

Relationship between Mental Health and Anxiety Sensitivity in Students

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Abstract

The present research aims to identify some anxiety sensitivity predictors in high schoolers. In the present study, the relationship between mental health and anxiety sensitivity in third-grade male high school students was studied. In a correlational study, 150 third-grade male high school students in high school and vocational schools in Karaj were selected using cluster sampling. Mental health and anxiety sensitivity questionnaires were completed by them. Data were analyzed using correlation test. Findings showed that there is a significant relationship between three subscales of the four subscales of mental health and anxiety sensitivity. The lowest correlation was in the subscale of anxiety ($r=0.27$) and the highest correlation was in the subscale of physical function ($r=0.32$). There was no significant relationship between the subscale of mental health and the subscale of anxiety sensitivity.

Based on the research findings, it can be concluded that in the sample students, the variable of anxiety sensitivity can be predicted from the scores of the subscales of physical function, depression, anxiety, and mental health.

Keywords: Mental Health, Anxiety Sensitivity, Physical Function, Depression, Anxiety, Social Functions.

Introduction

An anxiety attribute, which has received a lot of attention in the study background of anxiety disorders is anxiety sensitivity. Anxiety sensitivity appears to be one of the important mediating variables between stress and illness. Anxiety sensitivity is assumed to be a stable tendency variable that indicates a tendency to change the physical, psychological, and social consequences of social experiences as distressing and dangerous (Reiss and McNally, quoting Hale, 2004). Anxiety sensitivity refers to the fear of anxiety, the symptoms associated with anxiety, and arises from the belief that these symptoms lead to potentially harmful physical, psychological, and social consequences (Reiss and McNally, 1985, quoting Deacon et al., 2003). People with high anxiety sensitivity often react negatively to anxiety symptoms, while people with low anxiety sensitivity, although they may experience these symptoms as unpleasant, do not consider them threatening (McNally, 1996, 1999; quoting Hale, 2004).

A person with high anxiety sensitivity considers not only stressful events, but also relatively ordinary events to be catastrophic, while a person with low anxiety sensitivity considers these events undesirable but does not catastrophize them. Therefore, it can be concluded that a person's evaluation of a stressful situation has a decisive role in its subsequent consequences.

A particular event is perceived differently by two people, depending on their evaluation of the situation, and it seems that anxiety sensitivity affects this evaluation. Accordingly, several studies show that anxiety sensitivity is an important vulnerability factor in the development and persistence of mental disorders (Taylor et al., 1992; Stewart et al. 1998; Leah et al. 1999; Argys et al. 2005; MacPherson et al., 2001; Karen Mae et al. 2015), also longitudinal research supports the role of anxiety sensitivity as a vulnerability factor for the development of anxiety disorders (Stein et al., 1999).

One of the most important issues in human life is mental health and knowing how to achieve it. The issue of health has always been taken into consideration by human beings since the beginning of human existence and for centuries. Mental health is one of the most important issues that affects the growth and development of the family and society and is one of the key psychological concepts that Keyes has defined as a combination of positive emotions (emotional well-being) and positive functioning (social and psychological well-being) (Hosseinzadeh Bafarani, 2016).

Unhealthy family relationships lead to nervous children that may eventually lead to delinquent behaviors. In contrast, favorable and healthy family relationships nurture the concept of healthy self-control, self-confidence and individual and social adjustment, comfort after the strong influence of prevailing groups and peers in children (Navabi Nejad, 2009). The relationship between children in the family is affected by factors, the most important of which are the age difference, gender, and the relationship between children and parents. Parents' relationships with their children determine the relationship between the family members. Parents' relationships with their children are constantly evolving as a result of their parents' behavior, and on the other hand, parents expect their children to respect and apply valid family values.

This causes continuous psychological actions and reactions in the relationship between parents and children. Any factor that disturbs the balance and emotional peace of a family member will also disturb the emotional balance and peace of family members (Ahadi, 2003). Adolescents need knowledgeable and rational parents to help them adjust to the environment and achieve an independent and cultured personality and to guide them in a way that brings happiness, survival, and health to the family, themselves, and society through timely supporting and leaving in order to alleviate the anxiety and specific problems in this transitional period and to reach their destination healthily. Naturally, reducing conflicts between parents and adolescents will significantly help improve parent-adolescent relationships (Biabangard, 2004).

In the results of Haji Amini et al. (2013) which was conducted on the effect of training communication skills to mothers on students' anxiety, Wilcoxon statistical test shows that the level of anxiety in the experimental group after the intervention decreased significantly (0.05). Avison (2010) also investigates the studies on the mediating role of family conflicts and parental conflicts and states that the increase of these conflicts leads to a decrease in mental health of family members.

As a result, one of the most important and responsible issues for parents is upbringing their children, which is more complex than other parental issues. The duty of parents is much more sensitive and has more responsibility for adolescence. Adolescence is period of crisis of puberty and identity, an adolescent has reached a level of consciousness that does not accept all conversations with blind obedience, parents should treat and deal with them with compelling reasons, they are interested in independence, has a different and transient emotional state, and new needs arise for them.

Therefore, parents should have enough information and awareness to be able to develop in accordance with

their development and have appropriate answers to their questions. Therefore, considering the role of mental health, in this study, the researcher seeks to answer this research question whether there is a relationship between mental health and anxiety sensitivity in students.

Methodology

The present research is a correlational study in which mental health and anxiety sensitivity in male students are examined. In this research, students were asked to answer the mental health and anxiety sensitivity questionnaires honestly. The statistical population in this study includes all third-grade male students of high schools and vocational schools in Karaj in the academic year 2018-2019. In this research, 150 male students were selected by multi-stage cluster sampling method from boys' high schools in Karaj. From the four educational districts, first, the first cluster (an educational district) was randomly selected, which was the fourth educational district.

The next cluster was three schools, and from each school the final cluster, which was the classes, was selected. Two classes from each school and a total of six classes were selected for the research sample. After collecting the completed questionnaires, two categories of descriptive and inferential statistical methods were used to analyze the obtained information. In descriptive methods, mean and standard deviation and in inferential methods, Pearson correlation test were used to test hypotheses. The data were analyzed using SPSS software.

Tools

Goldberg General Health Questionnaire (GHQ-28)

The General Health Questionnaire is a self-report-based questionnaire developed by Goldberg in 1927, based on factor analysis on the original 60-item form. This questionnaire consists of 28 four-choice questions with the following four scales, each of which has seven questions. Goldberg reported the reliability value as high and acceptable using Cronbach's alpha and re-test.

The first subscale (A) includes information about how people feel about their health and their tiredness, and physical symptoms. This subscale evaluates bodily sensory findings that are often associated with emotional arousals.

The second sub-scale (B) includes items associated anxiety and insomnia, and the third sub-scale (C) measures the extent to which individuals are able to cope with professional demands and everyday life issues and reveals their feelings about how to cope with common life situations, and finally the fourth scale (d) includes cases associated with severe depression and a specific suicidal tendency. Each answer is given a score of zero to three.

Scores between 14 and 21 in the subscale indicate the severity of the subject's situation in that factor (Taghavi, 2001).

Chung and Spears (1994) studied 223 adults and concluded that the reliability coefficient of the 28-item version of the General Health Questionnaire by re-test for the whole test, scales of morbid, physical symptoms, anxiety, social dysfunction, and depression were 0.55, 0.44, 0.42, 0.46, and 0.47, respectively.

(Taghavi, 2001)

Anxiety Sensitivity Questionnaire

This tool is a 16-item test in which questions 1 to 10 measure collective concerns and questions 11 to 16 measure mental concerns on a four-point Likert scale from zero (completely incorrect) to three (completely correct) (Deacon & Valentiner 2002 quoting Mousavi, 2011). In the corrective method of this scale, first, the translation was checked and corrected by a researcher with the cooperation of two psychology experts, then to further ensure the accuracy of the translation and the compatibility of the two English and Persian versions, the Persian translation of the test was given to two English language specialists to translate it into Persian. Hence, after several stages of checking, reviewing, and applying changes and corrections to the Persian form, the Anxiety Sensitivity Scale was prepared for research. In order to determine the reliability coefficient by the retest method, the Anxiety Sensitivity Scale was performed on 34 normal subjects with an interval of two weeks and the reliability coefficient of the retest obtained from two performances was calculated.

The value of these coefficients for the Anxiety Sensitivity Scale was 0.11. Also, this value was $r=0.74$ and $r=0.83$ for physical concerns and mental concerns in this scale, respectively. These values indicate the satisfactory retest reliability of the scale (Mousavi, 2011).

Findings

Descriptive findings

Table 1. Education levels of parents of the sample students

Education	Frequency	Percentage	Cumulative percentage
Elementary	1	0.66	1
Secondary	5	3.33	3.99
High school	7	4.66	8.65
Diploma	70	46.66	55.33
Associate Degree	20	13.33	68.64
Bachelor	25	16.66	85.3
Masters	17	11.33	96.63
Ph.D.	5	3.33	100

As shown in Table 1, most parents had a diploma degree. The mean and standard deviation for the scores of the participants in the research for each of the variables and subscales used in the research are given in Table 2. Table 2 shows the mean and standard deviation of students' scores in each of the four subscales of the independent variable of mental health, which included physical function, social function, anxiety, and

depression, and the dependent variable of anxiety sensitivity.

Table 2. Indicators of descriptive statistics of the research variables

Variable	Number	M	SD	Min	Max
Physical function	150	5.95	3.59	1	17
Anxiety	150	6.09	4.65	0	21
Social functions	150	7.45	3.26	1	20
Depression	150	2.72	4.32	0	21
Total general health	150	22.05	13.37	5	71
Anxiety sensitivity	150	45.04	10.81	25	80

As can be seen in the table above, the lowest mean in the four general health subscales is for depression and the highest mean is for the subscale of social functions.

Inferential findings

Pearson correlation coefficient was used to investigate the relationship between independent and dependent variables. For this purpose, the results of Pearson correlation test are given in Table 3.

Table 3. Results of correlation coefficient of the research variables

Criterion variable	Predictor variable
	Anxiety sensitivity
Physical function	0.32**
Anxiety	0.27**
Social functions	-0.12
Depression	0.28*
Total general health	0.31**

**p<0.01 and *p< 0.05

As can be seen in Table 3, the correlation coefficient between the variables of mental health and anxiety sensitivity in students showed that, except for the subscale of social functions of mental health, its other subscales have a significant relationship with the dependent variable of anxiety sensitivity. This correlation in the subscales is as follows: physical function ($r=0.32$), anxiety ($r=-0.27$), depression ($r=-0.27$), and general mental health ($r=0.31$).

Discussion and Conclusion

Findings showed that, of the four subscales of mental health, there is a significant relationship between its three subscales and anxiety sensitivity (except for the subscale of social functions). The lowest correlation in the mental health subscales was related to anxiety and the highest correlation was related to physical function. There was no significant relationship between social functions and anxiety sensitivity.

Family is a person's first living environment. If children see love in the family and are confident in the love of the elders, they will always have full confidence in the two factors that provide their welfare. Improper relationships between parents and children and siblings in the form of rejection by parents, lack of caress, denial of love, lack of attention to the activities and progress of children, punishment, etc. can be effective sources for conflict and mental health of children (Ahmadi, 2004).

Therefore, it seems that if children are loved in the family and ensure the continuation of the parental affection process, they will have better mental health. Explaining this finding, it can be said that a person with adequate mental health will experience less stress, which in turn will reduce anxiety sensitivity, which is consistent with the findings of Golmohammadi et al. (2016) and Haji. Amini et al. (2013), and Avison (2010).

Also, the highest correlation in the mental health subscales was related to physical function. Findings of Behera and Rangaiah (2017) showed that people who have high physical activity have higher self-esteem, better mental health, higher emotional intelligence, and high life satisfaction.

Apparently, this will also reduce the anxiety sensitivity of these people. Therefore, explaining this finding, it can be said that those who have high self-esteem and are satisfied with life are less inclined to describe ordinary negative events in their lives as catastrophic, for example, when experiencing a moment of rapid heartbeat, considering it a prelude to a heart attack or severe cardiovascular disease and becoming anxious.

Also, the lowest correlation in the mental health subscales was related to anxiety, but in any case, a significant relationship was found. Aquino et al. (2015) in a study entitled "emotional maturity, anxiety, and interpersonal communication among adolescents with separated and non-separated parents" concluded that adolescents whose parents were separated had low emotional maturity, high anxiety, and had fewer interpersonal relationships than adolescents whose parents were not separated. Finally, based on behavioral perspectives, anxiety sensitivity may also be acquired through a variety of mechanisms such as direct experience of anxiety, observational learning, verbal transmission, and misinformation (Watt et al., 1998).

Therefore, parents, as the people who have the most interaction with their children, should pay attention to a few points:-

Do not reinforce your child's anxious behavior or complaints about anxiety symptoms.

Do not act as role models or rewarders for your children by showing fearful reactions to your own anxiety symptoms or verbally conveying your opinions about the harmfulness of these symptoms.

Do not give your children false and exaggerated information about anxiety issues.

Participate in training classes to promote your children's mental health.

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