



## Academic procrastination behavior in nursing students: the role of academic motivation, academic self-efficacy and academic attributional style

Hemşirelik öğrencilerinde akademik erteleme davranışı: akademik güdülenme, akademik özyeterlik ve akademik yüklenme stillerinin rolü

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### ABSTRACT

**Aim:** The purpose of this study, is to examine the extend to which the academic motivation the academic uploading styles and the academic self-efficacy belief how predicts the academic procrastination behavior in nursing students.

**Methods:** This cross-sectionally research was carried out on 747 nursing students in the Faculty of Health Sciences. The size of the sample is determined to be 476 students. In this study, Academic Procrastination Scale, Academic Motivation Scale, Academic Self- Efficacy Scale and Academic Attributional Style Scale were used. Number, percentage, mean, t-test, and analysis of variance (ANOVA) tests were used to evaluate the data.

**Results:** Students' academic procrastination behavior (52.2±11.6), academic self-efficacy beliefs (16.8±3.8), the level of academic motivation with a total score of (66.9±12.3), were found at a high level. Regression model with meaningfulness (F=4.898, p=0.002), in the negative meaning of the academic procrastination behavior (t=-.571, p=0.010) and the strongest predictor and variable is the academic self-sufficiency that explains of 12.3%. The second variable that predicts the academic procrastination behavior is the academic motivation and explains of 9% as (t=-.891, p=0.050) meaningfully in the negative direction.

**Conclusion:** As students' motivation and self-efficacy increase, they do less procrastination. Future studies may be conducted with different variables (anxiety, fear of success, fear of failure, depression, perfectionism, self-esteem, academic achievement, stress, control orientation, asociality, age) associated with academic procrastination behavior.

**Keywords:** academic motivation; academic postpoment; academic self efficacy; nursing

### ÖZET

**Amaç:** Hemşirelik öğrencilerinde akademik güdülenme, akademik yüklenme stilleri ve akademik özyeterlik inancının akademik erteleme davranışlarını ne derecede yordadığını incelemektir.

**Yöntem:** Kesitsel tipteki bu araştırma Sağlık Bilimleri Fakültesinde öğrenim gören 747 hemşirelik öğrencisi üzerinde gerçekleştirilmiştir. Örneklem büyüklüğü 476 öğrenci olarak belirlenmiştir. Bu çalışmada Akademik Ertelme Ölçeği, Akademik Güdülenme Ölçeği, Akademik Öz-yeterlik Ölçeği ve Akademik Yüklenme Stilleri Ölçeği kullanıldı. Verileri değerlendirmek için sayı, yüzde, ortalama, t-testi, varyans analizi (ANOVA), korelasyon ve regresyon analizi testleri kullanıldı.

**Bulgular:** Öğrencilerin akademik erteleme davranışları (52.2±11.6), akademik özyeterlik inançları (16.8±3.8), akademik güdülenme düzeyi toplam (66.9±12.3) puan ortalamaları yüksek düzeyde bulunmuştur. Regresyon modelimiz anlamlı olmakla birlikte (F=4.898, p=0.002) akademik erteleme davranışını negatif yönde anlamlı (t=-.571, p=0.010) en güçlü yordayan değişken %12.3'ünü açıklayan akademik öz yeterliliktir. Akademik erteleme davranışını ikinci sırada yordayan değişken ise Akademik güdülenme olup %9'unu negatif yönde anlamlı (t=-.891, p=0.050) olarak açıklamaktadır.

**Sonuçlar:** Öğrencilerin güdülenme ve öz-yeterliği arttıkça daha az erteleme yaparlar. Gelecekte akademik erteleme davranışı ile ilişkili farklı değişkenler (kaygı, başarı korkusu, başarısızlık korkusu, depresyon, mükemmeliyetçilik, benlik saygısı, akademik başarı, stres, kontrol yönelimi, asosyalılık, yaş) ile çalışmalar yapılabilir.

**Anahtar kelimeler:** akademik güdülenme; akademik erteleme; akademik özyeterlilik; hemşirelik

### Introduction

There are many academic duties and responsibilities that students have to fulfill and be successful throughout the university life. Undoubtedly, one of the most important problems faced by students in university life is the postponement of their duties and responsibilities in academic studies due to some reasons (Ozer, 2005). In many studies conducted on university students, it has been reported that between 25% and 95% of the students have academic procrastination behavior (Gur, 2018; Can, 2018). Studies show that academic delay has a negative effect on academic performance (Vural & Gunduz, 2019) and as a result, students who have academic procrastination behaviors are more

academically unsuccessful. As a result of these behaviors, the students are affected negatively, and they may face adverse situations that can cause problems such as anxiety, stress, low self-efficacy perception, leaving the university etc. (Sirin & Duman, 2018). Moreover, a postponed task causes other following tasks to be postponed. In this context, procrastination behavior leads to new problems day by day (Ozer, 2005). It is thought that if students' procrastination behaviors are corrected in a healthy way, their academic lives will be affected positively and their academic achievements can be increased in this way.

The university life greatly affects the students' future life and it is considered as the last step of education. Therefore,

university life is an important turning point for the university students to reconsider and change their behaviors if they have procrastination behavior. For this reason, it is very important to determine the factors that cause the decrease or increase of procrastination behavior of undergraduate students (Bozanoglu, 2004).

Academic procrastination behavior of students is closely related to academic motivation, academic attributional style and academic self-efficacy levels. In the literature, it is stated that procrastination behaviors are opposite to motivation and that there is a significant relationship between academic procrastination behaviors and academic motivation. The lower the level of motivation of the students, the more procrastination behaviors are exhibited (Bozanoglu, 2004; Vural & Gunduz, 2019; Sirin & Duman, 2008; Deniz, 2020; Sengul & Seyfi, 2020). Academic self-efficacy is ability to successfully complete an academic work (Duran, 2020). Likewise, there was a significant negative correlation between students' academic procrastination behaviors and self-efficacy beliefs, and that students with higher academic self-efficacy showed less procrastination behaviors (Deniz, 2020; Duran, 2020; Filiz & Dogar, 2021). Compared to those who have a pessimistic approach, those who have an optimistic approach are more effective, more willing, stronger and more energetic in dealing with problems. Therefore, it is thought that there is a significant relationship between the procrastination behaviors of undergraduate students and the academic perspective of optimism or academic perspective of pessimism (Saylam et al., 2021).

It is necessary for educators to make studies improving students academically and reaching their capacities to the highest level (Karadas, 2020). It is thought that this study will contribute to the theoretical framework related to academic procrastination behaviors and contribute to studies which will reduce procrastination behaviors of especially nursing and university students in general, and increase their academic success. This study was carried out to determine to what extend academic motivation, academic attributional styles and academic self-efficacy beliefs of nursing students affect their academic procrastination behaviors.

## Methods

### Study Design

This study was carried out in descriptive and relation-seeking type.

### Sampling and participants

This research was carried out on 747 undergraduate students of nursing department. The minimum sample size was determined as 441 with the help of the formula applied (universe = 750, sample size for  $\alpha = 0.05$ ,  $\pm 0.03$  sampling error, minimum sample size is 441 for  $p = 0.5$   $q = 0.5$ ). In the sampling, each layer was accepted with stratification sampling method, and then the number of samples and students were determined in proportion to the weight of each layer. 83 students from the first grade, 96 students from the second grade, 167 students from the third grade and 130 students from the fourth grade participated in the research. The research was completed with a total of 476 students.

### Data collection tools

The study data were collected using the Personal Information Form, Academic Procrastination Scale (APS),

Academic Motivation Scale (AMS), Academic Self-Efficacy Scale (ASES), Academic Attributional Styles Scale (AASS).

Table 1. Distribution of students according to their descriptive characteristics (n=476)

Introductory features		n	%
Gender	Female	327	68.7
	Male	149	31.3
Age	20 and under	153	32.1
	21 and over	323	67.9
Class	1st class	83	17.4
	2nd class	96	20.2
	3rd class	167	35.1
	4th class	130	27.3
GPA	0-2.50	278	58.9
	2.51-4.00	194	41.1
Graduated High School	Anatolian high school	292	61.4
	Normal high school	123	25.8
	Other	61	12.8
Marital Status	Married	2	0.4
	Single	474	99.6
Working Status	Yes	41	8.6
	No	435	91.4

### Personal information form

This form includes seven questions created by the researcher through a literature review.

### Academic Procrastination Scale (APS)

APS was developed by Solomon and Rothblum (1984), aiming to identify the main cause of student's procrastination behaviors. Ozer (2005) adapted this scale into Turkish. APS consists of two parts, namely a total of 44 items. It is a 5-point Likert type scale. The first part, which contains 18 items, aims to determine the prevalence of procrastination of 6 academic areas.

Solomon and Rothblum (1984) reported that the alpha reliability coefficient of the scale was .75 and the test retest reliability coefficient was .74. Ferrari, Parker and Ware (1992) reported that the test-retest reliability coefficients for the 6-week intervals were .74 and .65 respectively, while the Cronbach Alpha coefficients for the first and second part of the scale were .75 and .70, respectively. Ozer (2005) reported the internal consistency coefficient as .86. In this study, only the first part of the APS was used and the Cronbach Alpha coefficient was .88.

### Academic Motivation Scale (AMS)

AMS was developed by Bozanoglu (2004). The scale consisting of 20 items is of the likert type of 5. Students mark items according to their suitability for themselves (1=not absolutely appropriate, 5=absolutely appropriate). The range of points on the scale is 20-100. The higher the score from the scale, the higher the academic motivation of the individual. Only the fourth item in the measure is scored in reverse. This scale consists of three sub-dimensions: self-transcendence, knowledge use and discovery. The Cronbach Alpha internal consistency coefficients were reported to change from .85 to .77 at different times in the same group and from .86 to .77 in different groups (Bozanoglu, 2004). The Cronbach Alpha in this study is .88.

Table 2. Comparing the average score of procrastination assessment scale and the average score of academic self efficacy scale according to descriptive characteristics

Introductory features	Scales				
	Academic Procrastination (X±SD)	F/t-p	Academic Self-Efficacy (X±SD)	F/t-p	
<b>Gender</b>	Female	52.6±11.1	0.9-0.3	16.4±3.9	3.4- <b>0.001</b>
	Male	51.4±12.6		17.7±3.5	
<b>Age</b>	20 and under	52.4±11.2	0.2-0.8	16.3±3.7	0.7- <b>0.02</b>
	21 and over	52.1±11.8		17.1±3.8	
<b>Class</b>	1st class	51.6±11.0	0.1-0.8	16.2±3.3	3.7- <b>0.01</b>
	2nd class	51.8±12.0		15.9±3.6	
	3rd class	52.7±11.8		17.4±3.9	
	4th class	52.4±11.4		17.2±3.9	
<b>GPA</b>	0-2.50	52.1±11.2	0.3-0.7	16.9±3.8	0.4-0.6
	2.51-4.00	52.5±12.2		16.7±3.8	
<b>Graduated High School</b>	Anatolian	51.2±10.8	4.5- <b>0.01</b>	17.0±3.8	2.7-0.06
	High School	51.7±10.6		17.0±3.9	
	Other	56.4±15.6		15.7±3.7	
<b>Marital Status</b>	The Married	46.0±9.8	-0.7-0.4	19.0±2.8	0.7-0.4
	Single	52.2±11.6		16.8±3.8	
<b>Working Status</b>	Yes	54.8±8.4	1.4-0.59	16.9±3.0	0.1-0.8
	No	52.5±8.6		16.8±3.9	

GPA: Grade Point Average

### Academic Self-Efficacy Scale (ASES)

ASES was developed by Jerusalem and Schwarzer (1992). The Turkish version of the scale was adapted by Yılmaz et al. (2007). This scale, which does not have a sub-dimension, consists of 7 items and it is a 4- point likertscale. The score to be taken from the scale is between 7-28 points. It has been reported that the factor loads vary between .829 and .500.

Jerusalem and Schwarzer (1992) reported that the Cronbach Alpha reliability coefficient of the ASES was .87, Yılmaz et al. (2007) who adapted the scale into Turkish reported that the Cronbach Alpha internal consistency coefficient was .79. The Cronbach Alpha reliability coefficient was .74 in this study.

### Academic Attributional Styles Scale (AASS)

AASS developed by Peterson and Barrett (1987) was adapted to Turkish by Camgoz et al. (2008). AASS examines a total of 12 academic events, six of which are positive and six are negative. Low scores on the scale indicate optimism, while high scores indicate pessimism. Peterson & Barrett (1987) reported Cronbach Alpha internal reliability coefficient of the scale as .87. In the study conducted by Camgoz et al. (2008), internal consistency coefficient of AASS was determined as .80 for English students, .78 for Turkish students and .72 for the sum of both groups. In this study, Cronbach Alpha was found as .78.

### Ethical principles

Within the scope of this research permission was obtained from the authors for the use of the scale. A written permission to conduct a questionnaire to the students. An ethical committee approval was taken from Gaziantep University Clinical Research Ethics Committee (Decision no: 2017/58, Date: 27.02.2017).

### Statistical analysis

Data obtained from the study were evaluated with the SPSS 22 program. Frequency test in statistical analysis of data, independent sample t-test in binary groups in parametric distributions, ANOVA test in parametric distribution of three or more group comparisons, Kruskal-Wallis test in nonparametric distributions were used and also a correlation analysis was

performed between the subscales of the scale and the total point averages. The relationship between variable (level of Academic Procrastination) predicted by multiple regression analysis and the predictor variables (Academic Motivation, Academic Attributional Styles and Academic Self-efficacy) was examined and then the Pearson Correlation Coefficients between these variables were calculated.

### Limitations of the research

Those who did not accept to participate in the study while filling out the data collection tools, who went beyond the rules to be followed while filling out the questionnaire, who did not attend the school even though they were registered, were considered as the limitations of the research.

### Results

The informative characteristics of the nursing students are shown in Table 1. It was observed that, of the students, 68.7% of the students participating in the study were female, 67.9% were 20 years old and over, 35.1% were in the 3rd grade, the Cumulative Grade Point Average (GPA) of 58.9% is less than 2.5 out of 4, 61.4% are Anatolian High school graduates, 99.6% are single, 91.4% do not have any jobs.

A statistically significant difference was found between students' academic self-efficacy and male students (17.7±3.5), the students aged 20 and over (17.1±3.8), third grade students (17.4±3.9) (Table 2, p <0.05).

There was no statistically significant difference between the academic self-efficacy of the students and the GPA, the high school they graduated, the marital status (Table 2, p > 0.05).

When the descriptive characteristics of the students are compared with the academic procrastination behaviors, a statistically significant difference was found between the academic procrastination behaviors of students graduated from Anatolian high school (56.4±15.6) (Table 2, p <0.05).

There was no statistically significant difference between students' academic procrastination behaviors and gender, age, class, GPA, marital status (Table 2, p > 0.05). When the descriptive characteristics of the students and the academic

Table 3. Comparing sub-dimensions of academic motivation scale and total score averages according to the descriptive characteristics of the students

Characteristics		Self transcendence	Discovery	Use knowledge	AMS total
		X±SD	X±SD	X±SD	X±SD
Gender	Female	23.6±3.9	24.6±4.6	19.5±4.5	67.7±12.5
	Male	22.6±4.6	23.6±5.5	18.8±5.3	65.2±11.2
t-p value		2.3-0.02	1.9-0.06	1.3-0.1	2.0-0.04
Age	20 and under	23.7±4.4	24.4±5.8	19.5±5.3	68.1±12.8
	21 and over	23.0±4.1	24.2±4.5	19.2±4.5	66.3±12.1
t-p value		1.7-0.08	0.3-0.7	0.5-0.5	1.4-0.1
Class	1st class	23.6±4.7	24.3±6.1	19.2±5.6	67.5±11.6
	2nd class	23.5±3.9	24.1±5.1	19.8±4.5	65.2±12.5
	3rd class	23.2±4.1	24.3±4.5	19.1±4.6	62.3±4.5
	4th class	22.8±4.2	24.4±4.6	19.1±4.7	65.2±11.9
F- p value		0.7-0.5	0.09-0.9	0.4-0.7	0.4-0.7
GPA	0-2.50	22.9±4.2	24.0±4.7	19.6±4.9	67.5±11.6
	2.51-4.00	23.7±4.2	24.8±5.2	19.0±4.6	66.2±13.4
t-p value		2.0-0.04	1.7-0.08	1.3-0.1	1.1-0.2
Graduated high school	Anatolian	23.4±4.3	24.5±4.9	19.2±4.8	59.2±6.9
	High School	23.1±4.7	24.4±4.7	20.0±4.4	58.2±6.5
	Other	22.8±4.5	23.0±5.5	18.1±5.2	60.1±9.6
F- p value		0.4-0.6	2.5-0.08	3.3-0.03	1.9-0.1
Marital status	The Married	19.0±0.0	30.5±6.3	22.5±3.5	68.0±2.8
	Single	23.3±4.2	24.3±4.9	19.3±4.8	66.9±12.4
t-p value		1.4-0.1	1.7-0.08	0.9-0.3	0.1-0.9
Working status	Yes	23.2±5.0	25.0±4.9	19.5±4.2	64.7±10.6
	No	23.2±4.1	24.2±4.9	19.3±4.8	67.1±12.5
t-p value		0.1-0.9	0.9-0.3	0.2-0.7	1.1-0.2

GPA: Grade Point Average; AMS: Academic Motivation Scale

procrastination behaviors, a statistically significant difference was found between the academic procrastination behaviors of students graduated from Anatolian high school ( $56.4 \pm 15.6$ ) (Table 2,  $p < 0.05$ ). There was no statistically significant difference between students' academic procrastination behaviors and gender, age, class, GPA, marital status (Table 2,  $p > 0.05$ ).

When the descriptive characteristics of the students and the academic motivation scale total point average are compared, it was found statistically significant between female students ( $67.7 \pm 12.5$ ) (Table 3,  $p < 0.05$ ). When the subscales of academic motivation behaviors are compared with the descriptive characteristics; statistical significance was found between self-transcendence and female students ( $23.6 \pm 3.9$ ), (Table 3,  $p < 0.05$ ). A statistically significant difference was found between the use of information and the academic motivation subscale of the students who graduated from the regular high school ( $20.0 \pm 4.4$ ), who chose nursing intentionally ( $20.3 \pm 4.8$ ) (Table 3,  $p < 0.05$ ).

Academic procrastination behavior, academic motivation, academic self-efficacy and academic attributional styles of students were examined. The results of this examination are given in Table 4 below.

An in significant positive relationship between academic procrastination behaviors and academic attributional styles ( $r = .017$ ,  $p = .713$ ), a significant negative relation between academic motivation ( $r = -.128$ ,  $p = .002$ ) and academic self-efficacy ( $r = -.151$ ,  $p = .001$ ) were determined (Table 4). A negative relationship ( $r = .050$ ,  $p = .05$ ) was found between academic attributional styles and motivation, and a positive relationship ( $r = .311$ ,  $p = .001$ ) between academic attributional styles and self-efficacy. There was a positive relationship between academic motivation and self-efficacy ( $p < 0.001$ ).

The relationship between the students' academic procrastination behaviors and the variables that affect it (academic attributional styles, academic motivation and academic self-efficacy) was tested by multiple regression analysis. The analysis results are given in Table 5.

Our regression model was significant ( $F = 4.898$ ,  $p = 0.002$ ), on the other hand, academic self-efficacy, which predicts academic procrastination behavior negatively significant ( $t = -571$ ,  $p = 0.010$ ), is the strongest predictor explaining 12.3%. Academic motivation was the variable that predicted academic procrastination behavior in the second place, it explains 9% negatively significant ( $t = -891$ ,  $p = 0.050$ ). In line with these data, regression model can be presented as  $APS = 32.902 + 0.90x \text{ AMS} + 0.123 \text{ X ASES} + 0.012 \text{ X AASS}$  (Table 5).

Table 4. Correlation between scales

Scales	1	2	3	4
1. Procrastination assessment	-			
2. Academic attributional styles	.017	-		
3. Academic motivation	-.128*	-.050*	-	
4. Academic self-efficacy	-.151**	.111*	.311**	-

\*  $p < .05$  \*\*  $p < .001$

Table 5. Multiple regression analysis between academic procrastination behaviors, academic motivation, academic attributional styles and academic self-efficacy of students

Scales	B	Beta	t	P	R	R <sup>2</sup>	F	P
Constant	32.902	-	9.781	,000				
Academic motivation	-,053	-.090	-,891	,050	0.174	0.030	4.898	0.002
Academic attributional styles	-,001	-.002	-,035	,972				
Academic self-efficacy	,234	-.123	-,571	,010				

## Discussion

It is noteworthy that working in the field of academic procrastination behaviors, which is a kind of procrastination behavior, is quite inadequate in our country. Therefore, it is thought that descriptive studies related to academic procrastination behaviors should be done. It is thought that this research will contribute to the theoretical framework related to academic procrastination behaviors and will reduce procrastination behaviors of nursing students especially, university students in general, and increase their academic success.

When the sample is examined, academic motivation is determined as a variable that influences the academic procrastination behaviors of nursing students. There was a negative and moderate relationship between academic procrastination and academic motivation and sub-dimensions in the research. Nursing students with increased academic motivation exhibit fewer academic procrastination behaviors. In addition, academic motivation significantly and negatively explains 9% of procrastination behaviors. Similarly, Yeşiltaş (2020) found negative and moderate relationships between academic postponement and academic motivation and sub-dimensions (use of knowledge, exploration, self-transcendence). Kürker (2021) found that university students' academic motivation increased while academic procrastination behavior decreased.

Deniz (2020) believes that procrastination behaviors are contrary to motivation and states that there is a significant relationship between academic procrastination behaviors and academic motivation. At the same time, they pointed out that academic motivation is a variable that influences students' academic procrastination behaviors. In another study, similarly, they reported that there was a significant negative correlation between students' academic procrastination behaviors and academic motivations (Sengul & Seyfi, 2020). Likewise, it was determined that students have more procrastination behaviors as their motivation level decreases (Vural & Gunduz, 2019; Ferrari et al., 2005). In this study, the results obtained from the sample also support the results of the above mentioned researches. As a result, the more nursing students focus on what they plan to do, the more they are motivated and the clearer their goals are. Therefore, sufficiently motivated students are aware of how they will act to fulfill their duties and responsibilities in an academic sense, and are more willing to finish planned work. Thus, students who are more motivated are expected to exhibit fewer academic procrastination behaviors.

According to findings obtained from this study, academic self-efficacy is the strongest variable that explains the academic procrastination behaviors of nursing students. At the

same time, there was a very negatively significant correlation between the academic self-efficacy of the students and the academic procrastination behaviors. When this result is examined, it can be interpreted that the students whose academic self-efficacy level increase have less procrastination behaviors. When the literature is examined, a number of studies were carried out that resulted in a significant negative correlation between students' academic procrastination behaviors and self-efficacy beliefs (Deniz, 2020; Sengul & Seyfi, 2020; Duran, 2020; Filiz & Dogar, 2021; Zor, 2020). The results of this study also support the results of the literature. In another study, a significant and positive relationship was found between academic procrastination behaviors and academic self-efficacy beliefs in male and female university student (Kurker, 2021). Zor (2020) states that when individuals are motivated and capable enough, they are determined to start and maintain work. Therefore, students are expected to be competent and qualified in their duties and responsibilities, to be highly motivated in their academic life, and to have realistic expectations for their academic studies..

As a result, the decrease in the academic procrastination behavior of the students is a predictable phenomenon. The results of this study also support this approach. According to the results obtained from the study, there was no relation between academic attributional styles and academic procrastination behaviors and also academic attributional styles do not predict academic procrastination behaviors. This result can be interpreted as the fact that nursing students have an optimistic or pessimistic point of view in their academic studies do not affect academic procrastination behavior. When the literature is examined, it is found that there are studies having opposite results to our study. In a study, Solomon and Rothblum (1984) reported that students who exhibit too much academic procrastination behaviors mostly based their achievements on external and non-stationary factors, compared to students exhibiting less procrastination behaviors. There is a very positive significant relationship between academic self-efficacy and academic motivation levels of nursing students. It was determined that the increase in the academic self-efficacy of nursing students also increased their motivation towards their academic duties and responsibilities and also while fulfilling their duties and responsibilities in an academic sense, they exhibit less academic procrastination behaviors if they are motivated enough and their self-efficacy beliefs are high.

## Conclusion and Recommendations

Academic self-efficacy beliefs of students, total point average of academic motivation level, sub-dimensions such as self-transcendence, discovery, use of knowledge were

found at a high level. It was determined that students are more pessimistic about solving the problems they face in order to fulfill their academic duties and responsibilities, that they consider themselves as the cause of the problems, that these causes will exist in the future and they will affect other areas of life. There was an insignificant positive correlation between the academic procrastination behaviors and the academic attributional styles, and there was a significant negative correlation between academic motivation and academic self-efficacy. There was a significant negative correlation between the academic attributional styles and motivation, and a significant positive correlation between the academic attributional styles and academic self-efficacy. There was a significant positive correlation between academic motivation and self-efficacy. The regression model is significant and academic self-efficacy is the variable that predicts academic procrastination behavior most strongly and negatively and also explains 12.3% of it. The second predictor of academic procrastination behavior is academic motivation, and it explains 9% of it as negatively significant.

In line with the results obtained from the research: One of the most important duties and responsibilities of academicians working at universities is to enable students to develop to the highest level that they can reach in academic terms. In this context, it is very important for academicians to develop developmental and preventive studies to reduce students' academic procrastination behaviors. When the results of this study are evaluated, a variety of activities may be organized to support the academic self-efficacy beliefs of nursing students, to give them an optimistic view and to increase their academic motivation. To be successful, students who get into universities need to change their working habits that they got used since high school. In order to remove this cycle that prevent students from academic studies, various orientation activities should be organized for the students who get into the university to facilitate their academic adaptation. In addition, psychological counseling aimed at reducing students' academic procrastination tendencies and increasing their academic development can be given.

#### **Suggestions for future studies**

This study was conducted on a limited number of variables (academic motivation, academic attributional styles, and academic self-efficacy) suggested to predict academic procrastination behaviors. Future studies may be conducted with different variables (anxiety, fear of success, fear of failure, depression, perfectionism, self-esteem, academic achievement, stress, control orientation, asociality, age) associated with academic procrastination behavior. It is important for students to develop developmental and preventive studies to reduce their academic procrastination behaviors. Various orientation trainings should be organized for students who have won the university, which will facilitate their academic adaptation. Academic counseling should be provided to students in order to gain lifelong learning habits..

#### **Conflict of Interest**

There is no conflict of interest.

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#### **Ethics Committee Approval**

This study was approved by Gaziantep University Clinical Research Ethics Committee (Decision no: 2017/58, Date: 27.02.2017).

#### **Informed Consent**

Informed consent was obtained from nursing students who participated in this study.

#### **Peer-review**

Externally peer-reviewed.

#### **Author Contributions**

Ü.A.: Literature Search, Design, Supervision, Critical Review, Writing Manuscript.

M.C.: Concept, Materials, Data Collection and/or Processing, Writing Manuscript

S.A.: Concept, Materials, Data Collection and/or Processing.

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