

Artículo de investigación

A Study on the Relation between Early Maladaptive Schemas, Emotional Intelligence and Self-harm in Adolescent Girl Students of Tehran High Schools between 2017 And 2018

Un estudio sobre la relación entre los esquemas de mala adaptación temprana, inteligencia emocional y autolesiones en niñas adolescentes de escuelas secundarias de Teherán entre 2017 y 2018

Um estudo sobre a relação entre os esquemas desadaptativos precoces, a inteligência emocional e a automutilação em adolescentes estudantes das escolas secundárias de Teerã entre 2017 e 2018

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Abstract

One of the aspects of quality of life is the quality of mental health which is included in lack of fear, anxiety, and depression. The quality of mental health is one of the important variables in positive psychology which reflects the individuals' psychological health. Emotional intelligence and stress coping strategies are among the important variables that according to various researches play a significant role in the relation between the factors related to personality and their psychological consequences.

The purpose of this study is to investigate the relation between the early maladaptive schemas and emotional intelligence with self-harm of adolescent girls in Tehran high schools between 2017 and 2018. The findings of the research showed that there is a significant relation between the two schemas of emotional deprivation and sacrifice with self-harm but there is not a significant relation between the other schemas and the adolescent girls' self-harm.

Keywords: emotional intelligence, self-harm, emotional deprivation, sacrifice.

Resumen

Uno de los aspectos de la calidad de vida es la calidad de la salud mental que se incluye en la falta de miedo, ansiedad y depresión. La calidad de la salud mental es una de las variables importantes en la psicología positiva que refleja la salud psicológica de los individuos. La inteligencia emocional y las estrategias de afrontamiento del estrés son algunas de las variables importantes que, según diversas investigaciones, desempeñan un papel importante en la relación entre los factores relacionados con la personalidad y sus consecuencias psicológicas.

El propósito de este estudio es investigar la relación entre los esquemas de mala adaptación temprana y la inteligencia emocional con autolesiones de las adolescentes en las escuelas secundarias de Teherán entre 2017 y 2018. Los resultados de la investigación mostraron que existe una relación significativa entre los dos esquemas de privación emocional y sacrificio con autolesión, pero no existe una relación significativa entre los otros esquemas y la autolesión de las adolescentes.

Palabras clave: inteligencia emocional, autolesiones, privación emocional, sacrificio.

Resumo

Um dos aspectos da qualidade de vida é a qualidade da saúde mental incluída na falta de medo, ansiedade e depressão. A qualidade da saúde mental é uma das variáveis importantes na psicologia positiva que reflete a saúde psicológica dos indivíduos. A inteligência emocional e as estratégias de enfrentamento do estresse estão entre as variáveis importantes que, de acordo com várias pesquisas, desempenham um papel significativo na relação entre os fatores relacionados à personalidade e suas consequências psicológicas. O objetivo deste estudo é investigar a relação entre os esquemas desadaptativos precoces e a inteligência emocional com autoflagelação de adolescentes do ensino médio de Teerã entre 2017 e 2018. Os resultados da pesquisa mostraram que existe uma relação significativa entre os dois esquemas, de privação emocional e sacrifício com autoflagelação, mas não há uma relação significativa entre os outros esquemas e a automutilação das adolescentes.

Palavras-chave: inteligência emocional, autoflagelação, privação emocional, sacrifício

Introduction

Lack of attention to mental health of adolescents leads to mental disorders with long-term consequences in life and reduces productive capacity and safety of communities. Therefore, a simultaneous recognition of the adolescents' mental disorder is the base for identifying their problems and planning for appropriate policies which guarantee their future health (World Health Organization, 2003). One of the aspects of quality of life is the quality of mental health which is included in lack of fear, anxiety, and depression. The quality of mental health is one of the important variables in positive psychology which reflects the individuals' psychological health. Emotional intelligence and stress coping strategies are among the important variables that according to various researches play a significant role in the relation between the factors related to personality and their psychological consequences (McCann et al., 2011). The individual's emotional and cognitive patterns of self-harm that are formed at the beginning of the development of his mind are repeated during the life and are called maladaptive schemas. The early maladaptive schemas are created due to the dissatisfaction of the basic emotional needs of childhood such as secure attachment to others, self-regulation, freedom to express needs and healthy excitements, self-motivation and realistic constraints. These schemas act at the deepest level of cognition, usually act out of the level of awareness and make the person psychologically vulnerable to disturbances such as depression, anxiety, ineffective communication, addiction,

and psychosomatic disorders (Thimm, 2010). Maladaptive emotional schemas are associated with anxiety, depression, marital conflicts, chronic syndrome, irritable bowel syndrome, physical inability, eating disorders, social phobia, and personality disorders. The treatment of emotional schemas is a new form of cognitive behavioral therapy which was developed by Leahy who was inspired by Young's cognitive theory of schema therapy, Wells metacognitive model, and admission-based approaches for the treatment of emotional problems. According to this therapeutic model, everyone experiences negative and painful excitements, but what distinguishes people from each other is how they interpret and react to emotions or emotional schemas (Baker, 2011). Schemas form the cognitive foundations of an individual and can shape and direct the individual's behaviors, therefore, it is possible to make a relation between the early maladaptive schemas as the underlying part and the construction of the individuals' cognition that are often formed in the developmental stages of growth, and maladaptive behaviors in the later stages of the individuals' growth. Schemas orientate individuals' interpretations of events, and these orientations reveal themselves as distorted attitudes, false speculations, unrealistic goals and expectations.

The early maladaptive schemas are patterns or deep and widespread themes that are related to the individual's relation with himself or with

others and are highly inefficient (Cannon et al., 2012).

Social problems point to barriers created in the process of adolescents' adaptation to the society. In addition to physical and cognitive development, adolescents also need to grow socially. Self-harm is the compulsion or motivation to make physical injuries on the body as one wants to deal with an unbearable mental distress or regain his sense of psychological balance (Wilkinson et al., 2013). According to the definition of mental health, self-harm involves a wide range of behaviors that are deliberately and secretly executed by individuals. These behaviors will remain for a long time without being discovered (Tang et al., 2012). In fact,

when students are angry with themselves due to disturbances that are experienced in adolescence, and the tensions that they have with their relatives, and due to their low adaptation or even failure to reach the goals that are important to them, they may self-harm. Considering that adolescents are the potential capital of society and they make the future of the country, paying attention to their material and spiritual needs is of particular importance. Since adolescence is associated with many biological, psychological and social changes and as each of these changes can be a critical factor for adolescents which in some cases cause behavioral problems for them, studying these changes is of great importance.

2. Materials and methods

2.1 The methodology

The research method depends on the purpose and nature of the study and the apparatus for doing such studies. This research studies the relation between the early maladaptive schemas and emotional intelligence with self-harm in adolescent girl students in high schools in Tehran between 2017 and 2018. In terms of the object, this is an applied research and in terms of method, it is a descriptive and correlational research.

2.2 The statistical community

The statistical community of this research is 60 high school girl students in Tehran who have experienced self-harm and have a case in counseling centers.

2.3 The sample size and the sampling method

In this study, the Cochran formula was used to estimate the sample size which consists of 52 girl students. If the variance of the community and the probability of success for the intended variable are not known, the maximum number of samples is:

$$n = \frac{\frac{Z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{Z^2 pq - 1}{d^2} \right)} = \frac{\frac{1.96^2 \times 0.05 \times 0.05}{0.05^2}}{1 + \frac{1}{60} \left(\frac{1.96^2 \times 0.05}{0.05^2} \right)} = 52$$

In this equation:

N is the community size.

n is the sample size.

P is the percentage of individuals in the society who do not have that characteristic.

Q is the ration of that characteristic which is existed in the society (Khaki, 2011).

2.4 Data collection method

In this study, field and library methods were used to collect data.

2.4.1 Young's schema questionnaire (1990)

The short form of the Young schema questionnaire (SF SQ-) (1990) was made. The self-report questionnaire of the early maladaptive schemas (short form) has 75 items, of which measures 15 fields of the early maladaptive schemas such as emotional deprivation, left / instability, distrust / mistreatment, social isolation / alienation, defect / not be loved, failure in progress; dependence / practical incompetence; vulnerability to loss and illness; involvement; obedience; self-sacrifice; emotional inhibition; rigorous standards; being rightful / supremacy, self-control and insufficient self-discipline. Each item is scored by a 6-point grading scale (1 = completely false, 6 = perfectly correct). Each question is scored on a 6-point scale (1 for completely false, 6 for perfectly correct). In this questionnaire, every 5 questions measure a schema. If the average of each subscale is greater than 25, then the schema is inefficient.

2.4.2 Siberia Schering's emotional intelligence questionnaire

In this research, Schering's emotional intelligence questionnaire (1996), which is included of 33 questions and 5 subscales: self-motivation (7), self-awareness (8 questions), self-control (7 items), social consciousness or empathy (6 questions), social skills (5 questions), is used. This test was developed by Schering in 1996 based on Glenn's (1995) theory and was standardized by Mansouri in February 2001 in Iran on a master's degree at AllamehTabatabai University. The main form consists of 70 questions which assesses several aspects of emotional intelligence (self-awareness, self-regulation, motivation, empathy, and social skills in the job).

2.5 Method of data analysis

In the research process, after data collection, the next step is analyzing the data. The data obtained from the questionnaire were analyzed using SPSS software

3. Results and discussion

3.1 Descriptive analysis of data

The results showed that 31 individuals from 52 persons (59.6% of girls) have self-harmed once in the life and 21 persons (40.4% of them) have self-harmed twice.

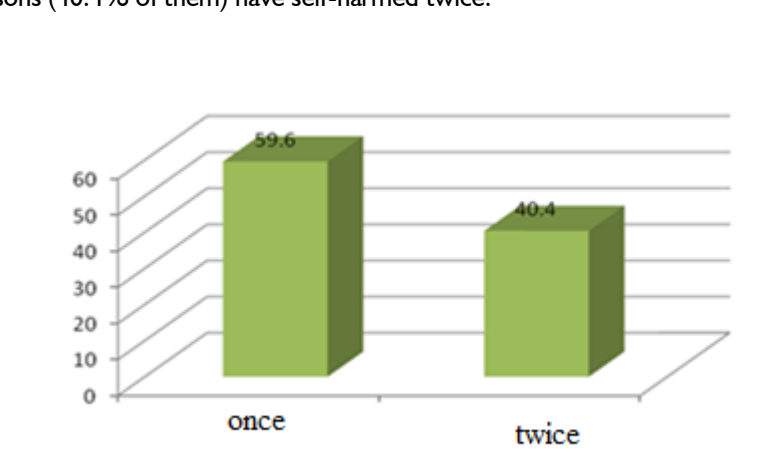


Figure 1 Comparison of the frequency percentage of adolescent girls based on the frequency of self-harm

Also, based on the results, the lowest, highest, average and standard deviations for the scores of all early maladaptive schemas are shown by the frequency of self-harm in adolescent girls is shown in figure 2, and there is no significant difference between the mean of these scores in both groups (figure 2).

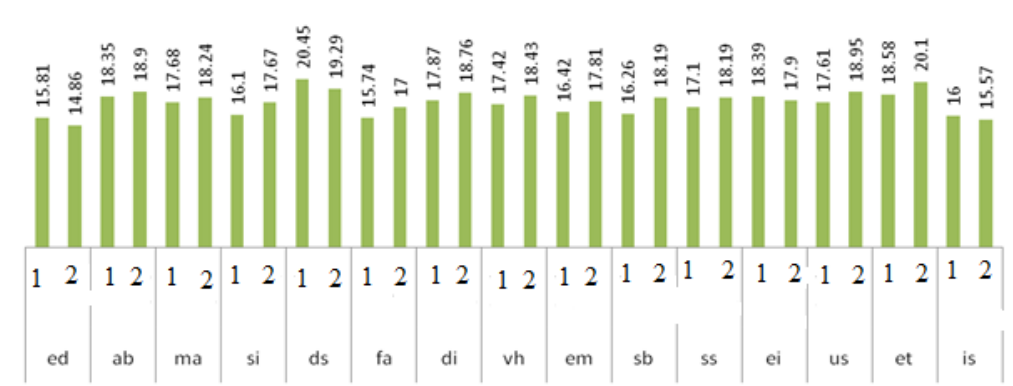


Figure 2 Comparison of the mean schemas scores of girls separated by frequency of self-harm
The frequency, minimum, maximum, mean, and standard deviation of emotional intelligence scores and its five dimensions separated by frequency of self-harm in adolescent girls, showed that there is no significant difference between the mean of these scores in both groups (figure 3)

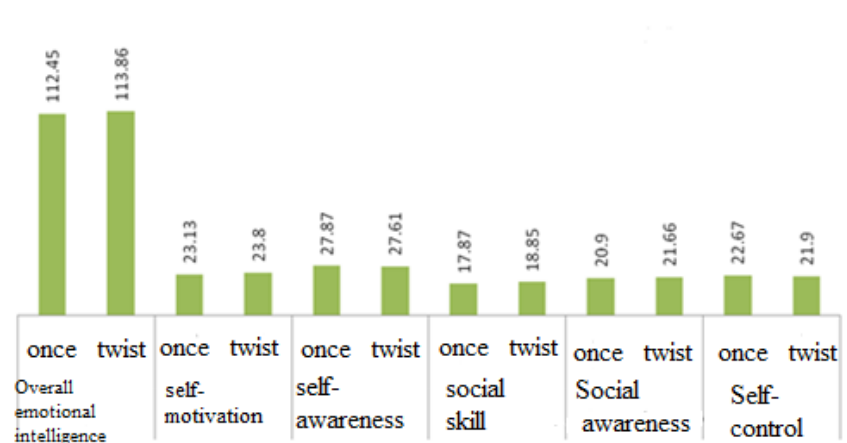


Figure 3 Comparison of the mean scores of two dimensions of emotional intelligence in adolescent girls separated by the frequency of self-harm

3.2. Inferential analysis of data (hypothesis testing)

To test the hypotheses of the present study, since the predictive research variables (early maladaptive schemas and emotional intelligence) are interval variables and the dependent variable in the research (self-harm in girls) is a nominal variable (the frequency of self-harm), therefore, parametric tests cannot be used to investigate the relationship between these variables. Therefore, by converting the predictive variables (interval scales) into the ordinal scales, the Chi-square test and Cramer's V test are used. Therefore, by converting the interval scale of the predictive variables to the ordinal scale, the Chi-square test and Cramer's V test are used. Chi-square test shows the existence or non-existence of a relationship. If the relationship between variables is proved, Cramer's V test is used to examine severity of this relationship.

3.2 Results of the study of the relationship between early maladaptive schemas and self-harm in adolescent girls

According to the results, it can be concluded with 95% confidence that there is not a significant relationship between these early maladaptive schemas and the self-harm in adolescent girls in this study. ($P > 0/05$)

According to the relationship between the early maladaptive schema of emotional deprivation (ed) and self-harm in girls, it can be stated with 99% confidence that there is a meaningful relationship between these two variables in this study. It means that girls who have self-harmed twice have shown less early maladaptive schema of emotional deprivation than girls who have self-harmed once. The severity of this relationship, according to Cramer's V statistics, is 0.499 and is modest (table I).

About the relationship between the early maladaptive schema of self-sacrifice (ss) and self-harm in girls, it can be stated with 95% confidence that there is a positive and significant relationship between these two variables in this study. It means that girls who have self-harmed twice have shown less early maladaptive schema of self-sacrifice than girls who have self-harmed once (table I). The severity of this relationship, according to Cramer's V statistics, is 0.352 and is modest.

Therefore, the results indicate that there is a significant relationship between early maladaptive schemas and self-sacrifice in adolescent girls that some part of this relationship is confirmed and the other part is not approved. In other words, except in the two schema of emotional deprivation and sacrifice schemes described, there was no significant relationship between 13 other schemas and self-harm in girls (table I).

Table I The results of Chi-square test to examine the relationship between early maladaptive schemas and self-harm in girls

Predictive variables				
Emotional deprivation (ed)	Chi-square (Pearson)	12.960	Cramer's V statistics	0.499
	Significance level (two domains)	0.005	Significance level (two domains)	0.005
Abandonment (ab)	Chi-square (Pearson)	2.166	Cramer's V statistics	0.204
	Significance level (two domains)	0.339	Significance level (two domains)	0.339
distrust / mistreatment (ma)	Chi-square (Pearson)	2.157	Cramer's V statistics	0.204
	Significance level (two domains)	0.340	Significance level (two domains)	0.340
Social isolation (si)	Chi-square (Pearson)	1.981	Cramer's V statistics	0.195
	Significance level (two domains)	0.576	Significance level (two domains)	0.576
Defective / Shame (ds)	Chi-square (Pearson)	3.072	Cramer's V statistics	0.243
	Significance level (two domains)	0.215	Significance level (two domains)	0.215
Failure (fa)	Chi-square (Pearson)	3.711	Cramer's V statistics	0.267
	Significance level (two domains)	0.249	Significance level (two domains)	0.294
Dependency / incompetence (di)	Chi-square (Pearson)	3.314	Cramer's V statistics	0.252
	Significance level (two domains)	0.346	Significance level (two domains)	0.346
Vulnerability to harm (vh)	Chi-square (Pearson)	2.471	Cramer's V statistics	0.216
	Significance level (two domains)	0.291	Significance level (two domains)	0.291
Involvement (em)	Chi-square (Pearson)	1.687	Cramer's V statistics	0.180
	Significance level (two domains)	0.640	Significance level (two domains)	0.640
Obedience (sb)	Chi-square (Pearson)	2.934	Cramer's V statistics	0.238
	Significance level (two domains)	0.402	Significance level (two domains)	0.402
Self- Sacrifice (ss)	Chi-square (Pearson)	6.427	Cramer's V statistics	0.352
	Significance level (two domains)	0.040	Significance level (two domains)	0.040
Emotional inhibition (ei)	Chi-square (Pearson)	0.415	Cramer's V statistics	0.890
	Significance level (two domains)	0.813	Significance level (two domains)	0.813
rigorous standards (us)	Chi-square (Pearson)	6.514	Cramer's V statistics	0.354
	Significance level (two domains)	0.890	Significance level (two domains)	0.089
Enlightenment (et)	Chi-square (Pearson)	4.043	Cramer's V statistics	0.279

	Significance level (two domains)	0.132	Significance level (two domains)	0.132
Inadequate Self-discipline (is)	Chi-square (Pearson)	1.277	Cramer's V statistics	0.157
	Significance level (two domains)	0.735	Significance level (two domains)	0.735

3.3 The results of the relationship between emotional intelligence and its dimensions with adolescent girls self-harm

Chi-square test was used in this study and the results showed that the p-value of chi square test was higher in examining the relationship between emotional intelligence and its dimensions with girls' self-defense with a 0.05 error rate. Therefore, there is not a meaningful relationship between emotional intelligence and its dimensions with self-harm of girls ($P > 0/05$) (Table 2).

Table 2 Chi-square test results to examine the relationship between emotional intelligence and its dimensions with self-harm of girls

Prediction variable				
Overall emotional intelligence	Chi-square (Pearson)	0.007	Cramer's V statistics	0.011
	Significance level (two domains)	0.935	Significance level (two domains)	0.935
Self-motivation dimension	Chi-square (Pearson)	2.623	Cramer's V statistics	0.225
	Significance level (two domains)	0.269	Significance level (two domains)	0.269
Self-awareness dimension	Chi-square (Pearson)	4.121	Cramer's V statistics	0.282
	Significance level (two domains)	0.127	Significance level (two domains)	0.127
Social skill dimension	Chi-square (Pearson)	4.022	Cramer's V statistics	0.287
	Significance level (two domains)	0.259	Significance level (two domains)	0.259
Social consciousness dimension	Chi-square (Pearson)	1.755	Cramer's V statistics	0.184
	Significance level (two domains)	0.416	Significance level (two domains)	0.416
Self-control dimension	Chi-square (Pearson)	2.242	Cramer's V statistics	0.208
	Significance level (two domains)	0.326	Significance level (two domains)	0.326

4. Conclusion

Intelligence is considered as one of the significant means of human compromise with the "environment" and is one of the important factors in the difference between human beings. The extend range of intelligence according to its constituent factors has been the subject of experts in this field. Intelligence is the leaning talent and the lessons use to adapt to new

situations and to solve new problems. In other words, intelligence is the ability to change or flexibility in adaptation. Likewise, the schemas form the cognitive foundations of an individual and can shape the individual behaviors and direct it and communicate with maladaptive behaviors in the next stages of individuals' growth (Hannam-Swain, 2018). Schemes lead to a focus on the interpretations of events by individuals, and these biases show themselves in different

ways. Each of the teenagers' problems in a particular calendar age reaches the peak of their tension, which varies due to gender differences. Whenever the age of the tension peak for several problems or issues occurs simultaneously, adolescent compatibility becomes difficult. In such a situation, behavioral problems are more evident for them (Galen, 2017). Lack of attention to mental health of adolescents leads to mental disorders with long-term consequences in the life and reduces productive capacity and safety of communities. Self-harm is an inappropriate way to deal with emotional problems, anger and disappointment. Self-harm or action against it is prevalent psychosocial problems in adolescence. Self-harm is unacceptable from the viewpoint of society and its aim is to overcome emotional turmoil (Walsh, 2006).

The purpose of this study was to investigate the relationship between early maladaptive schemas and emotional intelligence with self-harm of adolescent girls in Tehran high schools from 2017-2018. Findings from the study showed that the two schemes of emotional deprivation and sacrifice with adolescent girls' self-harm have significant relationship. Additionally, between emotional intelligence and its dimensions with self-harm of teen girl is a significant relationship. Makvandi et al (2017) in his research concluded that between five early maladaptive schemas and eating disorders symptoms of students exists a meaningful positive relationship. BahadariKhosroshahi (2017), in a study examined the effect of acceptance training and commitment on Self-harm and competency in students having the experience of self-harm.

They concluded that acceptance training and commitment influence self-criticism or self-harm and the competence of students with self-harm experience. In fact, admission training and commitment reduces self -criticism and increases the competence of students with self-harm experience.

Hakim Shooshtari and Khanipour (2014) wrote an article comparing self-harm and the suicide in adolescents. Severity of depressive symptoms, the frequency of the detection of post-traumatic stress disorder ((PTSD and borderline personality disorder in adolescents with a history of suicide attempts are more than self-damaging teens. AvakhKisomi, Mahdavi and Ibrahimi (2013) carried out a research to determine the relationship of self-harm and

personality disorder in soldiers. The results showed a significant difference between case and control groups, in other words, between self-mutilation and personality disorders soldiers there. The results obtained by Mehrabizadeh and Darani (2013) and Young (2014) are consistent with results this research. This means that the results of those researches are not precisely similar to results of this research, but those results are in line with the findings of this research.

In explaining the results of this research, we can say things that cause abnormal behaviors in adolescents they are not their initial schemas and emotional intelligence. But they are the lack of satisfaction to life, the experience of unpleasant events, the relation to the opposite sex, substance dependency, and affiliation to the peers groups. Self-harming in teenage girls can be affected by personality disorders, depression, obsession, and emotional problems. In addition, the presence of adolescents in the identification period and the desire for independence and individualism, distressing, problems in establishing social communication and weakness in educational performance can be among other factors in the tendency to self-harm and the causes of self-harm in adolescents.

The expansion of the internet and its users, especially among adolescents and young people, without intellectual and cultural placement, causes different kinds of harms to the real individual life from the virtual environment. Among them, teenagers and young people as the most vulnerable social strata are at high risk. Teenage girls between the ages of 13 and 18, with a scratch and scarring in their body, especially their hands, looking at the blood sometimes even eating it, or taking their blood with a syringe and again injecting it, finally get some kind of nerve relaxation (Such as opiate injection).

This is a false state due to the aggressive growth in tedious and degrading familial relationships, which reveals itself in mature age in the forms of verbal conflicts, continuous crying, silence and isolation (Hilt et al. 2008). Considering that the results of this study indicate that there is no relationship between the variables studied, it seems that other factors such as those mentioned above can provide such behaviors in adolescents.

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