## Available online at www.pelagiaresearchlibrary.com



## Pelagia Research Library

European Journal of Experimental Biology, 2014, 4(2):198-203



# Correlation between anxiety and early maladaptive schemas in female students of third year of high school in Minudasht

Sahar Shariati<sup>1</sup>, Kazem Shariatnia<sup>2</sup> and Daryoush Ghasemian<sup>1</sup>

<sup>1</sup>Department of Psychology, Science and Research Branch, Islamic Azad University, Mazandaran, Iran <sup>2</sup>Department of Psychology, Azad Shahr Branch, Islamic Azad University, Azad Shahr, Iran

#### **ABSTRACT**

The current research aim is studying the correlation between anxiety and the early maladaptive schemas and predicting this disorder with early maladaptive schemas. To this aim two questionnaires of Schema Questionnaire-Short Form (SQ-SF) designed by Young and Kettle's Anxiety Questionnaire were conducted on 144 female students of third year of high school in Minudasht. Research results analyses were conducted through the use of SPSS20 software and the Pearson's correlation coefficient, one-way ANOVA test and stepwise regression. Results indicate a significant correlation between the early maladaptive schemas and the symptoms of anxiety, and they predict that the early maladaptive schema of defectiveness/shame predicts anxiety, and the early maladaptive schema of self-sacrifice has an inverse correlation with students' anxiety, and the current survey results were consistent with the previous surveys, and it is possible to recognize the maladaptive schemas related to those in other disorders and use them for solving the problems.

Keywords: Early Maladaptive Schemas, Anxiety, Female Students of Third Year of High School.

#### INTRODUCTION

Anxiety disorders especially the separation anxiety disorder has high rates among children and adolescence, and some studies have reported the rate of separation anxiety disorder up to 42% [19]. All of us have an overall picture about the meaning of anxiety and our feelings when we say we are anxious. To some extent we can be similar to each other about the internal experience of such feelings. Apart from the theories made for anxiety, the anxiety plays the role of a danger signal for the individual indicating that the process is not going well [15], however anxiety could disturb the cognitive performance, and it is necessary to consider this phenomenon in institutions. A student's performance during an exam is influenced by anxiety, and this should not cause others to think that no learning has taken place. Maybe this student has learned the questions well but anxiety caused him/her to be unable to completely answer the questions [22]. Anxiety is considered as an emotional arousal and during the recent decades surveys about the anxiety the clinical and educational experts have considered the academic failure as one of the results of high levels of anxiety, and since then researches have been conducted in this field, and researchers such as Dark (1989) have studied this field, and they have studied the effect of anxiety on intelligence, memory, academic progress, self-esteem and ... As a part of human beings' life anxiety exists in all individuals to a moderate level and at this level it is considered as an adapted response, in other words f there was no anxiety we would have been fallen

asleep behind our desks [5]. Some people are sometimes anxious while others are anxious most of the times, these observations made the psychologists to distinguish between two types of anxiety [1]. It must be noted that anxiety exists in all human beings, each and every intelligent creature has anxiety, and in other words anxiety is a normal body status, several problems in individual, social and physical life necessitate us to show adaptation, it is only anxiety that makes us go forward and each individual thinks that he/she has a share in anxiety and generally it could be said that 10% of anxiety is necessary for every normal human being, but unfortunately this percentage is not always low [12]. However human beings have a share of anxiety that ranges from the lowest level to the highest level, thus it is necessary to pay attention to this matter and its span. Goldberg (1990) distinguishes between trait anxiety and state anxiety, and believes that state anxiety is an emotional reaction to the situation and it is temporary and it causes the individual to consider some situations risky, and this anxiety is different in terms of intensity and oscillation in different situations. For example, anxiety before speech is a type of state anxiety, while trait anxiety is a type of personality trait which indicates the stable characteristics of the individual, and stable individual differences in individuals prone to anxiety. The same as other traits this trait is also different from one person to another. Trait anxiety in some individuals is very high and in some individuals it is low. According to the conducted researches it could be said that there is a correlation between the trait and state anxiety [1]. During conducted studies by Silverman and et al (1995) and Morris and et al (2000) females showed more significant worries compared to males [23]. Anxiety affects the individuals' decision makings. An anxious person is typically unrealistic, angry and pessimist, and these types of people need overconfidence, and they may think that their safety is temporary, for such people anxiety is not a protection and it prevents them from participating in different types of daily activities, university, friendships, and academic performance [7].

The word schema has been used in different research fields and it has been defined as a structure, model or framework [6]. Young (1998) believed that some of these schemas, especially those mainly formed as a result of adverse experiences during childhood may be the main core of personality differences, minor cognitive disposition problems, and many chronic disorders that are called early maladaptive schemas. Early maladaptive schemas are self-destructing emotional and cognitive patterns formed at the early stages of growth and they repeat during life and an individual's behavior is not considered as a schema, but behaviors originate from schemas, but they are not considered as a part of schema [14]. These schemas took their form during individual's childhood experiences (that mostly have an internal impact on the child's life) and they control the individual's response to the environmental events [25]. Young states that although factors related to the society, school and peers are effective in formation of these schemas, their effects do not have the extent and stability of effects of family factors [24]. The origin of these schemas is basic emotional needs including 6 areas of: Secure attachment to others (such as feeling of security, stability and acceptance), autonomy, competition, and sense of identity, freedom of expression of needs and emotions, games, and spontaneity, and reasonable limits, self-control, early life experiences (failure to satisfy the basic needs, over satisfaction, and identification of improper behavior of parents), and child's emotional temperament (child's affective characteristics that are intrinsic and distinguish child's initial personality) [25]. These schemas create a fundamental change in relation to 5 tasks, and they are used as a framework for processing information and they determine the individuals' emotional reactions toward life situations and interpersonal relationships. Regarding the mentioned subjects schemas could have a correlation with individual's adaptation [14]. In conducted researches [18], the schema of mistrust, vulnerability, and insufficient discipline are the important predictors of anxiety. Researches being conducted by Dayan and et al showed that there is a correlation between anxiety and depression and the anxiety background in the family. When an individual within a family uses an undesirable procedure such as anxiety or depression during confronting problems, others who have contact with that person learn to use the same response and also they will use the same procedure in the future when they confront a problem and they do not concentrate on solving the problem [7]. Based on the researches of Cousineau (2004) in a study they predicted that the correlation between the schemas, anxiety, and symptoms of anxiety are significant. They theoretically divided the early maladaptive schemas into three categories. 1st group: schemas having anxiety factor within their definition. 2<sup>nd</sup> group: Schemas related to their lack of cohesion. 3<sup>rd</sup> group: schemas detected by communication crises and shortcomings. Ball and Cecero (2001) studied the symptoms of anxiety and the early maladaptive schemas in adolescence and they found a significant correlation. In a study Kisch and et al (2005) did not consider any special schema related to the anxiety factor, but they reached a higher level of activation of early maladaptive schemas compared to the healthy individuals. In surveying the schemas of anxious visitors compared to the healthy individuals concluded that generally the anxious individuals' early maladaptive schemas are more active. Most of the researchers in the field of mental health have a consensus about the fact that mental health has a significant effect on all of the personality aspects, activity and also their reactions to all of the life events. Yet this is also an accepted fact that schemas have a correlation with life negative events and mental pressures. When an early

maladaptive schema is activated some levels of emotions are released and they directly or indirectly result in different types of cognitive disturbances such as depression, anxiety, occupational disability, lack of academic progress, drug abuse and interpersonal conflicts [17]. On the other hand by the increase of maladaptive cognitive schemas some of the disorders increase and presence of such disorders result in individuals' drop in performance in jobs and education [10]. From this perspective it could be said that individuals' progress and success in different periods of life greatly depend on the cognitive schemas and their adaptation in life. In today's society individuals are exposed to different types of stresses and pressures; pressures which gradually increase along with the societies' progresses in technological and industrial fields, and they result in occurrence of several physical and psychological problems for the individuals. Regarding the mentioned problems the current research aim is to study the correlation between anxiety and the early maladaptive schemas in female students of third year of high schools, and the current research main question is that is there any correlation between the anxiety and the early maladaptive schemas of students?

#### MATERIALS AND METHODS

The current research is a descriptive study and also it is considered as a descriptive (non-experimental) research. The correlation between variables is analyzed based on the research aim. The descriptive researches are a set of methods with the aim of describing a situation or the phenomena. The current research population includes all of the female students of third year of high school in Minudasht during academic year 2012-2013 and their number is 225 individuals. By the use of Krejcie and Morgan table (1970) 144 individuals were calculated, but 180 questionnaires were distributed among the students since some of the questionnaires were not returned or they were incomplete, and 180 questionnaires were considered in order to avoid any error in research data. The measuring tools include Young's SQ-SF which is a 75-item questionnaire by Young (1998) formed for evaluating 15 early maladaptive schemas. These schemas consist of abandonment/instability, mistrust/abuse, social isolation/alienation, defectiveness/shame, and emotional deprivation, and dependence/incompetence, vulnerability to harm or illness, enmeshment/undeveloped self, failure, entitlement/grandiosity, insufficient self-control, subjugation, self-sacrifice, emotional inhibition, and unrelenting standards / hyper-criticalness. Grading for each question is based on a 6degree scale (1 for completely incorrect, 6 for completely correct). In this questionnaire each 5 questions evaluate one schema. If the mean of each subscale is higher than 25 that schema is inefficient. The other measuring tool is Kettle's anxiety questionnaire. This 40-item questionnaire designed by Kettle in 1962 and it is written about the problems individuals usually feel in their life. The kettle's scale score is one of the most reliable tools provided in the form of a questionnaire, and it could complete the clinical diagnoses. Its other advantage is that it is run in 5 minutes, and there is no need for watching the respondent, and it is used for measuring the state-trait anxiety of individuals older than 14 years old [22]. The schema questionnaire validity and reliability has been confirmed in several researches [13]. In Iran this questionnaire has been normalized by Lotfi (2006) and it has been conducted in the universities of Tehran, the internal consistency has been achieved by the use of Cronbach's Alpha in the female population of 0.97 and in the male population of 0.98. Sadoughi and et al (2008) studied the factor analysis of Young's SQ-SF in the Iranian non-clinical sample, and the research findings confirmed the psychometric properties of Young's SQ-SF in the intercultural validity and reliability. The validity and reliability of Kettle's anxiety questionnaire has been confirmed all over the world including Iran. This questionnaire has been normalized in 1988 in an Iranian sample including 977 students of University of Tehran in the age range of 18 to 30, and it has standard or normalized scores for trait anxiety, state anxiety and generalized anxiety [21]. In order to analyze the statistical data the frequency tables, mean, SD, and also for measuring the research variables the Pearson's correlation coefficient, one-way ANOVA test and stepwise regression have been used.

### **RESULTS**

As it is observable in table 1, the variable of unrelenting standards has the highest mean and the variable of covert anxiety has the lowest mean. Also the highest dispersion belongs to the variable of emotional inhibition and the lowest dispersion belongs to the variable of defectiveness/shame. The research main hypothesis was that there is a correlation between anxiety (overt and covert) and the early maladaptive schemas of female students of third year of high schools and the hypothesis is surveyed in table 2.

According to the Pearson's correlation test results in table 2 a significant and direct correlation(r>0) exists between the anxiety (overt & covert) and the early maladaptive schemas (except for self-sacrifice schema) of students at 99%

level (Sig. <0.01). On the other hand, an inverse correlation (r<0) exists between anxiety (overt & covert) and the self-sacrifice schema.

Table 1: Results achieved from describing variables

Variable	Minimum	Maximum	Mean	Variance	SD
Emotional deprivation	1.000	5.800	2.727778	1.671	1.2928228
Abandonment	1.000	6.000	3.295833	1.888	1.3740795
Mistrust/abuse	1.000	6.000	2.937500	1.492	1.2215933
Social isolation/alienation	1.000	5.600	2.590278	1.264	1.1242601
Defectiveness/shame	1.000	5.400	2.086111	.937	.9682087
Failure	1.000	6.000	2.268056	1.287	1.1343741
Dependence/incompetence	1.000	5.200	1.940278	.999	.9996027
Vulnerability to harm or illness	1.000	5.400	2.504861	1.575	1.2548830
Enmeshment / Undeveloped Self	1.0000	5.600	2.611111	1.172	1.0828033
Subjugation	1.000	5.600	2.468056	1.602	1.2658314
Self-sacrifice	1.000	6.000	3.616667	1.272	1.1279662
Emotional inhibition	1.000	6.000	3.158333	1.955	1.3982757
Unrelenting standards	1.400	6.000	4.090278	1.185	1.0887421
Entitlement	1.000	6.000	3.709722	1.235	1.1111211
Insufficient self-control/self-discipline	1.000	6.000	2.979167	1.139	1.0671755
Depression	1	4	2.74	1.395	1.181
Overt anxiety	1	8	1.95	1.613	1.270
Covert anxiety	1	4	1.81	1.053	1.026

Table 2: Pearson's test results between the variable of anxiety (overt & covert) and the early maladaptive schemas of students

Schema	Overt anxiety	Significance level	Covert anxiety	Significance level
Emotional deprivation	r= .289	.000	r= .470	.000
Abandonment	r =.273	.001	r =.229	.006
Mistrust/abuse	r =.337	.000	r=.300	.000
Social isolation/alienation	r =.322	.000	r = .456	.000
Defectiveness/shame	r =.330	.000	r =.478	.000
Failure	r =.314	.000	r =.421	.000
Dependence/incompetence	r =.350	.000	r=.371	.000
Vulnerability to harm and illness	r =.276	.001	r=.322	.000
Enmeshment	r =.232	.005	r =.295	.000
Subjugation	r =.230	.006	r=.390	.000
Self-sacrifice	r =229	.006	r =410	.000
Emotional inhibition	r =.232	.005	r = .345	.000
Unrelenting standards	r =.225	.007	r=.460	.000
Entitlement	r =.227	.006	r=.317	.000
Insufficient self-control/self-discipline	r =.293	.000	r=.354	.000

Another research hypothesis was that anxiety (overt & covert) can predict the early maladaptive schemas of female students of third year of high schools in Minudasht. Results of variance analysis test showed that both overt and covert anxiety could predict the early maladaptive schemas of students, and based on the coefficients achieved from the regression equations they could be written as followed:

Overt anxiety= 0.036 (overall early maladaptive schemas) + 0.383

## Covert anxiety= 0.040 (overall early maladaptive schemas) + 0.079

Also based on the achieved coefficient of determination it has been identified that the early maladaptive schemas have the ability to explain 32.5% of changes of covert anxiety and 14.9% of changes of overt anxiety.

#### DISCUSSION

This research subject has been limited to studying the correlation between anxiety and the early maladaptive schemas and the research main issue was that is there any significant correlation between anxiety and the early maladaptive schemas of female students of third year of high schools of Minudasht? Results showed that a significant and direct correlation exists between the anxiety and the early maladaptive schemas, which means by increasing the anxiety the individuals will have more maladaptive schemas, but there was an inverse correlation

between the anxiety and the self-sacrifice schema. In a study Calvete and et al (2005) found a significant correlation between the signs of emotional disorders (depression, anxiety and aggression) and the early maladaptive schemas. Heidgerken (2004) studied the signs of depression and the early maladaptive schemas in adolescence and he found a significant correlation between them. In a study Griffith (2003) does not consider any special schema related to the anxiety factor, but Griffith has reached a higher level of activation of early maladaptive schemas compared to the healthy individuals. Having compared the schemas of anxious visitors to the healthy individuals they concluded that generally the early maladaptive schemas are more active in anxious individuals. Also other results of this study showed that the predictive variables (dependence/incompetence, emotional deprivation) are effective on the students' criterion variable (overt anxiety) and the predictive variables (defectiveness/shame, unrelenting standards, and emotional deprivation) are effective on students' criterion variable (covert anxiety). Based on the research results that the defectiveness/shame schema can be a good predictor of depression and anxiety this schema is a kind of cognitive schema based on the fact that the individual is undesirable and bad and he/she does not deserve others' affection. This schema is put in the 1st group related to cutting out and being rejected, and this issue of the schema predictably happens due to lack of satisfying needs such as security and empathy, and the result is consistent with the research results of GhomiTak (2011). In addition to that, this result is consistent with the research of Kapfhammer (2001). Three schemas of subjugation, insufficient self-control/self-discipline and defectiveness/shame are significant in relation to the predictive symptoms of anxiety. Based on the research of Cousineau (2004) about studying the correlation between schemas and anxiety, they predicted that the anxiety symptoms are significant. In researches conducted by FathiAshtiyani (2010) the schemas of mistrust, vulnerability, and insufficient selfcontrol/self-discipline are the important predictors of anxiety.

According to the research results it seems that studying the schemas in other age groups and from both genders and awareness about their differences is useful for the therapists in the fields of schema therapy, couple therapy and family therapy. Also parents should coordinate their expectations with their children's real potencies. In addition to having reasonable expectations from adolescence, encouraging positive points and their capabilities, boosting their confidence, providing a secure environment full of peace could be effective in reducing the students' anxiety and depression. Also at the end as a research suggestion regarding the importance of schemas it is suggested to survey the existence of schemas in parents and the relationship of schemas with insecure families.

#### REFERENCES

- [1] Abolghasemi A, M.A thesis, ShahidChamran University of Ahvaz, (Iran, Ahvaz, 1995).
- [2] Ball S, Cecero J, Person Disorder J, 2001, 15(4): 72-83.
- [3] Calvete M, Psych Assess J, 2005, 21(2): 90-99.
- [4] Cousineau, InterPsych J, 2004, 29(1):53-60.
- [5] Dadsetan P,Morbid psychology a change from childhood to adulthood. 1st ed. Tehran: Samt pub,2005.
- [6] FathiAshtiyani A, Psychological tests of personality evaluation and mental health. 1st volume, Tehran: Besat Pub.**2010**.
- [7] Ghasemnezhad M, Barkhordari M, JameNegarNursing Midwifery J, 2012, 22(68): 40-47.
- [8] GhomiTak S, Bachelor thesis of Islamic Azad University of Azadshahr, 2011.
- [9] Goldberg R, Anxiety, Translated by Pourafkari, N.A., Tabriz: Resalat Pub, 1990.
- [10] Griffith A, Group Psychotherapy, Psychodrama, & Sociometry J, 2003, 55(4): 66-74.
- [11] Heidgerken N, Clinical Child and Adolescent Psycho J, 2004, 33(4): 684-693.
- [12] Izadi, M.R., M.A thesis, (Iran, Ahvaz, 2002).
- [13] Kapfhammer H.P., Biol Psychiatry J, 2001, 50: 978–985.
- [14] Kaviani H., Ghasemzadeh H.A. Medical faculty of University of Tehran J, 2003, 3: 171-177.
- [15] Khodapanahi M.K., Motivation and emotion, Tehran: Samt Pub, 1997.
- [16] Kisch J, Leino E.V., Silverman M.M., Suicide and Life-Threatening Behavior J, 2005, 35: 3-13.
- [17] Lotfi R, M.A thesis, Alzahra University, (Iran, Tehra, 2006).
- [18] Moradian S.T., Ebadi A, Saeid Y, Asiyabi M, Psychiatric Nursing J, 2013, 1(2): 54-61.
- [19] Mousavi R, Mousavi S.S, MahmoudiTorabi J, AbariZardkhaneh S, Scientific Research of Aja University of Medical Science J,2008, 6(2): 147-154.
- [20] Sadoughi, Z., Agilar-Vafay, M., RasoulzadehTabatabaei, S.K., Isfahanian, N, *Iranian Psychiatry Clinical Psycho J*, **2008**, 14(2): 214-219.
- [21] Salarifar M.H., Pouretemad H, Psychological Findings J, 2011, 13(4): 43-55.
- [22] Seyf, A.A., Introduction to psychology of learning, Doran Pub: Tehran. 2000.

- [23] Shirazi A, *Educat psycho J*, ShahidChamran University of Ahvaz, 3<sup>rd</sup> period, 2002, 9, 109-126.
  [24] Torres, Available in eprints.anu. edu.au/archive/ 00002617/01/02whole.pdf. 2002.
  [25] Young. Short Form, Available at http://home.sprynet.com/sprynet/schema/ysqs.htm. 1998