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## Relationships between Academic Achievement with Personality Traits and Early Maladaptive Schemas with Self-Determination Mediation in Students

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#### **Abstract**

**Purpose:** The aim of this study was to investigate the relationship between the components of academic performance with personality traits and early maladaptive schemas mediated by self-determination.

**Methodology:** The research method was descriptive-correlation and structural equation modeling. The statistical population of the present study included all female high school students in Tehran in the academic year 2019-2020. For this purpose, 350 students were selected by simple random sampling. Then their scores were measured through the Academic Procrastination Scale, Solomon and Rothblum (1984), Young Schema Short Form (2003), Neo-Form Short Personality Questionnaire (1985), Guardia, Desi and Ryan (2000) Self-Determination Questionnaire. Path analysis, structural equations and regression test were used.

**Findings:** Pearson correlation coefficient and path analysis showed that there is a positive and significant relationship between all components of academic affiliation with the components of early maladaptive schemas and the role of self-determination is in the relationship between the two. Also, the relationship between all components of academic work and personality traits except psychosis was negative. The relationship between the end-of-semester exam component of academic work with conscientiousness and agreement of personality traits was not significant and the role of self-determination in the relationship between these two variables is indirect.

**Conclusion:** According to the results of the present study, the importance and role of self-determination in reducing academic procrastination can be understood.

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#### 1. Introduction

Procrastination is a behavioral problem that is very common among the general public (Howell & Watson) and means avoiding, prolonging, and postponing work or task to be completed (Schraw, Wadkins & Olafson, 2007). Procrastination is a complex process that encompasses a variety of emotional, cognitive, and behavioral dimensions. The procrastinator delays the completion of necessary tasks while focusing on fruitless and less necessary tasks (Khodadoost, 2015). This feature is one of the behavioral problems that occur in most situations of daily life, including academic performance (Rosário & et al, 2009). Many pupils and students procrastinate in completing their homework and postpone it to another time, which is referred to as academic procrastination. In this type of procrastination, the person delays homework until the last moment, such as preparing for exams. In procrastination, a person procrastinates in completing his / her academic homework and postpones it to another time, and delays homework like preparing for exams (Basco, 2010). Different studies have reported the prevalence of academic work differently. In some studies, the prevalence of Iranian students' workload has been reported to be about 40 to 60% and in others up to 95%, and it is more common among students who have graduated from high school and entered the university (Mohammadi Qaleh Taki, Qamrani, Barmak 2014).

This condition can also be traced to students abroad. Prevalence of labor in Obrien (2002) research, 80 to 90% in the study of Ozer, Demir & Ferrari (2009) between 40 to 95% in the study of Ozer & Saçkes (2011) 38% in the study of Burnam (2014) more than 50%. Procrastination is defined as the delay in starting or completing a course of action to the irrational delay in continuing the action, and this delay is associated with mental distress (Tamadani, Hatami, Hashemi Zarini 2010). Prodigal people have no rational reasons for delaying homework (Klassen, Krawchuk & Rajani, 2008; Steel & Klingsieck, 2013; Durakiewicz, 2016). In other words, procrastination is a common form of failure in self-regulation in which one usually delays work intentionally and intentionally. Grunschel, et al (2013); in examining the profile of academic procrastination, he presented four distinct types of delays that can explain the reasons for procrastination. These four types are intangible delay, delay due to stress due to success in a task, delay due to anxiety / anxiety, and delay related to dissatisfaction with the study. In the first two types, academic procrastination is purposeful and less severe, and the person delays his academic activity for a short time. The third and fourth types, on the other hand, are more likely to be deficient in self-discipline, neuroticism, and a lack of responsibility. Although in recent years, numerous studies have been conducted separately in the field of academic employment and related variables, but limited research has been conducted on the factors affecting academic employment both abroad and in our country.

Incompatible schemas are among the psychological factors affecting academic procrastination and its persistence that are considered by a wide range of researchers. Yaghoubizadeh (2015) showed in his research that early maladaptive schemas are able to predict academic engagement. He pioneered the use of the term schema in the cognitive domain of Jean Piaget (Alfasfos, 2009). Piaget saw schema as the fundamental structure by which one's knowledge is mentally described. He uses the terms absorption and adaptation in terms of schema. Schemas are formed from childhood in the interaction of the environment based on pleasant or unpleasant experiences and become more complex day by day due to repetition. Schema structures are formed based on reality so that people can explain their experiences with their help (Saif, 2015). Some of these schemas are inconsistent and make one incapable of having a consistent pattern through which one can explain external events. These schemas are interpersonal in nature, and relate to a person's deepest beliefs about connecting with important people in his or her life. Schemas establish themselves over time in a way that prevents one from having a firm belief in oneself, others, or the world (Alfasfos, 2009). It should be noted that the concept of maladaptive schemas was first proposed by Yang. He believed that schemas are not always positive and adaptive and can be negative and inconsistent (Unoka, 2010). They are profound patterns of learning and arise from memories, emotions, cognitions, and bodily feelings rooted in childhood. They are persistent and highly inefficient in life and may be the

core of personality disorder. Form mild cognitive problems and many chronic Axis I disorders (Roelofs, 2013). Abandonment, distrust, deprivation, disgrace, isolation, vulnerability, self-evolving, failure, obedience, and emotional inhibition are examples of early maladaptive schemas (Young, Klosko, Weishaar, 2003). For example, in the scheme of stubborn criteria, a person is determined to do homework first, but may later lose his power and refuse to give homework. Other research suggests an association between early maladaptive schemas, personality traits, and empathy. In Young et al (2003), early maladaptive schemas were associated with personality traits (Alfasfos, 2009). In Thimm (2010) research, there was a relationship between early maladaptive schemas and the neuroticism component of personality. In the previous lines, it was said that there is a relationship between early maladaptive schemas and working schemes. On the other hand, personality traits play a role in creating educational attitudes of individuals. In the study of Kagan et al (2010), personality traits such as neuroticism and conscientiousness predicted academic procrastination. The results of Suri Nejad, Farhadi, Kordoonqabi, (2015) showed that personality traits are a significant predictor of academic procrastination. Or some components of personality traits such as flexibility are associated with academic procrastination (Karatas, 2015).

Personality can be studied in terms of how people are different or what they are similar to. Although the personality of individuals is unique, but the personality of different individuals has certain commonalities, according to the definition of personality is a set of relatively stable and stable mental, emotional and social characteristics of the individual (Schultz & Schultz, 2017). Thus, a person's personality remains relatively constant, but growth and experience can change it (Fist & Fist, 2016). Various theories have been proposed on how personality traits are formed. There is some evidence that some neural messages play a role in the evolution, growth, and expression of various personality traits, but there are insufficient reasons for them to shape and create personality (Atkinson et al, 2016). Self-determination is another psychological factor that affects academic procrastination. Based on the available resources, the self-determined individuals do their homework voluntarily; and their motivation is to do internal affairs (Cerino 2014).

Individuals see homework assignment as an opportunity for their abilities to emerge. They are willing to challenge their ability to interact with the environment, and according to Harlow, what they learn is teaching (Olsen & Hergenhahn, 2016). According to the findings of Akinsola, Tella & Tella (2007), people learn problem-solving techniques as they get older and will use them in the next steps. If they encounter a problem while doing their homework, they try to solve it, and by avoiding negative prejudices, they do not trap themselves in inconsistent schemas. This factor will most likely be effective in reducing academic procrastination. It was also found that self-determinants have positive personality traits and take responsibility for their own failures and do not expect rewards from others. Individuals have a decisive plan in implementing the goals; they use precise and calculated plans to execute the decision; they also have close monitoring and control during the implementation of the program (Hatami et al, 2013). Their assessment of the situation and the use of their capabilities are realistic. They have a healthy mental structure and, according to Piaget, use the process of absorption and adaptation in order to organize the mental structure (Saif, 2015). Thus, their mental structure is a complete mirror of the world around them. According to Kant, there is no significant difference between object and subject.

The types of intrinsic-external motivations, and their basic psychological needs, the specific environment and tendencies that affect the needs and types of motivations constitute the main elements of self-determination(Deci & Ryan, 2008). According to Desi & Ryan, autonomy, competence and communication are the three basic psychological needs in self-determination and are considered as the basis of a wide range of human behaviors. The results related to self-determination can be examined from two dimensions of direct relationship and mediation. The results of Burnam et al (2014) showed that students with low self-determination have higher academic performance. According to Johnson & Nishimura (2013), procrastination has an adverse effect on people's time and health. Considering the harmful and

negative consequences of procrastination on students' academic performance, the importance of studying its determining factors is necessary and important. In short, the prevalence of procrastination among different sections of society, including pupils and students, has raised concerns about what this process will lead to. The growing trend of procrastination and its destructive effects on personal, social and educational life have caused people, especially adolescents and young people, who are considered to be the crucial part of society, not to use their full potential. Therefore, the study of factors affecting academic performance is one of the topics that can play a constructive and key role in the design of educational programs and students' academic achievement. One of the most important goals of educational systems that have always been considered by researchers is to nurture motivated, purposeful, progressive and efficient learners. The knowledge of psychology, especially in the field of motivation and learning based on its research findings, has played the greatest role in advancing this path and has always had great achievements in identifying and understanding human behavior as well as improving his abilities. With the help of this research at the student level; Therapists and educators can develop practical plans to prevent the development of procrastinating self-destructive thoughts and behaviors so that they can educate students and adolescents during and even after graduation. Protect them from negligence.

Whereas students are the main asset and the builders of the future of any country and play a pivotal role in its development; Therefore, attention to the growth, maturity and flourishing of their talents has been constantly considered by the educational system. In order to achieve this, addressing the harmful factors (such as academic procrastination) on academic achievement is of particular importance. Given the above, the present study tries to test this model, whether the model of students' academic engagement can be explained based on maladaptive schemas and personality traits mediated by self-determination?

## 2. Methodology

The research method was descriptive-correlation and structural equation modeling. The statistical population of the present study included all female high school students in Tehran in the academic year 2009-2010. Sample size according to the number of statistical population (4000 people); According to Morgan's table, 350 people were counted. Sampling was done by simple random sampling. Research instruments included the Academic Procrastination Scale, Solomon and Rothblum (1984), the YOUNG Schema Short Form (2003), the Neo-Short Form Personality Questionnaire (1985), and the Gardi, Deci & Ryan (2008) Self-Determination Questionnaire.

A. Academic Procrastination Scale, Solomon and Rothblum (1984): This scale was developed by Solomon and Rothblum (1984) and was called the Academic Procrastination Scale. The Academic Procrastination Assessment Scale has 27 items that examine three components: The first component is preparing for exams; Contains 8 questions. The second component is preparing for homework and includes 11 items, and the third component is preparing for end-of-term papers, which includes 8 items. In the third component, the questions related to the end-of-term articles were looked at as research assignments and classroom research for Iranian students, and this option was explained to the respondents on this scale. How responders respond to the items is that respondents indicate their agreement with each by selecting one of the "Rare", "Sometimes", "Most of the time", and "Always" options. The "rarely" option is given a score of 1, the "sometimes" score of 2, the "most of the time" score of 3, and the "always" score of 4. Also in this scale, items 2 -4 -6 -11 -15 -16 -21 -23 -25 are scored in reverse. In Hassannajari (2017) research, the result of calculating Cronbach's alpha is estimated to be 0.86, which shows that reliability is at an acceptable level.

B) Young Schema Questionnaire (SQ-SF): This questionnaire was developed by Young & Brown (2003) to measure early maladaptive schemas. The short form of the Schemas Questionnaire has been prepared to measure 15 initial maladaptive schemas based on the original form. Its long form has 205 items and its

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short form has 75 items. Each schema is measured by 5 items and each item is scored on a 5-point Likert scale. In this questionnaire, the high score indicates the initial maladaptive schemas.

If the average of each comparison is higher than 2.5, that schema is inefficient. Various studies have confirmed the factor structure and construct validity. In Yousefi (2010) study, the reliability of the questionnaire through Cronbach's alpha was 0.88. This coefficient was in the range of 0.55 to 0.89 for the schema domains.

C) Neo-Form Short Personality Questionnaire (NEO-FFI): For the first time Costa & McCrae (1985) developed a questionnaire called NEO (NEO with 185 questions). They were able to prepare two questionnaires with 240 and 60 questions to measure personality traits. This scale measures five personality traits, which are neuroticism (N), extraversion (E), open Being in relation to experience (O), agreeableness (A) and conscientiousness (C) and in this research, four characteristics of five personality traits are considered, each of which is measured by 12 questions. The answer is that the subject chooses the answer in a 5-point Likert scale (from strongly disagree to strongly agree) with a score of 1, 2, 3, 4 and 5. NEO- Personality Questionnaire FFI was performed by McCrery and Costa on 208 American students over a period of three months with a coefficient of validity of 0.83 to 0.75. Volume 2000 people Among the students of Tabriz, Shiraz and medical universities of these two cities, a correlation coefficient of 5 main dimensions was reported between 0.56 and 0.87. Cronbach's alpha coefficients in each of the main factors of temper tantrums, extroversion, openness, adaptability and conscientiousness were 0.86, respectively., 0.73, 0.56, 0.68 and 0.87 were obtained.

E) Self-Determination Questionnaire: This scale was developed by Gardi et al (2000) and includes 21 questions. The scoring method in this scale is by Likert method from one to seven degrees, and the sum of the scores obtained from each subscale indicates the extent to which the feeling of need in that field is met. Autonomy subscale, including questions 1, 4, 8, 11, 14, 17, 20; Competency subscale, including questions 3, 5, 10, 13, 15, 19; the communication subscale includes questions 2, 6, 7, 9, 12, 16, 18, 21. The reliability coefficients obtained from its implementation have been reported 92%, 92%, 92% and 92, respectively (Gardi & Deci, 2007). In this study, in order to investigate the relationships between research variables and determine the extent of variance in each of the indicators, AMOS software was used to analyze the path, structural equations and regression test.

## 3. Findings

The method of data collection in the present study was that the scores of the subjects in the studied variables were measured through questionnaires of academic work, maladaptive schemas and personality traits and self-determination. The data corresponding to the research questions and hypotheses were analyzed and tested using appropriate statistical techniques. For this purpose, descriptive statistics indicators were used to describe and classify the data collected from the sample, and path analysis was used to test the model and analyze the questions. Achieving reliable results from path analysis requires assumptions such as sufficient sample size, one-sidedness of the model, distance between the scale of the criterion and predictor, and linearity of the relations, which are as follows. In path analysis, scores are available from criterion and predictor variables and average, standard deviation and covariance can be extracted from them. These indicators are the basis of calculation in path analysis. The results of Table 1 show the descriptive measures of the mean and standard deviation of the research variables in the sample group.

**Table1.** Descriptive statistics of variables in the sample

<b>Table1.</b> Descriptive statistics of variables in the sample									
Role	Variable	Component	code	Minimum	Maximum	Sample average	The standar d deviati on	Error	tilt
	Academic procrastination	Preparing for exams	A1	16	45	24. 74	4. 62	0. 45	. 69
Criterion		Prepare for homework	A2	16	44	33. 31	5. 94	0. 58	-1. 49
		Preparing for the final semester article	A3	15	32	23. 68	3. 90	0. 38	46
		Psychiatry	V1	18	46	34. 75	7. 76	0.76	80
	Personality characteristics	Extraversion	V2	17	46	28. 16	8. 39	0. 82	. 88
		Being open to experience	V3	25	45	32. 88	5. 70	0. 56	. 26
		Agreeableness	V4	20	45	31. 79	7. 45	0. 73	25
		Conscientiousness	V5	16	46	26. 09	9. 76	0. 95	. 98
•	Incompatible schemas	Abandonment	T1	8	19	15. 18	2. 95	0. 29	84
		Distrust	T2	8	18	15. 45	3. 01	0. 29	-1. 42
		Emotional deprivation	Т3	9	20	15. 29	2. 86	0. 28	74
		Defect. Shame	T4	8	19	14. 85	3. 02	0. 29	-1. 06
1.		Social isolation	T5	8	20	15. 18	2. 80	0. 27	48
predictor		Dependence	Т6	9	17	14. 46	2. 26	0. 22	91
		Vulnerability	T7	8	19	15. 41	2. 98	0. 29	-1. 12
		It has not evolved itself	Т8	9	18	14. 75	2. 25	0. 22	85
		Break	Т9	8	18	14. 67	2. 75	0. 27	88
		Grand Secretary	T10	8	18	14. 86	2. 52	0. 25	-1. 38
		Continence	T11	8	18	14. 54	2. 64	0. 26	81
		Obedience	T12	9	18	15. 62	2. 63	0. 26	-1.49
		Sacrifice	T13	9	18	14. 92	2. 68	0. 26	99
		Emotional deterrence	T14	8	18	15. 02	2. 79	0. 27	-1. 29
		Stubborn criteria	T15	8	19	14. 95	3.00	0. 29	83
Mediator		Self-determination		30	131	61.44	35. 81	3. 49	. 94

In table (1) descriptive statistics indicators of the studied variables are reported. For example, the average self-determination in the sample is 61.44. Since the values of the skew index in the studied variables are in the range between 3- to +3, so it is likely that the distribution of these variables is normal.

**Table2.** Standard and non-standard regression coefficients and t-statistic of predictor variables in predicting criterion variable

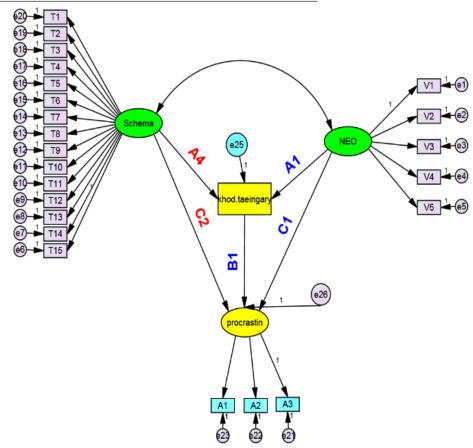
			7 41 14	010				
Results	Criterion	predictor	Standard coefficient	Non- standard coefficient	Error	Statistics T	The significance level	Direction
Direct		Personality characteristics	-0. 02	-0. 01	0.06	-0. 14	0. 89	C1
	procrastination	Incompatible schemas	0. 73	1. 07	0. 21	5. 03	0. 01	C2
	Self- determination	Personality characteristics	-0. 51	-2. 55	0. 55	-4. 61	0. 01	A1
indirect	Self- determination	Incompatible schemas	-0. 31	-4. 63	1. 67	-2. 77	0.006	A4
	Academic procrastination	Self- determination	-0. 79	-0. 08	0. 01	-11.6	0. 01	B1

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	Self-	Personality	-0. 50	-2. 48	0. 54	-4. 55	0. 01	A1
	determination	characteristics	-0. 50					
	Self-	Incompatible	-0. 33	-4. 85	1. 65	-2. 94	0.003	A4
	determination	schemas	-0. 33					Ат
Moderator	Academic	Self-	-0. 75	-0. 08	0. 01	-7. 48	0. 01	B1
	procrastination	determination	-0. 73			-7. 40	0. 01	
	Academic	Personality	-0. 39	-0. 20	0.06	-3. 29	0. 01	C1
	procrastination	characteristics	-0. 39					
	Academic	Incompatible	0. 46	0. 71	0. 18	3. 89	0. 01	C2
	procrastination	schemas						

According to the results of Table (2), except for the relationship between the first component of procrastination with the second component (extraversion) and the third (openness to experience), the relationship between all personality traits with procrastination is significant at the level of 0.01. The relationship between all components of academic work and self-determination is negative and significant.

The fourth column of Table (2) shows the standard regression coefficients (Beta). The explanation of this coefficient is that by changing a standard score (z) in the predictor variable, the beta value (Beta) in the standard score of the criterion variable will change. For example, by increasing a standard score in the personality trait predictor variable, the beta value (Beta = -0.01) in the standard score of the criterion variable will increase. According to the results of Table (4), in the section on the direct effects of personality traits and maladaptive schemas on academic performance, it is variable. The significance level for maladaptive schemas is less than (0.01) so the conclusion of this variable can be directly effective in predicting academic performance. This statement does not apply to personality traits.

In the section on indirect effects, the level of significance of personality traits and schemas incompatible with self-determination is less than (0.01) and the level of significance of self-determination with academic attainment is less than (0.01). It is effective. In the mediating effect of self-determination on the relationship between personality traits and schemas incompatible with academic engagement, the results are as follows: The direct effects of personality traits and maladaptive schemas on academic engagement and self-determination are significant mediating variables of academic self-determination. In the following diagram, five results are possible in the relationships between the predictor and criterion variables along with the mediator variable. The interpretation of paths is: a): There is no relationship between predictor variables and criteria. C): The role of the mediating variable in the relationship between predictor variables and the discriminant criterion. D): The role of the mediating variable in the relationship between predictor variables and criteria. In this model, personality traits and inconsistent schemas of self-determination, mediation, and academic engagement are two. Based on the research model, the mediating role of self-determination in the relationships between the variables of the sea and the river was investigated.



**Figure 1.** Model of Relationships between Academic Employee Variables with Personality Traits and Early Incompatible Schemas Mediated by Self-Determination in Students

**Table3.** Summary of the results of the above four steps to test the hypotheses

Criterion variable	Predictive variable	Mediator	B- Direct effect	C- Indirect effect		D- Mediating effect	The role of mediator variables in the
			(C)	(A) (B)			relationship between predictor and criterion variables
Academic procrastination	Incompatible schemas	Self- determination	Meaningful	Meaningful	Meaningful	Is separable (c)	
	Personality characteristics	-	Meaningless	Meaningful	Meaningful	Is indirect (b)	

#### 4. Discussion

The aim of the present study was to investigate the relationship between the components of academic work with personality traits and early maladaptive schemas mediated by self-determination. The results of path analysis showed that there is a positive and significant relationship between all components of academic affiliation with the components of early maladaptive schemas and the role of self-determination in the relationship between the two is different. Also, the relationship between all components of academic work and personality traits except psychosis was negative. The relationship between the

component of preparation for the final exam of academic work with conscientiousness and agreement of personality traits was not significant and the role of self-determination in the relationship between these two variables is indirect. According to the findings of the present study, there is a positive and significant relationship between all components of stochasticism with early maladaptive schemas and self-determination plays a mediating role between them. These results are also consistent with the findings of Hashemi & Latifian (2013) Mairet (2015); Ghasemi & Sharifi (2017); It is consistent.

In explaining the result of the present study, we can refer to the view of Young et al (2003) about maladaptive schemas. Young et al (2003) stated that some schemas are inconsistent and make it impossible for a person to have a consistent pattern through which he can explain external events. For example, in the scheme of stubborn criteria, a person is determined to do homework at first, but then he may lose his power and refuse to give homework, in which case the occurrence of academic procrastination will be inevitable. In the failure scheme, people with unrealistic prejudices lose the opportunity to test their abilities and that they will fail in their homework is an irrational belief and eventually postpone their work without a logical reason (Hashemi & Latifian 2013). The irrational belief in the dependency schema is that a person is able to do homework if he or she has a supporter. Therefore, this will be an excuse to abandon or postpone the leading tasks without logic. The irrational belief in rejection is that if a person fails in his homework and fails, he will be rejected by others. Another reason for the importance of academic work is the existence of strict criteria. The logical thing to do is to balance the criteria to such an extent that it is not avoided. Or one should prioritize the work of others instead of being involved in one's own work. Sometimes people are perceived with an unchanged and dependent schema that they will be harmed if they do their homework and therefore, by failing in homework, they will be blamed and ultimately embarrassed by others (Young, 2003). Abandonment, self-control, emotion inhibition, distrust, vulnerability, social isolation, disability, and emotional deprivation are other early maladaptive schemas that will make irrational procrastination inevitable.

In all of the above cases, self-determination with the components of independence, spontaneity and connection can provide an opportunity to remove one's incompatible schemas, to free oneself from the evaluation and judgment of others, to bring one's competencies to the forefront and gain valuable experiences through trial and error. Use the following situations. As mentioned in the present study, the role of self-determination in the positive relationships between early maladaptive schemas and academic engagement is different. According to Mohamad Beigi et al (2011), maladaptive schemas in the field of homework lead to academic procrastination and inefficiency. Since both the predictor variable and the criterion variable have a significant relationship with self-determination, these relationships are probably influenced by self-determination, so to reduce maladaptive schemas and subsequent academic work, it is necessary to provide measures to develop components of self-determination in students.

According to the findings of the present study, there is a significant relationship between all components of entrepreneurship with personality traits and self-determination plays a mediating role between them. According to the available data, on the one hand, the correlation between the first component of empowerment and the second component (extraversion) and the third (openness to experience) personality traits is not significant. On the other hand, the relationship between self-determination with both the criterion variable (academic procrastination) and predictor variables (personality traits) is significant. The role of self-determination in the relationship between incompatible schemas with discriminatory academic procrastination and in the relationship between personality traits and academic procrastination is indirect. These results are based on the findings of Rahimian Bogar (2015); Asfa et al (2017); Klassen et al (2008); Steel et al (2013); Grunschel et al (2013); Cerino (2014) Burnam et al (2014); Hassan Najari (2017); Durakiewicz (2016); It is consistent.

In explaining the results of the study of academic procrastination based on personality traits mediated by students' self-determination, we can refer to the view of McCreery and Costa (1992). According to

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McCray and Costa (1992), the general tendency to experience negative emotions such as fear, sadness, embarrassment, anger, guilt, and hatred forms the domain of neuroticism, so neuroticism leads to academic procrastination. On the other hand; McCray and Costa (1992) argue that extroverts are generally unable to achieve the desired level of internal arousal and tend to external arousal. As a result, extroverts are often more energetic and less prone to procrastination. Explaining why the relationship between the end-of-semester exam preparation component and conscientiousness and agreement is not significant, it is because at the end of the semester the person is forced to do homework. He knows that if he neglects to do his homework from this semester, it will have undesirable consequences, and therefore he does his homework not convincingly but reluctantly, in other words, his workload decreases with increasing compulsion. Communication is one of the characteristics of self-determining individuals (Deci & Ryan, 2008). In interpersonal interactions, these people observe the changes in their environment at any given moment and update their mental structure accordingly. Their schemas in the past and related experiences are not incarcerated. This constant communication helps them to consciously and realistically choose the goals that they are able to achieve. External resources are a determinant of motivation for individuals. They are constantly seeking the help of others to perform an action. A failed experience may evoke a variety of early maladaptive schemas. For example, the failure schema in the field of education may lead to the isolation schema and ultimately the educational attainment of individuals (Burnam et al, 2014). One of the reasons for the importance of academic work is probably the consequence of doing or not doing a homework assignment. If one knows that the task is a small but fundamental step towards achieving the goal, it is illogical to delay it. Or a task is postponed because it is not important to the individual. Or the person does not have prerequisite skills and therefore the assignment is postponed due to lack of prerequisite skills. Therefore, it is necessary to check the student's competence before completing homework (Hashemi & Latifian, 2013).

Research suggestions based on the researcher's experience for the proper and regular management of the teacher's classroom need the skill of effective and positive communication with students. This skill facilitates education and reduces undesirable behaviors such as students' academic work. One way to arouse students' interest in homework is to use educational technology to present them in the form of computer games. According to educational experts, tasks with a medium level of difficulty have a high motivation power. Students may be less motivated for very easy or difficult assignments. Therefore, it is necessary for homework to be designed to be motivating (for example, using tasks with a medium difficulty level). Another step is to start the training with assignments that one can succeed with little time and effort. This will give the person more confidence in the next steps. Or through regular desensitization, homework analysis can reduce individuals' academic performance. Isolation is one of the early maladaptive schemas. A mechanism can be devised in which the student can do his homework with his classmates. Distrust is one of the early maladaptive schemas. One can think of an adaptation based on Erickson that moderates students' level of distrust or absolute trust. The secretary is one of the initial maladaptive schemas. According to psychologists, balance in the use of schemas is accepted as a defense mechanism. For example, use the great secretary schematic in a situation where the person is particularly skilled in a trait. Or in the scheme of obedience and self-sacrifice, obedient propositions should be obeyed, not obedience due to fear of deprivation and punishment.

Schemas are formed from early childhood in the child's mental structure in the interaction of the environment based on pleasant or unpleasant experiences. Therefore, the effect of parents' educational style on the formation and development of schemas should be investigated. According to Adler, one of the signs of psychological damage is the existence of early maladaptive schemas in which the main element is incompatibility with the real world and becomes a lifestyle as a result of repeated use. Therefore, it is suggested that the effect of lifestyle on the formation and development of schemas be investigated. According to the findings of the present study, in order to prevent academic work, it is suggested that the

components of independence, spontaneity and communication in self-determination be strengthened. The latter feature helps one avoid untested biases. Finally, it should be noted that there may be other factors that affect academic performance that were beyond the control of the researcher. If the present study can be performed experimentally, the results will probably be more valid.

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