

Psychological Achievements

(Psychol Achiev), 2022,
29(Special Issue), 1-14
Received: 11 Jul 2022
Accepted: 14 Nov 2022
Doi: 10.22055/psy.2022.41319.2880

ISSN (E): 2588-6649
<https://psychac.scu.ac.ir/>



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Research Article

The Effectiveness of Schema Therapy in Experiential Avoidance and Anxiety Sensitivity of Students with Academic Procrastination

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Keywords:

Schema therapy,
Experiential avoidance,
Anxiety sensitivity,
Academic procrastination

Citation:

Farjaleh Chaabi, I.,
Mehrabizade Honarmand,
M., & Amini, N. (2022).
The effectiveness of schema
therapy in experiential
avoidance and anxiety
sensitivity of students with
academic procrastination.
*Psychological
Achievements*, 29(Special
Issue), 1-14.

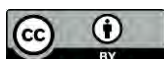
Abstract

Aim: The aim of this study was to examine the effectiveness of schema therapy in experiential avoidance and anxiety sensitivity of students with academic procrastination at Ahvaz Jundishapur University of Medical Sciences.

Methods: It was a quasi-experimental study with a pretest-posttest design with a control group. The statistical population included students with academic procrastination studying at Ahvaz Jundishapur University of Medical Sciences in the academic year 2021-2022. The first sample of the research consisted of 500 students who were selected by the multi-stage cluster sampling method. These people answered the academic procrastination questionnaire of Solomon and Roth Bloom (1984), and 152 of them who got at least one score higher than the standard deviation score were separated from Among them, 42 people who met the criteria for entering the research were selected and placed in two groups of 21 people (experimental and control group). The experimental group received schema therapy; however, the control group did not receive any intervention. Other tools of this research include. Reiss et al. (1986) Anxiety Sensitivity questionnaire, and Gamez et al.'s (1988) Multidimensional Experiential Avoidance questionnaire. the research hypotheses were tested through multivariate analysis of covariance (MANCOVA) through SPSS software (version 25).

Results: The results showed that there was a significant difference between the experimental and the control groups in the post-test phase in terms of experiential avoidance ($p < 0.0001$, $F = 42.81$) and anxiety sensitivity ($p < 0.037$, $F = 4.67$). This difference was also observed in the follow-up phase.

Conclusion: Therefore, according to the findings of this study, schema therapy can be used to reduce experiential avoidance and the anxiety sensitivity of students with academic procrastination.



1. Introduction

The academic performance of medical students and the factors affecting it is one of the concerns of the Ministry of Health in higher education. In this regard, one of the problems which many of these student's face is academic procrastination (Motieie et al., 2018). Procrastination or academic procrastination is one of the most common problems at different levels of education (Gagnon et al., 2019). Studies on the self-reports of procrastinators suggest that procrastination is increasing. Given the fact that when most people are faced with multiple and complex tasks which must be done in a short period, it is not surprising that this issue is addressed (Zacks & Hen, 2018). Research shows that procrastination (i.e., postponing tasks) is done with the awareness of its negative consequences. This irrational and harmful delay in completing homework is related to the student's mental health and emotional well-being; in many cases, it is due to clinical problems. Therefore, it can have irreparable consequences in terms of progress and failure to achieve goals (Nowruzzi, 2014). Academic procrastination represents a specific type of behavior that is potentially associated with maladaptive motivational processes and poor academic performance of individuals (Li et al., 2020).

On the other hand, experiential avoidance and anxiety sensitivity are among the clinical problems of procrastinators (Abdi & Kabudi, 2016). Avoidance refers to keeping away from the action, a person, or an object which reduces anxiety; however, it maintains anxiety in the long run. Avoidance prevents effective responses of people to emotional stimuli and the replacement of emotion management strategies; therefore, it is not an effective strategy (Yarollahi & Shairi, 2018). When inner experiences are avoided, experiential avoidance occurs. Experiential avoidance is the opposite pole of psychological flexibility. In other words, they are at the end of a continuum. Experiential avoidance is not the avoidance of objective or external stimuli, but the avoidance of internal thoughts or emotional experiences (Hayes, 2004; Kahtari Herznagh et al, 2009). In experiential anxiety, an individual does not tend to stay in touch with unwanted inner experiences because he predicts that facing unwanted experiences would increase his anxiety. As a result, reluctance to contact with emotions, thoughts, memories, and behavioral contexts is related to painful personal experiences or events which evoke them. It is an attempt to transform and reduce the frequency and duration of events that are evaluated negatively. The main characteristics of experiential avoidance are hypersensitivity to rejection and humiliation, or shame. Despite a strong desire for affection and acceptance, a feeling of extreme self-loathing causes a fear of establishing an emotional and social relationship with others for an individual. Unless, he has concluded that he is accepted unconditionally (Sadock & Sadock, 2007). Experiential avoidance is one of the clinical causes and mediators of procrastination which, if treated, can reduce students' procrastination in academic affairs (Abdi & Kabudi, 2016).

Procrastination is almost always associated with anxiety (Nowruzzi, 2014). Anxiety sensitivity, which expresses the fear of anxiety symptoms in an individual, shows a tendency to catastrophe. It is a cognitive variable in which an individual is afraid of fear and considers dealing with stressful factors equal to physical, psychological, and social harm. People with high anxiety sensitivity have a relatively higher perception of threat in terms of physical and psychological harm and a sense of shame in the crowd. These individuals, for genetic reasons or through learning, selectively process threat symptoms at a higher level (Jafari et al., 2013). The main reason for procrastination is fear and anxiety related to failure (Ferrari, 1994).

Anxiety sensitivity is significantly higher in people with procrastination than in normal people. It prevents the person from facing the triggers of anxiety; in other words, students with high anxiety sensitivity engage in procrastination to reduce their perceptions of threats to keep themselves away from stress and anxiety (Pour Sharafi & Jafari, 2019). In contrast, people with lower levels of anxiety perceive anxiety-related emotions. But, they believe that these emotions are harmless and transient; they do not focus on them (Stewart & George-Walker, 2014).

An intervention is needed to reduce experiential avoidance and anxiety sensitivity, which are among the variables affecting academic procrastination. It seems that one of these interventions can be schema therapy. To achieve this goal, schema therapy, which is one of the third-wave therapies, was selected to examine its effectiveness in reducing the avoidance symptoms and the anxiety sensitivity of students with academic procrastination. Schemas are patterns with deep and pervasive themes which are composed of memories, emotions, cognitions, and feelings; they are formed in childhood and adolescence, persistent in the path of life, and are inefficient. They may be the core of many chronic mental disorders (Young et al., 2003).

Schema therapy is a useful integrated therapy founded by Jeffrey Young; it is based on the development of the concepts and the methods of cognitive-behavioral therapy along with emotional changes, experiential techniques, and the therapeutic relationship. In this treatment, it is believed that the failure to satisfy basic emotional needs in childhood or their improper satisfaction leads to the creation of schemas which Young called the first maladaptive schemas (Young et al., 2003). Overall, "schema" is an indicator of both functional and dysfunctional cognitive functioning. Schemas are used to understand and explain the developmental nature of psychopathology based on perception, classification, observation, differentiation, and encoding of different developmental experiences and stimuli that individuals encountered throughout their lifetime (Mirdrikvand et al. 2019).

Schemas lead to biases in our interpretations of events, and these biases manifest themselves in interpersonal psychological pathology in the form of misunderstandings, distorted attitudes, misconceptions, and unrealistic expectations and objectives (Kandemir, 2014). Young introduced 15 schemas in schema theory which are: Emotional Deprivation, Abandonment, Mistrust/Abuse, Social Isolation, Defectiveness, Failure, Dependence, Vulnerability, Enmeshment, Subjugation, Self-Sacrifice, Emotional Inhibition, Unrelenting Standards, Entitlement, and Insufficient Self Control. Also, these 15 components can be classified into five domains including (1) Disconnection and Rejection, (2) Impaired Autonomy and Performance, (3) Impaired Limits, (4) Other-Directedness, and (5) Entitlement and Insufficient Self-Control (Veiskarami et al., 2019)

Early maladaptive schemas are dysfunctional mechanisms that directly or indirectly lead to psychological distress (Baser Baykal & Erden Cinar, 2022). Thus, the objective of schema therapy is to modify early maladaptive schemas which have developed in childhood and have gradually become entrenched throughout life through dysfunctional coping styles. In schema therapy, the schema model is discovered through using assessment and training (i.e., identifying early maladaptive schemas, coping styles, and evolutionary roots of these schemas in childhood). Then, strategy changes are created using cognitive techniques, experiential techniques, therapeutic relationships, and behavioral pattern-breaking (Young et al., 2003).

Changing behavioral patterns affect the experiential avoidance of people with academic procrastination. Athari et al. (2020) colleagues showed in a study that experiential avoidance directly, positively, and significantly predicted academic procrastination.

Rezapour Yaghoul (2020) concluded that early maladaptive schemas could significantly predict academic self-handicapping. Yarollahi and Shairi (2018) found that experiential avoidance could significantly predict the students' general health. In addition, Jenadeleh et al. (2018) showed that there was a significant positive relationship between anxiety sensitivity and experiential avoidance with test anxiety. Furthermore, Rahbar et al. (2018) studied the effectiveness of group schema therapy in behavioral inhibition activation systems and cognitive regulation of students with anxiety symptoms. They found that it was effective for coping with anxiety symptoms and emotion regulation schema therapy.

On the other hand, Azarbadkan et al. (2018) showed that self-handicapping had a positive and significant correlation with academic procrastination. In another Abdi and Kabudi (2016) showed that when anxiety sensitivity and experiential avoidance were at a high level, the perceived stress level was higher. Moreover, Ghaderi et al.'s (2016) study supported the effect of schema therapy on the dimensions of fear and avoidance symptoms. In addition, Sajjadi et al. (2016) concluded that schema therapy had a significant effect on increasing academic adaptation. Masoudi et al. (2016) found that schema therapy accompanied by psychological interventions could be effective in reducing the psychological disorders of the patients. Moreover, Jafari et al.'s (2013) study showed that schema therapy was a proper treatment to modify early maladaptive schemas and reduce the students' anxiety sensitivity.

Mohammad Beigi et al.'s (2012) study on the relationship between maladaptive schemas with students' procrastination and mental health showed that there was a significant positive relationship between early maladaptive schemas with procrastination and mental health in medical and non-medical students.

Furthermore, predicting general health symptoms based on early maladaptive schemas of 159 students of the Ferdowsi University of Mashhad, Shahamat (2010) showed that schemas played a mediating role in mental pathology. Bidari et al. (2021) conducted the effectiveness of schema therapy on irrational beliefs and emotional self-regulation of women with marital conflict with primary incompatible schemas. The findings showed that schema therapy is effective in irrational beliefs and emotional self-regulation of women with marital conflict with primary incompatible schemas. McCluskey et al. (2020) stated that experiential avoidance played a role in the development and the persistence of several psychological disorders, and reducing experiential avoidance (i.e., reducing the effort to suppress or prevent unwanted private experiences) could alleviate the students' anxiety. This study confirmed the mediating role of experiential avoidance.

Finally, Dire and Farajollah Chabi (2020) concluded that there was a significant direct relationship between maladaptive schemas and covert anxiety. Students with poorer academic performance had more maladaptive schemas. Thus, the objective of this study was to examine the effectiveness of schema therapy in experiential avoidance and anxiety sensitivity of students with academic procrastination at Ahvaz Jundishapur University of Medical Sciences. It should be noted that although this treatment has been considered by researchers in previous studies, its effects on the experiential avoidance and anxiety sensitivity of procrastinators have not yet been investigated.

Research studies on students' procrastination have examined each of the variables of experiential avoidance and anxiety sensitivity separately. They have shown the effect of these two clinical variables on the student's mental health. However, using new approaches in the treatment of the students' clinical problems is essential because variables such as experiential avoidance and anxiety sensitivity affect many aspects of the students' lives, especially their academic performance, both in the short and the long term. In addition,

threatening the students' physical and mental health makes it difficult for them to achieve their personal and social goals. As a result, the present study sought to find an answer to the question of whether schema therapy was effective in avoiding experiential avoidance and the anxiety sensitivity of students with academic procrastination at Ahvaz Jundishapur University of Medical Sciences.

2. Objectives

The objective of this study was to examine the effectiveness of schema therapy in experiential avoidance and anxiety sensitivity of students with academic procrastination at Ahvaz Jundishapur University of Medical Sciences.

3. Methods

3.1. Sample and Procedure

This research was a semi-experimental design with pre-test-post-test and follow-up with a control group. The statistical population includes all students with academic procrastination who were studying at Jundishapur University of Medical Sciences in Ahvaz in the first half of the academic year 1401-1401. The first sample of the research consisted of 500 students who were selected from seven faculties of Ahvaz Jundishapur University of Medical Sciences (faculties of medicine, dentistry, pharmacy, paramedicine, rehabilitation, nursing, midwifery, and health), using a multi-stage cluster sampling method. The selected people responded to the academic procrastination questionnaire of Solomon and Rothblum (1984), and 152 people whose score was one point higher than the standard deviation were separated (the cut-off point was 50). Then, among them, 42 people who met the criteria for entering the research were selected (taking into account the possibility of the subject dropping out) and were placed in two groups of 21 people (experimental and control group).

Furthermore, the participants of the control group were informed of the necessity to receive treatment at the end of the research study; they were asked to refer to the university counseling centers to receive the treatment (research schema) after receiving the research results. Then, experiential avoidance and anxiety sensitivity questionnaires were administered to the members of both experimental and control groups (pretest). The experimental group received schema therapy intervention; however, the control group did not receive any treatment. Finally, after the treatment sessions, Experiential Avoidance and Anxiety Sensitivity questionnaires (posttest) were administered to members of both experimental and control groups, and their statistical data were compared to analyze the results. Moreover, two months later, the research questionnaires were distributed again to track the effectiveness of the treatment (follow-up) in the experimental group.

The criteria for entering the students into the research include: meeting the criteria of Procrastination, i.e. getting a score of 50 or higher on the Solomon and Roth Bloom (1984) test, not having psychological injuries, not receiving any treatment (at least one month before conducting the research), not abusing substances and the desire The student was to cooperate in this research.

3.2. Research Tools

The tools of this research are:

3.2.1. Academic Procrastination Scale

The academic Procrastination Scale was developed by Solomon and Rothblum (1984). It has 27 items on a 4-point Likert scale; it includes three components. The first component is preparing for exams (8 items). The second component is preparing for assignments (11 items). The third component is preparing for end-of-term papers (8 items). Solomon (1998 cited in Motie et al., 2013) reported an internal consistency (Cronbach's alpha) of 0.64. In addition, Jokar and Delavarpour (2007) examined the validity of this questionnaire through factor analysis and correlation of items with the total score. Their results showed that factor analysis indicated the existence of a general factor, and the correlation was significant at the desired level. The reliability of the scale was reported to be 0.92. In this research study, the reliability was estimated and will be reported in the result section. In the present study, the reliability of the academic procrastination questionnaire was calculated using Cronbach's alpha equal to 0.89.

3.2.2. Multidimensional Experiential Avoidance Questionnaire

The 62-item questionnaire was developed by Gamezet al. (1988). It includes the six subscales of behavioral avoidance, anxiety avoidance, distraction, suppression, denial-suppression, and anxiety tolerance on a 5-point Likert scale. Gamez et al. (2011) examined Cronbach's alpha coefficients (between 0.91 and 0.95) in various samples. In addition, the correlation of this questionnaire with the Commitment and Practice Questionnaire (Hayes et al., 2004) was equal to 0.74, which indicated an appropriate validity. In the present study, the reliability of the experimental avoidance questionnaire was calculated using Cronbach's alpha equal to 0.96.

3.2.3. Anxiety Sensitivity Questionnaire

The anxiety Sensitivity questionnaire is an a16-item self-report questionnaire on a 4-point Likert scale. It was developed by Reiss et al. (1986). It consists of the three factors of fear of physical anxiety (8 items), fear of not having cognitive control (4 items), and fear of being observed as anxious by others (4 items) (Floyd et al., 2005). Studies on the psychometric properties of this questionnaire have shown its internal stability. To examine the internal consistency, Cronbach's alpha coefficient was calculated, which was 0.80 and 0.90. The test-retest reliability coefficients were 0.75 and 0.71 after two weeks and three years, respectively. It showed that anxiety sensitivity was a stable personality construct (Reiss et al., 1986). In Iran, Beyrami et al. (cited in Narimani & Sharbati, 2015) studied the psychometric properties of this questionnaire. Its reliability was estimated through the three methods of internal consistency, test-retest, and split-half estimate, which turned out to be 0.93, 0.95, and 0.97 for the whole scale, respectively. Furthermore, concurrent validity was estimated through the concurrent implementation of the 90-SCL questionnaire; the correlation coefficient was 0.56. The correlation coefficients with the total score ranged from 0.74 to 0.88 which were satisfactory. In addition, the correlation between the subscales ranged from 0.40 to 0.68. In this research, the reliability of the anxiety sensitivity questionnaire was calculated using Cronbach's alpha equal to 0.83.

3.2.4. Study Protocol

The summary of the schema therapy sessions according to the schema therapy protocol of Young et al. (2003) is presented as follows:

Session 1: Establishing therapeutic alliance and motivating the treatment, presenting the logic and the general objectives of the treatment, recognizing the current problem, and assessing the clients through focusing on personal history.

Session 2: Describing therapeutic schemas and maladaptive schemas, their characteristics, evolutionary roots of schemas, and the objective evidence supporting or rejecting schemas based on current and past life evidence.

Session 3: Teaching motivational schemas, the biology and the functions of maladaptive schemas, and cognitive techniques of schematic validity testing, presenting a new definition of evidence supporting existing schemas, and evaluating the advantages and the disadvantages of coping styles.

Session 4: Teaching maladaptive coping styles and responses, the concept of schema mentalities, the concept of healthy adults, and strategies for venting blocked emotions.

Session 5: Teaching healthy communication and imaginative dialogue, preparing for change.

Session 6: Having mental imagery of problematic situations and coping with the most problematic ones.

Session 7: Establishing a dialogue between the healthy aspect and the schema aspect, having a therapeutic relationship, presenting the relationship with important people in life, playing a role, and filling out the schema registration form.

Session 8: Practicing healthy behaviors through role-playing, conducting imaginary conversations, and writing letters as homework.

Session 9: Examining the advantages and the disadvantages of healthy and unhealthy behaviors, prioritizing behaviors for behavioral pattern breaking.

Session 10: Continuing behavioral pattern breaking, reviewing the content of the previous sessions, training healthy behaviors through mental imagery and role-playing, and training to overcome barriers to behavior change.

3.3. Ethical Consideration

First, the participants in both groups were asked to attend a briefing session that explained the objectives of the study. Moreover, to comply with ethical issues, written consent was obtained from the participants to report the anonymous result of the study in return for providing psychological services. It should be noted that the participants had the authority to sign this consent.

3.4. Data Analysis

The research hypotheses were tested through multivariate analysis of covariance (MANCOVA) through SPSS software (version 25).

4. Results

In the current study, to analyze the data, first, the mean and the standard deviation of experiential avoidance and anxiety sensitivity of the experimental and the control groups in the pretest and posttest phases are presented. Then, the assumptions of analysis of covariance, including the normality of score distribution, the homogeneity of variances, and the homogeneity of regression slopes were examined. Finally, [Table 1](#) shows the mean and the standard deviation of the pretest and the posttest scores of the experimental and the control groups in terms of experiential avoidance and anxiety sensitivity.

Table 1. The mean and the standard deviation of experiential avoidance and anxiety sensitivity of the experimental and the control groups in the pretest and posttest phases

Variables	Group	Pretest		Posttest	
		Mean	Std. deviation	Mean	Std. deviation
Experiential avoidance	Examination group	177.40	32.40	184.78	29.93
	Schema therapy	248.70	42.07	128.50	32.95
Anxiety sensitivity	Control group	25.72	4.57	26.90	6.11
	Schema therapy	33.05	5.90	23.29	5.92

According to Table 1, the mean and the standard deviation of the control group in terms of experiential avoidance were 177.30 (32.40) in the pretest phase and 184.78 (29.93) in the posttest phase. In addition, the mean and the standard deviation of the control group in terms of anxiety sensitivity were 25.72 (4.57) in the pretest phase and 26.90 (6.11) in the posttest phase. Furthermore, the mean and the standard deviation of the schema therapy group in terms of experiential avoidance were 248.70 (42.07) in the pretest phase and 128.50 (32.95) in the posttest phase. Moreover, the mean and the standard deviation of the schema therapy group in terms of anxiety sensitivity were 33.05 (5.90) in the pretest phase and 29.23 (5.92) in the posttest phase.

Regarding the assumptions of analysis of covariance, the assumptions of normality of the distribution, homogeneity of the variances, and homogeneity of regression slopes were examined. The Shapiro-Wilk test was used to investigate the normality of the distribution of the scores of the dependent variables. The results of the Shapiro-Wilk test showed that the distribution of the scores in terms of both experiential avoidance and anxiety sensitivity was not significant in none of the pretest and posttest phases in the experimental and the control groups ($p > 0.05$). Thus, it could be concluded that the distribution of the scores was normal and could not affect the results of the intervention. Furthermore, the assumption of the homogeneity of variances was examined using the Levene test. Due to the lack of statistical significance of this test for both dependent variables ($p > 0.05$), the assumption of the equality of the variances of the experimental and the control groups was confirmed. In addition, the equality results of the variance-covariance matrices of the MBox test in both experiential avoidance and anxiety sensitivity in the experimental and the control groups showed that the value of the MBox test was equal to 0.40, and its significance was at the level of $p < 0.945$, which was not statistically significant. This finding re-affirms the homogeneity of the variances of both dependent variables. Moreover, concerning the assumption of homogeneity of regression slopes, the results of the interaction of group F of experiential avoidance in the pretest phase showed that the pretest and the posttest regression patterns of the experimental and the control groups were not significant in terms of the experiential avoidance ($p = 0.605$, $F = 0.51$). Furthermore, the results of the interaction of group F of anxiety sensitivity in the pretest showed that the regression slope patterns of the experimental and the control groups were not significant in terms of anxiety sensitivity ($p = 0.068$, $F = 2.89$).

Then, since the assumptions of analysis of covariance were met, to investigate the effect of the intervention, multivariate analysis of covariance (MANCOVA) was performed on the mean of posttest scores while controlling the pretest scores of experiential avoidance and anxiety sensitivity. The results of MANCOVA are presented in Table 2.

Table 2. The results of MANCOVA comparing the means of posttest scores of experiential avoidance and anxiety sensitivity while controlling the pretest scores in the experimental and the control groups

Test	Value	F value	df of the hypothesis	df of error	Sig.	Effect size
Pillai's trace	0.55	22.73	2	37	0.0001	0.55
Wilks' Lambda test	0.45	22.73	2	37	0.0001	0.55
Hotelling effect	1.23	22.73	2	37	0.0001	0.55
Roy's Largest Root	1.23	22.73	2	37	0.0001	0.55

The results of Table 2 show that Pillai's trace, Wilks' Lambda test, Hotelling effect and also Roy's Largest Root were significant ($p < 0.0001$). Therefore, there was a significant difference between the experimental and the control groups in terms of at least one of the dependent variables (i.e., experiential avoidance and anxiety sensitivity). To investigate this difference, univariate analysis of covariance (ANCOVA) in Manco text was performed on dependent variables, the results of which are shown in Table 3.

Table 3. The results of ANCOVA comparing the posttest means of experiential avoidance and anxiety sensitivity while controlling the pretests in the experimental and the control groups

Dependent variable	Sorce effect	Sum of the squares	df	Mean of the squares	F value	Sig.	Effect size
Experiential avoidance	Group	32628.43	1	32628.43	42.81	0.0001	0.53
	Error	28962.03	38	762.16			
Anxiety sensitivity	Group	156.66	1	156.66	4.67	0.037	0.11
	Error	1274.39	38	33.54			

According to the results of Table 3, the F value of experiential avoidance was 42.81, which was significant at the level of 91% confidence. Hence, it could be stated that schema therapy reduced the experiential avoidance of the experimental group's experiences compared to the control group. Furthermore, the F value of the anxiety sensitivity was 4.67, ($F=4.67$) which was significant at the level of 95% confidence. Therefore, it can be said that schema therapy reduced the anxiety sensitivity of the experimental group (compared to the control group). In addition, according to the effect size, schema therapy has the greatest effectiveness in terms of experiential avoidance (effect size = 0.53) and anxiety sensitivity (effect size = 0.11), respectively.

5. Discussion

The objective of the current study was to investigate the effectiveness of schema therapy in experiential avoidance and anxiety sensitivity of students with academic procrastination at Ahvaz Jundishapur University of Medical Sciences. The research hypotheses indicated that schema therapy was effective in experiential avoidance and anxiety sensitivity of the students with academic procrastination. The results showed that there was a significant difference between the experimental and the control groups in terms of the dependent variables (i.e., experiential avoidance and anxiety sensitivity). The results showed that schema therapy is also effective in reducing experiential avoidance and anxiety sensitivity of students with procrastination, which is consistent with the results of other research (Ghaderi, 2016; Rahbar et al., 2018; Nazarandaz Korandeh et al., 2021; Ahmad Zadeh Samani et al., 2021; Ghadampour et al., 2018).

It should be noted that in schema therapy, the objective is to modify schemas because schemas are threats to our inner world; they are activated by schematics. Thus, an individual feels threatened (Ghaderi et al., 2016). In schema therapy, maladaptive schemas are targeted from three dimensions (i.e., emotional dimension, cognitive dimension, and behavioral or skill dimension) (Young et al., 2003). In the emotional dimension, discharging the negative emotions which are suppressed in childhood and creating a connection between the current emotions and fears and those of childhood reduce individuals' experiential avoidance and anxiety sensitivity by providing them with insight into considering the cause of their feelings and reactions. Since this treatment is based on the development of the concepts and methods of cognitive-behavioral therapy, in the cognitive dimension, dealing with individuals' cognitive errors and creating insights about their thinking and replacing healthy thinking to a large extent reduce their experiential avoidance and anxiety sensitivity.

There are three ways in which people react to the activation of their schemas. Some flee their schemas (i.e., avoidance style), some fight their schemas (i.e., extreme compensation style), and some succumb to their schemas. The use of these styles is the result of two factors: the initial mood and the learning patterns. Thus, they can be changed to a large extent. Schema therapy training challenges the unhealthy coping styles of procrastination and replaces them with healthy coping styles (healthy adult style). A healthy adult is an individual who does not run away from problems and does not give up. However, he tries logically and does not compensate excessively. As a result, through changing behavioral patterns, the experiential avoidance of procrastinators would be reduced, and people would be exposed to schematics. As a result of exposure, people's anxiety sensitivity would also be decreased; decreased anxiety sensitivity, in turn, is effective in reducing experiential avoidance.

On the other hand, It takes a lot of time for people to face the schema of stimuli because as a result of the exposure, the anxiety sensitivity of people also decreases. In this research, conducting only ten sessions of schema therapy caused the effect size on anxiety sensitivity to be small, with an increase in the number of schema therapy sessions, the effect size will probably be larger.

In the third dimension of schema therapy, after healthy adult training, skill training is performed. In addition to reducing anxiety sensitivity and experiential avoidance, according to the research results, improving these skills in procrastinators is probably effective in stabilizing the therapeutic effects (in the follow-up phase). The effectiveness, sustainability, and efficiency of schema therapy have increased the interest in its use because behavioral therapies and exposure therapy, without deep cognitive approaches, would make the treatment difficult for the students (Sohrabi, 2015).

6. Limitation and Recommendation

The limitations of the researchers in this research include problems related to the corona pandemic, and problems related to student procrastination, which caused the number of subjects to drop to 21 in each experimental and control group. Based on the above-mentioned discussion and conclusion, it is suggested that, through early identification of the students with academic procrastination and their timely treatment, efforts be made to eliminate their anxiety sensitivity and their experiential avoidance. According to the results of this study, schema therapy is recommended as one of the useful treatments to reduce the

clinical symptoms of students with academic procrastination. Hence, counseling offices of medical universities can use this treatment to reduce the clinical symptoms of procrastination and its consequences to reduce the experiential avoidance and anxiety sensitivity of students with academic procrastination.

7. Conclusion

Therefore, according to the findings of this study, schema therapy can be used to reduce experiential avoidance and the anxiety sensitivity of students with academic procrastination.

8. Author Contributions

In the present study; the research design, the process of data collection, analysis and interpretation of the findings, was done by researchers and discussed with colleagues and professors of technology.

9. Acknowledgment

The present research would not have been possible without the cooperation of the participants; we hereby acknowledge and thank all the participants.

10. Conflicts of Interest

There are no conflicts of interest.

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