

Family Functioning and Early Adolescents' Psychopathology

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Abstract: With respect to the relationship between family functioning and the early adolescent's alexithymia construct is still being developed with empirical support. The psychological literature on how family functioning may be related to early adolescent's psychopathology has grown substantially in the last two decades. Alexithymia refers to difficulties in identifying and to an externally oriented, unimaginative way of thinking. Hence, this research follows a specific objective for determination of the association between family functioning and early adolescent's alexithymia. The present study was carried out among 234 Iranian students in the second and third grades of guidance schools (age 12-15) in Tehran, Iran. The students (girls and boys) were clustered through random and multistage sampling. Data were collected by employing two selected instruments the Rieffe's Children's Alexithymia Scale (2006) consistent with the original adult questionnaire for alexithymia (TAS-20) in the 1st stage and Family Assessment Device (FAD) based on McMaster's model in the 2nd stage. The statistical findings, with respect to family functioning and alexithymia, Pearson correlation between subscales and total of the family functioning and alexithymia was indicated that family function (dysfunction) is significantly and positively correlated with alexithymia.

Key words: Family Functioning • Early Adolescent's Alexithymia • Family Psychopathology • Alexithymia • Early Adolescent's Emotional Intelligence • Family Assessment Device • Rieffe's Children's Alexithymia Scale

INTRODUCTION

Emotional intelligence (EI) is a new concept based on the tradition of multiple intelligences. EI can be traced back to the work of Thorndike (1920) who introduced the concept of Social Intelligence in his Multi-Factor theory of intelligence [1]. Recently, as a behavioural model rose to prominence with Daniel Goleman's 1995 book by the title "Emotional Intelligence". However, the early Emotional Intelligence theory was originally developed during the 1970's and 80's by the work and writings of psychologists in Harvard, Yale and New Hampshire universities [2]. The basic principles of Emotional Intelligence are identifying, managing, understanding and regulating emotions [3].

In the other hand, family is a social system and fundaments of society that is formed through family mutual agreements of man and woman [4]. The family has the highest effect on the individual and forms their behaviors at any moment. A behavior created in relation to other family members is not limited to normal agreeable behavior. The family forms abnormal behaviors, too [5].

The role of families' performance in all the individual's behaviors, personality and development of his different talents is important. Behavioral sciences researchers call a suitable environment an orchard and an unsuitable environment; cemetery of talents. In addition, alexithymia is not classified as a mental disorder in the DSM-IV. It is a dimensional personality characteristic that varies in severity from person to person thus, family as a first circumstance can create this kind of characters, too [6].

The concept of alexithymia is taken from clinical observations on patients who made weak responses to insight-oriented psychotherapy. Alexithymia is a disturbance of the experience and expression of emotions, resulting in flattened or highly restrained affect and lack of awareness of emotions [4, 8-10]. Ruesch (1948) detected a cluster of personality variables in a subset of his patients by studying those who were experiencing psychophysical disorders. The tended to establish dependant relations and it seemed that they were immature and uncreative with their thinking and that they tended to use physical actions to express emotion [7].

According to Walsh (1993), “complexities caused by the effects and interaction of different factors in the formation of family concept and nature in cultures make it difficult to define family functioning.” Family functioning refers to performing the functions of the family and the patterns of the relationships which connect members of a family system [8]. There are different patterns of relationships and these include patterns for showing affection and for solving problems encountered in performing daily tasks [9].

The record of studies on the relationship between family functioning and alexithymia was that according to Lumley, Mader, Gramzow, Pepineau (2000) studied the family and parental correlations of alexithymia in a research titled “Family factors associated with alexithymia”. In this research, composed of two parts, the relation between cognitive and emotional characteristics of alexithymia and family malfunctioning and mothers’ alexithymia was studied. In the first part, 127 young people were assessed by alexithymia scale (TAS-20). To assess impaired imagination, Cohen’s Scored Archetypal Test with nine factors was used and FAD instrument was applied to assess family malfunctioning. In the second part, 80 of their mothers filled out TAS-20 about themselves. The correlation of mothers’ alexithymia characteristics were studied by the same characteristics in their children. The results showed that overall family pathology is related with alexithymia. Difficulty in identifying feelings was related with the affective involvement of a malfunctioning family, thinking with external orientation and partial control of family behavior and defective imagination with inefficiency in solving family problems. In the second part, mothers’ alexithymia characteristics had a meaningful correlation with children’s alexithymia. This finding shows perplexed family functioning and mothers’ alexithymia in generating children’s alexithymia characteristics [14].

There are many assumptions about family functioning and alexithymia. King *et al.* (2005) studied and compared the family factors of alexithymia in a research titled “Family ambience and alexithymia in patients and others”. In this study, Toronto Alexithymia Scale was used to assess alexithymia and retrospective ratings of family malfunctioning were measured by Family Structure Scale. Patients showed higher meaningful family malfunctioning and reported higher tendency to alexithymia. Alexithymia had a positive relation with retrospective reports of family functioning, reverse role of parent-child and fear of isolation [15].

Akimoto and Fukunishi (2007) studied the relation between emotional intelligence and alexithymia in a research. They noted the effect of overlapping structures presence and absence between alexithymia and emotional intelligence by using factor analysis in specimens of patients with diabetes and college students. The specimens included 161 diabetic patients, 240 students and 122 patients with psychiatric disorders. They were given TAS-20 and the emotional intelligence questionnaire. The alexithymia people were willing to show a poor emotional intelligence and factor analysis indicated that their matrix had correlation. Some parts of both emotional intelligence and alexithymia created separate factors [19].

Berenbaum and James (2000) studied the relation between alexithymia and family ambience in their research titled “Associates and retrospective history of alexithymia”. This research was carried out on college students and the findings showed that higher degrees of alexithymia had a meaningful correlation with decreased expression in the family and lower emotional protection feeling in early adolescence. In essence, the importance of family functioning on alexithymia has been found to be very significant. Nevertheless and in spite of the studies reviewed, there is still a need to further investigate the relationship of family functioning to alexithymia most especially in country like Iran, where most researchers are yet to show interest in the construct [18].

In brief, according to these researches, family is the first emotional education placing and parents and their observers are the first persons playing a role. Then, it is conservable to associate between family functioning and alexithymia to contributing in the way of negative mental health in the family [18]. In essence, the importance of family functioning on alexithymia has been found to be very significant. Nevertheless and in spite of the studies reviewed, there is still a need to further investigate the relationship of family functioning to alexithymia most especially in country like Iran, where most researchers are yet to show interest in the construct. Hence, examining these interactions is another important contribution of this research.

MATERIALS AND METHODS

Participants: The purpose of this study was to examine the relationship between family functioning and alexithymia among 234 early adolescents consisted of 116 boys (49.6%), 118 girls (50.4%) in grades 2 and 3 of guidance schools of Tehran, Iran selected through cluster

sampling method. The population of research involved in this study consisted of all the Iranian students who enrolled in guidance schools programs (234 students, academic year 2010-2011).

Procedures: At the beginning of the last semester, the researcher visited all in grades second and third of Tehran's guidance schools and before distribution of questionnaires, a brief explanation regarding the aim of the study and the content of the instruments were given to the students. The questionnaire was divided into two parts. The Rieffe's Children's Alexithymia Scale (2006) consistent with the original adult questionnaire for alexithymia (TAS-20) in the first stage and Family Assessment Device (FAD) based on McMaster's model in the second stage, followed by a scale which assessed the respondent's alexithymia. Furthermore, it should be mentioned that the questionnaires were translated into Persian was available. Early adolescents answered the questions in the class and they were reminded that participation was voluntary and their responses did not have any influence on their grades. It is important to note that identification information (e.g., early adolescents' name) was not included on questionnaires and respondents were instead given identification numbers, data was coded and entered in computer files by author.

Measures

Rieffe's Children's Alexithymia Scale (2006): The Rieffe's Children's Alexithymia scale (2006) consistent with the original adult questionnaire for alexithymia [15, 16], the Rieffe's scale was used to assess the alexithymia children's. In 1986, this scale was introduced by Taylor and revised by Taylor, Bagby and Parker in 1994. They made the alexithymia 20-question questionnaire by using the factors analysis method. As noted; The Alexithymia questionnaire for children consistent with the original adult questionnaire for alexithymia (TAS-20) developed by Bagby *et al.* (1994), in this research alexithymia questionnaire for children consisted of 20 items, representing 3 factors Difficulty Identifying Feelings (DIF, 7 items), Difficulty Describing Feelings (DDF, 5 items) and Externally-Oriented Thinking (EOT, 8 items). These three factor scores make up the total score which may range from 20 to 100 and is obtained by summing the 20 item scores. The higher the score on the Rieffe's scale, the higher the level of alexithymia. All sentences were coded on 3 forms from not true (a) to true (c). This instrument developed by Rieffe *et al* (2006). Examples of items are:

- Sometimes I can't find the words to say how I feel inside.
- It is important to understand how you feel inside.
- I find it hard to say how I feel about other people.

Reliability indicates the extent to which individual differences in test scores are attributable to "True" differences in the characteristics under consideration [17]. In this study, the internal consistency (reliability) of the Rieffe's Children's Alexithymia scale (2006) was examined using the Cronbach's alpha and the result was $\alpha = 0.73$.

Family Assessment Device; FAD Questionnaire:

The independent variables in this study are seven factors that is, problem solving, communication, roles, effective responsiveness, effective involvement, behavior control and general functioning. This questionnaire was designed to measure family functioning based on McMaster's model. It contains 60 questions specifying six aspects of family functioning: problem-solving, communication, affective responding, affective involvement, control and a 7th subscale related to overall family functioning. Every question presents a description of family and the subject chooses his/her agreement or disagreement with a sentence in a four-option scale (strongly agreed = 1, agreed = 2, disagreed = 3, strongly disagreed = 4). FAD test is scored in a way that the score of each family shows its vulnerability degree; lower scores indicate sounder functioning. High score on the family functioning questionnaire indicates family's inefficiency. It means that the higher score is the less healthy the family functioning. Samples of items include:

- If a member of our family faces a problem the rest get involved to solve it.
- We can rely on the support of the rest when facing a crisis.
- When an emergency case appears we don't know what to do.

In the current study for the family functioning questionnaire, obtained reliability was $\alpha = 0.89$.

RESULTS AND DISCUSSION

The Description of the Early Adolescence's Family Functioning: The descriptive analysis of the early adolescence's family functioning (FAD) scores and its subscales are presented in Table 1, which includes mean, standard deviations, higher and lower of the all variables involved in the study.

Table 1: Descriptive information of the early adolescent's family functioning and their factors

Variables	Number	Mean	SD	Skewness	Kurtosis
Family functioning	234	129.84	4.45	-0.03	-0.14
Problem-solving	234	132.08	3.08	-0.04	-0.07
Communication	234	127.47	3.52	-0.13	-0.11
Roles	234	130.85	4.23	-0.08	-0.05
Affective company	234	126.26	3.54	-0.01	-0.24
Affective involvement	234	127.47	4.76	-0.01	-0.12
Behavior control	234	130.68	4.02	-0.02	-0.04
General functioning	234	134.07	6.13	-0.05	-0.10

Table 2: Descriptive information of the early adolescence's alexithymia and their factors

Variables	Number	Mean	SD	Skewness	Kurtosis
Alexithymia	234	58.17	3.74	0.23	0.13
Difficulty in identifying feelings	234	61.54	5.23	0.13	0.10
Difficulty in describing feelings	234	55.96	2.77	0.27	0.03
Thinking with external orientation	234	57.01	4.39	0.21	0.18

Table 3: Correlation coefficients matrix for Subscales of Family Functioning and Alexithymia

Correlation coefficients	Variables								
	X1	X2	X3	X4	X5	X6	X7	X8	X9
X1: Problem-solving	1								
X2: Communicatio Roles	0.01*	1							
X3: Affective company	.11**	0.03	1						
X4: Affective involvement	0.17	0.03*	0.21**	1					
X5: Behavior control	0.10**	0.19**	0.31*	0.35	1				
X6: General functioning	0.04**	.22**	0.18*	0.40*	0.05*	1			
X7: Difficulty in identifying feelings	.11**	0.72*	0.09	0.01**	0.07*	0.36**	1		
X8: Difficulty in describing feelings	0.44	0.37**	0.01*	0.23*	0.15*	0.38*	0.03*	1	
X9: Thinking with external orientation	0.14*	0.22	0.08*	0.09*	0.00*	0.08*	0.25**	0.77	1

Note: * $P < 0.05$. ** $p < 0.005$

* Correlation is significant at the 0.05 level (one tailed)

** Correlation is significant at the 0.01 level (two tailed)

The descriptive analysis of early adolescent's family functioning scores and its subscales are presented by Table 1, including, mean, standard deviations, skewness and kurtosis of the all variables of study area. The total FAD scores of early adolescent's shows that skew (-0.03). High score on the family functioning questionnaire indicates family's inefficiency. According to Epstein *et al.*, (1998) the findings of this study indicated that the mean of the early adolescents' family functioning is 129.84, which means that it is normal category [18]. The subscales of early adolescents' family functioning follow a ranking with Problem solving ($M=132.08$, $SD=3.08$), Communication ($M=127.47$, $SD=3.52$), Roles ($M=130.85$, $SD=4.23$), Affective company ($M=126.26$, $SD=3.54$), Affective involvement ($M=127.47$, $SD=4.76$), Behavior control ($M=130.68$, $SD=4.02$) and General functioning ($M=134.07$, $SD=6.13$).

The Description of the Early Adolescence's Alexithymia:

The descriptive analysis of the early adolescence's Rieffe's Children's Alexithymia Scale scores and its subscales are presented in Table 2, which includes mean, standard deviations, skewness and kurtosis of the all variables involved in the study.

The descriptive analysis of early adolescent's alexithymia scores and its subscales are presented by Table 2, including, mean, standard deviations, skewness and kurtosis of the all variables of study area. The total alexithymia scores of early adolescent's shows that skew (0.23). According to Rieffe *et al.*, (2006) the findings of this study indicated that the mean of the early adolescents' alexithymia is 58.17, which means that it is normal category. The subscales of early adolescents' alexithymia follow a ranking with Difficulty in identifying feelings ($M=61.54$, $SD=5.23$), Difficulty in describing feelings ($M=55.96$, $SD=2.77$) and Thinking with external orientation ($M=57.01$, $SD=4.39$).

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Correlational Analyses: Following the scientific research tradition, the level of confidence for all calculations was set at alpha 0.05 and 0.01 (1&2-tailed). An intercorrelation matrix was produced between all predictor variables and the criterion variable for the total sample as presented in Table 3. Overall, the results from the correlation analyses as illustrated in the correlation matrix identified significant relationships between the independent variables and the dependent variable. A Pearson correlation was used to address the relationship between family functioning (M=129.84, SD=4.45) and alexithymia (M=58.17, SD=3.74). The result indicated a statistically significant relationship, positive with high magnitude, between family functioning and alexithymia of early adolescent, ($r=0.663$, $p<0.01$). The result of the analysis indicated that the higher level of the family functioning is linked to the higher level of the alexithymia. In other words, early adolescents with category of high family functioning displayed high alexithymia.

The correlation coefficient between subscales of family functioning and alexithymia except some cases were found to be statistically significant, ($\text{sig}=0.000$, $p<0.01$). The range of Pearson correlation coefficient (r) between subscales of family functioning and alexithymia estimated from ($r=0.80$ to $r=0.91$, $p<0.01$ and $p<0.050$).

As reported above, relationship between pair subscales of family functioning and alexithymia are significant and positive. In other words, early adolescents with category of high factors of family functioning displayed more factors of alexithymia. The results from the correlation analyses as illustrated in the correlation matrix identified significant relationships between some of the independent variables and the dependent variable. In other words, early adolescents with category of high factors of family functioning displayed more factors of alexithymia. Overall, the variables of family functioning and Alexithymia had significant positive relationship, which suggested that as family functioning increased, Alexithymia also tended to increase too, significantly. Dysfunctional family affective responsiveness was related to difficulty in describing feelings. Furthermore, findings of the previous research on family factors related to alexithymia indicated that general family pathology was associated with alexithymia. In particular, difficulty identifying feelings was related to dysfunctional family affective involvement [10]. Thus, early adolescent develop specific alexithymia characteristics as a result of family dysfunction in emotional or cognitive domains. This view agrees with theories of the social cognitive theory. The results of the current research confirmed the

finding of previous research which shows that there is significance association between family functioning and the early adolescent's alexithymia [13, 10-12]. It means that while the family is not efficient enough to affective responsiveness, the probability of early adolescents' alexithymia would increase too, significantly.

This research concludes that the mean of the family functioning and early adolescent's alexithymia and its subscales, based on the McMaster's model and in the findings showed that there is a significant correlation between family functioning and alexithymia.

The present study makes several contributions to the literature by providing data on an important and understudied population of early adolescents and by bringing together a number of different constructs (family functioning items and alexithymia items) that have typically only been explored individually or in pairs in the past [19, 8]. The results indicated that there is statistical significant association between family functioning and alexithymia. In other words, as family functioning scores increase (malfunctioning), alexithymia increases, too. These results confirm the hypothesis and conform to Lomely and *et al* studies on the existence of a meaningful relation between general family functioning (malfunctioning) and alexithymia, King & Malin Krot's research (2005) and Beren Baum & James' (2000) study on a significant correlation between high extent of alexithymia and decrease of expression in the family and lower affective welfare feeling in early adolescence.

The current study includes several limitations which need to be considered in future research. The limitation of this study may to the self-report measures. Future studies should be conducted through qualitative methods. Information regarding family functioning, alexithymia and emotional intelligence as well may enhanced is accessed through in-depth clinical interviews. Furthermore, due to the exploratory nature of this study, as well as the relative novelty of the theory of family functioning and alexithymia significant findings should be considered for future research. It merely demonstrates the value of expanding future research on the relationship between early adolescent's alexithymia and their personal characteristics.

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