

The Role of Child Abuse and Neglect in Predicting the Early Maladaptive Schemas Domain

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Article information	Abstract
<p>Article history: Received: 30 June 2011 Accepted: 4 Sep 2011 Available online: 24 Oct 2012 ZJRMS 2012; 14(10): 28-32</p> <p>Keywords: Child Abuse Neglect Early Maladaptive Schema</p> <p>*Corresponding author at: Department Psychology, Mohaghegh Ardebili University E-mail: mansor.fermesk@gmail.com</p>	<p>Background: The purpose of this study was to investigate the role of child abuse and neglect in predicting the early maladaptive schemas domains.</p> <p>Materials and Methods: This is a causal-comparative research. Sampling was performed using multistage clustering and simple random sampling methods. 500 individuals constituted the preliminary sample. After identifying 140 abused individuals, they were compared to 140 ordinary persons. In order to collect the data, the 53-item version of Bernstein Childhood Trauma Questionnaire (CTQ), and Yang Schema Questionnaire: Short Form 2 (YSQ-SF2) were used. To analyze the data, multivariate regression coefficient enter method was deployed.</p> <p>Results: Results showed that about 24% of the variance of the disconnection and rejection maladaptive schema domain, as well as 12% of the variance of the impaired autonomy and performance maladaptive schema domain were explained by the emotional abuse, physical abuse, and physical neglect. 13% of the other-directedness maladaptive schema domain variance, 6% of the impaired limits maladaptive schema domain, and 5% of the overvigilance and inhibition maladaptive schema domain variance were explained by the emotional abuse.</p> <p>Conclusion: According to the findings, it can be concluded that one could predict schemas and their respective domains with regards to abused children. Abused children are likely to develop maladaptive schemas and cognitive distortions due to the dull and harsh atmosphere of the family and its unhealthy environment.</p> <p>Copyright © 2012 Zahedan University of Medical Sciences. All rights reserved.</p>

Introduction

When talking about child abuse, most of us think that the way we treat our child is not child abuse, because we really do not tend to annoy and harass our child; indeed, we aim at fostering him/her. We begin to beat or swear at our child when we are no more in control and his/her behavior is unbearable. This has numerous negative effects and is deemed as child abuse. According to the World Health Organization, child abuse is harming or threatening of an (under-18-years-of-age) child's physical and mental health or comfort, welfare, and well-being by the parents or individuals in charge of the child who give care for him/her [1].

Following American child abuse and neglect bureau [2], the six major types of child abuse and neglect are: 1. emotional abuse, 2. physical abuse, 3. sexual abuse, 4. physical neglect, 5. educational abuse, and 6. emotional neglect.

Early maladaptive schemas are among the common factors relating to child abuse. Early maladaptive schemas mean constant and long-term issues that are formed during childhood, extended into adulthood, and are greatly inefficient. Such schemas are assumed as a pattern for processing later experiences. With respect to the origin of the early maladaptive schemas, there are five

basic evolutionary tasks (linkage and acceptance, autonomy and performance, realistic limits, self-directedness, self-expression, and self-motivation) that a child needs to carry out for a healthy growth. If any of the tasks is not performed, one will face difficulties in his/her performance in one or more of these schemas: 1. disconnection and rejection, 2. impaired autonomy and performance, 3. impaired limits, 4. other-directedness, and 5. overvigilance and inhibition [3].

More than being a result of the individual shocking events, Yang states, the maladaptive schemas are more likely established by the daily poisoned constant patterns and experiences with the family members and peers that increasingly enhance the schema [4]. In a study by Saariaho et al. [5], conducted on patients with chronic diseases and a history of child abuse and neglect, they reported that such patients achieved high scores in disconnectedness/rejection domain. The results from the study of Wright et al. indicated that the history of emotional abuse and neglect in childhood was related to the self-sacrifice schema [6]. Moreover, according to Cecero et al, the emotional abuse and neglect experiences were related to defectiveness and shame schema [7]. In a study by Haghigat Manesh et al, they concluded that the

most prominent dimensions of the schema in sexual abusers clinical group were disconnectedness/rejection and impaired autonomy/performance [8]. Therefore, the main objective of the present study is to investigate the role of child abuse and neglect in predicting the early maladaptive schemas domains.

Materials and Methods

This study is a causal-comparative and cross-sectional-comparative research. The population of this study consisted of 6268 male high school students of Boakan County in 2011-2012. The sampling of the research was conducted in two steps of identification and selection of the subjects. Schools, classes, and different educational levels were selected and completed Bernstein Childhood Trauma Questionnaire. In the first step of the sampling, 500 individuals were chosen as the sample. However, according to Krejcie and Morgan table, a sample of 370 individuals would suffice a population of 6,200. Nevertheless, in order to achieve more validity and generalizability, we selected 500 persons. In the second step, i.e. selection of the subjects, all the students identified as abused, who accounted for 140 individuals, were compared to 140 ordinary children and completed the brief Yang Schema Questionnaire form 2. These 140 children were also selected based on the simple random selection method. It is noteworthy that all the subjects of the study responded the questionnaires with content. Moreover, to avoid concerns about the privacy of individuals and bias responding, the subjects were asked not to include their names and family names in the questionnaire.

Data gathering tools: 1- Demographics checklist, which was a self-administered tool including 11 questions about the age, education level, number of children in the family, education and income status of the parents, being what number of the family, educational disqualification history, the average score of the previous year, and economical status of the family. 2- Bernstein CTQ [9]: This questionnaire is provided by Bernstein in 28-, 53-, 70-, and 90-item versions. In this research, the 53-item form, which was given in 1994, was used. CTQ measures being abused in five subscales and provides a general score which is called the overall maltreatment scale.

The five subscales of CTQ include emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. In order to score each of the items, a 5-point Likert scale (1-2-3-4-5) is used. Items 30, 45, and 51 are used as the denial subscales and are not included in the overall maltreatment scale. Following the conventional guideline of the CTQ, the scoring is in the form of absence or minimal, low to medium, medium to high, and above harsh, where for the emotional abuse a score of 12-29, 30-34, 34-35, and above 41 is translated as absence, low, medium, and high classes, respectively. With respect to the physical abuse, a score of 7-11, 12-13, 14-17, and above 18 are placed in the classes of absence, low, medium, and high, respectively. About the sexual

abuse, a score of 7-8, 9-12, 13-21, and above 22 is rendered as absence, low, medium, and high, respectively. In the case of the emotional neglect scores of 16-38, 39-49, 50-60, and above 61 each represent absence, low, medium, and high classes, respectively. Finally, concerning the physical neglect, 8-10, 12-13, 14-18, and above 19 indicate absence, low, medium, and high levels, respectively. Bernstein reported the internal consistency of the test, 63-95%, as good and its criterion validity in clinical samples and the society 50-75%. In a study by Shahani Yeylaq et al. on the female students of Ahvaz, they calculated the reliability of the various factors of the test between 65 and 94% [10].

Also, in this study, Cronbach's alpha of Bernstein CTQ was calculated as 0.86. 3- Yang Schema Questionnaire-Short Form 2 (YSQ-SF2): In this research, YSQ-SF2 was used. This questionnaire includes 75 items and measures 15 maladaptive schemas in five domains. Yang constructed this questionnaire in 1995, based on Schmidt's findings. Each of the items are scored based on a 6-point (1-2-3-4-5-6) scale. Every 5 items measure a schema. If the average score of any subscale is above 3, the respective subscale will be regarded as inefficient. In the study of Sadooghi et al, Cronbach's alpha for the scale validity of YSQ-SF2 is computed as 0.96 for the overall test, and 0.80 for all the individual subscales [11]. Also, Welburn et al. calculated the alpha values of the subscales as between 0.76 and 0.93 [12]. In this research, Cronbach's alpha for YSQ-SF2 was computed as 0.93. After collecting the questionnaires, the raw data were analyzed using SPSS-18 software and the multivariate regression statistical test. The significance level of findings was assumed $p \leq 0.05$.

Results

In this research, the average and standard deviation of the children's age were 15.93 and 1.09, respectively. Furthermore, the average and standard deviation of scores in maladaptive schemas domains in the abused children were 30.30 and 9.88 for other-directedness, 32.63 and 9.50 for impaired limits, 53.50 and 17.80 for impaired autonomy and performance, 75.44 and 24.85 for disconnection and rejection, and 34.79 and 10.38 for overvigilance and inhibition, accordingly. The results of the multivariate (enter) regression analysis for predicting the maladaptive schema domain relating to the five domains is presented in tables 1 to 5. As it can be seen in table 1, physical abuse, emotional abuse, and physical neglect predict about 25% of the variance associated with disconnection and rejection maladaptive schema domain ($p=0.001$).

Table 2 implies that the emotional abuse predicts about 13% of the other-directedness maladaptive schema domain variance ($p=0.001$).

Table 3 indicates that almost 5% of the overvigilance and inhibition maladaptive schema domain variance is predicted by the emotional abuse ($p=0.007$). Based on table 4, emotional abuse, physical abuse, and physical

neglect predict about 12 of the impaired autonomy and performance maladaptive schema domain ($p=0.001$).

Table 5 indicates that the emotional abuse predicts almost 7% of the impaired limits maladaptive schema domain ($p=0.001$).

Table 1. The results of the multivariate (enter) regression analysis for predicting the disconnection and rejection maladaptive schema domain by the abused children

Model	SS	df	MS	F	p-Value
Regression	35256.687	4	8814.172	22.480	0.001
Residual	107822.297	275	392.081		
Total	143078.985	279			
St. Coefficients		Non-St. Coefficients			
Model	B	SE	Beta	t	Sig
Constant	59.383	1.560	-	38.059	0.001
Physical Abuse	4.340	1.332	0.184	3.258	0.001
Emotional Abuse	10.629	1.035	0.311	5.222	0.001
Physical Neglect	4.389	1.739	0.139	2.524	0.012
Emotional Neglect	2.501	1.809	0.075	1.383	0.168
Adj. R ² = 0.235		R ² =0.246		R=0.469	

Table 2. The results of the multivariate (enter) regression analysis for predicting the other-directedness maladaptive schema domain by the abused children

Model	SS	df	MS	F	p-Value
Regression	3046.410	4	761.602	10.202	0.001
Residual	20529.571	275	74.653		
Total	23575.981	279			
St. Coefficients		Non-St. Coefficients			
Model	B	SE	Beta	t	p-Value
Constant	26.653	0.681	-	39.148	0.001
Physical Abuse	0.562	0.581	0.059	0.967	0.334
Emotional Abuse	4.205	0.888	0.303	4.734	0.001
Physical Neglect	1.056	0.759	0.082	1.329	0.165
Emotional Neglect	-0.186	0.789	-0.014	-0.236	0.814
Adj. R ² =0.117		R ² =0.129		R=0.359	

Table 3. The results of the multivariate (enter) regression analysis for predicting the overvigilance and inhibition maladaptive schema domain by the abused children

Model	SS	df	MS	F	p-Value
Regression	1432.165	4	358.041	3.592	0.007
Residual	27413.511	275	99.685		
Total	28845.676	279			
St. Coefficients		Non-St. Coefficients			
Model	B	SE	Beta	t	p-Value
Constant	32.169	0.787	-	40.889	0.001
Physical Abuse	0.773	0.672	0.073	1.151	0.251
Emotional Abuse	2.632	1.026	0.171	2.564	0.011
Physical Neglect	0.529	0.877	0.037	0.603	0.547
Emotional Neglect	-0.41	0.912	-0.003	-0.045	0.964
Adj. R ² =0.036		R ² =0.050		R=0.223	

Table 4. The results of the multivariate (enter) regression analysis for predicting the impaired autonomy and performance maladaptive schema domain by the abused children

Model	SS	df	MS	F	p-Value
Regression	9294.066	4	2323.516	9.510	0.001
Residual	67189.959	275	244.327		
Total	76484.25	279			
St. Coefficients		Non-St. Coefficients			
Model	B	SE	Beta	t	p-Value
Constant	45.268	1.232	-	36.753	0.001
Physical Abuse	3.162	1.051	0.184	3.007	0.003
Emotional Abuse	3.854	1.607	0.154	2.399	0.017
Physical Neglect	3.598	1.373	0.155	2.621	0.009
Emotional Neglect	-0.769	1.428	-0.032	-0.538	0.591
Adj. R ² =0.109		R ² =0.122		R=0.349	

Table 5. The results of the multivariate (enter) regression analysis for predicting the impaired limits maladaptive schema domain by the abused children

Model	SS	df	MS	F	p-Value
Regression	1806.286	4	451.572	5.105	0.001
Residual	24323.984	275	88.451		
Total	26130.270	279			
St. Coefficients		Non-St. Coefficients			
Model	B	SE	Beta	t	p-Value
Constant	31.318	0.741	-	42.260	0.001
Physical Abuse	-0.412	0.633	-0.041	-0.652	0.515
Emotional Abuse	4.079	0.967	0.279	4.220	0.001
Physical Neglect	0.083	0.826	0.006	0.101	0.920
Emotional Neglect	-0.572	0.859	-0.040	-0.665	0.506
Adj. R ² =0.056		R ² =0.069		R=0.263	

Discussion

Findings from this research show that among the abused and neglected children, the schema domains of disconnectedness and rejection (abandonment/instability, mistrust/abuse, emotional deprivation, defectiveness/shame, and social isolation), and impaired autonomy and performance (failure, dependence, vulnerability to harm or illness) are predicted by physical abuse, emotional abuse, and physical neglect. These findings are in line with studies of Hawkins [13], Saariaho [5], Vlierberghe [14], Cecero [7], and Dutra [15]. Due to maltreatment of parents and lack of kindness from them, the abused children could not establish a safe and relaxed attachment to them. Such children believe that their needs to affection, safety, and attachment will not be met, because their families are not stable. The relationship of the parents with these children is dull and cheerless, more often than not accompanied by violence. In such children, being a dwarf is a huge deprivation, because they greatly experience emotional deprivation [16]. Moreover, a

feeling of worthlessness and inferiority compared to peers in these children play a role in generating defectiveness/shame schema [17]. Educational and occupational failure of abused children are much more than those of ordinary children. Maltreatment in the family results in the risk of minor educational progress and performance [18]. With respect to the dependence schema, it should be noted that since these children are humiliated and reprehended by their families, their feeling of dependence and autonomy fail to develop. Therefore, in order to satisfy their needs, they would depend on the entourages [19]. Concerning the vulnerability to harm schema, it is noteworthy that the level of post-event disorder in such children is high, since oftentimes they feel bad about their childhood incidents and remember memories, of recurrence of which and being abused again they are afraid [20].

The parents of the abused children are unable to establish an environment that could encourage autonomy in such children, because they inhibit or repress any activity that can help the autonomy of the child, and this plays a role in forming the impaired autonomy and performance schema domain. These characteristics of the abused children and their parents are in conformity with Yang's opinion about the individuals who feature such schema domain. Thimm's study shows that the maladaptive domains, particularly the disconnectedness and rejection, are related to harmful thoughts and memories of parents, childhood trauma, and subscales of child abuse [21]. Also, the results of this study indicate that the emotional abuse, among other abuses and neglects, predicts schema domains of other-directedness (subjugation, self-sacrifice, approval seeking/recognition seeking), overvigilance (negativity/pessimism, emotional inhibition, unrelenting standards, punitiveness), and impaired limits (entitlement/grandiosity, insufficient self-control). These findings are in agreement with studies of Richardson [22], Muris [23], and Vlierberghe [14]. Investigations show that abuse and maltreatment in childhood have negative effects on self-adjustment systems.

Self-adjustment systems enable annoying emotional modification, behavioral adjustment, and controlling the environmental stresses and emotional regulations. Since with respect to the self-adjustment system the emotionally abused children are impaired, they cannot adjust their emotions and behaviors and often suffer from social isolation, emotional inhibition, negativity, pessimism, and entitlement [24]. This, in turn, interferes with the formation of the overvigilance and impaired limits schema domains. In families who support other-directedness and unhealthy vigilance, the children learn to

accentuate others' inclinations and feelings, in such a way that it leads to neglect of their healthy and legitimate needs. In facing the entourages, such children are indifferent and cold, avoid expressing their emotions, and are often isolated. These instances specify that all these characteristics and features of such children and their parents can be an explanation for the presence of the three schema domains of other-directedness, overvigilance, and impaired limits in the abused children.

Overall, it can be said that there are numerous maladaptive schemas in the abused children, and, through these children, we can predict such schemas. Due to the dull and harsh atmosphere of the family and its unhealthy environment, the abused children are capable of developing maladaptive schemas and cognitive distortions. Because of their maladaptivity and negative nature, such schemas make the child vulnerable to many disorders in childhood and adulthood, such as personality disorders, depression, digestion disorders, post-event stress disorder, phobia, etc. In the preamble of the Children Rights Convention, it is said that a child should be raised in an environment full of wellbeing and amity. Thus, caring for the children during their upbringing and attempting to enhance their lives is a vital issue. And, since most of child abusers had once been abused, it is recommended that more attention be paid to the living environment of the children who are exposed to the risk of parents with a history of being abused, so that children abuse is avoided. Finally, we should mention that one of the limitations of this research is its inability to administer the items related to the sexual abuse part of Bernstein Child Abuse Questionnaire due to the constraints of the Education Organization, as well as failure in employing Yang Child Abuse and Schema Questionnaire for female students due to time and money requirements.

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Authors' Contributions

All authors had equal role in design, work, statistical analysis and manuscript writing.

Conflict of Interest

The authors declare no conflict of interest.

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References

1. Aghabiglouy A, Rasoulzadeh-Tabatabaiy K, Moosavi-Chelk SH. Child abuse. Tehran: Avand Press; 2002: 5-30.
2. Clark RE, Clark JF, Adamec Ch. The encyclopedia of child abuse. 3rd ed. New York: Facts on file; 2007: 13-14.
3. Young JE. Cognitive therapy for personality disorder: A schema-focused approach. 3rd ed. Sarasota: Professional Resource Press; 1999: 10-50.

4. Yang J, Klosko JS, Weishaar ME. Schema therapy: A practitioners guide. New york: Guilford Press; 2003: 8-25.
5. Saariaho TH, Saariaho AS, Karila IA and Joukamaa MI. Early maladaptive schema in finnish adult chronic pain patients and a control sample. Scand J Psychol 2011; 52(2): 146-53.
6. Wright Mo, Crawford E, Del Castillo D. Childhood emotional maltreatment and later psychological distress among college student: The mediating role of maladaptive schemas. Child Abuse Negl 2009; 33(1): 59-68.
7. Cecero JJ, Nelson JD, Gillie JM. Tools and tenets of schema therapy: Toward the construct validity of the early maladaptive schema questionnaire-research version (EMSQ-R). Clin Psychol Psychother 2004; 11: 344-357.
8. Haghightmanesh E, Agha-Mohammadian HR, Ghanbari-Hashemabadi BA and Mahram B. [Early maladaptive schemas and schema domains in rapits] Persian. Iran J Psychiatr Clin Psychol 2010; 16(2): 145-153.
9. Bernstein DP. Cognitive therapy of personality disorder in patients with histories of emotional abuse or neglect. Library 2002; 32(10): 618-628.
10. Shahni-Yeylugh M, Mikaeili N, Shokorkon H, Haghghi J. [The prevalence of child abuse and parental mental health predicted by these variable, adaptability, self-esteem and academic performance in students and demographic variables in girl students abused and normal junior school ahwaz] Persian. J Educ Psychol Shahid Chamran Univ Ahwaz 2007; 3: 167-194.
11. Sadooghi Z, Aguilar-Vafaie ME, Rasoulzadeh-Tabatabaie K and Esfehanian N. [Factor analysis of the young schema questionnaire short form in a nonclinical iranian sample] Persian. Iran J Psychiatr Clin Psychol 2008; 14(2): 214-219.
12. Welburn K, Coristine M, Dagg P, et al. The schema questionnaire-short form: Factor analysis and relationship between schemas and symptoms. Cognit Ther Res 2002; 26: 519-530.
13. Hawkins D. [Relationships between childhood abuse and eating disorders] [dissertation]. Coventry: University of Warwick; 2003.
14. Vlierberghe LV, Braet C. Dysfunctional schemas and psychopathology in referred obese adolescents. Clin Psychol Psychother 2007; 14: 342-351.
15. Dutra L, Callahan K, Forman E, et al. Core schemas and suicidality in a chronically traumatized population. J Nerv Ment Dis 2008; 196(1): 71-74.
16. Olive MF, Collins CE. Child abuse and stress disorder. New York: Chelsea House Press; 2007: 69-70.
17. Stallard P. Early maladaptive schema in children: Stability and differences between a community and a clinic referred sample. J Clin Psychol Psychiatr 2010; 14(1): 10-18.
18. Goldmann J, Salus MK, Wolcott D and Kennedy KY A coordinated response to child abuse and neglect: The foundation for practice. Washington DC: US Department of Health and Human Services; 2003: 20-44.
19. Corby B. Child abuse: Toward a knowledge base. 3rd ed. Philadelphia: Open University Press; 2006: 181-210.
20. Juettner B. Child Abuse (Hot topics). California: Lucent Books; 2009: 68-73.
21. Thimm JC. Personality and early maladaptive schema: A five-factor model perspective. J Behav Ther Exp Psychiatry 2010; 41(4): 373-380.
22. Richardson G. Early maladaptive schema in a sample of british adolescent sexual abusers: Implications for therapy. J Sex Aggress 2005; 7: 259-276.
23. Muris P. Maladaptive schemas in nonclinical adolescents: Relations to perceived parental rearing behaviours big five personality factor and psychopathologieal symptoms. Clin Psychol Psychother 2006; 13(6): 405-413.
24. Hyman SM, Paliwal P, Sinha R. Childhood maltreatment, perceived stress-related coping in recently abstinent cocaine dependent adults. Psychol Addict Behav 2007; 21(2): 233-8.

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