An Empirical Research: The Relationship between Family Functioning and Early Adolescent's Emotional Intelligence

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Abstract: The aim of the present paper was to survey the relationship between family functioning and the early adolescent's emotional intelligence. Hence, this research follows a specific objective for determination of the relationship between family functioning and early adolescent's emotional intelligence (EQ). EQ is a set of abilities such as conception, emotion appraisal and expression, emotion management and regulation, and emotion utilization of emotion. The present study was carried out among 234 Iranian students in the second and grades of guidance schools with ages 12-15 years old. The students (girls and boys) were clustered through random and multistage sampling. Data were collected using the Schutte's (1998) Emotional Intelligence Scale and Family Assessment Device (FAD), based on McMaster's model. Pearson correlation between subscales of total family functioning and emotional intelligence was statistically significant. Results of the regression analysis, together with independent variables entered, indicate that as a group, the independent variables significantly contributed to the prediction of emotional intelligence.

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1. Introduction

The history of research on intelligence has made it clear that the reason for people's success in their personal and occupational life is not merely EQ. Years before that, Throndike (1920) presented a model of intelligence which included not only the factors of traditional intelligence, but also the factor that he called as 'social intelligence'. He defined it as the ability to understand and management of wise action and behavior in human relations . Throndike's definition of social intelligence was a behavioral and cognitive ability and it implied that firstly, man's conception and management abilities are intellectual abilities, and secondly, such abilities are distinct from the classic, abstract, and mechanical-objective aspects of intelligence. Since then, much attention has been paid on the concept of social intelligence. For years, the principal question has been that whether an empirically unique and solid limit for social intelligence can be specified, and whether it is only a function of a more general abstract intelligence. A lot of studies have been carried out to separate educational-scientific intelligence from social intelligence, but only a little progress has been made (Ford & Tisak, 1983; Goleman, 1995). Emotional intelligence is a form of social intelligence (Mayer, Salovey, Caruso, 2000) and a suitable predictor of general functioning and particular areas such as occupational performance (Goleman, 1995; 2005) including one's ability to manage his/her and others' feelings and emotions, distinguish between them, and use such information to direct one's thinking and practice (Mayer & Salovey, 2000). In addition, the treatment by parents to their children and how they react to their interests and activities, as well as children treatment to one another, emotion and information exchange among them, emotional protection to one another, and the relationships of the family members' with outsiders may also influence the children's emotional intelligence (Naghavi, 2010).

The family functioning construct is a relatively new concept with little empirical research, particularly related to the link between seven specific sub-components of the family function (dysfunction) and their emotional intelligence's early adolescent. Furthermore Naghavi & Ma'rof (2012) theoretically demonstrate that early adolescents' emotional intelligence is influenced by some factors such as the different tasks, communications, roles and aspects of family and some personal characters.

There has been a growing interest in the family functioning and emotional functioning of early adolescence (Goodyer, & Herbert, 1998; Walsh, 1993, Patterson, 2002, Ozbaci , 2006) and the factors that influence it (Goleman 1996, Mayer and Salovey, 1990; Carlson, 1999; Palmer et al., 2007; Bar-On, 1997; Martinez-Pons, 1997; Schutte's, 1998) in order

to develop more integrated theories of development (McMaster's, 1995; Epstein, Bishop, & Levin, 1960; Goleman, 1995). There are many assumptions about family functioning and emotional intelligence. Ozbaci (2006) has assessed the relationship between and family environment and emotional intelligence EQ. The sample of the study was selected as 274 parents who live in Istanbul including 152 female, 122 male. Data were collected by EQ-NED and "Family Environment Scale" to determine family characteristics and the EQ. The results of the study indicate that there was a relationship between family cooperation and EQ.

It is understood from the previous studies that emotional intelligence is associated with some factors, such as family function and some personality characters. This research studied the relation between family functioning and emotional intelligence so as to develop and expand the concept of emotional intelligence in the family. It is expected that this research would identify different family functioning dimensions have influences on early adolescents' emotional intelligence. Although a body of relevant research literature is available, the findings of such research studies which investigated the effects of family functioning on early adolescents' emotional intelligence were derived mainly from western-based samples that are socially and culturally different from the Iranian sample.

2. Materials and Methods

The purpose of this study was to examine the relationship between family functioning and sub-components of the early adolescent's emotional intelligence among Iranian guidance schools students in Tehran, Iran. The schools were chosen based upon their location and programs of study. The population of research involved in this study consisted of all the Iranian students who enrolled in guidance schools of Tehran (234 students, academic year 2010-2011).

The data were collected using (Schutte, 1998) Emotional Intelligence Scale for assessing early adolescence's emotional intelligence and the Family Assessment Device (FAD). In addition, the demographic questionnaire was also used to gather relevant background information of the subjects in this research.

The emotional intelligence scales used to assess emotional intelligence, i.e. Schutte's Emotional Intelligence Self-measuring Scale (introduced by Schutte and her colleagues in 1998 and Mayer and Salovey's original emotional intelligence model, 1990), was used to measure emotional intelligence, which includes emotional conception and appraisal, emotion regulation and emotion utilization. This scale includes 33 self-report items. The subject selected his/her degree of agreement or disagreement by any of these sentences in a five-point Likret scale, from strongly disagreed = 1 to strongly agreed = 5. In this study, the reliability for the emotional intelligence test was obtained by using Crombach's alpha, α= 0.84 (Naghavi, 2012).

Family Assessment Device (FAD); This particular 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 the 7th subscale related to the 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 agree = 1, agree = 2, disagree = 3, strongly disagree = 4). The FAD test is scored in a way that the score of each family shows its vulnerability degree; lower scores indicate sounder functioning and higher scores on the family functioning questionnaire indicate family's inefficiency. It means that the higher the score, the less healthy is the family functioning. In the current study for the family functioning questionnaire, the reliability obtained was α = 0.89.

Considering the questions and research hypotheses, the following statistical methods are use to analyze data: after normality test, Correlation techniques enable researchers to describe the relationship between two sets of measures (Pierson r). Pierson's Correlation and Regression for describing the relation between variables (e.g., correlation between family functioning and emotional intelligence), were conducted for analyses of this research hypothesizes. The regression analysis was used to predict the variables.

3. Results and Discussion

Description of the participants

The study was among 7150 girls and boys Iranian students. After determining the sample gathering, 4 regions selected random among Tehran's 19 educational regions. Then, among the guidance schools of each region, 2 schools are selected by simple random method: one girls' school and one boys' school. In each school, pupils are selected from grade 3 and grade 2 by simple random method. The sample (234) consisted of the guidance schools pupils (12-15 years old). The respondents (234) for this study were the early adolescence with 116 boys and 118 girls.

The descriptive analysis of early adolescences' family functioning, emotional intelligence scores and its subscales are presented in Table 1, including, mean, standard deviations, highest and lowest scores of the all variables of study area. The correlation

coefficient between the subscales of emotional intelligence and family functioning, except for some cases, was found to be statistically significant, sig=.000, p<0.01. The range of Pearson correlation coefficient (r) for the subscales of emotional intelligence and family functioning was estimated from r=-0.21 to r=-0.89 (p<0.01 and p<0.05). In addition, the purpose of these correlations is to make sure that multicollinearity is not issue in this study.

Table 1: Mean and Standard Deviation of Family Functioning, Emotional Intelligence and Their Factors

Descriptive indicators Variables	*Frequency*	*M*	*SD*	*Up*	*Low*
Family functioning	234	129.25	23.39	158	58
Problem-solving	234	11.52	3.08	86	34
Communication	234	15.47	3.52	190	16
Roles	234	19.85	4.23	64	23
Affective company	234	18.26	3.54	50	12
Affective involvement	234	17.47	4.76	47	19
Behavior control	234	19.68	4.02	35	6
General functioning	234	27.07	6.13	25	5
Emotional intelligence	234	122.36	16.93	32	10
Emotional conception & appraisal	234	35.84	7.96	22	1
Emotion regulation	234	50.27	6.75	27	2
Emotion utilization	234	36.25	5.71	31	3

In this research regression analysis was used for studying the relationship between several predictors' independent variable and dependent variable. The main purpose is to find precisely which independent variable predict the dependent variables. In this linear regression analysis, emotional intelligence was the dependent variable and family functioning was the independent variable. The independent variable was entered simultaneously into the regression analysis. Table 3, presents the result of the Pearson correlation between emotional intelligence and family functioning.

Regression analysis

Result of regression analysis with the independent variable entered indicated that the independent variable as a group significantly contributed to the prediction of emotional intelligence. The independent variable were entered into the regression analysis as a group and independent variable (family functioning) was presented in the total score obtained on the respective measure. The independent variable predicted 82% of the variance in Emotional Intelligence (F=516.239, p<.01) table 4, The adjusted R square value suggests the percentage of variance in the dependence variable (Emotional Intelligence) that is likely to be explained by the set of predictors (family functioning) for the entire population. For this regression analysis the adjusted R square was 0.82. For the entire population, 82% of the variance in Emotional Intelligence is likely to be explained by family functioning.

The R square obtained on this sample is quite significant. Based on Cohen's (1988) guidelines, an R square on 0.26 is considered to be large. In the current sample, the very large R square suggests that the effects are not simply due to a large sample. The same effects would likely have been found even with a much smaller sample size. This indicates that the current study has much practical significance.

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Table 2: Correlation Coefficients Matrix for Subscales of Emotional Intelligence and Family Functioning

Variables Correlation coefficients	*X1*	*X2*	*X3*	*X4*	*X5*	*X6*	*X7*	*X8*	*X9*	*X10*
X1:Emotional conception &appraisal	1									
X2:Emotion regulation	0.326**	1								
X3:Emotion utilization	0.421**	0.382**	1							
X4:Problem-solving	-0.602**	-0.664**	-0.701**	1						
X5:Communicatio	-0.563**	-0.201**	-0.410**	0.478**	1					
X6: Roles	-0.578**	-.0681**	-0.805**	0.431**	0.472**	1				
X7:Affective company	-0.501**	-0.261**	.821**	0.122**	0.110*	0.233	1			
X8:Affective involvement	-0.661**	0.097	0.312*	-0.899*	0.177	0.053*	0.213**	1		
X9:Behavior control	-0.711**	0.005	0.822**	-0.397**	0.104*	0.194**	0.312*	0.352	1	
X10:General functioning	-0.432**	-0.201**	0.880**	0.501*	0.304*	0.228**	0.082*	0.407*	0.053*	1

-DependentVariable:EmotionalEntelligence

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).

Table 3: Summary Information of Pearson correlation for Emotional Intelligence and Family Functioning

Variables Correlation coefficients	**Family functioning**	**Emotional intelligence**
Family functioning	1	-.764**
Emotional intelligence		1

P<.01

Table 4: Summary Information of ANOVA for Emotional Intelligence Regression on Family Functioning

	SS	*Df*	*MS*	*F*	*Sig*
Regression	14023.93	2	7011.97	516.24	.000
Residual	3137.63	231	13.58	516.24	.000
Total	17161.56	233			

Table 5: Relative Effects of Family Functioning to the Prediction of Emotional Intelligence

	B	*SE B*	*Beta*	*T*	*Sig*
Constant	293.24	7.15		41.04	.000
Family functioning	-0.65	0.07	-0.34	-8.98	.000

According Table 5 each of the independent variable had significant effect on the prediction of emotional intelligence. Family functioning had a significant effect with (Beta= -0.34, t=-8.98, p<0.05) respectively.

4. Conclusion

Regarding to finding of this research, early adolescents with category of high factors of family functioning displayed less factors of EQ. According Naghavi & Ma'rof (2012), parental motion affect on early adolescent's emotion and social behaviors by its emotional regulation.

These findings are well agreed with theories of the social cognitive theory. Due to according social cognitive theory early adolescents learn to express, understand, and regulate their emotions in interactions with their family, siblings. Family is strong shapers to early adolescent's behavior (Stover, 2003). In addition, parental emotion affect on early adolescent's emotion and social behaviors by its emotional regulation.

The important point is that, today in the Iran, Iranian families have started to take on roles vastly different from family of previous generations. Moreover, family takes on ever more responsibility for raising their early adolescents than in the generations that preceded them. Subsequently, the modern role of Iranian family would responsibly as several dimensions more now than ever at home with the family particular, with early adolescents and family is as emotional coachers of early adolescent's emotional intelligence and their social behaviors. According Naghavi & Ma'rof (2012) As the effects of families on the development of emotional intelligent levels of individuals are highly emphasized, some programmes supporting emotional intelligence may also be included in family education.

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