



Journal of Fundamentals
of Mental Health



Mashhad University
of Medical Sciences



Psychiatry and Behavioral Sciences
Research Center

Original Article

The relationship between irrational beliefs and perfectionism with academic procrastination

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Abstract

Introduction: The general objective of the present study was the relationship of irrational beliefs and perfectionism with academic procrastination.

Materials and Methods: The statistical population of this descriptive-correlational study included all female students of high schools in Shiraz in academic year 1393-1394. The number of 300 students was selected by multistage clustering sampling method. The measurement tools used in this study included academic procrastination scale (Solomon and Rothblum 1984), IBT-A test (Ebadi and Motamedian 1384) and positive –negative perfectionism scale (Terry Short et al 1995). For data analysis, the descriptive statistics and regression analysis were used with SPSS.

Results: The results of simultaneous multiple regression analysis showed that irrational belief of helplessness for change can positively and negatively predict academic procrastination and demand for approval can negatively predict academic procrastination. Also positive perfectionism can negatively predict academic procrastination and negative perfectionism can positively predict academic procrastination.

Conclusion: According to the obtained results, the irrational beliefs and perfectionism can predict academic procrastination.

Keywords: Academic procrastination, Irrational beliefs, Perfectionism

Please cite this paper as:

Naddafi L, Kouroshnia M. The relationship between irrational beliefs and perfectionism with academic procrastination. *Journal of Fundamentals of Mental Health* 2016; 18(Special Issue): 531-540.

Introduction

Due to its complexity, understanding many human behaviors is very difficult and one of the concerns of psychologists and researchers. One of these complex behaviors is procrastination. Procrastination or postponing things to the future is a habit that exists in many people to the extent

that researchers believe that this feature is an innate human tendency. Ellis and Naas (1) defined procrastination as the tendency to avoid activities, assign work to the future, and use excuses to justify the delay in activities. There are various types of procrastination, but the most common form is academic procrastination.

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Received: Aug. 22, 2016

Accepted: Sep. 29, 2016

Solomon and Rothbloom (2) have described the tendency to procrastinate academically, such as doing homework, preparing for an exam, or the term "last-minute paper." Also, Rothblum et al. (3) have defined this type of procrastination as the dominant and constant desire of learners to postpone academic activities, which is almost always accompanied by anxiety. A clear example of that is postponing the study of lessons until the night of the exam and the resulting haste that plagues the student. Steele (4) showed that problematic academic procrastination among undergraduate students is estimated to be at least 70-95%. The existence of procrastination among students leads to adverse consequences, which not only cause academic failure, probation, lack of necessary expertise and even dismissal, but also waste material and spiritual resources of them and the society.

The high prevalence of procrastination has caused many studies to be conducted on the factors affecting procrastination. One of the factors that seems to be effective in its occurrence is perfectionism. Perfectionism is a personality construct and is characterized by characteristics such as striving for completeness, perfection, and setting very extreme standards in performance along with a tendency to critically evaluate behavior (5). Johnson and Sloaney (6) hypothesized that procrastination is a problem experienced by perfectionists. Because perfectionists want to create the best work, painting or new innovation. So, due to doubt and thinking and reflection, they suffer procrastination and delay in the beginning or end of the work, and sometimes it is possible that their final product and effect may never even be completed. Kagan et al. (7) conducted a research on the academic procrastination behavior of students with regard to perfectionism, obsession and five personality traits of students of different universities and concluded that perfectionism, obsession and personality traits are important variables that procrastinate behavior They explain education. In their research, Tamnai Fard and Mansouri Nik (8) explained academic procrastination based on personality traits, perfectionism and life satisfaction of students. The results of this research showed that there is a significant relationship between the personality traits of perfectionism and life satisfaction with

academic procrastination. The results of regression analysis showed that responsibility and perfectionism are predictors of academic procrastination. In the framework of opposite styles, Weiner and Carton (9) showed that dimensions of perfectionism, which are concerned about being evaluated, when faced with challenging tasks such as an exam, deal with problems more passively and avoidably than with a solution approach. Question. In this way, society-oriented perfectionists, whose fear of evaluation is one of their characteristics, tend to use an avoidance approach when faced with the thesis instead of actively engaging with this task. Therefore, they choose procrastination as a strategy to deal with the problem so that their ability is not evaluated.

Other factors that can be effective in the occurrence of procrastination are irrational beliefs. According to Bernard, irrational beliefs are desires and goals that become necessary preferences, so that if they are not fulfilled, they cause confusion (10). According to Jaradat, supporters of the cognitive theory consider irrational beliefs to be the basis of negligent behavior. Some learners act irrationally when they measure their worth only based on their ability to do assignments and avoid completing assignments so that others cannot evaluate their true ability to do assignment (11). Many cognitive characteristics such as expectation of definite success (Barka and Yuen) (12), irrational beliefs (Felt et al.) (13) and fear of failure (2) are seen in perfectionists and procrastinators. Balkis et al. (14) investigated the relationship between logical and irrational beliefs, time management for studying and exams, and academic progress. The results showed that logical beliefs have a direct effect on procrastination and time management for studying and exams. In his research, Begi examined the relationship between dysfunctional schemas, procrastination and mental health of medical and non-medical students of Shahid Beheshti University of Medical Sciences. The findings of this research indicate that there is a significant positive relationship between initial ineffective schemas and procrastination. In general, this research confirms the role of primary dysfunctional schema in psychopathology and neglect (15). Bridges and Roig (16) in a research to investigate

the role of irrational thinking on academic procrastination of high school students concluded that there is a correlation between academic procrastination and irrational thinking of students. After a 3-week training on correcting irrational thinking, they observed a significant improvement in students' performance and academic performance.

Considering the role that each of the variables of perfectionism, irrational beliefs and negligence have in the behavior, health and successes and even failures of humans and also, considering Since little research has been done on how these variables affect each other in Iran, the present study was conducted with the aim of investigating the relationship between irrational beliefs and perfectionism with academic procrastination.

Materials and Methods

This research was correlational. The statistical population included all female secondary school students (second period) in the four districts of Shiraz city who were studying in the academic year 2003-2014. From this population, a sample of 300 people was selected by multi-stage cluster random method. In order to collect information, the academic procrastination scale of Sulmon and Rothbloom (2), the perfectionist scale of Terry Short et al. (17) and the Ahvaz irrational beliefs test (18) were used.

Research instruments

A) Academic Procrastination Scale: It made by Solomon and Rothbloom (2) and has three components: "Procrastination in preparing for exams", "Procrastination in preparing assignments" and "Procrastination in preparing end-of-semester essays". This questionnaire contains 27 items, in front of each item, there is a range of four options: rarely (score 1), sometimes (score 2), often (score 3) and almost always (score 4). In addition to the mentioned 21 questions, 6 questions (Questions 7, 8, 18, 19, 26, 27) have been considered to measure the two characteristics of discomfort towards procrastination and the desire to change the habit of procrastination. Items 2, 4, 6, 11, 13, 15, 16, 21, 23 and 25 are graded in reverse on this scale. The minimum and maximum score in this scale are 27 and 108, respectively. Jokar et al.

(19) have investigated the validity of this tool. The results of factor analysis using the method of principal components with Varimax rotation have confirmed the validity of the scale constructs. The value of KMO coefficient by these researchers was 0.88 and Bartlett's sphericity coefficient was equal to 2158.38 and was significant at the level of less than 0.001. Also, the degree of internal consistency, as an indicator of the validity of the scale, was reported as 0.85 in procrastination in preparing for the exam, 0.86 in procrastination in preparing for assignments, and 0.89 in procrastination in preparing essays. Also, in Jokar et al.'s research (19), the reliability coefficient of this scale was obtained using Cronbach's alpha method of 0.91. In Hossein Chari and Dehghani's research (20), the reliability coefficient of this scale was reported as 0.79 using Cronbach's alpha method. In the research of Temanaifar and Moghadsin (15), the reliability of this scale was 92/92 using Cronbach's alpha method. Is obtained. In his research, Hashemian (21) has confirmed the validity of this scale with the factor analysis method and also obtained the reliability coefficient of this scale with Cronbach's alpha coefficients and half for the academic procrastination scale, respectively 0.73 and 0.69, which indicates acceptable reliability of this scale. In the present study, the reliability of this questionnaire was obtained using Cronbach's alpha method of 0.77.

B) Positive and Negative Perfectionism Scale: It was created by Terry Short et al. (17). This scale has 40 questions, 20 of which measure positive perfectionism and 20 of which measure negative perfectionism. Questions 2-3-6-9-14-16-18-19-21-23-24-25-28-29-30-31-32-34-35 and 37 Positive perfectionism and questions 1-4-5-7-8-10-11-12-13-15-17-20-22-26-27-33-36-38-39 and 40 measure negative perfectionism. Questions on a 5-point Likert scale from 1 (completely disagree) to 5 (completely agree) measure a person's perfectionism in two dimensions, positive and negative. The minimum score is 20 and the maximum score is 100 in each subscale. In Iran, Basharat (22) in a research titled perfectionism and self-respect in pre-university students, Cronbach's alpha coefficient of positive and negative scales of perfectionism in a sample of 212 people obtained 0.90 and 0.78. Also, he obtained the internal consistency coefficient of

positive perfectionism and negative perfectionism of 0.90 and 0.97, respectively. In the present study, the reliability of this questionnaire was obtained using Cronbach's alpha method of 0.79.

C) *Ahvaz 4-factor Irrational Beliefs Test (4IBT-A)*: It was created by Motamedin and Ebadi (18) from the 10-factor Jones Irrational Beliefs Test (23) using the factor analysis method. This test is considered a valid test related to measuring the amount of irrational thoughts and is used in various fields such as project implementation, diagnosis, treatment, etc. by researchers, therapists, counselors, psychologists and students. The test has 40 questions and four factors (1- Helplessness against change, 2- Expecting approval from others, 3- Avoiding problems and 4- Emotional irresponsibility). Questions 1 to 15 are related to the first factor, questions 16 to 25 are related to the second factor, questions 26 to 30 are related to the third factor, and questions 31 to 40 are related to the fourth factor. Questionnaire scoring is based on a 5-point Likert scale, which is done by assigning scores (4, 3, 2, 1, and 5) for the options (strongly disagree to strongly agree), the minimum

possible score is 40 and the maximum score of this test is 200. A score between 40 and 80 indicates weak irrational beliefs, a score between 80 and 120 indicates moderate irrational beliefs, and a score above 120 indicates strong irrational beliefs in a person. In the study of Motamedin and Ebadi (18), the convergent validity coefficient of the 4IBT-A test was mentioned as 0.87. The reliability coefficient of the whole test was obtained through Cronbach's alpha of 0.79. Using Cronbach's alpha method, Motamedin et al. (24) obtained the reliability of the test for the factors and the whole test as 0.77, 0.68, 0.59, 0.68 and 0.86. In the present study, the reliability of this questionnaire was obtained using Cronbach's alpha method of 0.88.

Results

In this section, first the descriptive findings of the research variables and then the results of the regression analysis which were conducted to test the hypothesis are presented. Descriptive information including mean, standard deviation and range of scores of the research variables are given in Table 1.

Table 1. Descriptive indices of irrational beliefs variable

Variables		Average weigh	Standard deviation	Minimum score	Maximum score
Irrational belief	Helplessness for change	3.04	0.64	1.8	4.87
	Demand for approval	3.39	0.74	1.6	5
	Problem avoidance	2.73	0.81	1	4.4
	Emotional irresponsibility	2.79	0.72	1	5
	Total Irrational belief	2.99	0.56	1.73	4.6
Perfectionism	Positive perfectionism	3.77	0.54	2/55	5
	Negative perfectionism	3.32	0.45	2/45	4
Procrastination	Total perfectionism	2.27	0.49	1.06	3.78

As can be seen in Table 1, the average of irrational beliefs is 2.99 and the highest average is related to the expectation of approval from others and the lowest average is related to the belief of avoiding problems, and the average of positive perfectionism is 3.77 and the average of

perfection Negativity is 3.32 and the average procrastination is 2.27.

To test this hypothesis, Pearson's correlation coefficient was first used, the result of which can be seen in the form of correlation matrix in Table 2.

Table 2. Variable correlation matrix of illogical beliefs and academic procrastination

Variables	1	2	3	4	5	6
Helplessness for change	1					
Demand for approval	0.45**	1				
Problem avoidance	0.56**	0.33**	1			
Emotional irresponsibility	0.60**	0.30**	0.50**	1		
Total irrational belief	0.83**	0.67**	0.797**	0.778**	1	
academic procrastination	0.20**	0.04	0.19**	0.17**	0.17**	1

As can be seen in the last row of Table 2, there is a significant direct relationship between helplessness against change, problem avoidance, emotional irresponsibility and total irrational

beliefs with students' academic procrastination at a level of less than 0.01. Then, multiple regression was used simultaneously, the result of which can be seen in Table 3.

Table 3. Prediction of academic procrastination through irrational beliefs

Variables	R	R ²	F	P<	β	T	P
Helplessness for change					0.18	2.27	0.02
Demand for approval					-0.18	-2.83	0.005
Problem avoidance	0.27	0.07	6.03	0.001	0.12	1.72	0.08
Emotional Irresponsibility					0.05	0.71	0.47

According to Table 3, it can be seen that the F ratio and its significance level indicate the significant effect of the variables in the regression equation. R² or coefficient of determination calculated based on these variables is 0.07. That is, these variables predict 7% of the variance of the academic procrastination variable, and according to the beta coefficients and the significant level of the t value, we realize that

helplessness against change can predict academic procrastination in a positive direction ($P < 0.05$) and $\beta = 0.18$ and the expectation of approval from others can predict academic procrastination in the reverse direction, $P < 0.01$ and $\beta = -0.18$.

To test this hypothesis, Pearson's correlation coefficient was first used, the result of which can be seen in the form of correlation matrix in Table 4.

Table 4. Correlation matrix of perfectionism variable and academic procrastination

Variables	1	2	3
Positive perfectionism	1		
Negative perfectionism	0.38**	1	
Academic procrastination	-0.23*	0.11*	1

* $P < 0.05$ ** $P < 0.00$

As can be seen in the last row of Table 4, there is an inverse and significant relationship between positive perfectionism and academic procrastination of students at the level of less than 0.05 and between negative perfectionism and

academic procrastination of students at the level of There is less than 0.05 significant direct relationship. Then, in order to test this hypothesis, multiple regression was used simultaneously, the result of which can be seen in Table 5.

Table 5. Prediction of academic procrastination through perfectionism

Variables	R	R ²	F	P<	β	T	P
Positive perfectionism	0.32	0.10	16.94	0.001	-0.325	-5.45	0.001
Negative perfectionism					0.242	3.98	0.001

The data in Table 5 shows that the F ratio and its significance level indicate the significant effect of the variables in the regression equation. The regression effect ($F = 16.94$) was obtained, which is significant at a level less than 0.01, and the coefficient of determination (R^2) calculated based on these variables is 0.10, that is, these variables account for 10% of the variance of the procrastination variable. They predict education. And according to the beta coefficients and the significance level of the t value, we find that positive perfectionism is able to predict academic procrastination in the reverse direction ($P < 0.01$ and $\beta = -0.325$), negative perfectionism is able to predict Academic procrastination is in the direct direction ($P < 0.01$ and $\beta = 0.242$).

Discussion

The findings showed that although helplessness against change, avoidance of problems, emotional irresponsibility have a direct and meaningful relationship with students' academic procrastination, the irrational belief of helplessness against change, in the positive direction, and the expectation of approval from others in the opposite direction, are able to advance. They are academic procrastination. In the following, each of these results will be explained.

The first finding was that the irrational belief of helplessness against change has a direct and significant relationship with academic procrastination. Also, it is able to predict academic procrastination positively and meaningfully. This finding means that people who are under the influence of the irrational belief of helplessness against change, are negligent in their affairs. This finding is consistent with the findings of Balkis et al. (11), Bridges and Roig (13), Tahidi et al. (28) and Heydari et al. (29). In explaining this finding, it can be said that the irrational belief of helplessness towards change means a person's

belief that past events and experiences are the absolute determinant of his behavior and their effects cannot be eliminated. Such people do not want to change. Because the need for change is to question past experiences and thoughts, and delving into the past causes tension in these people. Therefore, they continue to take advantage of their past experiences and ineffective behaviors in current affairs, and since this false belief and the behavior caused by that person cause many problems, they postpone things as much as possible and as far as possible. They continue to procrastinate, and this procrastination has unpleasant consequences for them.

Another finding of the current research indicated that the irrational belief of expecting approval from others, although it has no significant relationship with academic procrastination, but it is capable of predicting academic procrastination in a negative and meaningful way. This finding means that in order to be approved by others, a person tries to do things right and avoid negligence. This finding is in line with the findings of Parshaish and Inteziri (25) and inconsistent with the findings of Felt et al. (10), Wing et al. (30), Touhidi et al.) and Heydari et al. (29). A person who expects approval from others is less self-directed and more a follower of others, and does his work at the request of others or delays in doing it. Here, although the irrational belief of expecting approval from others individually does not have a significant relationship with academic procrastination, but this variable has a significant combined effect with the variable of procrastination. This means that the expectation of being approved by others does not have a significant relationship with procrastination by itself, but when it is combined with the belief of helplessness against change, it prevents the occurrence of procrastination. It seems that when the approval of others depends on making

changes in the person and controlling their behavior more, the person stops neglecting to gain or maintain this approval.

Another finding of the current research stated that the irrational belief of avoiding the problem has a direct and meaningful relationship with academic procrastination, but it is not able to predict it. This finding means that people who are afraid of facing problems, postpone their work and responsibilities and are constantly neglecting their affairs. This finding is in line with the findings of Balkis et al. (11), Tahidi et al. (29) and internal (32). Since academic affairs require effort and tolerance of problems, there is a direct relationship between the belief of avoiding problems and academic procrastination. Despite this direct relationship, the irrational belief of problem avoidance is not able to predict academic procrastination. It seems that the reason for this is the power of predicting the irrational belief of helplessness against change and at the same time its correlation with the irrational belief of problem avoidance. Because in dealing with academic problems and to solve them, a person must make changes in himself and replace the wrong experiences of the past with new solutions, which is contrary to the belief of helplessness in the face of change. This belief avoids problems and procrastination.

The next finding of the current research was that the irrational belief of emotional irresponsibility has a direct and meaningful relationship with academic procrastination, but it is not able to predict procrastination. This finding means that a person who is influenced by the irrational belief of emotional irresponsibility considers all his discomforts and emotional disorders to be influenced by external factors. For this reason, he is negligent in many matters and blames external factors for this performance. This finding is consistent with the findings of Balkis et al. (11), Beigi (12), Bakshaish and Inteziri (26), Karimian Fard (31), Alizadeh Sahraei et al. (28), Heydari et al. (29) and Dronkalai (32). is. The irrational belief of emotional irresponsibility prevents the timely completion of academic affairs and leads to procrastination. However, despite the existence of a positive relationship between this belief and academic procrastination, this belief is not able to predict academic procrastination. It seems that here too the

irrational belief of helplessness against change overshadows the belief of emotional irresponsibility. In this sense, believing that the adverse effects of past unpleasant events will not change, diminishes the role of believing in the involvement of external factors in the occurrence of unpleasant events. The findings showed that positive perfectionism has a direct and meaningful relationship with students' academic procrastination, and negative perfectionism has a direct and meaningful relationship with students' academic procrastination. Also, positive perfectionism can predict academic procrastination negatively and negative perfectionism can predict academic procrastination positively. One of the findings of this research was that positive perfectionism has an inverse and significant relationship with students' academic procrastination. Also, it is able to predict academic procrastination negatively. This finding shows that people with positive perfectionism strive to reach the goal and do not procrastinate in this way and avoid procrastination, and the higher the positive perfectionism, the lower the probability of procrastination. Was. This finding is in line with the findings of Hashemi and Latifian (33), Shibani (34), Tamnai Fard and Mansoori Nik (15), Moghadsin et al. (35), Hashemi (36), Fathi Jahrami (37), Sheikhi et al. (38).), Nowrozi (39), Fatehi et al. (40), Kuroi et al. (41), Birami et al. (42) and inconsistent with the findings of Kleibert et al. (43), Maszynski and Akamatsu (44). People with positive perfectionism feel freedom in doing things and try to do the best. Also, success in doing things strengthens positive perfectionism and strives harder to achieve higher goals. These people do not procrastinate and do not tend to procrastinate.

The last finding of this research showed that negative perfectionism has a significant direct relationship with academic procrastination of students and is able to positively predict academic procrastination. This finding indicates that abnormal (negative) perfectionists are more likely to fail and feel dissatisfied in their work due to unrealistic goals and expectations. As a result, they tend to procrastinate more, and the increase in negative perfectionism increases the probability of procrastination in these people. This finding is in line with the findings of Weiner

and Carton (16), Rice and Delo (45), Milgram et al. (46), Felt et al. Nik (15), Moghadsin et al. (35), Hashemi (36), Sheikhi et al. (38), Nowrozi (39), Fatehi et al. (40), Birami et al. (44), Fathi Jahrami (37), Kuroi et al. (41). Regarding the relationship between procrastination and negative perfectionism, it can be said that a person who always thinks about the perfection of things, nothing can convince him. Because of this, this person is always experiencing anxiety. Because he is afraid that his work will not turn out well and for this reason, he neglects to start the work. In this way, avoiding work and procrastination in these people will first appear as an excuse and then as a habit. The family is one of the institutions that has the greatest impact on the formation of students' beliefs. It is suggested that by holding educational sessions for families, they

will be provided with the knowledge of illogical beliefs and how to correct them.

Since academic procrastination is very common among students, it is suggested that parents and teachers evaluate the irrational belief of helplessness in the face of change in students and correct it if such a belief exists. Conducting family education sessions to know the negative and positive dimensions of perfectionism and their effects on students' procrastination is the last suggestion of this research.

Conclusion

According to the obtained results, irrational belief of helplessness against change, expectation of approval from others as well as positive and negative perfectionism can predict academic procrastination.

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