Analysis of Academic Self-Efficacy, University Graduation Expectations and Academic Procrastination Behaviors

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Abstract. This study aims to examine the relationship between academic self-efficacy, academic procrastination and university graduation levels of university undergraduate students. The study also investigated whether these variables differ according to the gender of the students. The study was conducted with a relational screening model. The data of the study were obtained from 277 female and 109 male students. According to the findings obtained, the students' academic self-efficacy and academic procrastination behaviors were found out at a moderate level; and their university graduation expectations were found out at a high level. No difference was found in these variables according to gender variable. In the correlation analysis, a negative moderate relationship was found between academic self-efficacy and academic procrastination behaviors; a positive low-level relationship was found between academic self-efficacy and university graduation expectations; and a negative low-level relationship was found between academic procrastination and university graduation expectations.

Keywords. Self efficacy, graduation, academic procrastination.

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Note: This article is derived from the first author's master's thesis.

There are many factors that affect student success. Examining these factors contributes to the creation of policies necessary for students to receive quality education and for educational institutions to achieve their goals. Academic self-efficacy beliefs, academic procrastination behaviors, and graduation expectations are among these factors that directly affect students' academic success. For example, academic procrastination behaviors affect not only the individual's educational life, but also their psychological state, social relationships, and economic activities. (Grunschel, Patrzek, & Fries, 2013). Klassen, Krawchuk, & Rajani (2008) state that the perception of self-efficacy has positive effects on a person's academic life and that high self-efficacy beliefs reduce academic procrastination behaviors. In fact, it is stated by Beltekin and Kuyulu (2020) that there may be a relationship between graduation expectations and academic procrastination behaviors.

Self-efficacy, an important factor for a person to successfully complete a task, is a concept that provides motivation by affecting thoughts and emotions and expresses the person's level of belief in success regarding the target (Zulkosky, 2009; Stajkoviç, 1979). While self-efficacy perception could increase awareness and motivation, it may also decrease it. The level of self-efficacy perception and the level of success are related to each other (Gülmez, 2015). People with low self-efficacy consider the tasks given or to be fulfilled as more difficult than they are. People with low self-efficacy usually create failure scenarios and believe that they will not be successful. On the other hand, people who believe that they will be effective in their field and create success-oriented scenarios based on their own performances perform better (Bandura, 1989).

Academic self-efficacy is the belief that a student can successfully complete an academic task (Yılmaz, et al., 2007; Zimmerman, 1995). Bandura (1977) defines academic self-efficacy as the individual's personal thought judgments related to his/her abilities to organize action plans and put these plans into practice to reach the types of educational effort and performance that are already determined (p.203). According to Gore (2006) and Millburg (2009), academic self-efficacy refers to the individual's belief related to his/her desire to do academic tasks at the desired level and with success. Individuals with high academic self-efficacy are those who have the ability to control their skills, put forward new ideas or opinions, and set more difficult goals for themselves by putting them into practice. Students' self-efficacy is determined by their active experiences related to the work to be done, their observational experiences, the thoughts that their social environment is exposed to regarding doing the work, and the individual's physiological and psychological state (Bandura, 1997). Students with strong academic self-efficacy have a stronger mindset and tend to find solutions to

problems; students with low academic self-efficacy tend to withdraw from school in the face of failure (Millburg, 2009).

Procrastination is a behavioral tendency to delay actions that need to be taken for a task to be completed (Li et al., 2020). Procrastination is based on the person's acceptance of the possible negative consequences by doing a task reluctantly and without paying attention to the work schedule (Kandemir, 2010, pp. 14-15; Milgram et al., 1997). According to the first studies, procrastination behavior is explained as a situation that occurs as a result of the failure of a person's self-control skills (Ellis and Knaus, 1979). According to Solomon and Rothblum (1984), it is the person's delaying and not fulfilling their responsibilities until it reaches a level that causes personal illness. According to Fiore (1989), procrastination is an escape; it catches a person in their most depressed vicious cycle and drives them to procrastinate, thus escaping from their work. Therefore, as Aremu et al. (2011) stated, procrastination is a psychological state and is based on the person's inadequacy in self-regulation.

Academic procrastination refers to the dimension of procrastination behavior specific to academic tasks and jobs. Senécal et al. (2003) define it as an irrational tendency to delay in the beginning or completion of an academic task (p. 135). When these tasks are academic, it is called academic procrastination and students engaging in this behavior experience stress and anxiety (Rothblum, et al., 1986, p. 387). Academic procrastination is mostly observed among students (Clessens, et al., 2007) and is a situation that negatively affects students' academic performance (Onwuegbuzie, 2004). According to Balkıs and Duru (2010), academic procrastination does not only cause academic failure in students, but it also negatively affects the psychological state and mental health of the individual.

According to Solomon and Rothblum (1984), there are two main reasons for academic procrastination. These are fear of failure and avoidance of work. Feelings which are related to not being able to fulfill the academic assignment that is required to be fulfilled, which is brought about by low self-efficacy belief, may reduce the person's belief in success and give way to anxiety. As a result of procrastination behaviors, students may have to experience situations such as failure, prolonged education period and dropping out of school (Baltacı, 2017). Academic procrastination behaviors and the problems to be experienced cause the person to struggle with anxiety, restlessness and feelings of inadequacy (Akbay and Gizir, 2010, p. 61).

Academic procrastination may be observed more frequently, especially among university students (Dewitte & Schouwenburg, 2002). Academic procrastination is also related to students' academic adaptation and fatigue after feeling depressed. Students tend to procrastinate because they feel helpless in all academic tasks. In addition, another factor is that students live independently from their families for the first time. This situation frees them to make their own decisions. Because the social environment and activities they are in offer a more attractive environment, this situation leads students to academic procrastination (Szalavitz, 2003). Academic procrastination behaviors are a problem that should be taken into consideration among students. Uzun Özer (2009) states that more than half of the university students in Turkey have academic procrastination behavior. The reasons why academic procrastination behaviors have become a common problem are internet and phone addiction (Güngör & Koçak, 2020), low academic self-efficacy (Sula-Ataş & Kumcağız, 2019; Ekinci & Gökler, 2017; It is stated in the literature that the student's personality traits Gün, Turabik and Atanur Başkan, 2020) and the student's personality traits (Kandemir, 2014) may be effective.

The concept of expectation involves anticipating what will happen as a result of a certain action and associating subsequent actions with subsequent outcomes (Betz & Voyten, 1997). When the concept of expectation is associated with higher education, the following example could be given: "If I successfully complete a higher education program ... I would like to." (Orçan & Çelik, 2021). Flores, et al. (2008) emphasize that the success of university students in university education will be related not only to their personal motivations, academic interests, and course success, but also to their university graduation expectations and goals. In addition, an individual's expectations regarding their education are closely related to their economic opportunities, family support, educational status and expectations (Cheng & Starks, 2002), and personal characteristics (Balloo, Pauli, & Worrell, 2017).

University graduation expectations are directly related to both motivation and future plans, and this issue should be addressed on a common ground (Karadeniz & Özkan, 2021). Jones (2018) emphasizes that there is a predictable relationship between university graduation expectations and positive student experiences. Therefore, students' expectations regarding their education are a factor that could have important consequences not only academically but also in their lives after graduation (Orçan & Çelik, 2021). At the same time, the fact that graduation expectations have the power to negatively predict academic procrastination behaviors (Dikmen, 2021) shows that high graduation expectations are a factor that could positively contribute to the increase in academic success. Therefore, the quality of higher education students receive is closely related not only to the opportunities provided by the university, but also to the alignment between the student and their

academic department, as well as the student's characteristics and efforts. For this reason, identifying students' self-efficacy levels, academic procrastination behaviors, and graduation expectations—and examining the relationships among these variables—may offer valuable insights for ensuring effective education within universities.

The aim of this study is to determine the relationship between self-efficacy beliefs, academic procrastination behaviors and graduation expectations, which are effective in academic success and career planning of higher education undergraduate students. Within the framework of this purpose, the following questions have been answered:

1. What are the levels of academic self-efficacy, academic procrastination behaviors, and university graduation expectations of undergraduate students?

2. Do the academic self-efficacy, academic procrastination behaviors, and university graduation expectations of undergraduate students differ according to the gender variable?

3. Is there a relationship between the academic self-efficacy, procrastination behaviors, and university graduation expectations of undergraduate students?

Method

In this study, the relational screening model, one of the quantitative research methods, has been used as the design of this study. Relational screening models are used to determine interactions among multiple variables. Thus, appropriate statistical analysis techniques could be applied to determine relationships, effects or differences to determine relationships between variables and compare group means (Büyüköztürk et al., 2013).

Study Group

The target population of the study consists of 4-year undergraduate students at a state university in Turkey. The sample selection was made using the simple random sampling method. Simple random sampling is opted for fairly homogeneous groups, where research members are randomly selected to participate in the study (Bhardwaj, 2019). During the data collection process, the online version of the survey form was delivered to all faculty members of the university via e-mail on the university's website; the form was sent to the students and those who volunteered were asked to participate in the study. Data were collected from 386 undergraduate students, 277 female and 109 males, who received the form in this way and voluntarily participated in the study.

Data Collection Tools

The data of the study were obtained with four different data collection tools. The first is the personal information form that asks for personal information. The second is the Academic Self-Efficacy Scale developed by Jerusalem and Schwarzer (1981), which was adapted to Turkish culture by Yılmaz et al. (2007). The scale is a 4-point Likert-type and consists of 7 items. The scale consists of a single factor. The Cronbach's α reliability coefficient of the Turkish version was measured as .79. The third is the University Graduation Expectation Questionnaire developed by Flores, et al. (2008) and adapted to Turkish by Orçan and Çelik (2021). The questionnaire is a 10-point Likert-type and consists of 15 items. The scale consists of two factors. The total variance explained by these two dimensions was calculated as 49.49%. The Cronbach α internal consistency coefficient of the scale was determined as .87. The fourth is the Tuckman Procrastination Scale. This scale was adapted to Turkish by Özer, et al. (2013). The scale is a 5-point Likert-type scale, consisting of 14 items and two dimensions. The total variance explained by these dimensions was calculated as 47.15%. The Cronbach α internal consistency coefficient of the scale was found to be .87

Data Analysis

SPSS 25 statistical package software was used for data analysis. Before the analysis of the study, it was checked whether there was any data loss, and normality tests were performed. It was seen that the kurtosis and skewness values of the items in the scales were between +1.5 and -1.5. It was seen that the data showed a normal distribution with these values (Tabachnick and Fidell, 2013). Then, the average scores of the scales were determined with the data. For the difference tests, independent groups t-test was applied according to the gender and faculty variables and ANOVA test was applied according to the grade level variable. After the average scores were calculated for each scale, correlation analysis was performed and the level and direction of the relationship between the three variables were determined with this analysis.

Results

The level of academic self-efficacy, academic deferral and graduation expectations of undergraduate students was examined. The findings of the examination are given in Table 1.

Table 1.

Findings Regarding the Levels of Academic Self-Efficacy, Academic Procrastination, and University Graduation Expectations of Undergraduate Students

Scale	n	Min	Max.	X̄	S.S.
Academic Self-Efficacy	386	1.00	4.00	2.74	.43
Academic Procrastination	386	1.00	4.93	2.84	.80
Graduation Expectations	386	1.00	10.00	6.69	1.86

According to the findings shown in Table 1, it is seen that undergraduate students have a medium level academic self-efficacy score ($\bar{x} = 2.74$), a medium level academic procrastination score ($\bar{x} = 2.84$), and a high level of university graduation expectations ($\bar{x}=6.69$).

Whether the levels of academic self-efficacy, academic procrastination, and university graduation expectations of undergraduate students differ according to the gender variable was analyzed with an independent group t-test. The findings obtained after the independent groups t-test are shown in Table 2.

Table 2.

Differentiation Status of Undergraduate Students' Academic Self-Efficacy, Academic Procrastination and University Graduation Expectations Levels According to Gender Variable

Dimension	Gender	n	x̄	S.S.	Sd	t	p
Academic Self-Efficacy	Female	277	2.73	.87	384	-.21	.82
	Male	109	2.74	.89	384		
Academic Procrastination	Female	277	2.87	.72	384	1.33	.18
	Male	109	2.75	.74	384		
Graduation Expectations	Female	277	6.73	.52	384	.79	.42
	Male	109	6.57	.70	384		

Table 2 shows the average scores of undergraduate students' academic self-efficacy, academic procrastination and university graduation expectations levels according to the gender variable. According to the analysis findings, no significant difference was found in the students' academic self-efficacy levels ($t_{384} = -.21$; $p>.05$), academic procrastination levels ($t_{384} = .1.33$; $p>.05$) and university graduation expectations levels ($t_{384} = .79$; $p>.05$), according to the gender variable. Correlation analysis was conducted to determine the relationship between the participants' academic self-efficacy, academic procrastination and university graduation expectations levels. The results of the analysis are shown in Table 3.

Table 3.

Findings Regarding the Relationship Between Academic Self-Efficacy, Academic Procrastination and University Graduation Expectations of Undergraduate Students

Variables	1	2	3
(1) Academic Self-Efficacy	1	-.324[**]	.218[**]
(2) Academic Procrastination	-.324[**]	1	-.264[**]
(3) Graduation Expectations	.218[**]	-.264[**]	1

There is a medium-level negative relationship between the academic self-efficacy levels of undergraduate students and their levels of academic procrastination behaviors, while there is a low-level positive relationship between their university graduation expectations. There is a low-level negative relationship between the academic procrastination levels of students and their graduation expectations.

Discussion and Conclusion

Since the students' academic self-efficacy levels are at a moderate level, it could be interpreted that the students' academic self-efficacy is partially positive in terms of statistics. In the studies conducted by Oğuz (2012) and Gündoğan and Koçak (2017) with teacher candidates, it was observed that the students' self-efficacy belief level was high. It could be said that it is normal for the findings to differ partially according to different sample groups. In addition, the fact that universities were providing distance education during the period the study was conducted may have caused a partial decrease in self-efficacy beliefs. Active participation in learning, which is enhanced by teachers' emotional support, has been found to be positively associated with academic self-efficacy (Guo et al., 2025). However, Melgaard et al. (2022) emphasize that distance education environments are often characterized by reduced student engagement and limited interaction. Accordingly, the lack of face-to-face interaction with teachers and the reduced availability of emotional support during the distance education process may have contributed to lower levels of self-efficacy.

The fact that the students' academic procrastination levels were at a moderate level indicates that the students partially engaged in procrastination behaviors. In the study of Güngör and Koçak (2020) and Rad, et al. (2025), the students' academic procrastination behaviors were found out at a moderate level, and this is consistent with the study. It can be said that being away from school due to distance education and limited interaction may have been effective in the students' procrastination behaviors, even at a moderate level. Studies show that the duration of social media and internet use in Türkiye exceeds the global average (TRT Haber, 2025). Therefore, students who are away from

school and spend most of their time at home may have experienced an increase in academic procrastination if they used social media and the internet extensively. Indeed, the finding by Kürker and Sürücü (2024) that excessive use of social media increases academic procrastination also supports this inference. In the study, it was found out that the students' graduation expectations were at a high level. According to this finding, it can be interpreted that the students are hopeful about their future and intend to advance in their careers. Epstein (2001) stated that having high graduation expectations plays an important role in students being more efficiently prepared for school life and the education they receive.

It has been found that the gender variable of the students does not create a difference in their academic self-efficacy perceptions. Studies conducted on teacher candidates and other faculty groups have revealed that there is no significant difference in students' academic self-efficacy in terms of gender (Yalmancı, et al. 2014; Ekşi & Dilmaç, 2010; Şeker, 2017; Oğuz, 2012, Kurum et al., 2023; Şirin & Duman, 2018). These findings are consistent with this study. According to the findings in question, it can be said that gender does not create any difference in self-efficacy beliefs.

In this study, academic procrastination behaviors do not lead to any difference according to the gender variable. There are similar findings in different studies which were conducted on the academic procrastination variable (Tufan & Gök, 2008; Özer & Topkaya, 2011). While some studies have found that male students have higher procrastination behaviors than female students (Abdi-Zarrin & Gracia, 2020; Akdamar & Kızılkaya, 2022; Kekeç & Erdönmez, 2011; Khan et al., 2014), some studies (Mişe & Hançer, 2019) have found that female students have higher procrastination behavior levels. Different findings in this aspect may vary depending on the sample and the time the study was conducted. The fact that there is no difference in terms of the gender variable in this study also shows that gender does not have a differentiating role in students' academic procrastination behaviors. The fact that the universities provided online education during the data collection process of the study and that no time was spent on lessons and other activities at school may have also caused the lack of difference in procrastination behaviors.

As a result of this study, no significant difference was found between male and female students in terms of graduation expectations. This finding is also found in other studies (Chun & Choi, 2005; Usher & Pajares, 2006). Taştepe and Duramaz (2022) found that there was a positive difference in the future expectations of female students compared to males. The fact that the graduation expectation levels of women and men are close could be interpreted as the fact that gender discrimination is not

perceived in the employment processes of the country, and that gender does not have a decisive role in the future expectations of students of both genders.

A negative and medium-level relationship has emerged between the level of academic self-efficacy and the level of academic procrastination. The negative relationship between an individual's self-efficacy belief and academic procrastination behaviors seems to be consistent with the literature (Sula-Ataş and Kumcağız, 2019; Akbay and Gizir, 2010; Ekinci and Gökler, 2017; Gün, Turabik and Atanur Başkan, 2020; Yuan, et, al., 2024)). The positive relationship between self-efficacy belief, expressing the belief that an individual can complete an academic task, and academic motivation (Akyürek, 2020) supports the findings of the study. Since a student with a high self-efficacy belief can also increase their motivation to complete the task on time, it can also ensure that academic procrastination behaviors may result in being at low level. Therefore, it can be said that increasing academic self-efficacy and motivation could reduce academic procrastination behaviors and help increase academic success. Considering that academic procrastination behaviors have a negative impact on academic achievement (Baykan, Güneş, & Seyfeli, 2021), it may be a predictable result that academic procrastination behaviors can be reduced, and academic achievement can be increased by increasing self-efficacy beliefs.

There is a positive, albeit low, relationship between academic self-efficacy and university graduation expectations. While there is a positive relationship between academic self-efficacy and academic success (Multon, Brown, & Lent, 1991; Bahar, 2019; Koca & Dadandı, 2019), there is a negative relationship between academic success and internet and phone addiction (Demir & Kutlu, 2017). However, when we consider the negative relationship between internet addiction and future expectations (Çimen & Dilmaç, 2022), the positive relationship between academic self-efficacy and future expectations becomes understandable. Individuals with high academic self-efficacy may be more likely to have positive and realizable expectations about their course interest, academic success, and their future. Thus, these individuals may also have higher future expectations. Indeed, the negative relationship between academic self-efficacy and academic procrastination behaviors also facilitates the understanding of this finding.

The findings of the study demonstrate a low-level negative relationship between academic procrastination and graduation expectations. This finding is supported by the positive relationship between self-efficacy and graduation expectations. Dikmen (2021) found that students' future expectations negatively predict academic procrastination behaviors. Accordingly, students' high

expectation after university graduation is a variable that can be effective in reducing academic procrastination behaviors. When students have high expectations after graduation, their motivation to complete academic tasks is also high, and thus, they may be more willing to do so on time. In addition, individuals with high self-efficacy may have a supporting role in lower academic procrastination behaviors and higher academic success and future expectations.

According to the findings, it is seen that students' academic self-efficacy can have a positive role in doing their academic tasks on time and having high expectations for the future. Therefore, the supportive role of faculty members in increasing students' academic self-efficacy at school and reducing academic procrastination behaviors could have positive effects. The fact that the given tasks are achievable and focused on the purpose of the course, and that students are given sufficient time and explanatory instructions on how to do the tasks can be effective in reducing academic procrastination behaviors. In addition, supportive activities can be functionalized more widely and professionally in universities for students' development in this direction. There are not enough studies which investigate the relationship between graduation expectations and academic self-efficacy and academic procrastination behaviors. Therefore, new studies ought to be conducted in this aspect with different groups and different variables, and the findings regarding graduation expectations may be enriched.

Recommendations

Increasing students' academic self-efficacy levels may reduce academic procrastination behaviours and increase their success. Therefore, it may be useful to organise activities that can increase students' academic self-efficacy in universities and to create encouraging communication environments. There may be many social, cultural, economic or individual obstacles that constitute an obstacle to increasing students' self-efficacy levels. Academic studies to be designed or surveys and interviews to be conducted within the university can be investigated to reveal these obstacles. Thus, carrying out studies to reduce the identified obstacles and carrying out activities suitable for the target group of students may have positive effects.

In this study, the relationship between students' academic self-efficacy, academic procrastination and graduation expectations was analysed with a quantitative method. An increase in both the number and quality of such studies may contribute not only to the enrichment of the academic literature but also to the design of a more qualified and successful university education.

Limitations

This study was conducted using data collected in 2023 from undergraduate students at Eskişehir Osmangazi University. Therefore, there are limitations regarding the generalizability of the findings to students from other universities. During the data collection period, universities in Türkiye had transitioned to online education due to the February 6, 2023 earthquake. This situation also limits the ability to conclude face-to-face education processes.

The study utilized three different scales, and data were collected through online means. Thus, the interpretations made are limited to the responses provided through these instruments. For this reason, conducting similar studies using different measurement tools and involving universities that offer face-to-face education may provide a broader perspective and allow for a more comprehensive interpretation of the findings related to this research topic.

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Conflict of Interest

There is no conflict of interest.

Funding

Ethical Standards

The authors hereby declare that they have not used any sources other than those listed in the references. The permission of this research was approved decision number 2023/5 of the ethics committee of Eskişehir Osmangazi University held on 05.04.2023. Data were collected with the permission of the scale owners.

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