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A CASE STUDY ON ACADEMIC PROCRASTINATION IN EFL SETTINGS IN TURKEY

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Abstract: The purpose of this study is to determine some correlations of academic procrastination, as well as to examine gender differences in this hypothetical construct important to the learning environment (in our case, in a Turkish EFL context). A total of 213 participants (120 females and 93 males), recruited from Muğla Sttkı Koçman University, participated in this study. Their mean age was 20.70 (SD = 1.99). Results revealed that the instrument (Academic Procrastination Questionnaire) applied in this research had very good reliability and validity. The other findings suggested that Turkish students from our sample had average levels of academic procrastination. In addition, students who were intrinsically (and less extrinsically) motivated and who estimated their English competencies as high (very good or excellent) did not procrastinate too much. Furthermore, academic procrastination was in a strong, negative correlation with students' grades at the last English exam. At the end of the article, the author provided some recommendations for researchers who are eager to contribute to this field of educational sciences.

Key words: EFL, English proficiency, academic procrastination, motivation, validation

1. Introduction

Contemporary education has to go hand in hand with the global development in various areas of human activity. (Akbarov, Gönen & Aydoğan, 2018). There are lots of factors that impact students' academic performance. Some of them are burnout (emotional exhaustion, cynism and academic inefficacy), demotivation, and lack of interest in school materials and for learning in general (Ghanizadeh and Jahedizadeh 2015). The influence of the mentioned factors was confirmed within English as a foreign language (EFL) learning environment. Language, for better or worse, is a vital element of culture, and it is only within a cultural and social context that it comes fully alive (Akbarov & Milak, 2017). Other influences include, for instance, personality traits, study habits, intelligence and procrastination.

Procrastination is a word that literally means (leaving something) "for tomorrow". Its three main synonyms are "delaying", "postponing", and "putting off". This phenomenon is linked to self-regulation issues, experiences and percepetions of an individual while trying to achieve academic, professional, life related or other (less important and less specific) goals. In fact, procrastination is a self-handicapping phenomenon that usually prevents us from completing tasks and duties within previously defined deadlines. It can be regarded as a state (e.g. postponing learning for a particular English exam) or as a personality trait (e.g. along with extraversion, neuroticism, conscientiousness, etc.). Hence, procrastination means having trouble with personal time management. In other words, those who are not capable of organizing and scheduling their duties properly and purposefully, or completing the assigned tasks on time, are referred to as procrastinators. The special (and probably mostly researched) type of procrastination is the academic one. To say it in a simple way, this kind of procrastination is observed in the school/academic environment. Students usually report an average degree of academic procrastination (Mahasnehet et al. 2016).

This phenomenon was usually investigated in terms of sociodemographics (e.g. gender and age), personality traits (e.g. agreeableness and openness to experience), environmental stimuli (e.g.

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distractibility as a result of the availability of modern devices such as smartphones, computers, etc.), task characteristics (e.g. boring and unpleasant tasks that have to be completed usually enhance our levels of procrastination), and motivational factors (Rozental and Carlbring 2014). Several previous studies suggested that males procrastinate more than females do (e.g. Steel and Ferrari 2013). However, there are studies in which gender differences in this psychological/educational variable were not statistically significant (Mahasneh et al. 2016). Furthermore, the difference between finishing individual and collaborative tasks was found. Students tend to stick to deadlines more when they perform individual tasks compared to the collaborative ones (Gafni and Geri 2010). This is probably due to social influences. To be more specific, they expect others to put more effort and to do some of their part of a task. Next, a study relevant to our topic revealed that academic procrastination negatively correlates with intrinsic motivation, positively correlates with amotivation and has a statistically non-significant correlation with extrinsic motivation (Cerino 2014). Self-esteem and self-efficacy are usually in negative correlations with academic procrastination (Kanten and Kanten 2015).

Some consistent and strong predictors of procrastination were identified. They were task delay, aversiveness toward tasks, impulsiveness, distractibility, organization, self-control, achievement motivation and self-efficacy (Steel 2007). The first four predictors were in negative whereas the last four ones were in positive correlations with procrastination. Moreover, a great deal of evidence pointed out the relationship between procrastination and negative mental health states/outcomes (Tice and Baumeister 1997). It seems that procrastination accounts for around 40% of the academic performance variance; thus, its impact on academic/school achievement should not be neglected (Lakshminarayan et al. 2013).

The purpose of our study is to investigate the levels and correlates of academic procrastination among Turkish students as well as gender differences in this educationally relevant variable.

This study sought to answer the following research questions:

- Is the Academic Procrastination Questionnaire (APQ) suitable for applying to Turkish educational (more precisely, EFL) environment in terms of its psychometric properties (reliability and factor validity)?
- What is the level of academic procrastination among Turkish students?
- Are EFL variables included in this research (years of learning English, self-reported English competencies and students' grades on the last English exam) and motivational variables (more precisely, two indicators of extrinsic and intrinsic motivation) in statistically significant correlations with academic procrastination?
- Is academic procrastination in a higher correlation than the EFL and motivational variables with students' grades on the last English exam?
- Are there statistically significant gender differences in the level of academic procrastination?

2. Methodology

The present study is a cross-sectional one and most part of it corresponds to correlational studies (where searching for the relationships among a set of variables is the primary goal to be achieved). Hence, it is based on quantitative methodology.

2.1. Participants

A total of 213 students who attended the Marmaris Tourism Department at Muğla Sıtkı Koçman University in Turkey took part in this study. There were 120 females (56.3% of the total sample) and 93 males (43.7%) in this sample of adolescents. Their average age was M = 20.70 (with the standard deviation of SD = 1.99). The youngest student was 18 whereas the oldest one was 27 years old.

2.2. Instruments

The main instrument used in this study was the *Academic Procrastination Questionnaire* (APQ, Abu Ghazal 2012). It consists of 21 items out of which seven are reversely-coded (no. 1, 3, 5, 6, 10, 12, and 17). Each item (statement) is given on a five-point Likert scale (1 – completely disagree, 2 – disagree, 3 – neither agree nor disagree, 4 – agree, and 5 – completely agree). In the present study, Cronbach's

alpha coefficient of this questionnaire was calculated as $\alpha = .961$. Therefore, it had a very good internal consistency (as a type of reliability). All the corrected item-total correlation coefficients were above the value of .500. The lowest one was of the fifth item ("I usually start doing study duties immediately after being assigned them"). It was $r_{it} = .541$ and was positive because it had been coded reversely. High score on this item indicates high levels of conscientiousness, committment, and responsibility with regard to study and assignments within it. On the other hand, the highest item-total correlation was that of the item no. 14 (" I delay doing duties without justification even if they are important"). This coefficient was as high as $r_{it} = .866$. This item indeed represents the concept of academic procrastination and if participants score high on it, they really have problems which are linked to procrastination in an academic/school context.

When we tested APQ's construct (factor) validity, by the means of the principal component analysis (PCA), the Cattell's scree plot test revealed one latent dimension (Figure 1).

Thus, it appears that the aforementioned instrument was, applied to our Turkish sample, a unidimensional one. This dimension, namely academic procrastination, explained 57.252% of the manifest variables' variance. Additionally, its eigenvalue was $\lambda = 12.023$. Of course, the main preconditions of conducting the principal component analysis were met: Kaiser-Meyer-Olkin's measure of sample adequacy was high enough (*KMO* = .903) and Bartlett's test of sphericity yielded a statistically significant result ($\chi^2 = 4218.95$, p < .001).

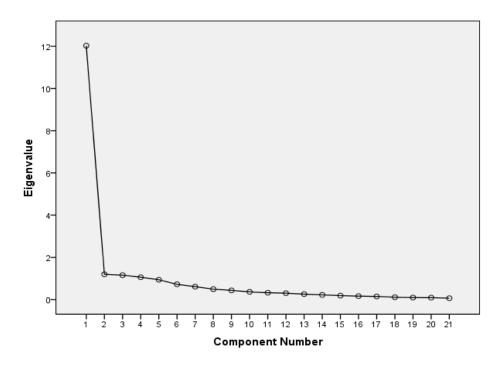


Figure 1. Scree plot of the Academic Procrastination Questionnaire (APQ)

Participants were also asked to provide their gender and age, as well as to write the number of years' spent in studying English, estimate their English competencies (on a five-point Likert scale, where the numbers indicate the following: 1 - very poor, 2 - poor, 3 - good, 4 - very good, and 5 - excellent English competencies), and provide us their grades on the last (most recent) English exam they had taken (ranging from 0 to 100, expressed as the percent of the correct answers on the applied test).

In addition, two questions intended to measure extrinsic and intrinsic motivation were administered as well. The first one was "Are you motivated to learn English mostly in order to achieve a better grade (please, answer on the following five-point scale: 1 - not at all, 2 - no, 3 - not sure, 4 - yes, and 5 - absolutely yes)?". This question was used to measure to what extent students learn English in order to gain some reward (in our case, school/academic grades). The second one was "Are you motivated to learn English mostly because you are really interested in it and because you enjoy it (<math>1 - not at all, 2 - not sure, 4 - yes, and 5 - absolutely yes)?".

no, 3 - not sure, 4 - yes, and to 5 - absolutely yes?" The content of this question implies that a particular number of students learn English because they find it interesting and enjoyable (i.e. learning because of the joy of learning a particular subject matter).

2. 3. Research procedure and data processing

All participants filled the instrument out within 10 to 15 minutes. First of all, the researcher provided them clear instructions and directions on how to fill out the questionnaire. He highlighted that students' answers will be strictly confidential. In addition, their anonymity is guaranteed and the researcher confirms that their answers will not have impact on their school grades. He also added that the collected data will be used for scientific purposes only. When the process of data collection was finished, the researcher coded them and entered into *SPSS for Win (ver. 23)*, in order to make a database which will serve for the next phases of the study.

Further, data were analyzed by calculating the main descriptive statistical values (minimum and maximum results, arithmetic means and standard deviations) as well as by conducting the appropriate procedures which formally belong to inferential statistics (correlation analysis and *t*-test for independent samples). The level of significance was set to be .05, which is the level of significance that is ordinarily used in social sciences and in most other sciences. This means that we refuse our null hypothesis with 95% accuracy.

3. Results

First, descriptive statistical values of the EFL variables (years of learning English, self-reported English competencies, and students' grades on the last English exam), motivation (extrinsic and intrinsic) and academic procrastination were displayed (Table 1).

Table 1. Descriptive statistical values of the math variables								
Variables	Ν	Min	Max	М	SD			
Academic procrastination	213	1.14	4.19	2.51	0.86			
Years of learning English	213	1	14	8.42	2.07			
Self-reported English competencies	213	1	5	3.07	1.33			
Grades on the last English exam	213	20	94	64.51	22.98			
Extrinsic motivation	213	1	5	2.45	1.07			
Intrinsic motivation	213	1	5	2.51	0.86			

Table 1. Descriptive statistical values of the main variables

As seen in Table 1, Turkish students in our sample reported a moderate level of academic procrastination (M = 2.51). The mean value of their scores was somewhat below the theoretical average of the APQ (the theoretical average of a five-point scale is 3), but not that small to be concluded that they had a low level of this kind of procrastination. Additionally, standard deviation of participants' scores on academic procrastination was SD = 0.86. The lowest score they obtained was 1.14 whereas the highest one was 4.19.

The average number of years participants have learned English was M = 8.42 (with a standard deviation of SD = 2.07). The lowest number of years of learning English was 1 and the greatest number was 14. Next, participants' estimated their level of English competencies as average (M = 3.07). Participants estimated their levels of English skills and knowledge from very poor (1) to excellent (5).

Additionally, their average grade on the most recent exam was M = 64.51 (SD = 22.98). The lowest grade reported by students was 20 (i.e. 20% of the total, the highest possible number of points on the last English test) and the highest grade students reported was 94.

Finally, their extrinsic and intrinsic motivation to learn English was slightly lower than the theoretical average of the correspondent scale (which was also 3), where their level of intrinsic motivation was somewhat higher (M = 2.51) compared to the level of their extrinsic motivation (M = 2.45). In contrast, the standard deviation of participants' scores on intrinsic motivation question was lower (SD = 0.86) compared to the standard deviation of their scores on extrinsic motivation item (SD = 1.07).

All these scores fell somewhere between 1 (not at all motivated) and 5 (absolutely motivated), while these two extreme values were achieved as well.

	Academic procrastination			
Years of learning English	.010			
Self-reported English competencies	713*			
Grades on the last English exam	921*			
Extrinsic motivation	.723*			
Intrinsic motivation	828*			
*p < .001				

Table 2. The relationships of EFL variables and motivation with academic procrastination

As can be noticed in Table 2, the number of years participants have been learning English was not in a statistically significant correlation with academic procrastination. This coefficient of correlation was very low and positive (r = .010, p > .05). In contrast, academic procrastination was in strong and statistically significant correlations with all the other variables: self-reported English competencies (a negative correlation was obtained: r = .713, p < .001), students' grades on the last English exam (a very strong negative correlation, as high as r = .921, p < .001), extrinsic motivation (positive correlation: r = .723, p < .001) and intrinsic motivation (a very strong negative correlation which was r = -.828, p < .001). It is clear that only extrinsic motivation correlated positively with academic procrastination.

Thus, the higher levels of extrinsic motivation, the higher degree of academic procrastination among Turkish students. On the other hand, students who estimated their English competencies as high, along with those who had better grades at the last English exam will procrastinate less frequently in this academic context. In addition, intrinsic motivation significantly contributed to decreasing levels of academic procrastination.

The figures shown in Table 3 indicated that years of learning English did not significantly contribute to students' grades on the last English exam (r = .010, p > .05).

	Grades on the last			
	English exam			
Years of learning English	.010			
Self-reported English competencies	.777*			
Extrinsic motivation	686*			
Intrinsic motivation	.779*			
* p < .001				

Table 3. The relationships of EFL variables and motivation with students' grades on the last English exam

However, the rest of the variables were in strong and statistically significant correlations with participants' grades on the last English exam: self-reported English competencies (a positive correlation was observed: r = .777, p < .001), extrinsic motivation (negative correlation, which was r = .686, p < .001), and intrinsic motivation (positive correlation which was r = .779, p < .001). In other words, if students regard themselves as competent considering the English language and if they are predominantly intrinsically motivated, they will have better academic performance (to be more specific, better achievements at English exams).

Table 4. The results of t-test for independent samples in determining gender differences

Gender	Ν	М	SD	t	df	р
Males	93	2.62	0.90	1.526	211	120
Females	120	2.44	0.82		211	.129

Despite male students scored higher (M = 2.62) compared to female students (M = 2.44), the difference between their average scores on academic procrastination was of a small size (0.18) and statistically non-significant (t(211) = 1.526, p > .05). Hence, Turkish male and female students from our sample had approximately equal levels of academic procrastination. In other words, they were

almost equally prone to delaying their academic duties, i.e. performing them just before the deadline have passed or even after it. In addition, scores of male students were somewhat more spread in comparison with those of female students involved in this study (SD = 0.90 vs. SD = 0.82).

4. Discussion

First, the Academic Procrastination Questionnaire (APQ) showed very good (psycho)metric properties. To be more specific, it is a reliable (internally consistent) and valid measuring tool that can be used to assess students' levels of academic procrastination in Turkey as well. Its metric properties were congruent with those obtained by its author, Abu Ghazal (2012). This finding was the answer to the first research question (Is the APQ suitable for applying to Turkish EFL environment in terms of its psychometric properties reliability and factor validity?).

Turkish students who were sampled in this study had an average level of academic procrastination. This finding was in accordance with one of the results obtained by Mahasneh et al. (2016), and in the same time, it is the answer to the second research question (What is the level of academic procrastination among Turkish students?).

With regard to the third research question (Are EFL variables included in this research and motivational variables in statistically significant correlations with academic procrastination?), academic procrastination was in negative and statistically significant correlations with two EFL variables (self-reported English competencies and students' grades on the most recent English exam) and the two motivational variables. Students who believe they possess high levels of English knowledge and skills and those who had high English grades reported lower levels of academic procrastination. The first part of these findings suggests that students' sense of self-efficacy experienced while learning and using English as a foreign language has a significant impact on their levels of academic procrastination. A similar pattern was found in Steel's (2007) as well as Kanten and Kanten's (2015) study. A strong negative link between academic procrastination and achievements was observed in the study obtained by Lakshminarayan and his colleagues (2013) as well. Those who learn only to get a better English grade will procrastinate more, in contrast with students who learn this language because they find it really interesting, enjoyable, and worth of learning. Our result related to intrinsic motivation was similar to one of the results of Cerino's study (2014). However, the cited study did not yield a positive and statistically significant correlation between extrinsic motivation and academic procrastination. The results also revealed that a total number of years students have been learning English was not relevant to academic procrastination; hence, not correlated with this phenomenon.

An interesting result was found while answering the fourth research question (Is academic procrastination in a higher correlation than the EFL and motivational variables with students' grades on the last English exam?). It appeared that years spent in learning English were in a negligible and insignificant correlation with students' grades at the last English exam. However, participants' (subjective) estimates of their English skills and knowledge were in a positive, strong and statistically significant correlation with their academic (particularly English) performance. Furthermore, the two motivational variables were correlated strongly with students' academic achievements with regard to English as an academic course. Students who were truly, authentically, and honestly interested in learning English (and who claimed they enjoy it very much) got better English grades. Therefore, their academic achievements are significantly higher compared to those of students who are not intrinsically motivated. This result is comparable to one of the findings from the study carried out by Amrai, Motlagh, Zalani and Parhon (2011). However, students' grades on the last English exam were in the highest correlation with academic procrastination. As mentioned above, this correlation implied a negative relationship. Hence, the answer to the third research question was positive (i.e. in favor of debilitating and unfavorable effects of academic procrastination on academic performance).

The last research question was about gender differences in academic procrastination and their statistical significance. Our study did not yield statistically significant differences between Turkish male and female students in their levels of academic procrastination. This result was similar to a finding from the study conducted by Mahasneh and his colleagues (2016). However, it was not

consistent with the results regarding gender differences in a study by Steel and Ferrari (2013), because these two authors obtained statistically significant differences in favor of male students. Their study reavealed that male students are more prone to procrastination compared to their female peers. In our study, males outperformed females in academic procrastination, but the difference between their average scores was not sufficiently large (i.e. not large enough to reach at least the .05 level of statistical significance).

Some disadvantages of the present study are as follows. Firstly, extrinsic and intrinsic motivation were assessed by only two items (however, these items were sufficiently specific because they referred to EFL context, as a distinct domain of education). Secondly, a single objective measure was used as an indicator of English skills and knowledge. This measure was the last English exam our participants took at their university. Thirdly, there were some limitations with regard to the generalization of the obtained results. They emerged from the fact that our sampling was conducted at only one Turkish university, instead of a greater number of universities in our country.

Teachers, educologists and psychologist can help students procrastinate less frequently, mostly by:

- 1. organizing workshops on how to overcome academic performance (by forming groups and doing group exercises facilitated by both teachers' and peer support, understanding, acceptance, and experience exchange);
- 2. giving lectures related to psychoeducation (What is academic and general procrastination? What are its symptoms? How can students help themselves to solve this issue or to alleviate their problems? Where to ask for professional help? How to improve their studying habits? How to work on self-regulation?, etc.);
- 3. working individually with students who often procrastinate (e.g. by the means of individual supportive counseling or psychotherapy).

At the end, the following recommendations could be listed. Firstly, English teachers' proneness to procrastinate while meeting professional goals and duties should be investigated. Thus, not only academic procrastination in students but also procrastination in teachers should be on the list of research subject of educational sciences. Teachers can have their own reasons to procrastinate as well as justifications for this bad habit.

Next, interventions that can help students avoid academic procrastination should be compared to each other, by using quantitative methodology. This kind of comparison can help us determine on one hand what are the best (i.e. very effective) and, on the other hand, what are the worst (i.e. almost ineffective) interventions related to academic procrastination.

Thirdly, by using a qualitative methodology, EFL students may be asked to write about their reasons that lay behind their procrastination behavior. In this case, researchers can do the content analysis of their writings and extract some main ideas that can raise other research questions. This is because results of the qualitative research could be the starting point of defining some new hypotheses that can be tested by the means of quantitative methodology. Another version of this research idea (or recommendation) would include holding focus groups meetings. We recommend smaller focus groups (for instance, consisting of five to six members - students) which would talk about their experiences with academic procrastination, the possible reasons to delay school/academic duties, ways students have helped themselves so far, and future projections about the influence of academic procrastination to their academic performance.

3. Conclusion

Academic procrastination plays an important role in English as a foreign language (EFL) context. It also plays one of the major roles in education in general and should never be neglected by teachers, psychologists, and researchers. The instrument administered to participants in this research is a unidimensional, reliable measure of this hypothetical construct. Therefore, it was suitable for administration in Turkish educational context. Then, it was determined that participants reported moderate levels of procrastination as well as average levels of their English competencies. These two

average scores are following one another because academic procrastination and English competences (that is, skills and knowledge) are mutually correlated, as determined before.

Students who are not prone to procrastination get better grades and are intrinsically motivated to learn (in our case, English) and meet their school/academic duties (e.g. assignments, projects, etc). They should also have greater levels of academic self-efficacy because they perceive themselves as very competent in one or more school subjects or academic courses. Despite the fact that motivation and self-efficacy are some of the most crucial correlates of students' academic performance, it seems that procrastination is more strongly linked to their school/academic achievements. On the other hand, gender differences in delaying/postponing academic duties were very small and insignificant. Hence, males and females procrastinate in a similar way and their levels of procrastination are practically the same.

Apart from its main purpose and general scope, this article aimed to stimulate and motivate other researchers to shed light on this field of educational science by using both quantitative and qualitative methodology. The intention of the authors of this study was not only to "grasp" and investigate the problem of academic procrastination in an EFL framework from the scientific viewpoint but also to point out some practical implications of it for the process of formal education in general.

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