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The Relationship Between Academic Procrastination, Academic Self-Efficacy, And Academic Achievement Among Undergraduates

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Abstract

The aim of the study is to investigate the relationship between academic procrastination, academic self-efficacy, and academic achievement. In this context, the data was obtained from 86 senior undergraduates studying at Faculty of Humanities and Social Sciences - Atatürk University in 2020 and was subjected to reqired analyses. The results of the analyses show that there is a negative and significant relationship between academic self-efficacy and academic procrastination; positive and significant relationship between academic self-efficacy and academic achievement. Morever, the results of the regression analyses show that academic self-efficacy is a predictor factor for academic procrastination and academic achievement. There is not any significant relationship between academic procrastination and academic achievement.

Keywords: *Academic Procrastination, Academic Self-efficacy, Academic Achievement*

Üniversite Öğrencileri Arasında Akademik Erteleme, Akademik Öz-Yeterlik Ve Akademik Başarı İlişkisi

Özet

Çalışmanın amacı, üniversite öğrencileri arasında akademik erteleme, akademik öz-yeterlik ve akademik başarı değişkenleri arasındaki ilişkiyi incelemektedir. Bu bağlamda, 2020 yılında Atatürk Üniversitesi Oltu Beşeri ve Sosyal Bilimler Fakültesi'nde öğrenim görmekte olan 86 son sınıf lisans öğrencisinden internet yoluyla veri toplanmış ve toplanan veriler gerekli analizlere tabi tutulmuştur. Analiz sonuçları akademik öz-yeterlik ile akademik erteleme arasında negatif yönlü ve anlamlı bir ilişki olduğunu, akademik öz-yeterlik ile akademik başarı arasında pozitif yönlü ve anlamlı bir ilişki olduğunu göstermektedir. Ayrıca regresyon analizi sonuçları akademik öz-yeterliğin, akademik erteleme ve akademik başarı için yordayıcı bir faktör olduğunu göstermektedir. Akademik erteleme ile akademik başarı arasında ise anlamlı bir ilişki bulunamamıştır.

Anahtar Sözcükler: *Akademik Erteleme, Akademik Öz-yeterlik, Akademik Başarı*

1. Introduction

Factors such as lack of motivation (Arbabisarjou et al., 2016: 12275; Shikwari, 2017: 23), exam anxiety (Hamzah et al., 2018: 2226; Khalaila: 435), low self-esteem (Asakereh & Yousofi: 79), negative affect (Quinn & Duckworth, 2007: 4; Lv vd., 2016: 4), addiction to smart phone (Ibrahim et al., 2018: 4; Samaha & Hawi, 2016: 323), distractibility, lack of

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clear plan, depression, and anxiety (Al-Zoubi & Younes, 2015: 2262) have negative relationship with academic achievement. Another factor which has relationship with academic achievement is academic procrastination. Studies conducted shows that academic achievement decreases when academic procrastination rises (Balkıs, 2011: 5; Haghani, 2014: 36; Kim & Seo, 2015: 29; Satayeshi et al., 2017; Duru and Balkıs, 2017: 107).

Ellis and Knaus (1977) indicated that %95 of undergraduates showed academic procrastination behavior. Solomon and Rothblum (1984) remarked that %46 of students procrastinated their term papers, %28 preparation of exams, %30 weekly reading assignments. Another study found that %42 of students procrastinated their term paper, %39 weekly reading assignments (Onwuegbuzie, 2004: 8). Hence, it can be said that academic procrastination behavior is common among students.

Procrastination is defined as impediment of the done tasks motivelessly until feeling discomfort (Solomon and Rothblum, 1984: 503). When these tasks are academic, it's called as academic procrastination and students who make this behavior feel stress and anxiety (Rothblum et al., 1986: 387; Senecal et al., 1995: 608).

Research conducted has indicated that Caucasian-American undergradutes procrastined their term papers (%46), studies for exams (%28) and weekly reading assignments (%30), while the rates are for Afro-Americans %30 for term papers, %28 for studies for exams, and %36 for weekly reading aasignments. Additionally, most of undergraduates (%55 - %60) specified that they wanted to decrease their procrastination behaviors (Clarc & Hill, 1994: 934). Academic procrastination behavior which is common among undergraduates results in negatively such as feeling discomfort, weariness, anger, remorse, dissatisfaction, sadness, shame, time lag, dropping behind of classmates, and even dropping out univesity. In addition to these, academic procrastination decreases physical and mental health of undergraduates with the effect of stress, exhaustion, and sleep-related problems (Grunschel et al., 2013: 851).

Another output of academic procrastination is it's effect on academic achievement (GDP) of undergraduates. Previous studies have showed that there is a significant and negative relationship between academic procrastination behavior and academic achievement (Balkıs et al., 2006: 64; Balkıs and Duru, 2010: 163; Grunschel et al., 2016: 166; Duru & Balkıs, 2017: 107). In addition, Kim and Seo (2015) investigated 33 studies which had

handled these two variables and did a meta-analysis study with 38.529 participants. This study also supported previous studies and verified significant and negative relationship between academic procrastination behavior and academic achievement. In the light of this information, H_1 has been hypothesized.

H_1: There is a significant and negative relationship between academic procrastination and academic achievement.

Another study seperates procrastination behavior as active and passive. Active procrastination is defined as behavioral characteristic of individual preference related to satisfactory outputs, cognitive decision making for procrastination, time pressure and capacity to meet deadline. Thereby, active procrstination refers to behaviors of individual to benefit from these factors deliberately. On the other hand, passive procrastination includes postponed behaviors without caring about these benefits. As a result of the study, it has found that there is a significant and negative relationhsip between passive procrastination behavior and academic achievement, while there is not any significant relationship between active procrastination and academic achievement (Kim et al., 2017: 154).

Self-efficacy refers to belief of individual about his/her own skills and abilities to complete specific task. Self-efficacy is a subjective notion because of being perception of individual regarding himself/herself. Accordingly, even though individual doesn't have required skills and abilities to complete specific task, he/she might have high self-efficacy if he/she believes to himself/herself to complete the specific task and perceives himself/herself as a skilled individual (Schunk, 1991: 207-208). Previous studies have showed that indiviuals with a high self-efficacy has high academic achievement (Pajares, 1996: 556; Bong, 2001: 564; Fátima Goulão, 2014: 244; Feldman & Kubota, 2015: 214; Høigaard et al., 2015: 78; Doménech-Betoret et al., 2017: 8). In this context, H_2 has been hypothesized.

H_2: There is a significant and positive relationship between academic self-efficacy and academic achievement.

Previous researches have indicated that there is a significant relationship between academic self-efficacy and academic procrastination (Farran, 2004; Klassen et al., 2008, 921; Hejazi et al., 2009: 128; Odacı, 2011: 1111; Jamali et al., 2013: 634; Hen & Goroshit, 2014: 121). Findings of these studies have supported the significant and negative relationship

between academic self-efficacy and academic achievement. Moreover, some studies have stated that academic self-efficacy is a predictor of academic prorastination (Öcal, 2016: 486; Batool et al., 2017: 202). Hence, H_3 has been hypothesized.

H_3: There is a significant and negative relationship between academic self-efficacy and academic procrastination.

2. Methods

2.1. Research Model

Investigation of factors which affect academic achievement is crucial to increase performace of undergraduates. Previous studies have denoted that "academic procrastination", "academic self-efficacy", and "academic achievement" are related with each other (Klassen et al., 2008: 921; Balkıs, 2011: 5; Azar, 2013: 176; Hen & Goroshit, 2014: 5-6). In this regard, the model of this research is as in the Figure 1.

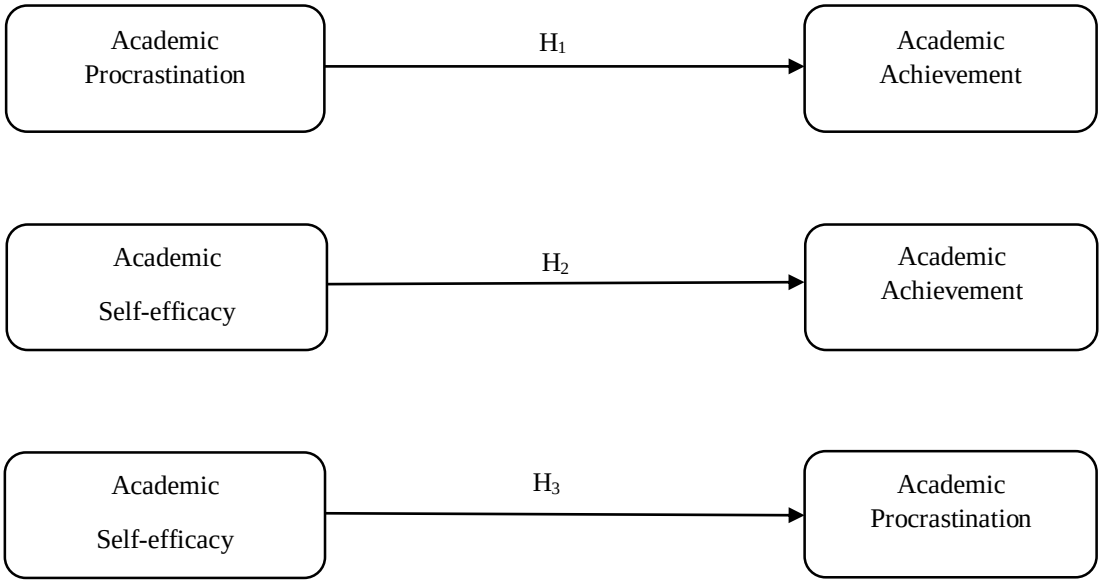

Figure 1: Reseach Model

2.2. Study Group

Population of the study consists of 105 active senior undergraduates who have been studing at Ataturk Univesity – Faculty of Humanities and Social Sciences in 2019-2020 academic year. The number of the sample is 86, while the number of minimum sample for the selected population is 83 with %95 confidence interval and %5 margin of error (Gürbüz & Şahin, 2018: 130). Therefore, it could be said that the sample represents the selected

population. The sample consists of 62 female (%72) and 24 male (%28). Average age of the sample is 22. The number of undergraduates who have been studing in "Banking and Finance" department is 23, while it's 28 for "Business Administration" and 35 for "Social Work".

2.3. Data Collection Instruments

2.3.1. The Scale of Academic Procrastination Tendency

Academic procrastinaton variable has been measured by "*The Scale of Academic Procrastination Tendency"* developed by Aitken (1982) and adopted to Turkish by Balkıs (2006). The scale consists of 16 items and reverse items have been fixed. Item 2 and item 14 have been removed after confirmatory factor anaylsis. Conducted confirmatory factor analysis for remained 14 items has been carried out by AMOS 20 programme. After required modifications have been made, the model fit has indicated that the values (CMIN/DF = 1,041; NFI = ,901; TLI = ,994; CFI = ,996; RMSEA = ,022) are at acceptable level (Gürbüz & Şahin, 2018: 345). Reliability anaylsis of the scale with 14 items has been done by measuring Cronbach alpha (α) value. Reliability coefficent of the scale (α) is 0,918. Hence, it could be said that internal consistency reliability value of the scale is at acceptable level because it's higher than 0,70 (Nunnally, 1978).

2.3.2. The Scale of Academic Achievement

GPA of undergraduates has been used as an indicator of academic achievement by sampling previous studies (Kennedy & Tuckman, 2013: 449; Balkıs, 2013: 64; Kim & Seo, 2015: 27; Grunsachel et al., 2016: 164; Kim et al., 2017: 155; Duru & Balkıs, 2017: 106).

2.3.3. The Scale of Academic Self-efficacy

Academic self-efficacy variable has been measured by "The Scale of Academic Self-efficacy" developed by Jerusalem and Schwarzer (1981) and adopted to Turkish by Yılmaz et al., (2007). The scale consists of 7 items and reverse items have been fixed. Conducted confirmatory factor analysis has been carried out by AMOS 20 programme. After required modifications have been made, the model fit has indicated that the values (CMIN/DF = 1,308; NFI = ,908; TLI = ,957; CFI = ,975; RMSEA = ,060) are at acceptable level (Gürbüz & Şahin, 2018: 345). Reliability anaylsis of the scale with 7 items has been done by measuring Cronbach alpha (α) value. Reliability coefficent of the scale (α) is 0,759. Hence,

it could be said that internal consistency reliability value of the scale is at acceptable level because it's higher than 0,70 (Nunnally, 1978).

2.3.4. Personal Data Form

Personal data form developed by authors include questions such as gender, age, and department.

2.4. Data Collection and Analyses

Questionnaire forms have been conveyed undergraduates via internet and convenience sampling method has been used. While 105 questionnaires have been sent to undergraduates, 86 of them has been responded by participants and incorporated into analyses. Confirmatory factor analyses has been utilised by using AMOS 20 programme. Correlation anaylses has been utilised to test hypotheses and regression analyses has been utilised to investigate effects among variables which has had correlation with each other by using IBM Statistics 20 programme.

3. Findings

As it could be seen on the Table 1, bivariate correlation analysis has been utilised to check whether there is a correlation between "academic procrastination", "academic self-efficacy", and "academic achievement". Results of the analysis have showed that there is a significant and negative relationship between "academic self-efficacy" and "academic procrastination" ($r = -,221$, $p < 0,05$). Negative relationship among the variables states that they change together and one increases when the other one decreases.

Another finding of the study is the significant and positive relationship between "academic self-efficacy" and "academic achievement" ($r = ,317$, $p < 0,01$). Positive relationship among the variables states that they increase or decrease together.

As a result of the bivariate correlation analysis, Table 1 remarks that there is not any significant relationship between "academic self-efficacy" and "academic achievement".

Table 1: Correlation analysis between academic procrastination, academic self-efficacy, and academic achievement

	AP	AS	AA	Mean	sd
AP	1	-,221*	-,175	2,27	,80
AS	-,221*	1	,317**	3,79	,56
AA	-,175	,317**	1	2,89	,45

*p < .05, **p < .01, AP = Academic procrastination, AS = Academic self-efficacy, AA = Academic achievement.

As it could be seen on the Table 2, simple regression analysis has been utilised to investigate the effect of academic self-efficacy on academic procrastination. The result of the anaylsis is significant (F = 4,320, p < ,05.). The regression equation among "academic self-efficacy" and "academic procrastination" is AP = 3,489 + (-3,21) (AS). According to R^2 (,049) value obtained after analysis result, %4,9 variance of academic procrastination depends on academic self-efficacy.

Table 2: The effect of academic self-efficacy on academic procratination

Model	**β**	t	R	R^2	F	p
AP	-,221	-2,078	,221[a]	,049	4,320	,041[b]

Independent variable: AS = Academic self-efficacy
Dependent variable: AP = Academic procrastination.

As it could be seen on the Table 3, simple regression analysis has been utilised to investigate the effect of academic self-efficacy on academic achievement. The result of the anaylsis is significant (F = 9,369, p < ,01). The regression equation among "academic self efficact" and "academic achievement" is AA = 1,900 + ,261 (AS). According to R^2 (,10) value obtained after analysis result, %10 variance of academic achievement depends on academic self-efficacy.

Table 3: The effect of academic self-efficacy on academic achievement

Model	**β**	t	R	R^2	F	p
AA	,317	3,031	,317[a]	,100	9,369	,003[b]

Independent variable: AS = Academic self-efficacy
Dependent variable: AA = Academic achievement.

4. Discussion and Reccomendations

Academic procrastination is a common behavior among undergraduates. Undergraduates who have this behavior are confronted with some undesirable situations such as stress and anxiety. However, when undergraduates who constitute the sample of this study are considered, it could be said that they have low level of academic procrastination (N = 86, m = 2,27).

Another notion has been investigated in this study is academic self-efficacy. The result of the analysis has indicated that undergraduates have high level of academic self-efficacy (N = 86, m = 3,79). Therefore, it could be indicated that undergraduates have high level of belief that they could fulfil their tasks such as assignments, projects or exams.

Academic achievement of the undergraduates has been evaluated by GPA. The results show that undergraduates have sufficient level of academic achievement (N = 86, m = 2,89).

H_2 and H_3 have been supported, while H_1 has been rejected. Hence, it could be said that there is a significant and positive relationship between academic self-efficacy and academic achievement among undergraduates. This result also supports previous studies in the literature (Samavi et al., 2016; Doménech-Betoret et al., 2017: 7; Eakman et al., 2019: 1014). Morever, some studies have demonstrated that academic self-efficacy is a substabtial predictor of academic achievement. In this context, additon to correlation analysis, regression analysis has been executed. The result of the analysis has remarked that academic self-efficacy is a substantial predictor of academic achievement. This supports previous studies in the literature (Lee et al., 2014: 95; Doğan, 2015: 556; Hassan et al., 2015: 281; Vogel & Human-Vogel, 2016: 1307).

The significant and negative relationship between academic self-efficacy and academic procrastination could be evaluated as another result of the study. In this regard, it could be said that academic procrastionation behavior of undergraduates decrease when their self-efficacy increase. This obtained result supports previous studies (Klassen et al., 2008: 921; Özer & Altun, 2011: 54; Cerino, 2014: 161; Zhang et al., 2018: 824). In addition, previous studies have supported that academic self-efficacy is a predictor of academic procrastination. Within this scope, additon to correlation analysis, regression analysis has been executed. The result of the analysis has remarked that academic self-efficacy is a substantial predictor of academic procrastination. This result supports previous studies (Chow, 2011: 236; Strunk & Steele, 2011: 987; Corkin et al., 2014: 300).

Another issue has been investigated in the study is the relationship between academic procrastination and academic achievement and there is not any significant relationship between these variables. This result contradicts with several studies (Balkıs & Duru, 2010: 163; Tamadoni et al., 2010; Azar, 2013: 176; Haghani, 2014: 36). However, there are also a few studies which couldn't find any significant relationship between these variables (Seo, 2011: 213; Karataş, 2015: 249). Besides, Yaycı and Düşmez (2016) didn't find a significant relationship between academic procrastination and academic achievement among students who had high level of academic achievement, while they found it among students with very high and medium level of academic achievement. The study of Kim et al., (2017) might be

an explanation of this contradiction. In fact, they could find a significant relationship between passive procrastination and academic achievement, they couldn't find any significant relationship between active procrastination and academic achievement. In this regard, it is seen that students procrastinate their academic tasks on purpose to benefit from pressure and stress (active procrastination) don't encounter academic failure while passive procrastinators who ignore these benefits have low academic achievement.

Consequently, it could be suggested that academic procrastination should investigate seperately as active academic procrastination and passive academic procrastination. In addition, academic achievement of undergraduates could be contributed by rising their academic self-efficacy. Within this framework, it is crucial to determine factors which affect academic self-efficacy of undergraduates.

The results of this study is limited with selected sample so future studies with larger and various samples could give more appropriate and generalizable results. Furthermore, future studies could be conducted with new models by adding another variables which might affect the relationship between these variables.

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