

Research Paper





Mediating Role of Self-efficacy Beliefs in the Relationship Between Family Emotional Climate and Time Management With Academic Stress in University Students

Zahra Kordzanganeh¹ (10), Saeed Bakhtiarpour** (10), Fariba Hafezi¹ (10) Zahra Dasht Bozorgi¹ (10)

1. Department of Psychology, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran.



Citation Kordzanganeh Z, Bakhtiarpour S, Hafezi F, Dasht Bozorgi Z. Mediating Role of Self-efficacy Beliefs in the Relationship Between Family Emotional Climate and Time Management With Academic Stress in University Students. Journal of Research & Health. 2022; 12(3):185-192. http://dx.doi.org/10.32598/JRH.12.3.1958.1





ABSTRACT

Background: Students' minds fail to quickly analyze the mass of information to which they are exposed when experiencing academic stress, resulting in irreparable physical and mental damage. The present study aims to investigate the mediating role of self-efficacy beliefs in the relationship between family emotional climate and time management with academic stress in university students.

Methods: This is a correlational-descriptive study conducted with path analysis. The statistical population consisted of all male and female students of Islamic Azad University of Ahvaz in the academic year of 2019-2020, of whom 222 students were selected as the sample via the convenience sampling method. The research instruments included the educational stress scale, the family emotional climate questionnaire, the time management scale, and the self-efficacy scale. The proposed model was evaluated by Structural Equation Modeling (SEM).

Results: The results revealed a significant relationship between family emotional climate and academic stress (β =-0.57, P=0.001), family emotional climate and self-efficacy beliefs (β =0.27, P=0.001), time management and self-efficacy beliefs (β =0.23, P=0.001), and self-efficacy beliefs and academic stress (β =-0.15, P=0.007). However, no significant relationship was found between time management and academic stress. The results also indicated that self-efficacy beliefs could significantly mediate the indirect relationship between family emotional climate and academic stress (P=0.016), and also the relationship between time management and academic stress (P=0.017).

Conclusion: Study findings confirmed the proposed model's goodness of fit; therefore, the model can be employed to effectively identify the factors causing academic stress in university students.

Keywords: Academic stress, Emotions, Time management, Self-efficacy, Family, Students

Article info:

Received: 08 Nov 2021 Accepted: 15 Jan 2022 Publish: 01 May 2022

* Corresponding Author:

Saeed Bakhtiarpour

Address: Department of Psychology, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran.

Phone: +98 (61) 33329200 E-mail: bakhtiyarpours@gmail.com



1. Introduction

he stress and anxiety the youth may experience during their growth are sometimes so severe that affect their everyday lives and academic performance. Academic stress is a type of stress the youth may face in academic settings [1]. Individuals may experience information stress or academic stress in educational and academic settings due to exposure to extensive information and data. In such situations, the overflow of information prevents the individual from learning. This is a common condition among current university students [2]. Students' minds fail to quickly analyze the mass of information to which they are exposed when experiencing academic stress, which results in irreparable physical and mental damage. Such stress originates from the nature of the highly competitive modern world that requires absorbing most of the information in the shortest time. The pressure imposed on individuals to study better to get the best grades, ranks, and academic positions can lead to frustration and stress. Academic stress is a serious educational problem that affects millions of students worldwide each year. The main cause of such feeling is the need to obtain the greatest amount of information within the shortest time in highly competitive environments. The severe and chronic form of academic stress can have consequences, such as anxiety, loneliness, anger, depression, biological, social, and academic dysfunction, insomnia, and even suicide attempts [3].

One of the common causes of academic stress in students is family emotional climate. Some psychologists and family therapists argue that the communication network among family members, governing rules of the family, and the family emotional climate are the best criteria for measuring the moral, social, and psychological quality of individuals. Parents' inattention to children's and adolescents' mental and emotional health. and the lack of proper relationships between family members can predispose this population to emotional and motivational deficiencies as well as psychological and academic problems [4]. According to Abuya et al. [5], the main task of a family is to convey their values and expectations to students, give them advice and feedback to realize such values and expectations and provide them with the conditions and the emotional support for moving toward them.

Time management is another factor associated with academic stress in university students. Most university students usually have difficulty managing their time to achieve educational goals. Academic achievement also depends on students' abilities to manage time and perform the assigned tasks correctly [6]. Enough support from family and friends is a predictor of good academic performance and also a factor in enhancing students' skills, such as time management. Time management is the process of planning and exercising conscious control of time spent on specific activities, especially to increase effectiveness, efficiency, and productivity. Time management makes the individual engage in purposeful activities, whereas the lack of it leads to wasting time merely on entertainment and fun activities. Therefore, proper time management can increase academic performance and reduce academic burnout of university students [7, 8]. Poor time management is one of the reasons for students' failure to complete their assignments, which leads to academic failure and educational demotivation. Since time management skills can be taught and learned, they are considered an effective strategy to reduce test anxiety in students [9, 10].

Despite the proven direct effects of family emotional climate and time management on university students' academic stress, recent studies suggest that these factors may indirectly affect academic stress. Another factor, namely self-efficacy beliefs, mediates the effect of family emotional climate and time management on academic stress. Self-efficacy refers to one's belief in their ability to control their emotions, feelings, and behaviors while managing their consequences [11]. Williams and Rhodes [12] argue that self-efficacy plays a more important role than other personality traits in individuals' motivation and behavior. Accordingly, individuals who strongly believe in their capabilities make greater efforts and persevere in completing their assignments, whereas those who doubt their abilities are more likely to give up completing their assigned tasks. Therefore, it can be stated that self-efficacy can be a driving force for individuals [13]. Many studies have also discussed the role of self-efficacy beliefs in reducing academic stress and burnout [14-17]. Felaza et al. [14] reported that efforts to strengthen intrinsic motivations may help develop better perceptions of personal accomplishment and protect students from burnout. Grotan et al. [17] showed that there was a strong association between symptoms of mental distress, academic self-efficacy, and study progress.

There are various reasons why academic stress is an interesting area of research, such as the impact of burnout on academic performance, students' commitment to educational affairs, and interest in postgraduate education and postgraduation scientific participation. Considering the important role of university students in the progress



of any society and the various problems and issues students face during their education, it is necessary to solve any of their problems. Since the authors did not find a study that simultaneously examined the mediating role of self-efficacy beliefs in the relationship between family emotional climate and time management with academic stress in university students, the need for the present study was recognized. Therefore, based on the above considerations, the present study aims to investigate the mediating role of self-efficacy beliefs in the relationship between family emotional climate and time management with academic stress in university students. The theoretical model of the research is presented in Figure 1.

2. Methods

In this correlational-descriptive study, the statistical population consisted of all the students of Islamic Azad University of Ahvaz in the academic year of 2019-2020, of whom 222 students were selected as the sample through the convenience sampling method. The number of parameters in SEM research is determined based on the number of direct paths, exogenous variables, and error variances. According to Kline [18], at least 10 participants are needed per parameter to test a model. However, this figure can be about 25 participants per parameter to achieve the sample size adequacy. This study consisted of 15 observed variables (15×10+50=200). To reduce sampling error, 250 participants were considered as a sample in this study using the convenience sampling method. The following items were considered the inclusion criteria: being a student of the Islamic Azad University of Ahvaz, aging from 18 to 30 years, giving informed consent to participate in the study, and not suffering from psychological disorders. The exclusion criterion was an incomplete questionnaire. After distributing the research questionnaires, the data obtained from 222 participants were used for statistical analysis.

Research tools

Educational Stress Scale

The educational stress scale is a 16-items questionnaire developed by Sun et al. [19]. The items are scored based on a 5-point Likert scale, from 1 (totally disagree) to 5 (totally agree). The total score on this scale ranges from 16 to 80, with higher scores indicating higher levels of academic stress. Tajari [20] reported the Cronbach α coefficient of 0.83 for this scale. The Cronbach α coefficient in the present study was 0.85 for the scale.

Family Emotional Climate Questionnaire

The family emotional climate questionnaire was developed by Hill Burn in 1964, and consists of 16 items in 8 subscales: love, caress, affirmation, shared experiences, gift-giving, encouragement, trust, and a sense of security (each containing two items). The items are scored based on a 5-point Likert scale (1: very low, 2: low, 3: moderate, 4: high, 5: very high). The respondents are expected to choose one of the options based on their inner emotions. Yousefi and Pariyad [21] reported the Cronbach α coefficient of 0.94 for the questionnaire. In the current study, the reliability of the questionnaire was 0.87 using the Cronbach α coefficient.

Time Management Scale

The time management scale was developed by Trueman and Hartley [22] to measure time management behaviors. It consists of 14 items that are scored based on a 5-point Likert scale (5: always, 4: often, 3: sometimes, 2: rarely, 1: never). This questionnaire was translated into Persian by Sevari [23]. The reliability of this questionnaire was calculated by the Cronbach α and the bisection method to be 0.88 and 0.63, respectively. In the current study, the reliability of the questionnaire was 0.83 using the Cronbach α coefficient.

Self-efficacy Scale

The self-efficacy scale is a 17-item general self-efficacy questionnaire, developed by Sherer et al. [24]. Without specifying the factors and items, Sherer et al. [24] argue that this scale measures three aspects of behavior, including the desire to initiate a behavior, trying to complete a behavior, and resistance to obstacles. The items are scored based on a 5-point Likert scale. The items 1, 3, 8, 9, 13, and 15 are scored as follows: 5=totally agree, 4=agree, 3=no comment, 2=disagree, and 1=totally disagree. Other items are scored inversely. The total score on this questionnaire ranges from 17 to 85, with higher scores indicating a higher level of self-efficacy. Dougherty et al. [25], reported the Cronbach α coefficient of 0.84 for the scale. The Cronbach α coefficient in the present study was 0.82 for the scale.

Statistical analyses

The research model was evaluated using SEM in the SPSS software, version 25, and AMOS software, version 25.

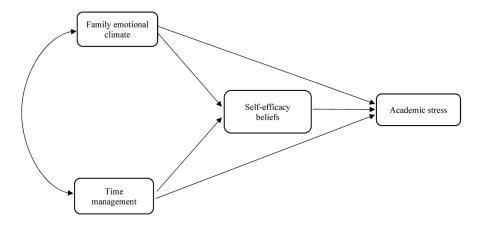


Figure 1. Theoretical model of the research

3. Results

The demographic data showed that 64.56% of participants were female and 35.44% were male. In terms of marital status, 59.50% of participants were single while 40.50% were married. In addition, 73.74%, 22.09%, and 4.17% of participants were undergraduate, postgraduate, and PhD students, respectively. Table 1 provides the mean, the Standard Deviation (SD), and the Pearson correlation coefficient between the study variables.

Path analysis, missing data, normality, independence of errors, and no multicollinearity were checked before data analysis to ensure that the presumptions were met. There was no missing data in this study. Skewness and kurtosis were examined to determine the normality of variables, demonstrating that the absolute value of skewness for all variables was less than 3 and the absolute value of kurtosis was less than 10; therefore, the normality assump-

tion of the variables has been observed. To investigate multicollinearity, the tolerance and Variance Inflation Factor (VIF) was calculated. As the tolerance was above 0.01 and VIF was below 10.0, no multicollinearity was observed between the variables. According to Table 2, the initial model needed some corrections because the Root Mean Square Error Of Approximation (RMSEA) was equal to 0.391. Considering that the initial model was saturated, i.e., all possible directions were drawn, it was not possible to calculate the Chi-square and other indicators. Therefore, one of the directions (time management \rightarrow academic stress) was eliminated to desaturate the model and calculate the Chi-square and other indicators. The RMSEA of the final model was equal to 0.050, indicating its goodness of fit (Table 2).

According to the results, there was a direct and significant relationship between family emotional climate and self-efficacy beliefs (β =0.26, P=0.001), and between

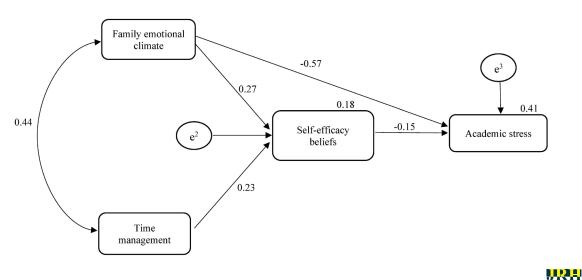


Figure 2. Final model of the mediating role of self-efficacy beliefs in the relationship between family emotional climate and time management



Table 1. Mean±SD and the pearson correlation coefficients of the research variables

Variables	Mean±SD	Pearson Correlation Coefficient		
Academic stress	43.29±18.24	1		
Family emotional climate	55.00±20.40	-0.66		
Time management	37.61±16.11	-0.49		
Self-efficacy beliefs	58.38±19.08	-0.45		

J.R.A

time management and self-efficacy beliefs (β =0.23, P=0.001) in the students. Also, the results showed a negative and significant relationship between family emotional climate and academic stress (β =-0.57, P=0.001), and between self-efficacy beliefs and academic stress (β =-0.15, P=0.007). The results showed no significant relationship between time management and academic stress (β =-0.07, P=0.211).

The confidence levels in Table 3 suggest the significance of the indirect relationship between family emotional climate and academic stress (β =-0.04, P=0.016) as well as the indirect relationship between time management and academic stress, both mediated by self-efficacy beliefs (β =-0.25, P=0.017).

4. Discussion

The present study aimed to investigate the mediating role of self-efficacy beliefs in the relationship of family emotional climate and time management with academic stress in university students. The results indicated a significant relationship in all direct paths, except for time management to academic stress. The indirect paths were also significant through self-efficacy beliefs with academic stress. Since the study findings confirmed the proposed model's goodness of fit, this model can be employed to effectively identify the factors causing academic stress in university students.

The first finding was the direct relationship between family emotional climate and academic stress. This is rather consistent with the finding of Amani et al. [26], who investigated the relationship between family cohesion and academic burnout in university students. To justify this finding, it can be stated that the continuity and stability of the socio-political and cultural life of a society depend on the cohesion and solidarity between the components of that society. Social cohesion refers to an agreement on goals, values, and attitudes that results from the rational and autonomous actions of individuals in a social process. A family will achieve the desired emotional function and atmosphere and the children will experience less academic stress if the following conditions are met: they learn how to deal with their problems, family roles are already defined, a good way to control the behaviors exists in the family, a clear and coherent relationship exists between the family members, all the family members pay attention to each other's interests and desires, and all the family members know how to appropriately react to each other's positive and negative emotions. Otherwise, children may face high levels of academic stress because of poor social skills, anxiety, low self-esteem, and poor family support. It is noteworthy that academic stress is less common among children of families with a better emotional climate. In addition to raising the awareness and the communication literacy of children, families should pay careful attention to their functions and try to enhance them. Family emotional climate, relationships between family roles, emotional attachment, emotional responsiveness, and behavioral control are directly and significantly correlated with academic stress. This indicates that any problem with the family emotional climate can cause academic stress in children [26]. Family support, especially from parents, and the quality of the parent-child relationship can play

Table 2. Initial and final model fit indicators

Fit Indicators	χ²	df	(χ²/df)	IFI	TLI	CFI	NFI	RMSEA
Initial model	-	0	-	0.67	-	0.84	0.90	0.391
Final model	1.56	1	1.56	0.99	0.98	0.99	0.99	0.050



Table 3. Results of the bootstrap method for investigating indirect paths

Predictor Variable	Mediator Variable	Criterion Variable —	Initial	Initial Model		Final Model	
			β	Р	β	Р	
Family emotional climate	Self-efficacy beliefs	Academic stress	-0.03	0.027	-0.04	0.016	
Time management	Self-efficacy beliefs	Academic stress	-0.22	0.024	-0.25	0.017	

JR.

a major role in preventing academic stress. Therefore, insufficient family support can predispose children to academic stress and behavioral problems.

Another finding of this study revealed that no direct relationship exists between time management and academic stress. This finding is inconsistent with the findings of studies carried out by Erdemir et al. [7] and Shih [8]. Most previous studies reporting the significant relationship of time management with academic burnout and stress have employed correlation coefficient and regression tests, whereas the hypotheses in this study were tested by SEM. Although the Pearson correlation coefficient demonstrated a significant relationship between time management and academic stress, the model suggested an indirect relationship between these two variables because of the existence of a mediating variable. In other words, time management indirectly affects academic stress in this model. Therefore, it can be concluded that this finding is rather consistent with the findings of previous studies. Moreover, this study was conducted on a different population. Students should be able to learn the educational materials in a relatively short period and use time management techniques to increase their insight into how to use time and get a more accurate estimate of how long it takes to finish tasks. Time management is one of the essential skills for learning new things. Time is a strategic source for advancing human goals and aspirations [7]. The behavioral examination of successful and influential individuals shows that time is an important factor for all of them, as they always eliminate useless and irrelevant activities to focus on their goals and manage their time to achieve them.

Another finding of this study was the negative and direct relationship between self-efficacy beliefs and academic stress. This means that stronger self-efficacy beliefs are expected to reduce the academic stress of university students. This finding is in line with Felaza et al. [14] and Yu et al. [27]. To explain this finding, it can be stated that students with a higher level of self-efficacy experience less academic stress because they are more energetic and self-sacrificing in their relationships with their classmates, and also in learning the educational

content. Self-efficacy beliefs are associated with depersonalization while having a negative relation to emotional exhaustion and deficiency of personal success [27]. The results also demonstrated that individuals with a higher self-efficacy score were experiencing fewer stress symptoms. Studies have shown that individuals with high levels of self-efficacy openly face difficult tasks are highly committed to achieving their objectives, believe that any failure is compensated with more effort, and, consequently, experience less academic stress [14].

The study also showed that self-efficacy beliefs mediated the relationship of family emotional climate and time management with academic stress. No similar study was found in the literature to compare the findings. Regarding this result, there was a direct significant relationship between family emotional climate and academic stress, while family emotional climate could indirectly reduce academic stress by affecting self-efficacy beliefs. Moreover, there was no direct significant relationship between time management and academic stress, whereas time management could indirectly reduce the academic stress of university students if it firstly enhanced their self-efficacy beliefs.

To explain this finding, it can be stated that several factors affect students' academic achievement and performance either positively or negatively. Academic stress is a factor that has negative impacts on students' academic achievement and performance. Academic stress refers to a sense of fatigue, disinterest in homework, pessimism, and unworthiness [16]. Time management skills and an appropriate family emotional climate are among the strategies that can reduce students' academic stress. University students who have a rational family emotional climate and know time management skills have more incentives, better plan to achieve their objectives, enjoy higher levels of self-efficacy, and, consequently, can cope with academic stress.

A limitation of this study was related to its sample because this research was conducted on students of the Islamic Azad University of Ahvaz; therefore, the findings should be cautiously generalized to other students. In



addition, some variables that can affect academic stress, such as age and gender, were not investigated in this study. Accordingly, future studies are recommended to consider these two variables.

5. Conclusion

The family emotional climate had a negative association with academic stress in students. Time management had a negative association with self-efficacy beliefs in university students. The study findings confirmed the proposed model's goodness of fit; therefore, this model can be employed to effectively identify the factors causing academic stress in university students. Based on the findings, academic experts and university officials are recommended to plan and provide conditions for university students to help them make the most of their positive personality and behavioral aspects and enhance their self-efficacy beliefs to take steps toward their further development and reduce their academic stress, which is an obstacle to their academic growth and progress.

Ethical Considerations

Compliance with ethical guidelines

The study was approved by the Ethics Committee of Islamic Azad University-Ahvaz Branch (Code: IR.IAU. AHVAZ.REC.1399.025).

Funding

This research did not receive any grant from funding agencies in the public, commercial, or non-profit sectors.

Authors' contributions

Study concept and design, Data Collection, Analysis and Interpretation, and Statistical Analysis: Zahra Kordzanganeh; Administrative, Technical and Material Support, and Study Supervision: Saeed Bakhtiarpour; Critical Revision of the Manuscript for Important Intellectual Content: Fariba Hafezi, Zahra Dasht Bozorgi; Approval of the Final Version: All authors.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgments

This article was extracted from a PhD dissertation by Zahra Kordzanganeh from the Department of Psychology, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran. The researchers wish to thank all the individuals who participated in the study.

Referencess

- [1] Alsulami S, Al Omar Z, Binnwejim MS, Alhamdan F, Aldrees A, Al-Bawardi A, et al. Perception of academic stress among health science preparatory program students in two Saudi universities. Advances in Medical Education and Practice. 2018; 9:159-64. [DOI:10.2147/AMEP.S143151] [PMID] [PMCID]
- [2] Ahmad M. Academic stress: How extrinsic motivation and self-efficacy affect. Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan. 2021; 6(2):164-80. [DOI:10.31851/jmksp.v6i2.5433]
- [3] Mehrabi S, Etemadi A, Borjali A, Sadipoor E. Effect of physical and psychological puberty training on general well-being and its dimensions in girl students. Journal of Research & Health. 2018; 8(2):108-15. [DOI:10.29252/jrh.8.2.108]
- [4] Rapp AM, Lau A, Chavira DA. Differential associations between social anxiety disorder, family cohesion, and suicidality across racial/ethnic groups: Findings from the national comorbidity survey-adolescent (NCS-A). Journal of Anxiety Disorders. 2017; 48:13-21. [DOI:10.1016/j.janxdis.2016.09.009] [PMID]
- [5] Abuya BA, Wekulo P, Muhia N. Support to children's education in the urban slums of Nairobi: Community and parents' perceptions with an expanded phase of an education intervention program. Qualitative Research in Education. 2018; 7(2):118-43. [DOI:10.17583/qre.2018.3240]
- [6] Hensley LC, Wolters CA, Won S, Brady AC. Academic probation, time management, and time use in a college success course. Journal of College Reading and Learning. 2018; 48(2):105-23. [DOI:10.1080/10790195.2017.1411214]
- [7] Erdemir M, Tomar H. The influence of time management behaviours before starting general physics laboratory-I experiments on academic achievement in the course. Cypriot Journal of Educational Sciences. 2019; 14(3):457-70. [DOI:10.18844/cjes.v14i3.4133]
- [8] Shih S-S. Factors related to Taiwanese adolescents' academic procrastination, time management, and perfectionism. The Journal of Educational Research. 2017; 110(4):415-24. [D OI:10.1080/00220671.2015.1108278]
- [9] Ekaterine G. Impact of time management on personal development of master's degree students. European Journal of Social Science Education and Research. 2017; 4(4s):110-8. [DOI:10.26417/ejser.v11i2.p110-118]
- [10] Panek E. Left to their own devices: College students' "guilty pleasure" media use and time management. Communication Research. 2014; 41(4):561-77. [DOI:10.1177/0093650213499657]
- [11] Haji Vosoogh NS, Tavakolizadeh J, Pakdaman M. The role of self-efficacy in the relationship between classroom climate and students' educational motivation. Journal of Research & Health . 2021; 11(4):225-34. [DOI:10.32598/JRH.11.4.1839.1]
- [12] Williams DM, Rhodes RE. The confounded self-efficacy construct: Conceptual analysis and recommendations for future research. Health Psychology Review. 2016; 10(2):113-28. [DOI:10.1080/17437199.2014.941998] [PMID] [PMCID]
- [13] Bayat B, Akbarisomar N, Tori NA, Salehiniya H. The relation between self-confidence and risk-taking among the stu-



- dents. Journal of Education and Health Promotion. 2019; 8:27. [PMID] [PMCID]
- [14] Felaza E, Findyartini A, Setyorini D, Mustika R. How motivation correlates with academic burnout: Study conducted in undergraduate medical students. Education in Medicine Journal. 2020; 12(1):43-52. [DOI:10.21315/ eimj2020.12.1.5]
- [15] Freire C, Ferradás MDM, Regueiro B, Rodríguez S, Valle A, Núñez JC. Coping strategies and self-efficacy in university students: A person-centered approach. Frontiers in Psychology. 2020; 11:841. [DOI:10.3389/fpsyg.2020.00841] [PMID] [PMCID]
- [16] Popa-Velea O, Pîrvan I, Diaconescu LV. The impact of self-efficacy, optimism, resilience and perceived stress on academic performance and its subjective evaluation: A cross-sectional study. International Journal of Environmental Research and Public Health. 2021; 18(17):8911. [DOI:10.3390/ijerph18178911] [PMID] [PMCID]
- [17] Grotan K, Sund ER, Bjerkeset O. Mental health, academic self-efficacy and study progress among college students - the shot study, Norway. Frontiers in Psychology. 2019; 10:45. [DOI:10.3389/fpsyg.2019.00045] [PMID] [PMCID]
- [18] Kline RB. Software review: Software programs for structural equation modeling: Amos, EQS, and LISREL. Journal of Psychoeducational Assessment. 1998; 16(4):343-64. [DOI: 10.1177/073428299801600407]
- [19] Sun J, Dunne MP, Hou X, Xu A. Educational stress scale for adolescents: Development, validity, and reliability with Chinese students. Journal of Psychoeducational Assessment. 2011; 29(6):534-46. [DOI:10.1177/0734282910394976]
- [20] Tajari T. [The relationship between academic stress and motivational beliefs with educational procrastination in athlete students: The mediating role of cognitive strategies (Persian)]. Sport Psychology Studies (ie, Mutaleat Ravanshenasi Varzeshi). 2019; 8(27):193-210. [Link]
- [21] Yousefi N, Pariyad M. [The relationship between family emotional climate and epistemological beliefs with academic performance among fourth year high school students in Bukan (Persian)]. Journal of School Psychology. 2020; 9(3):307-24. [Link]
- [22] Trueman M, Hartley J A comparison between the timemanagement skills and academic performance of mature and traditional-entry university students. Higher Education. 1996; 32(2):199-215. [DOI:10.1007/BF00138396]
- [23] Sevari K, Beshlideh K, Shehni M. [The relationship between time management and self-efficacy with academic procrastination (Persian)]. Educational Psychology. 2009; 5(14):100-14. [Link]
- [24] Sherer M, Maddux JE, Mercandante B, Prentice-dunn S, Jacobs B, Rogers RW. The self-efficacy scale: Construction and validation. Psychological Reports. 1982; 51(2):663-71. [DOI:10.2466/pr0.1982.51.2.663]
- [25] Dougherty CM, Johnston SK, Thompson EA. Reliability and validity of the self-efficacy expectations and outcome expectations after implantable cardioverter defibrillator implantation scales. Applied Nursing Research: ANR. 2007; 20(3):116-24. [DOI:10.1016/j.apnr.2007.04.004] [PMID] [PMCID]

- [26] Amani N, Vahabi A, Sayyad S, Latifi S, Kashefi H, Narmashiri A. [Evaluation of the relationship between family cohesion and academic burnout in the students of Kurdistan university of medical sciences in 2016 (Persian)]. Scientific Journal of Nursing, Midwifery and Paramedical Faculty. 2018; 4(2):17-26. [Link]
- [27] Yu JH, Chae SJ, Chang KH. The relationship among self-efficacy, perfectionism and academic burnout in medical school students. Korean Journal of Medical Education. 2016; 28(1):49-55. [DOI:10.3946/kjme.2016.9] [PMID] [PMCID]