emotionaler Misshandlung und emotionalen Störungen in der Vorpubertät spielen. Für die Studie wurde ein Korrelationsmodell verwendet. Insgesamt nahmen 492 Schüler im Alter von 12bis 15 Jahren an der Studie teil. Zur Ermittlung und Analyse von emotionaler Misshandlung und EMS bei den Schülern wurden der Fragebogen zu emotionalem Missbrauch oder emotionaler Misshandlung von NOROUZI (2012), Achenbachs Selbstbeurteilungsfragebogen zu emotionalen Störungen in der Vorpubertät (ACHENBACH& RESCORLA2001) und der Fragebogen zu den Early Maladaptive Schemas (RIJKEBOER & DE BOO 2010) eingesetzt. Die Ergebnisse legen nahe, dass emotionale Misshandlung unmittelbar zu emotionalen Störungen (Angststörungen, affektiven Störungen) sowie Schemata wie Einsamkeit, Unterwerfung und Verletzlichkeit führen kann. Emotionale Misshandlung war ein wichtiger Prädiktor für emotionale Störungen. Die Ergebnisse dieser Studie können Eltern und anderen, die Kinder schlecht behandeln (Misshandlung), bewusst machen, was für einen Einfluss sie auf die Emotionen und die negative Entwicklung der Kinder haben.

Schlüsselbegriffe: emotionale Misshandlung oder emotionaler Missbrauch, frühe maladaptive Schemata, emotionale Störungen, Angst, affektive Störung

1. Introduction

Literature in the area of emotional disorders indicates that about one in every three to four children suffer from a mental disorder and that about one in ten has a Serious Emotional Disturbance (Brauner & Stephens 2006, Costello, Egger, Angold 2005; Merikangas et al. 2010). This also extends to adolescents, where data suggest that 20 percent of adolescents have a diagnosable mental disorder (Schwarz 2009).

GLASER (2002, 697) states, 'Emotional abuse and neglect are defined as a carerchild relationship that is characterised by patterns of harmful interactions, requiring no physical contact with the child'. Studies about the cause and development of emotional disorders reveal that the role of families could be very important in this matter (SKUS et al. 1998; SHAFFER, YATES & EGELAND 2009; SHENK, NOLL & CASSARLY 2010; WEKERLE et al. 2009). There are different parent-child relationships, ranging from good to maladaptive, damaging and abusive ones. Emotional abuse/maltreatment describes a relationship between the parents and the child which is harmful causing impairment to the child's psychological/emotional health and development (GLASER 2002). It might be the most prevalent form of child maltreatment, and also the most hidden, under-reported, and least studied form of abuse (BARNET et al. 2005). Emotional maltreatment/abuse could have negative impacts on the development and functionality of children and cause problems such as unsafe attachment, low self-control and self-esteem, aggression, rejection by peers, depression, educational problems, and

physical illnesses like headaches, digestive and heart difficulties (Tietjen et al. 2010, 2007; Ramiro et al. 2010; Klein, et al. 2007; Hund & Espelage 2006; Zanarini 2000; Cullerton-Sen et al. 2008; Hamarman 2000; Rogosch & Cicchetti 2004; Varia et al. 1996; Duncan 2000; Hart et al. 1998; Herrenkohl & Herrenkohl 2007; Powers et al. 2009; Gibb et al. 2007).

Emotional disorders in adolescents could be caused by emotional maltreatment/abuse (Shaffer et al. 2009; Shenk et al. 2010; Wekerle et al. 2009). Emotional maltreatment has a strong link with self-depression and self-anxiety associations (VAN HARMELEN et al. 2010). Young's theory about the formation of personal and psychological problems in individuals (YOUNG et al. 2003) indicates five emotional needs of a human being and explains how unmet needs could result in forming maladaptive schemas and then psychological problems: 1) secure attachments (includes safety, stability, nurturance, and acceptance), 2) autonomy, competence, and sense of identity, 3) freedom to express valid needs and emotions, 4) spontaneity and play, 5) realistic limitations and self-control. Of course, fulfilling all needs of individuals would be important, but because of the cognitive, physical and social changes that occur during the adolescent years, meeting all these emotional needs seems impossible. Emotional maltreatment might be an obstacle for indulging the emotional needs. For example, a child forms representational models of attachment figures of the self, and of self-in-relation to others based on his or her relationship with primary caregivers (BOWLBY 1982). If within a child's mind, the maladaptive models of the self develops as unworthy, incompetent, powerless or bad instead of the self as worthy of love and attention, he/she could be at risk for psychological distress (LIEM & BOUDEWYN 1999; PERRY et al. 2007; WRIGHT 2009).

Findings reveal that the perceptions of childhood emotional abuse and neglect each influence later symptoms of anxiety and depression. This relationship is mediated by some schemas (HORNOR 2012). Schemas are individuals' prior experiences that influence current perceptions, thinking, and behaviour. WRIGHT and colleagues (2009) state that the way a person evaluates and internalises experiences is even more important than the events themselves in determining their long-term impact. Limited work has been done to examine the mediating mechanism in the link between childhood maltreatment and later adaptations. However, the link has been found between early child maltreatment and subsequent internalising symptoms of depression and anxiety with self-criticism (SACHS-ERICSSON et al. 2006). This means self-criticism has been found to mediate the relationship between maltreatment and subsequent mental illness symptoms. SACHS-ERICSSON and colleagues (2006) stated that selfcriticism mediates the relationship between childhood verbal abuse perpetrated by parents and symptoms of anxiety or depression. WRIGHT and colleagues (2009) also support Sach-Ericsson's findings, mentioning that childhood emotional abuse is significantly associated with a negative cognitive attribution style (GIBB 2002) and negative self-schemas mediate the relationship between emotional abuse and internalising disorders (GIBB et al. 2001; HANKIN 2005). HANKIN (2005) studied childhood maltreatment as a risk factor for depression through three mechanisms as mediators. He

showed that a childhood history of maltreatment predicted an elevation of depressive symptoms and that a negative cognitive style, attachment style, and negative events accounted for the link between child maltreatment and later depressive symptoms. GIBB and colleagues (2001) indicated that levels of childhood emotional maltreatment related to the level of depression and that cognitive risks fully mediated the relation between childhood emotional maltreatment and major depression.

Unfortunately, the number of incidents of maltreatment are high and sometimes the consequences are irreparable. The role of schemas as mediators in this process is not clear enough; that is why giving some attention to this area and extending such studies seems necessary. This study aims to investigate the mediating role of early maladaptive schemas in the link of adolescence emotional maltreatment and emotional disorders.

2. Methods

2.1. Participants

There were 600 students recruited from middle schools (7^{th} and 8^{th} grades). 35 students who had some kind of learning disabilities or intellectual disabilities, and those who had not filled out the questionnaires completely were not included in the study. The participants were 492 students: 183 boys (37.2%) and 309 girls (62.8%). In terms of grades, 264 students (53.7%) were in 7^{th} grade and 228 (46.3%) in 8^{th} grade. The mean for students' age was 13.61 ± 0.682 for boys and 13.60 ± 0.572 for girls.

2.2. Instruments

The emotional abuse or maltreatment: This questionnaire made by Norouzi (2012) was used, which is based on Hart and his colleagues' (1998) definition of maltreatment, and Garbarino and colleagues' (1986), and Esteban's (2006) works. The formal and content validity is high, and internal consistency is reported as 0.96. The validity was also evaluated by Abdolahzadeh Rafi (2014) and Mohamadkhani and colleagues (2003; r = 0.720, p < 0.001). The reliability was measured by Cronbach's alpha reported as 0.96.

The Achenbach System of Empirically Based Assessment (ASEBA): This questionnaire was for the assessment of adolescence emotional disorders. MINAEY (2005) standardised this form of assessment (ACHENBACH & RESCORLA 2001) in Persian. There were three forms in which the adolescence self-reported form was used in this study. An internal correlation coefficient of 0.74 to 0.88 was reported. The emotional disorders: anxiety and depression (affective disorder) scales of this questionnaire were used.

The Early Maladaptive Schemas questionnaire: This utilised scale was made based on Young's work and designed by RIJKEBOER and DE BOO (2010). There were

Table 1 Correlations between the variables

	-	2	3	4	5	9	7	8	6	10	II	12	13
Emotional Abuse	1												
Affective.dis DSM	0.665**	1											
Anxiety.DSM 0.411	*	0.652**	-										
Loneliness	0.550^{**}	0.533**	0.468**	-									
Vulnerability 0.388**		0.459**	0.369**	0.647**	1								
Mistrust	0.365**	0.376**	0.275**	0.545**	0.529**								
Defectiveness 0.430**		0.401**	0.343**	0.641**	0.501**	0.465**	_						
Entitlement	0.035	*060.0	0.039	0.133**	0.206**	0.199**	0.131**	1					
Enmeshment 0.363**	0.363**	0.195^{**}	0.008	0.104^*	0.015	0.017	0.073	0.186^{**}					
Self-sacrifice 0.137**		0.167**	0.064	0.272**	0.377**	0.419**	0.234**	0.298**	0.076				
Self-control	0.387**	0.426**	0.334**	0.577**	0.560**	0.471**	0.469**	0.171**	0.022	0.280**			
Failure	0.453**	0.399**	0.295**	0.674**	0.511**	0.454**	0.581**	900.0	0.137**	0.199**	0.514**	_	
Submission	0.343**	0.434**	0.376**	0.683**	0.635**	0.559**	0.574**	0.187**	0.001	0.329**	0.611**	0.586**	
Unrelent Standards	0.344**	0.385**	0.324**	0.500**	0.586**	0.475**	0.369**	0.298**	0.052	0.364**	0.462**	0.364**	0.484***
p < 0.05													

40 questions about childhood maladaptive schemas (Loneliness, Vulnerability to Harm or Illness, Mistrust/Abuse, Defectiveness/Shame, Unrelenting Standards, Enmeshment, Entitlement/Grandiosity, Insufficient Control, Failure, Submission, and Self-sacrifice) which were answered by students. Cronbach's alpha was between 0.53 to 0.79. Montezeri and his colleague (2012) reported a = 0.73.

For this study the agreement was obtained from the education administration office and its research committee. The assigned schools were introduced for the study. The schools invited the mothers to a meeting and the researcher informed them about the study and the secrecy of the results, except for those who engage with the study to learn more, and, in case of a problem, to get some help. Those who consented to the participation of their children and themselves signed a consent form.

3. Results

This study used a correlation-modelling design. The relationships or links between the variables were found by correlation and a model that consisted of these links was made. *Table 1* shows that there were significant positive relationships between emotional maltreatment and emotional disorders (anxiety and affective disorder) (p < 0.05). There was a positive correlation between emotional abuse and early maladaptive schemas (loneliness, vulnerability, mistrust, defectiveness, entitlement, enmeshment, self-sacrifice, self-control, submission, unrelenting standards; p < 0.05), and a positive link between maladaptive schemas and emotional problems (anxiety and affective disorder; p < 0.05).

To evaluate the fit of each model, several subjective indices of goodness-of-fit were used. *Table 2* shows that they were not appropriate for the suggested research model. Thus, the paths that were not statistically significant have been deleted and the model was tested again.

Table 2
Fit indexes in models of relationships of parenting styles, anxiety disorders,
and maladantive schemas

Index	Statistic	p-value	Admissibility	Results
X2	1933.26	> 0,001	> 0.05	Model isn't fit
GFI	0.412	_	> 0.9	Model isn't fit
RMSEA	0.359	_	< 0.08	Model isn't fit
NFI	0.411	-	> 0.95	Model isn't fit

X2= chi-square statistic; CFI = Comparative Fit Index; GFI = Goodness Fit Index; RMSEA = Root Mean Square Error of Approximation; NFI = Normal Fit Index

Changes were implemented in the model as demonstrated in Index *Table 3*. Fit indices were excellent for this model, $X^2 = 2.31$, p < 0.05; RMSEA = 0.052, NNFI = 0.997, CFI = 0.998.

Table 3 Corrected model of fitting indicators

Index	Statistic	p-value	Admissibility	Results
X2	2.31	0.099	> 0,05	Model fits
GFI	0.998	-	> 0.9	Model fits
<i>RMSEA</i>	0.052	-	< 0.08	Model fits
NFI	0.997	-	> 0.95	Model fits

 $^{^{}X2=}$ 2.31, p < 0.05; RMSEA = 0.052, NNFI = 0.997, CFI = 0.998

Table 4
The direct and indirect impact of variables in fitted model

			Estimate	Standard Estimate	S.E.	C.R.	P
Submission	<	Emotional. Abuse	0.044	0.343	0.005	8.080	***
Vulnerability	<	Emotional. Abuse	0.064	0.388	0.007	9.335	***
Loneliness	<	Emotional. Abuse	0.075	0.550	0.005	14.593	***
Anxiety.DSM	<	Submission	0.070	0.149	0.024	2.921	0.003
Affective.DSM	<	Submission	0.151	0.168	0.036	4.215	***
Affective.DSM	<	Vulnerability	0.083	0.116	0.0026	3.127	0.002
Anxiety.DSM	<	Loneliness	0.095	0.212	0.023	4.039	***
Affective.DSM	<	Emotional. Abuse	0.066	0.564	0.004	16.253	***
Anxiety.DSM		Emotional. Abuse	0.015	0.246	0.003	5.388	***

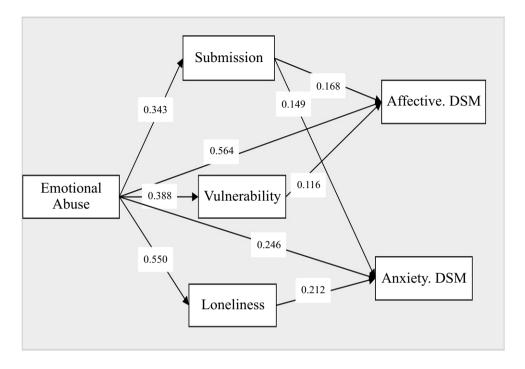


Figure 1
Model: The direct and indirect (through schemas) impacts of emotional abuse on emotional disorders

The fitted model represents that emotional maltreatment impacts anxiety directly and through loneliness and submission schemas. It also has a direct impact on affective disorders and an indirect effect through vulnerability and submission schemas.

4. Discussion

The results of this study indicate that emotional maltreatment influences emotional disorders directly and through some schemas as mediators which support past research by many authors (Shaffer et al. 2009; Shenk et al. 2010; Gibb & Abela 2008; Lumley & Harkness 2009; Abdolahzadeh Rafi 2014; Lesson & Nixon 2011)¹. The mediation analysis suggested that early maladaptive schemas such as

There was a research project for University of Social Welfare and Rehabilitation Sciences, Tehran (2014), N. Adibsereshki: The mediating role of maladaptive schemas in mothers' parenting style and child anxiety disorders.

loneliness, vulnerability to harm, and submission have an effective role on the relationship of emotional maltreatment and emotional disorders such as anxiety and affective disorders, which is consistent with WRIGHT and colleagues (2009) and CALVET 2014). WRIGHT and her colleagues (2009) focused on the extent to which experiencing emotional abuse by parents contributed to Young's adult maladaptive outcomes in terms of anxiety, depression, and dissociation. The findings revealed that emotional abuse continued to exert an influence on later symptoms of anxiety and depression. This relationship was mediated by vulnerability to harm, shame, and self-sacrifice. Calvet (2014) assessed whether the influence of emotional abuse in depression and social anxiety is mediated by EMSs and the mechanisms that contribute to developing depression and social anxiety. The results for the case of depression indicated that mediation occurred through disconnection/rejection, and for social anxiety it occurred through other domains (Calvete et al. 2013a; EBERHART et al. 2011; Lumley & Harkness 2007; Roelofs et al. 2011; Calvete et al. 2013b; Hinrichsen et al. 2004).

Emotional maltreatment may result in global, negative beliefs about the self (WRIGHT et al. 2009). When the parents have negative ways of interaction with their children, such as threatening, blaming, not loving/boycotting, rejecting, and put downs which are known as emotional maltreatments, the emotional needs of children cannot be met. These adolescents, not having the needed love and support, have beliefs they cannot do anything by themselves, and disappointment and hopelessness might dominate their minds and feelings. Since they feel incompetent and worthless, some maladaptive schemas may be formed, which then lead to emotional disorders such as anxiety and affective disorders.

Limitations and future studies: The findings of this study were based on participants' self-reported recalls of the incidences of their childhood maltreatment, rating of schemas, and psychological well-being. Longitudinal studies related to this area could have clearer results. Another limitation was that the sample was recruited from an almost homogeneous community and the results may not be generalised to all. Also, this study did not consider gender effects; future studies can look at this factor and emotional maltreatment, the severity of abuse on forming different schemas in boys and girls, and their impacts on their emotional disorders.

References

ABDOLAHZADEH RAFI, M. (2014) The Mediating Role of Individual, Social, and Family Support in the Relationships of Emotional Maltreatment and Emotional, Behavioural Disorders of Adolescence (PhD Dissertation, University of Allameh Tabatabai, Tehran).

ACHENBACH, T.M. & L.A. RESCORLA (2001) Manual for the ASEBA School-Age Forms & Profiles (Burlington, VT: ASEBA).

Barnet, O., C.L. Miller-Perrin & R.D. Perrin (2005) 'Child Psychological Maltreatment' in O. Barnet, C.L. Miller-Perrin & R.D. Perrin, eds., *Family Violence across the Lifespan: An Introduction* (2nd ed., Thousand Oaks, CA: Sage Publications) 151–78.

BOWLBY, J. (1982) Attachment (2nd ed., London: Hogarth; New York: Basic Books).

- Brauner, C.B & C.B. Stephens (2006) 'Estimating the Prevalence of Early Childhood Serious Emotional-Behavioural Disorders: Challenges and Recommendations', *Public Health Reports* 121, 303–10.
- CALVET, E. (2014) 'Emotional Abuse as a Predictor of Early Maladaptive Schemas in Adolescents: Contributions to the Development of Depressive and Social Anxiety Symptoms', *Child Abuse & Neglect* 38, 735–46.
- CALVETE, E., I. ORUE & B.L. HANKIN (2013a) 'Transactional Relationships among Cognitive Vulnerabilities, Stressors, and Depressive Symptoms in Adolescence', *Journal of Abnormal Child Psychology* 41, 399–410 (DOI: 10.1007/s10802-012-9691-y).
- CALVETE, E., I. ORUE & B.L. HANKIN (2013b) 'Early Maladaptive Schemas and Social Anxiety in Adolescents: The Mediating Role of Anxious Automatic Thought', *Journal of Anxiety Disorders* 27, 278–88 (DOI: 10.1016/j.janxdis.2013.02.011).
- Costello, E.J., H. Egger & A. Angold (2005) '10-Year Research Update Review: The Epidemiology of Child and Adolescent Psychiatric Disorders: I. Methods and Public Health Burden', *Journal American Academy Child Adolescent Psychiatry* 44, 972–86.
- CULLERTON-SEN, C., A.R. CASSIDY, D. MURRAY-CLOSE, D. CICCHETTI, N.R. CRICK & F.A. ROGOSCH (2008) 'Childhood Maltreatment and the Development of Relational and Physical Aggression: The Importance of a Gender-Informed Approach', *Child Development* 6, 1736–51.
- DUNCAN, R.D. (2000) 'Childhood Maltreatment and College Drop-Out Rates: Implication for Child Abuse Researcher', Journal of Interpersonal Violence 9, 987–95.
- EBERHART, N.K., R.P. AUERBACH, J. BIGDA-PEYTON & J.R.Z. ABELA (2011) 'Maladaptive Schemas and Depression: Tests of Stress Generation and Diathesis-Stress Models', *Journal of Social & Clinical Psychology* 30, 75–104 (DOI: 10.1521/jscp.2011.30.1.75).
- ESTEBAN, E. (2006) 'Parental Verbal Abuse: Culture-Apecific Coping Behavior of College Students in the Philippines', *Child Psychiatry & Human Development* 36, 243–59 (DOI:10.1007/s10578-005-0001-6).
- GARBARINO, J., E. GUTTMAN & J. SEELEY (1986) The Psychologically Battered Child: Strategies for Identification, Assessment, and Intervention (San Francisco, CA: Jossey-Bass).
- GIBB, B.E. &J.R.Z. ABELA (2008) 'Emotional Abuse, Verbal Victimization, and the Development of Children's Negative Inferential Styles and Depressive Symptoms', Cognitive Therapy and Research 32, 161–76.
- GIBB, B.E., L. CHELMINSKI & M. ZIMMERMAN (2007) 'Childhood Emotional, Physical, and Sexual Abuse, and Diagnoses of Depressive and Anxiety Disorders in Adult Psychiatric Outpatients', Depression and Anxiety 24, 256–63 (DOI: 10.1007/s10608-006-9106-x).
- GIBB, B.E. (2002) 'Childhood Maltreatment and Negative Cognitive Styles: A Quantitative and Qualitative Review', Clinical Psychology Review 22, 223–46.
- GIBB, B.E., L.B. ALLOY, L.Y. ABRAMSON, D.T. ROSE, W.G. WHITEHOUSE, P. DONOVAN, M.E. HOGAN, J. CRONHOLM & S. TIERNEY (2001) 'History of Childhood Maltreatment, Negative Cognitive Styles, and Episodes of Depression in Adulthood', Cognitive Therapy and Research 25, 425–46.
- GLASER, D. (2002) 'Emotional Abuse and Neglect (Psychological Maltreatment): A Conceptual Framework', Child Abuse & Neglect 26, 697–714.
- HAMARMAN, S. & W. BERNET (2000) 'Evaluating and Reporting Emotional Abuse in Children: Parent-Based, Action Based Focus Aids in Clinical Decision-Making', *Journal of American Academy Child Adolescent Psychiatry* 39, 928-30 (DOI: 10.1097/00004583-200007000-00023).
- HANKIN, B.L. (2005) 'Childhood Maltreatment and Psychopathology: Prospective Tests of Attachment, Cognitive Vulnerability, and Stress as Mediating Processes', Cognitive Therapy and Research 29,645–71.
- HART S., N. BINGGELI & M. BRASSARD (1998) 'Evidence of the Effects of Psychological Maltreatment', Journal of Emotional Abuse 1, 27–58.
- HORNOR, G. (2012) 'Emotional Maltreatment', Journal of Pediatric Health Care 26, 436-42.

- HERRENKOHL, T.I. &R.C. HERRENKOHL (2007) 'Examining the Overlap and Prediction of Muliple Forms of Child Maltreatment, Stressors, and Socioeconomic Status: A Longitudinal Analysis of Youth Outcomes', *Journal of Family Violence* 22, 553–62.
- HINRICHSEN, H., G. WALLER & F. EMANUELLI (2004) 'Social Anxiety and Agoraphobia in the Eating Disorders: Associations with Core Beliefs', *Journal of Nervous and Mental Disease* 192, 784–87.
- HUND, A.R. & D.L. ESPELAGE (2006) 'Childhood Emotional Abuse and Disordered Eating among Undergraduate Females: Mediating Influence of Alexithymia and Distress', Child Abuse & Neglect 30, 393–407.
- KLEIN, H., K.W. ELIFSON & C.E. STERK (2007) 'Childhood Neglect and Adulthood Involvement in HIV-Related Risk Behaviours', Child Abuse & Neglect 31, 39–53.
- LEESON, F.J. & R.D.V. NIXON (2011) 'The Role of Children's Appraisals on Adjustment Following Psychological Maltreatment: A Pilot Study', *Journal of Abnormal Child Psychology* 39, 759–71 DOI: 10.1007/s10802-011-9507-5).
- LIEM J.H. & A.C. BOUDEWYN (1999) 'Contextualizing the Effects of Childhood Sexual Abuse on Adult Self- and Social Functioning: An Attachment Theory Perspective', *Child Abuse & Neglect* 23, 1141–57.
- LUMLEY, M.L. & K.L. HARKNESS (2009) 'Childhood Maltreatment and Depressotypic Cognitive Organization', *Cognitive Therapy and Research* 33, 511–22 (DOI: 10.1007/s10608-009-9257-7).
- LUMLEY, M.N. & K.L. HARKNESS (2007) 'Specificity in the Relations among Childhood Adversity, Early Maladaptive Schemas, and Symptom Profiles in Adolescent Depression', *Cognitive Therapy and Research* 31, 639–57 (DOI: 10.1007/s10608-006-9100-3).
- MERIKANGAS, K.R., J.P. HE, D. BRODY, P.W. FISHER, K. BOURDON & D.S. KORETZ (2010) 'Prevalence and Treatment of Mental Disorders among US Children in the 2001–2004 NHANES', *Pediatrics* 125, 75–81 (DOI: 10.1542/peds.2008-2598).
- MINAEY, A. (2005) Manual Forms of School-Age Measurement System Based on the Experience Achenbach (ASEBA) (Tehran: Center for Exceptional Children).
- MOHAMMADKHANI, P., M.R. MOHAMMADI, M.A. NAZARI, M. SALAVATI & O.M. RAZZAGHI (2003) 'Development, Validation and Reliability of Child Abuse Self Report Scale (Casrs) In Iranian Students', *Medical Journal of The Islamic Republic of Iran (MJIRI)* 17, 51–58.
- MONTEZERI, M.S., Z. FARSANI, H. MEHRABI & A. SHAKIBA (2012) 'The Relationships between Early Maladaptive Schemas and Depression in Male Students', *Journal of Mazandaran Medical University* 97, 179–88.
- NOROUZI, P. (2012) 'The Comparison of Neuropsychological Function of Emotional Abused and Nonabused Female Students Master's Thesis of Exceptional Children Psychology, Tehran: Allame Tabatabae'i University.
- Perry, A.R., D. DiLillo & J. Peugh (2007) 'Childhood Psychological Maltreatment and Quality of Marriage: The Mediating Role of Psychological Distress', *Journal of Emotional Abuse* 7, 117–42.
- Powers, A., K.J. Ressler & R.G. Bradley (2009) 'The Protective Role of Friendship on the Effects of Childhood Abuse and Depression', *Depression and Anxiety* 26, 46–53 (DOI: 10.1002/da.20534).
- RAMIRO, L.S., B.J. MADRID & D.W. BROWN (2010) 'Adverse Childhood Experiences (ACE) and Health-Risk Behaviours among Adults in a Developing Country Setting', *Child Abuse & Neglect* 34, 842–55 (DOI: 10.1016/j.chiabu.2010.02.012).
- RIJKEBOER, M.M. & G.M. DE BOO (2010) 'Early Maladaptive Schemas in Children: Development and Validation of the Schema Inventory for Children', *Journal of Behavior Therapy and Experimental Psychiatry* 41, 102–09 (DOI: 10.1016/j.jbtep.2009.11.001).
- ROELOFS, J., C. LEE, T. RUIJTEN & J. LOBBESTAEL (2011) 'The Mediating Role of Early Maladaptive Schemas in the Relation between Quality of Attachment Relation-Ships and Symptoms of Depression in Adolescents', *Behavioural and Cognitive Psychotherapy* 39, 471–79 (DOI: 10.1017/S1352465811000117).

- ROGOSCH, F.A. & D. CICCHETTI (2004) 'Child Maltreatment and Emergent Personality Organization: Perspective from the Five-Factor Model', *Journal of Abnormal Child Psychology* 32, 123–45.
- SACHS-ERICSSON, N., E. VERONA, T. JOINER & K.J. PREACHER (2006) 'Parental Verbal Abuse and the Mediating Role of Self-Criticism in Adult Internalizing Disorders', *Journal of Affective Disorders* 93, 71–78.
- SCHWARZ, S.W. (2009) Adolescent Mental Health in the United States: Facts for Policy-makers, retrieved 21Apr 2017 from http://nccp.org/publications/pdf/text 878.pdf.
- SHAFFER, A., T.M. YATES & B.R. EGELAND (2009) 'The Relation of Emotional Maltreatment to Early Adolescent Competence: Developmental Processes in a Prospective Study', *Child Abuse & Neglect* 33, 36–44.
- SHENK, C.E., J.G. NOLL & J.A. CASSARLY (2010) 'A Multiple Mediational Test of the Relationship between Childhood Maltreatment and Non-suicidal Self-Injury', *Journal of Youth and Adoles*cence 39, 335–42.
- SKUSE, D., A. BENTOVIM, J. HODGES, J. STEVENSON, C. ANDREOU, M. LANYAD, M. NEW, B. WILLIAMS & D. MCMILLAN (1998) Risk Factors for the Development of Sexually Abusive Behaviour in Sexually Victimized Adolescent Males: Cross Sectional Study', British Medical Journal 317, 175–79.
- Tietjen, G.E., J.L. Brandes, K.B. Digre, S. Baggaley, V.T. Martin, A. Recober, L.O. Geweke, F. Hafeez, S.K. Aurora, N.A. Herial, C. Utley & S.A. Khuder (2007) 'History of Childhood Maltreatment is Associated with Co-Morbid Depression in Women with Migraine', *Neurology* 69, 959–68.
- Tietjen, G.E, J.L. Brandes, B.L. Peterlin, A. Eloff, R.M. Dafer, M.R. Stein, E. Drexler, V.T. Martin, S. Hutchinson, S.K. Aurora, A. Recober, N.A. Herial, C. Utley, L. White & S.A. Khuder (2010) 'Childhood Maltreatment and Migraine (Part II): Emotional Abuse as a Risk Factor for Headache Chronificationhead', *Headache* 50, 32–41 (DOI: 10.1111/j.1526-4610. 2009.01557.x).
- Van Harmelen, A.L., P.J. de Jong, K.A. Glashouwer, P. Spinhoven, B.W. Penninx & B.M. Elzinga (2010) 'Child Abuse and Negative Explicit and Automatic Self-Associations: The Cognitive Scars of Emotional Maltreatment', *Behavior Research and Therapy* 48, 486–94.
- Varia, R., R.R. Abiding & P. Dass (1996) 'Perceptions of Abuse: Effects on Adult Psychological and Social Adjustment', *Child Abuse & Neglect* 6, 511–26.
- WEKERLE, C., E. LEUNG, A.M. WALL, H. MACMILLAN, M. BOYLE., N. TROCME & R. WAECHTER (2009) 'The Contribution of Childhood Emotional Abuse to Teen Dating Violence among Child Protective Services-Involved Youth', *Child Abuse & Neglect* 33, 45–58.
- WRIGHT, M.O., E. CRAWFORD & D. DEL CASTILLO (2009) 'Childhood Emotional Maltreatment and Later Psychological Distress among College Students: The Mediating Role of Maladaptive Schemas', *Child Abuse & Neglect* 33, 59–68.
- YOUNG, J.E., J.S. KLOSKO & M.E. WEISHAAR (2003) Schema Therapy: A Practitioner's Guide (New York, NY: Guilford Press).
- Zanarini, M.C. (2000) 'Childhood Experiences Associated with the Development of Borderline Personality Disorder', *Psychiatric Clinics of North America* 23, 89–101.
- ZANARINI, M.C., A.A. WILLIAMS, R.E. LEWIS, R.B. REICH, C. SOLEDAD, A. VERA & F.R. FRANKENBURG (1997) 'Reported Pathological Childhood Experiences Associated with the Development of Borderline Personality Disorder', *American Journal of Psychiatry* 154, 1101–06 (DOI: 10.1176/ ajp.154.8.1101).