Eurasian Journal of Educational Research 69 (2017) 221-240

Eurasian Journal of Educational Research
www.ejer.com.tr

Predictive and Explanatory Relationship Model between Procrastination, Motivation, Anxiety and Academic Achievement

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ARTICLE INFO

Article History:

Received: 10 August 2015

Received in revised form: 03 December 2016

Accepted: 25 February 2017

DOI: http://dx.doi.org/10.14689/ejer.2017.69.12

Keywords

affective factors,
language learning,
structural equation modelling

ABSTRACT

Purpose: The purpose of this study is to determine the predictive and explanatory relationship model between procrastination, motivation, anxiety and academic achievement of university students. **Research Methods:** In this study, a causal research design was used. The study group consisted of 211 participants. In order to determine their motivation levels, Academic Motivation Scale (AMS); their anxiety levels, Foreign Language Classroom Anxiety Scale (FLCAS) and their procrastination levels, Aitken Procrastination Inventory (API) were all applied. Students' grades during the term were considered as the criteria for academic achievement. Data were obtained through Structural Equation Model (SEM). **Findings:** Within the theoretical background, the proposed model was tested, and after path analysis it was modified and verified by testing through fitness indexes. The values confirmed that the model is compatible and the goodness-of-fitness values are within the limits. Findings reveal that, there is not a significant relationship between anxiety and academic achievement. However, both the relationship between academic procrastination and academic achievement and the relationship between motivation and academic achievement are significant. According to findings, the relationship between academic procrastination and motivation is significant and negative. Considering the findings, the predictive and explanatory relationship pattern between procrastination, motivation anxiety and academic achievement was suggested as a model. **Implications for Research and Practice:** Procrastination and motivation are significant variables in predicting academic achievement. Future studies could focus on other affective variables that are thought to have relationship to academic achievement.

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Introduction

Many responsibilities that the students have to take on during their educational lives influence the efficiency of their education as well as their success to some extent. However, it is frequently observed that students generally procrastinate in their duties. The term procrastination derives from the Latin word "*procrastinat*-deferred till the morning" (Procrastination, 2015). According to Solomon and Rothblum, (1984, 503), procrastination is "the act of needlessly delaying tasks to the point of experiencing subjective discomfort." Ackerman and Gross (2005, 5) define the term "as the delay of a task or assignment that is under one's control." Furthermore, Steel (2007), along with Gustavson and Miyake (2017), while defining the term, mentions the notion of voluntariness. According to this, procrastination comprises intentional choice of one action over the other choices. Similarly, Shraw, Wadkins and Olafson (2007, p. 12) describe the term as "intentionally delaying or deferring work that must be completed". In other words, it is a "self-report tendency to nearly always or always put off academic tasks and to nearly always or always experience problematic levels of anxiety associated with procrastination" (Rothblum, Beswick & Mann, 1984, as cited in Rothblum, Solomon & Murakami, 1986, 387). Solomon and Rothblum (1984) argue that procrastination involves something more than time spent on studying or attitudes towards a subject. Rather, it encompasses anxiety, being indecisive, rebellion against control, and so on.

Procrastination is closely associated with academic performance, and in the literature there are many studies aiming to explain the notion's frequency and consequences. It is estimated that nearly 95% of college students procrastinate on academic assignments (Ellis & Knaus, 1977, as cited in Onwuegbuzie & Jiao, 2000). Solomon and Rothblum (1984) asserted that undergraduate students procrastinate on academic tasks such as term papers, preparing for exams and reading assignments within the range of 27 to 46 percent. Onwuegbuzie and Jiao (2000) offer that 60 percent of graduate level students procrastinate on academic tasks. Similarly, Onwuegbuzie (2004) in his study reports that 41.7% of graduate students nearly always or always procrastinate on writing their term papers, 39.3% of students procrastinate on preparing for their exams, and finally 60.0% of students procrastinate on doing their weekly reading assignments. Klassen and Kuzucu (2009) assert that 83% of adolescents procrastinate at least one hour per day on writing tasks. Ebadi and Shakoorzade (2015) in their study argue that more than half of students almost always procrastinate or always procrastinate. Steel (2007, 80), in his meta-analysis, found that, across 41 studies, there are consistently negative relationships between academic performance and procrastination with the average correlation of -19. That is, procrastination although sometimes "harmless," is generally detrimental; however "never helpful." Likewise, Kim and Seo (2015) conducted a meta-analysis of 33 studies which involved 38,529 participants and their research shows that procrastination is negatively correlated with academic performance. Similarly, Klassen et al. (2010) and You (2015) found that procrastination has a negative influence upon academic performance. As observed,

the great majority of studies assert that there is a negative correlation between procrastination and academic performance.

There have been many attempts to define the reasons why individuals procrastinate or keep procrastinating despite knowing its consequences. While Lay and Silverman (1995) argue that there is not a significant relationship between anxiety and procrastination, Rothblum et al. (1986) claim that the notion of procrastination contains cognitive and affective constituents and has a significant relationship to anxiety. They also asserted the idea that more than 40 percent of the participants in their study claimed a considerable amount of stress. Another study conducted by Senecal, Koestner and Vallerand (1995) reveals that individuals with high intrinsic motivation procrastinate less, and those with high extrinsic motivation procrastinate more. This supports the claim that procrastination is a motivational matter. Likewise, Lee (2005) asserts that intrinsic motivation has important effects on procrastination. Thus, while considering the reasons for procrastination, one has to take motivational factors into consideration.

In the conceptual framework, it is clear that motivational, affective and cognitive aspects should be taken into account to apprehend procrastination (Muszynski & Akamatsu, 1991; Senecal et al., Koestner & Vallerand, 1995). As Klassen, Krawchuk, Lynch and Rajani (2008, 137) assert, while motivation expresses something to do with struggle, determination and endeavor to a special purpose, procrastination, then, might be considered a kind of "anti-motivation," evasion and postponement. Thus, procrastination suggests lack of motivation, and this might be a disadvantage to academic success (Dunn, Rakes & Rakes, 2014) because it limits or even hinders the individual's potential to fulfill certain tasks.

Like procrastination, the notion of motivation has also gained much attention among researchers. Despite its popularity, the definition of the term has not been specifically stated (Oxford & Shearin, 1994), and Kleinginna and Kleinginna (1981) assert that reaching a consensus among the definitions of the term is a major problem as there are 102 different categories of explanations of the term. For instance, Ryan and Deci (2000, 54) describe it as "to be moved to do something," while Cheng and Dörnyei (2007, 153) frame the term as the "initial engine to generate learning". Notwithstanding the different explanations, the term itself generally connotes an impulse-like feeling.

Although it is mostly treated as a unitary notion by classical and modern theories, Self-Determination Theory (SDT) handles motivation from a different viewpoint. From this perspective, the types of motivation are far more important than the total amount of motivation (Deci & Ryan, 2008). That is, rather than the amounts, kinds of motivation are stressed (Ryan & Deci, 2000). In SDT, a basic distinction is made clear between intrinsic and extrinsic motivation (Ryan & Deci, 2000; Lee, 2011; Dornyei, 2003; Pelletier, 2002). Intrinsic motivation refers to inner satisfaction, interest or joy. On the other hand, extrinsic motivation refers to a reward, praise, wish or order from the outer world (Ryan & Deci, 2000; Deci & Ryan,

1985; Vallerand & Ratelle, 2002). In short, despite the general tendency, SDT focuses on the separation of the motivation types.

There are many views and studies asserting that motivation does affect academic achievement. For instance, Gardner (1985) states that there is a close relationship between students' motivation, their aptitude in a foreign language and their academic performance. Mallik (2017) mentions the crucial role of motivation in acquiring a foreign language. Goodman et al. (2011) in their study, which aims to determine the relationship between university students' motivation and academic performance, have found that there are significant relationships between intrinsic motivation, extrinsic motivation and academic performance. Further, it was revealed that their intrinsic and extrinsic motivation influenced the level of efforts they made to fulfill the targeted outcome. Similarly, a study conducted by Bidin et al. (2009) revealed the fact that motivation is an important variable in the language learning process, and a high extrinsic motivation level especially enhances academic achievement. Examining the relationship between procrastination and motivation, Klassen, Krawchuk and Rajani (2008) hold that procrastination suggests lower levels of motivation and mirrors lack of motivation. They maintain the idea that motivation has a negative correlation with procrastination which influences students' academic performance unsatisfactorily.

Being generally associated with poor academic performance, anxiety (Hussain, 2011; Kitano, 2001; Matsuda & Gobel, 2013; Rassaei, 2015; Tuncer & Dogan, 2015; Bensalem, 2017; Kuscu, 2017) is another variable of procrastination (Solomon & Rothblum, 1984). Akbay and Gizir (2010) put forward the idea that even though a momentary feeling of relaxation emerges just after the academic procrastination behavior, in the long term, this feeling changes into a kind of anxiety that has negative effects on academic performance. In their study, Solomon and Rothblum (1984) reveal that there is a positive relationship between academic procrastination and particular types of anxiety, like test anxiety and social anxiety, pointing to the same opinion. Similarly, Scher and Osterman (2002) argue that anxiety is a prevalent reason for procrastination. Likewise, Ferrari, O'Callaghan and Newbegin (2005) together with Haycock, McCarthy and Skay (1998), assert that procrastination is linked with inadequate academic performance and higher anxiety levels. Onwuegbuzie (2004), in his study examining the prevalence of procrastination among graduate students, reached the conclusion that academic procrastination is related significantly to test and class anxiety which influences academic performance in a negative way. The notion of anxiety also plays an important role in the language learning process (Onwuegbuzie, Bailey & Daley, 2000; Horwitz, 2010; MacIntyre & Gardner, 1991; Young, 1991; Cakici, 2016) while Gregersen and Horwitz (2002, 566) found that anxious learners expressed "avoidance and procrastination in their language learning," whereas not even a single non-anxious learner mentioned procrastination or work avoidance.

As an overall conclusion, the findings of the aforementioned studies reveal that procrastination displays a negative influence on academic performance (Dunn et al., 2014; Steel, 2007; Kim & Seo, 2015); the students who procrastinate have lower

motivation to fulfill a certain task (Klassen et al., 2008; Steel 2007) and as the procrastination level increases, the level of anxiety increases, as well (Solomon & Rothblum, 1984; Gregersen & Horwitz, 2002; Ferrari et al., 2005; Onwuegbuzie 2004). As a consequence, in light of the literature review, it is argued that academic procrastination adversely affects academic performance as well as motivation. On the other hand, there seems a positive and significant relationship between academic procrastination and anxiety. In this framework, the purpose of this study emerged as follows:

What is the predictive and explanatory relationship model between procrastination, motivation, anxiety and academic achievement?

After reviewing the theoretical background and empirical research, the proposed model was shaped as follows:

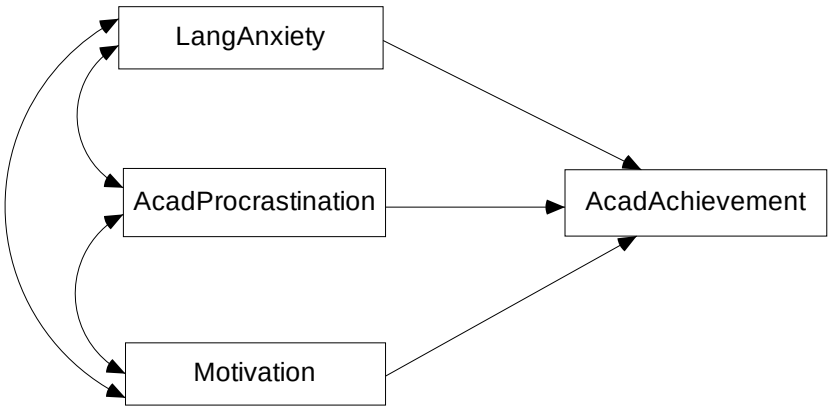

Figure 1. Proposed model

In Figure 1, the proposed model was constituted in accordance with the theoretical context of the independent variables (procrastination, motivation, anxiety) and dependent variable (academic achievement).

Method

Research Design

The study was conducted in causal research design. The cause and effect relationship between variables was analyzed through Structural Equation Modeling (SEM).

Research Sample

The population of this study includes university students attending Yıldız Technical University preparatory classes due the fall term of the Academic Year 2014-2015. The study group consisted of 229 students. Eighteen questionnaire sheets were ignored due to the poor feedback. In the end, 211 students, who were chosen randomly, formed the study group. The data gained from 211 students, 87 (41.2%) being female and 124 (58.8%) being male, were assessed.

Research Instruments and Procedure

In order to determine the students' procrastination levels, the Aitken Procrastination Inventory (API) was applied. Developed by Aitken (1982), the inventory was adapted into Turkish by Balkis (2006). Consisting of 16 items, the inventory is a five-point Likert scale ranging from false (1) to true (5). For each of the items, the participants are supposed to choose the item which is more or less convenient for them. High scores display the participants' high level of procrastination while the low scores indicate just the opposite. The inventory's internal consistency coefficient was calculated .89 Cronbach's Alpha, and test-retest reliability coefficient was found to be .87 (p<.001) (Balkis, 2006).

The Foreign Language Classroom Anxiety Scale (FLCAS), which was originally developed by Horwitz, Horwitz and Cope (1986), aims to determine levels of anxiety among students in foreign language classes. Composed of 33 items, the scale was adapted into Turkish by Aydin (2001). Being a five-point Likert scale, FLCAS was conducted on 300 university students who were studying in the foreign language department, and factor analysis indicated that internal consistency coefficient was .93 Cronbach's Alpha. Test-retest process was conducted for eight weeks and test-retest reliability coefficient was found to be .83 (p = .001) (Aydin, 2001).

Students' motivation levels were assessed through the Academic Motivation Scale (AMS), which was developed by Vallerand and Ratelle (1992) and adapted into Turkish by Karatas and Erden (2012). The scale is made up of 27 items and its internal consistency coefficient was found to be .97 Cronbach's Alpha (Karatas & Erden, 2012). In this study, four items (5, 12, 19, 26 items) that belong to the Amotivation dimension were excluded. Consequently, the inventory consisting of 23 items was applied in the study. The coefficient reliability of the scale in this form was found to be .89 Cronbach's Alpha.

The students' academic achivement was assessed through their grade point average for the fall term of the 2014-2015 academic year. The assessment criteria were as folows:

Table 1

The Assessment of Academic Achievement

2 Midterm Exams	40%
3 Pop-Quizzes	20%
2 Reading Exams	10%
Portfolio Work	10%
Presentation and Oral Exam	15%
Class Participation	5%
Total	**100**

Data Analysis

The data gained from the study were analyzed through SEM and statistically evaluated by means of AMOS software. SEM, which may shortly be depicted as a bunch of statistical methods, allowed us to comprehend "the relationship between one or more than one independent variables and one or more than one dependent variables" (Ullman & Bentler, 2013, 661). Further, it offers a broad and flexible evaluation between the observed and latent variables (Hoyle & Smith, 1994). Additionally, it can also be used to test, analyze and comprehend the multidimensional structure of a model. In this way, determining and removing the weaknesses of a hypothesized model and displaying multifaceted interactions can be clearly accomplished (Weston & Gore, 2006; Kline, 1998; Anderson & Gerbing, 1998).

Although there is not a consensus on the appropriate sample size for SEM (Hoe, 2008; Raoprasert & Islam, 2010), Hoe (2008) reports that a sample size of more than 200 provides adequate statistical value for an analysis. Likewise, Kline (2005) asserts that a sample size of less than 100 is considered a small sample, a size between 100 and 200 is a medium sample, and a size more than 200 is a large sample. Hoelter (1983) also holds 200 as the critical sample size.

Results

In the model to be tested, the relationship pattern between the variables of procrastination, motivation, anxiety and academic achievement was analyzed through path analysis.

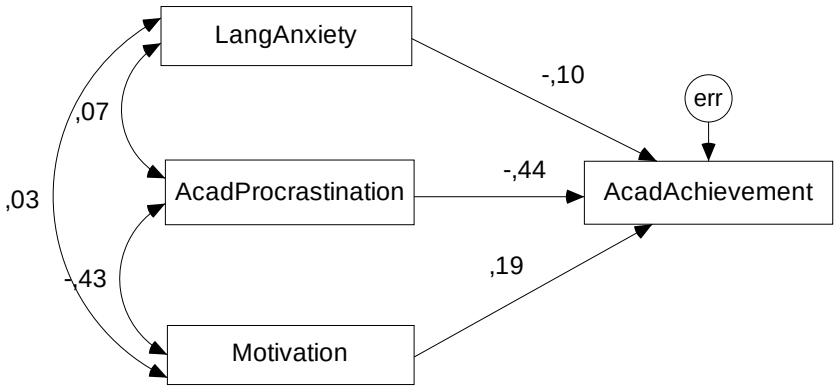

Figure 2. Values of the proposed model

In Figure 2, the values of the proposed model along with the relationship pattern between variables are displayed.

In order to test the model, the maximum likelihood process was applied in the AMOS program. Among the ways of testing a model, determining the values of some goodness-of-indexes and comparing them with the acceptable values can be regarded as a reliable method (Schermelleh-Engel, Moosbrugger & Muller, 2003).

The values of good fit and acceptable fit along with the values of the proposed model displayed in Table 2.

Table 2

Recommendation for Model Evaluation

Fit Measure	Good Fit	Acceptable Fit	Proposed Model
χ2/df	.0 ≤ χ2/df ≤ 2	2 ≤ χ2/df ≤ 3	.0
RMSEA	0 ≤ RMSEA ≤ .05	0 ≤ RMSEA ≤ .08	.30
NFI	.95 ≤ NFI ≤ 1.00	.90 ≤ NFI ≤ .95	.1
CFI	.97 ≤ CFI ≤ 1.00	.95 ≤ CFI ≤ .97	.1
GFI	.95 ≤ GFI ≤ 1.00	.90 ≤ AGFI ≤ .95	.1
AGFI	.90 ≤ AGFI ≤ 1.00	.85 ≤ AGFI ≤ .90	.94

RMSEA = Root Mean Square Error of Approximation, NFI = Normed Fit Index, CFI = Comparative Fit Index, GFI = Goodness-of-Fit Index, AGFI = Adjusted Goodness-of-Fit-Index (Schermelleh-Engel et al., 2003).

In the proposed model, the value of chi-square is "0", should be less than three when divided by the degree of freedom. This shows that the model has a suitable index value regarding the value of chi-square.

The results of the research also demonstrated that the goodness-of-fit indexes of the proposed model were as follows: NFI = .1(.95 ≤ NFI ≤ 1.00); CFI = .1(.97 ≤ CFI ≤ 1.00); GFI = .1(.95 ≤ GFI ≤ 1.00); AGFI = .94 (.90 ≤ AGFI ≤ 1.00). These figures demonstrate that the model's fitness was acceptable. Nevertheless, RMSEA value was found to be .25, which is not within the limits of the recommended value (0 ≤ RMSEA ≤ .05). Thus, after the necessary path analysis, the model was reviewed again and modified.

To obtain the suitability of the model as a whole, the two-headed row between language anxiety and motivation was omitted and after this adjustment, the model was re-evaluated as in Figure 3.

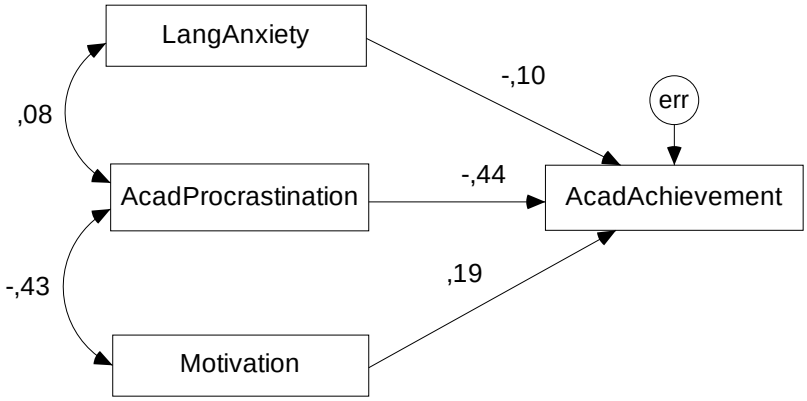

Figure 3. Values of the last model

In Figure 3, the proposed model was modified and after the necessary adjustments it was evaluated again.

Table 3

The Values of the Last Model

Fit Measure	Good Fit	Acceptable Fit	The Last Model
χ2/df	.0 ≤ χ2/df ≤ 2	2 ≤ χ2/df ≤ 3	.20
RMSEA	0 ≤ RMSEA ≤ .05	0 ≤ RMSEA ≤ .08	.01
NFI	.95 ≤ NFI ≤ 1.00	.90 ≤ NFI ≤ .95	.99
CFI	.97 ≤ CFI ≤ 1.00	.95 ≤ CFI ≤ .97	.98
GFI	.95 ≤ GFI ≤ 1.00	.90 ≤ AGFI ≤ .95	.97
AGFI	.90 ≤ AGFI ≤ 1.00	.85 ≤ AGFI ≤ .90	.99

The figures displayed in Table 3 indicate that, when the two-headed row between Language Anxiety and Motivation is omitted, the model is compatible with the goodness-of-fit indexes. The value of chi-square when divided by the degree of freedom (df: 1), was found to be .20, which can be considered a good fit.

Similarly, the values of NFI = .99 (.95 ≤ NFI ≤ 1.00); CFI = .98 (.97 ≤ CFI ≤ 1.00); GFI = .97 (.95 ≤ GFI ≤ 1.00); AGFI = .99 (.90 ≤ AGFI ≤ 1.00) provided verification that the model is compatible and the goodness-of-fitness values of it are within the limits. Contrary to the initial model, the value of RMSEA was found to be .01, which is within the limits of the recommended value (0 ≤ RMSEA ≤ .05).

Table 4

Regression Weights, Standard Errors, Critical Ratios and 'p' Values of the Variables of the Last Model

Variable			Estimate	St. Err.	Critical Ratio	p
Lang. Anxiety	→	Acad. Achiev.	-.134	.075	-1.786	.07*
Acad. Procr.	→	Acad. Achiev.	-.579	.084	-6.898	.00**
Motivation	→	Acad. Achiev.	.121	.041	2.946	.00**

Total Effect Value: .88.36 **p<.05, **p<.01.

Table 4 shows that the predictive power of language anxiety to predict academic achievement is -.134; the power of academic procrastination to predict academic achievement is -.579; and the power of motivation upon academic performance is .121. The total effect value of anxiety, procrastination and motivation is 88.36.

Table 4 also shows that the relationship between language anxiety and academic achievement is not significant (Critical Ratio-CR = -1.786; p<.05). On the other hand, the relationship between academic procrastination and academic achievement is significant (CR = -6.898; p<.01). Similarly, there is a significant relationship between motivation and academic achievement, as well (CR = 2.946; p<.01).

In Table 5, correlations, standard errors, critical ratios and 'p' values of the variables of the last model are itemized.

Table 5

Correlations, Standard Errors, Critical Ratios and 'p' Values of the Variables of the Last Model

Variable			Estimate	St. Err.	Critical Ratio	p
Lang. Anxiety	↔	Acad.Achiev.	11.45	9.09	1.260	.20*
Acad. Procr.	↔	Motivation	-125.60	21.93	-5.726	.00**

*p<.05, **p.01

Table 6 shows that there is not a significant relationship between language anxiety and academic achievement (CR = 1.260; p<.05). Nevertheless, the relationship between academic procrastination and motivation is significant in a negative way (CR = -5.726; p<.01).

Discussion and Conclusions

The current study's aim was to determine and propose a model analyzing the relationship pattern between academic procrastination, motivation, anxiety and academic achievement. In the current study, it was found that the relationship between academic procrastination and academic achievement is significant in a negative way. This confirms the view that procrastination although sometimes "harmless," is generally detrimental however; it is "never helpful" (Steel, 2007, 80). The results obtained in the study are compatible with most of the research performed in various countries (Steel, 2007; Kim & Seo, 2015; Klassen et al. 2010; Onwuegbuzie, 2004; Dunn et al., 2014). Therefore, being aware of the consequences of the notion could increase the quality and efficiency of education.

As for the notion of motivation, in the present study, it was discovered that motivation was a significant predictor of academic achievement. As anticipated, the findings displayed the same results. The results are also consistent with various research from different sorces and samples. (Bidin et al. 2009; Goodman et al. 2011; Mo, 2011; Cheng, Lin & Su, 2011; Nishitani & Matsuda, 2011). Thus, it is clear that, motivating students in learning environments will bring about enhanced academic achievement. In other words, once students are motivated to do something, they will perform their responsibilities and duties simply by virtue of the wish and resulting contentment.

With regard to anxiety, it was found out that foreign language anxiety is not a significant predictor of language achievement, and there is not a significant relationship between anxiety and language achievement. This supports the idea that facilitating anxiety may play an important role in academic performance (Scovel, 1978; Skehan, 1990; Eysenck, 1979). On the other hand, there are various studies suggesting that anxiety is generally associated with poor academic performance (Gardner, 2010; MacIntyre, Noels & Clément, 1997; Hussain, 2011; Kitano, 2001; Matsuda & Gobel, 2013). This controversy may arise from the fact that, as Horwitz (2010, 154) claimed, the notion of anxiety is "multi-faceted and psychologists have differentiated a number of types of anxiety including trait anxiety, state anxiety, achievement anxiety, and facilitative-debilitative anxiety".

Commenting on the findings, some limitations should be considered. The results are limited by the size of the sample and the findings should be evaluated in this context. Apart from university students, further research could be carried out with bigger samples from different schools and grades. Further, it would be advisable to study other affective variables that are thought to have relationship with academic achievement. What is more, conducting the study at the end of the academic year may have affected the results, and the participants may respond to the items differently, whereby the reliability and the validity of the model could vary.

Outside of its limitations, one of the important aspects of the study is that it proves a unique model for analyzing the relationships between academic procrastination, motivation, language anxiety and academic achievement. In accordance with the analysis of the literature, it was acknowledged that the

aforementioned variables have close relationships with academic achievement, and the model tested offers a thorough description of their interactions. Furthermore, the findings, which generally bear resemblance to other studies, provide illumination to decision-makers in planning, applying and evaluating the educational programs.

As an overall conclusion, the findings of the study, which are thought to aid educators comprehending the relationships between the aforesaid variables and the roles they play in an educational context, demonstrate that foreign language anxiety and academic procrastination have negative effects on academic achievement. On the other hand, it has been revealed that motivation has positive effects on academic achievement. As for the correlations between the variables, although there is not a significant relationship between language anxiety and academic achievement, it has been found that the relationship between academic procrastination and motivation is significant. Thus, it is apparent that procrastination, motivation and anxiety can be noted as important affective variables that affect academic achievement, and they should therefore be treated with utmost attention.

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Erteleme, Motivasyon, Kaygı ve Akademik Başarı Arasındaki Yordayıcı ve Açıklayıcı İlişkiler Modeli

Atıf:

Akpur, U. (2017). Predictive and explanatory relationship model between procrastination, motivation, anxiety and academic achievement. *Eurasian Journal of Educational Research, 69*, 221-240. http://dx.doi.org/10.14689/ejer.2017.69.12

Özet

Problem Durumu: Öğrencilerin sorumlulukları arasında, kendilerine verilen ödevleri ya da projeleri zamanında teslim etmek ve çalışma programlarını sekteye uğratmadan eğitimlerine devam etmek büyük önem taşımaktadır. Bu durum, alınan eğitimin etkinliğini ve başarısını etkileyen en önemli unsurlardan biridir. Akademik görevlerin bilinçli olarak ileri bir tarihe ertelenmesi akademik başarıyı azaltmakta ve eğitimin niteliğini olumsuz yönde etkilemektedir. Genel olarak, bitirilmesi gereken görevleri bireyin kendi isteği doğrultusunda ertelemesi ya da ötelemesi şeklinde tanımlanan erteleme davranışı, zaman yönetiminde karşılaşılan problemlerden çok, bünyesinde kaygı, motivasyon eksikliği, kararsız olma durumu ve otoriteye karşı koyma gibi unsurları barındırmaktadır. Gerçekleştirilen araştırmalarda öğrencilerin büyük bir bölümünün akademik görevlerde erteleme davranışı sergilediği; bu oranın yazma ödevlerinin yanı sıra sınavlara hazırlanma ve özellikle okuma ödevlerinde büyük bir artış gösterdiği ifade edilmektedir. Erteleme davranışlarının arkasında yatan nedenlerin belirlenmesi amacıyla çeşitli araştırmalar gerçekleştirilmiş ve bu konuda farklı yaklaşımlar ortaya konmuştur. Bu görüşlerden biri, erteleme davranışlarının motivasyonel bir durum olduğu şeklindedir. Yapılan araştırmalarda Öz-Belirleme Teorisine göre bir motivasyon çeşidi olan içsel motivasyonun, erteleme davranışları üzerinde etkili olduğunu öne sürülmektedir. Bir diğer deyişle, erteleme davranışı sergileyen bireylerin herhangi bir eylemi gerçekleştirmede daha düşük bir motivasyon düzeyine sahip olduğu, bu durumun da beraberin de akademik başarıyı olumsuz etkilediği ifade edilmektedir. Diğer bir görüş ise, erteleme davranışlarını tetikleyen unsurun, bireylerin sahip olduğu yüksek kaygı düzeyi olduğuna dikkat çekmektedir. Buna göre, bireylerin kaygı düzeyleri ile sergiledikleri erteleme davranışları arasında anlamlı bir ilişki bulunmakta ve her iki değişken de akademik başarıyı olumsuz yönde etkilemektedir. Gerçekleştirilen bazı araştırmalarda ise erteleme davranışının temel sebebinin kaygı durumu olduğu özellikle ifade edilmektedir. Sonuç olarak, alan yazın incelendiğinde akademik erteleme davranışlarının genellikle akademik başarı ve motivasyon üzerinde olumsuz etkilerinin olduğu; öte yandan akademik erteleme davranışları ile kaygı düzeyleri arasında ise olumlu bir ilişki olduğu görülmektedir.

Araştırmanın Amacı: Bu çalışmada akademik erteleme, motivasyon, kaygı ve akademik başarı arasındaki yordayıcı ve açıklayıcı modelin belirlenmesi ve söz konusu değişkenler arasındaki ilişkiler örüntüsünün saptanması amaçlanmıştır.

Araştırmanın Yöntemi: Bu araştırmada değişkenler arasında neden-sonuç ilişkisi olacağı düşünüldüğü için nedensel araştırma deseni kullanılmıştır. Çalışmanın evrenini, 2014-2015 akademik yılı güz yarıyılında Yıldız Teknik Üniversitesi, Yabancı Diller Yüksekokulu, Temel İngilizce (Hazırlık) Bölümüne devam eden öğrenciler oluşturmuştur. Çalışma grubunda ise, evrenden tesadüfi olarak seçilen ve araştırmaya gönüllü olarak katılan 229 öğrenci bulunmaktadır. Gerçekleştirilen uygulama sonucunda 18 ölçek eksik doldurulduğundan dolayı değerlendirilmeye alınmamış ve sonuç olarak 221 öğrenci çalışmaya dâhil edilmiştir. Öğrencilerin akademik erteleme davranışlarını ölçek amacıyla, Aitken (1982) tarafından geliştirilen ve Balkıs (2006) tarafından Türkçeye uyarlanan "Aitken Erteleme Eğilimi Ölçeği"; motivasyon düzeylerini belirlemek amacıyla, Vallerand ve diğ. (1992) tarafından geliştirilen ve Türkçeye Karataş ve Erden (2012) tarafından uyarlanan "Akademik Motivasyon Ölçeği" ile kaygı düzeylerini ölçmek için Horwitz, Horwitz ve Cope (1986) tarafından geliştirilen ve Türkçeye Aydın (2001) tarafından uyarlanan "Yabancı Dil Sınıf Kaygısı Ölçeği" kullanılmıştır. Öğrencilerin 2014-2015 akademik yılı güz yarıyılı boyunca aldıkları dönem içi notları da akademik başarı ölçütü olarak değerlendirilmiştir. Çalışma sonucunda elde edilen veriler SPSS 22.0 ve AMOS programları yardımıyla, yapısal eşitlik modeli kullanılarak analiz edilmiştir.

Araştırmanın Bulguları: Alan yazın incelemesine paralel olarak önerilen model test edilmiş ve path analizi sonucunda gerekli değişiklikler yapılarak tekrar test edilip doğrulanmıştır. Yapılandırılmış modelin uyum indeksleri incelendiğinde, modelin verilerle uyumlu olduğu görülmüştür (NFI = .99; CFI = .98; GFI = .97; AGFI = .99; RMSEA = .01). Elde edilen sonuçlar kaygı ile akademik başarı arasında anlamlı bir ilişkinin olmadığını, öte yandan erteleme davranışları ile akademik başarı arasında ve motivasyon ile akademik başarı arasında anlamlı bir ilişki olduğunu ortaya koymuştur. Ayrıca, erteleme davranışları ile motivasyon arasında olumsuz bir ilişki olduğu da saptanmıştır. Bulgulara paralel olarak erteleme davranışları, motivasyon ve kaygı ile akademik başarı arasındaki açıklayıcı ve yordayıcı ilişkiler örüntüsü bir model olarak verilmiştir.

Araştırmanın Sonuçları ve Öneriler: Elde edilen bulgular ışığında, eğitim-öğretim etkinliklerinde, erteleme davranışları, motivasyon, kaygı gibi değişkenlerin belirlenmesi ve olumsuz sonuçlarla karşılaşılmaması amacıyla gerekli önlemlerin alınması başarıyı arttıran unsurlar olarak değerlendirilmektedir. Öğrencilerin akademik erteleme davranışlarının azaltılması amacıyla kendilerine verilen görevleri önem sırasına koyarak bir takım planlamalarda bulunmaları ve bunlar gerçekleştirmek için de zaman aralıkları belirlemeleri önerilmektedir. Buna ek olarak, erteleme davranışlarının, motivasyon ve kaygı kavramlarıyla yakından ilişkili olmasından dolayı, öğrencilerin motivasyonlarının arttırılması gerektiği düşünülmektedir. Bu amaçla, öğrenme ortamlarının öğrencilerin kendi amaç ve ilgileri doğrultusunda düzenlenmesinin motivasyonlarını arttıracağı ifade edilmektedir. Bunun yanı sıra, eğitim-öğretim aktivitelerinde merak uyandıran

etkinliklerin planlanması, öğrencilere kendi yetenek ve kabiliyetleri doğrultusunda gerçekçi ve ulaşılabilir amaçlar belirlenmesi, öğrencilerin kendilerini rahat hissedebilecekleri bir öğrenme ortamının sağlanması, öğrencilere kendilerini ifade edebilmeleri için uygun fırsatların sunulması ve onların bu konuda teşvik edilmesi gibi etkinliklerin motivasyon düzeylerini arttıracağı ve buna paralel olarak da kaygı düzeylerini azaltacağı düşünülmektedir. Bu tür uygulamaların, aynı zamanda, akademik başarıyı Bu araştırmada test edilen model, yabancı dil eğitimi alan öğrencilerden elde edilen verilerle şekillendirilmiştir. Söz konusu model farklı program ve sınıflara devam eden öğrenciler üzerinde test edilebilir. Böylece değişkenler arasındaki açıklayıcı ve yordayıcı ilişkiler farklı perspektiflerle değerlendirilebilir.

Anahtar Kelimeler: Duyuşsal faktörler, dil öğrenimi, yapısal eşitlik modeli.