



## Personal Factors Predicting College Student Success

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### ABSTRACT

**Purpose:** With the changing perspective in modern education systems, success means more than grades and includes emotional, social, cognitive, and academic development. The aim of this study was to investigate the role of personal factors (academic self-efficacy, organization and attention to study, time utilization, classroom communication, stress and emotional components, student involvement with college life) in predicting student success. **Method:** Three hundred and seventeen college students participated in the study, and a demographic information form and the College Learning Effectiveness Inventory (CLEI) were used.

A correlational research design was utilized for data analysis. **Findings:** The results indicate that personal variables significantly predicted student success,  $\Delta R^2 = .16$ ,  $\Delta F(6, 310) = 10.16$ ,  $p < .05$ , and that 16% of the total variance was explained with the model. Among the personal variables of effective learning, stress and time pressure and classroom communication were found to be significant predictors of success. **Implications for Research and Practice:** The findings indicate that students who communicate better and feel more stressed in the classroom reached a higher level of achievement in college learning. The results suggest that activities that increase student communication in the class should be given priority in the classroom environment. In addition, instructors and university counselors should pay attention to the positive relationship between stress and academic success, as a balanced level of stress should not always be feared during studies. For further research, the CLEI should be used with college students in all grades rather than preparatory students to investigate college students' profiles about personal factors.

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## Introduction

Higher education is important in today's world by means of its contribution to well-qualified graduates, personal development, and economic, scientific, and technological advancements (Nguyen, 2011). The relevance of higher education underlines the issue of student success or college achievement, which is a complex term to define due to multiple personal and institutional factors affecting college success (Mills, Heyworth, Rosenwax & Carr, 2009; Toutkoushian & Smart, 2001). College success is defined by Kim, Newton, Downey and Benton (2010) as "acceptable grade averages, retention toward a degree and attainment of productive life skills" (p. 112). In recent years, the perspective of education systems has undergone a change from "How should we teach students?" to "How should we help students learn?" to develop and maintain the academic achievement of students. It means that student success is related to student and faculty responsibility as well as a campus-wide responsibility (Hunter, 2006).

Studies in recent years have indicated that success means more than grades. Thus, success has been defined in several ways, including whole student development and having many dimensions beyond cognitive and academic factors (Hunter, 2006). According to Pritchard and Wilson (2003), emotional and social factors are crucial in relation to student success, and there is a strong impact of psychological variables on students' academic achievement through students' adjustment to college. Pike and Kuh (2005) emphasized the value of students' behaviors, attitudes, expectations, and their engagement into college life to measure student success. However, Finn and Rock (1997) argued that success means graduating from the institution on time with good grades. In this regard, it is entirely crucial to notice that, even though the emphasis is placed on attaining high grades to signify success, recent years have introduced the idea of considering faculty-student face-to-face interaction as a supplier of an increase in academic success (Crisp, Baker, Griffin, Lunsford & Pifer, 2017).

A vast number of studies have been conducted to examine student success. Kuh (2006) proposed that student success is formed by pre-college experiences (student academic background and readiness for college); student engagement (studying skills, involvement in social life and campus environment); and post-college outcomes (grades and job-related issues). Expectancy-value theory attaches importance to motivation as being a crucial component of academic achievement. According to this theory, motivation is the direct source of expectations for achieving success (Wigfield, 1994). As the level of expectation increases regarding academic tasks, students' motivation increases as well, and they, intentionally and willingly, commit themselves to achieve the desired goals. Similar to this sense, Tinto's academic and social integration model underlines the prevalence of engagement in the new college environment. The more students commit themselves to college, the more they display retention and achievement (Tinto & Pusser, 2006). Furthermore, achievement goal theory is another theory of student success in which defining goals is emphasized because of a leading level of higher achievement (Canfield & Zastavker, 2010).

Research has focused on student success by taking various perspectives into consideration. Kim et al. (2010) proposed that factors affecting student success can be categorized under three types of variables. The first one is previous success in high school (academic) (Wolfe & Johnson, 1995). The second category is constructed by demographics or socio-economic status that are found to influence student achievement and are difficult to change by the students themselves. For example, regarding gender difference in college success, although some of the studies stated that there was no significant difference (Campbell & Fuqua, 2008; Peterson, 2009), others indicated that female students were more successful than male students in the first year of college (Adams, Marsh, Irons, & Carlson, 2010; Mills et al., 2009). The third one is formed by the factors such as perceptions, actions, attitudes, and values that individuals can control and change (Forsyth & Schlenker, 1977). Personal factors are due to many kinds of individual differences. Every individual has the capacity to influence, enhance, or shape his/her own life. Therefore, for the sake of success, personal variables, also known as "psychosocial factors," have taken the attention of researchers. According to Newton, Kim, Wilcox, and Beemer (2008), these factors include attitudes, motivation, usage of campus resources, study approach, etc. (Newton et al., 2008, p. 4). Even though there are several types of personal factors, according to Newton et al. (2008), academic self-efficacy and confidence, strategic organization and study approach, time utilization, stress and emotional components, student involvement with college life and motivation are among the most outstanding personal factors that affect college student success. In this sense, Newton et al. (2008) developed College Learning Effectiveness Inventory, consisting of these six subscales to measure personal variables in college learning. Considering their emphasis on naming these personal variables as the most powerful influences over success, this study was designed to place importance into personal factors and study them separately.

To begin, academic self-efficacy refers to the competency level of students in achieving academic responsibilities, such as tests or homework (Schunk, 1991). Investigating academic self-efficacy is not only a concern for college learning, but also for high school education (Peguero & Shaffer, 2015). A vast number of studies have indicated a positive relationship between academic self-efficacy and college grades (Bong, 2001; Linnenbrink & Pintrich, 2002). As another variable of personal factors, the significance of study habits and attitudes has been underlined to increase college students' success (Crede & Kuncel, 2008). In addition to time management efforts, the ability to organize tasks and concentrate on their studies also affects students' success (Pauk & Owens, 2011). The literature has also advocated the view that the ability to organize time and responsibilities can increase students' level of success. However, when students do not have organizational skills, they tend to view themselves as failures.

Time management, as another personal variable that leads to success, is defined as "the ability to effectively organize your time and responsibilities in order to get most out of your day" (Combs, 2007, p. 74). Combs (2007) also mentioned that time management during the college years creates a difference between students who are

successful in achieving their goals and those who regret being unaware of the critical aspect of managing time. Balduf (2009) also emphasized that a lack of time management leads to underachievement. Furthermore, colleges should be regarded not only as places to provide education, but also as places in which students can develop their social lives. Research has indicated that college students who become a member of social activities engage in the college life and experience the advantages of being social around campus (Reason, Terenzini & Domingo, 2006). Along with activities inside the classroom, evidence shows that attending extracurricular activities forms another part of the personal factors that increase the satisfaction and engagement of students, influencing student success (Pascarella & Terenzini, 2005).

Apart from other personal variables, student achievement is also based on students' satisfaction level regarding the college. Satisfaction is explained by means of various parts of campus life, such as satisfaction about faculty, program quality, college activities and environment, and overall satisfaction about life (Klein, Kuh, Chun, Hamilton & Shavelson, 2005; Pascarella & Terenzini, 2005). Literature has supported the view that students who are emotionally satisfied with the college attend courses at a higher rate and achieve more academic success (Pascarella & Terenzini, 2005). Moreover, Decker, Dona, and Christenson (2007) argued that good relationships between students and faculty members exhibit a greater influence on emotional functioning than academic achievement. Accordingly, learning and teaching happens through open communication (Nurzali & Khairu'l, 2009; Wall, 2007). The increase in sharing and learning happens more frequently by means of communication between student-student and student-teacher. As a crucial factor influencing achievement, student-faculty relationships display a fundamental effect if the faculty is attentive to students' achievements (Komarraju, Musulkin & Bhattacharya, 2010). Similarly, student-student relationships exert a prominent influence over success. Rubin, Graham, and Mignerey (1990) mentioned that students who feel relaxed when communicating demonstrate a higher level of achievement in terms of GPAs at the end of their college education, as openness in communication creates good relationships, which lead to increased academic success. Therefore, classroom communication is viewed as another personal variable that affects student success.

The present study is expected to make a valuable contribution to the literature by investigating the association between personal variables and academic success. Firstly, the study was conducted with a different sample than suggested by Newton et al. (2008), that is, students who were at the beginning of their college education. In addition, the results of the study might contribute to previous studies indicating significant personal factors as well as other affective variables of effective learning (Aydin, 2012) and priorities of prevention facilities, since beginning students would provide valuable information for the development and improvement of services offered by psychological counseling centers. Moreover, an adapted inventory measuring several personal factors can be a practical inventory tool for psychological counselors at university counseling centers while discovering the personal variables that might affect academic success. Furthermore, students might use the inventory

by themselves to gain insight about their strengths and weaknesses. Additionally, the study might be crucial for psychological counselors working with low-achieving first-year students because personal variables, which students are able to exert some control to change by themselves, can be used to increase the academic success of students. Finally, there is a lack of literature concerning first-year college students' success in the Turkish population. Even though there are studies about undergraduate students' success, the literature lacks information about the personal factors that affect academic success of students during their first year of college. Therefore, the present study may offer different perspectives for further research because the role of personal factors is investigated separately by means of a newly adapted instrument measuring effectiveness of college learning. Although there was a previous study investigating personal and affective variables of success in college students (Aydin, 2012), it is necessary to analyze the predictive role of personal variables separately to get a clear picture over the concept of effective learning in college. Considering all the related information regarding the impact of personal factors, the present study aimed at answering the following research question: What is the role of personal factors (academic self-efficacy, organization and attention to study, stress and time pressure, involvement in college activities, emotional satisfaction and classroom communication) in predicting students' academic success?

## Method

### *Research Design*

In relation with the purpose of this study, a correlation research design was utilized. The personal variables affecting student success were independent variables, and each personal variable was a subscale of the college learning effectiveness inventory. The dependent variable (students' academic success) was gathered via English proficiency exam scores.

### *Research Sample*

A demographic data form and Turkish version of the College Learning Effectiveness Inventory (CLEI) were administered to language preparatory students of a state university in Turkey. The convenient sampling method was used, and the participants were volunteer students from the pre-intermediate and intermediate English levels at the preparatory school. A total of 317 students participated in the study (50.8% female, 49.2% male). The mean age of the participants was 19.55 with a standard deviation of 2.28, and their ages ranged between 18 and 28. Among the participants, 174 (54.9%) of respondents were pre-intermediate level students and 143 (45.1%) of participants were intermediate level students. The demographic information is indicated in Table 1.

**Table 1***Demographic Information of the Participants*

Variables	<i>n</i>	%
Gender		
Female	161	50.8
Male	156	49.2
English Proficiency Level		
Pre-Intermediate	174	54.9
Intermediate	143	45.1

The language preparatory school, from where participants of the study were selected, aims to provide basic language skills for students whose level of English is below proficiency level during the first year of university. The department functions as a language preparatory school, offering English courses through two semesters. The courses are based on reading, writing, listening, and speaking skills to prepare students for the English medium of instruction in undergraduate study. Students' academic success was obtained via English Proficiency Exam scores given to students at all levels at the end of the year. The exam includes tests consisting of standard grammar and vocabulary, reading comprehension, and listening and writing sections.

*Research Instruments and Procedures*

Two instruments were used for data collection: The demographic information form was designed by the researcher, including gender, age, and English proficiency level at preparatory school; and the College Learning Effectiveness Inventory (CLEI) developed and revised by Newton et al. (2008) to measure personal factors influencing college student success. The inventory consists of 51 items on a 5-point Likert scale ("1. Never" to "5. Always") and six subscales: Academic Self-efficacy, Organization and Attention to Study, Stress and Time Pressure, Involvement in College Activity, Emotional Satisfaction, and Class Communication. Sample items from the scale are "30. I make study goals and keep up with them," and "36. I feel there are so many things to get done each week that I am stressed." For the scales, high scores indicate expectations to be successful in achieving goals; effective organizational planning; managing pressures, such as procrastination; engaging in activities; encouragement; and active communication with friends and faculty. The Cronbach Alpha levels of scales were .87 (ASE), .81 (OAS), .77 (STP), .81 (ICA), .72 (ES), and .68 (CC) (Newton et al., 2008). A summed score can be calculated for each subscale representing a different personal variable. Similarly, the Cronbach alpha values of the scale with the Iranian sample were between .68 and .79 (Saeed, 2014).

The inventory was adapted to Turkish by Aydin (2012) with a Confirmatory Factor Analysis (CFA) to examine how well the model fit the Turkish population. CFA results confirmed the six-factor structure of the Turkish version of the College Learning Effectiveness Inventory and indicated a significant chi-square value  $\chi^2(1051) = 1957.84, p < .05$  with a mediocre fit. However, Items 12 ("I am discouraged

with how I am treated by my instructors.”) and 41 (“My friends have good study habits.”) were found as insignificant and omitted in the data analysis. In the end, the scale consisted of 49 items in the Turkish adaptation. For internal consistency, Cronbach’s alpha level of the total scale was found as .88, and the reliability of the subscales for the Turkish adaptation were .75 (ASE), .79 (OAS), .68 (STP), .73 (ICA), .62 (ES), and .61 (CC). Although the internal consistency value was low for some subscales, the researcher preferred to use this inventory because it exhibited a high quality with different subscales measuring the most prominent factors of personal variables, and there were no learning effectiveness inventories that measured all these psychosocial factors together in Turkish.

Academic achievement scores were gathered via The English Proficiency Exam (EPE) scores administered by the language preparatory school. The data for this study were gathered from preparatory students via the demographic information form and the Turkish version of the College Learning Effectiveness Inventory with an explanation of the current study. Prior to data collection, permission was granted from the Human Subjects Ethics Committee. The scales were administered in approximately 15 minutes via paper-pencil format during class hours with the permission of instructors. The data were collected in two weeks, and the English Proficiency Exam results of each student were collected from the administration at the end of the semester.

#### *Data Analysis*

In the study, descriptive statistics (means, standard deviations, and correlation coefficients among variables) and a Multiple Regression Analysis were utilized to analyze the data. Prior to running the analysis, a missing value analysis was conducted and all the necessary assumptions of multiple regression analysis (normality, multicollinearity, homoscedasticity, independence of residuals, and outliers) were checked (Tabachnick & Fidell, 2007).

The normality assumption of the residuals was checked through the histogram and normal probability plot of residuals. According to Tabachnick and Fidell (2007), the distribution of the histogram should not be too peaked or too flat. The histogram (Figure 1) of residuals showed an approximately normal distribution. Moreover, the normal P-P plots (Figure 2) indicated no serious deviation from the straight line.

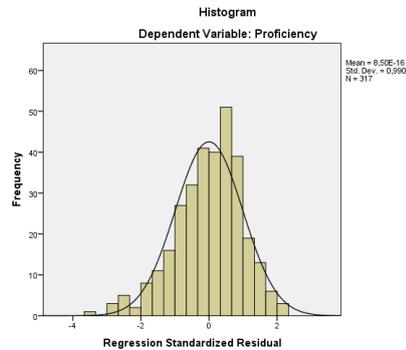


Figure 1

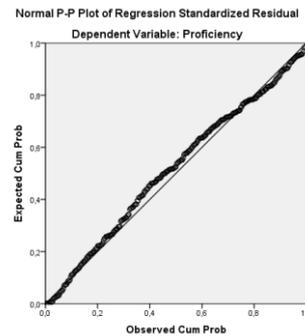


Figure 2

The variance inflation factor (VIF) and tolerance values were checked for the multicollinearity assumption testing high correlations among the independent variables. According to Field (2005), VIF values should be less than 10, and the values of tolerance should be more than .20. Tolerance and VIF value requirements were satisfied, as tolerance changed from .42 to .83 and VIF values from 1.21 to 2.63. Then, scatter plots were checked for the assumption of homoscedasticity, and there seemed to be no violation of assumption as a result of any pattern of scores indicated by randomly spread scatterplots. Moreover, the independence of residuals assumption was checked via the Durbin-Watson value, which should be between 1 and 3 (Tabachnick & Fidell, 2007). It was found as 1.58; therefore, the independence of residuals assumption was satisfied in the current study. Finally, Cook's distances, Leverage, and Mahalanobis distance were checked for assumption relevancy; none of them showed any violation, as Cook's distance was observed as .03; leverage values were within the standards, which should be between 0 and 1; and Mahalanobis distance indicated no outliers, as all the values were lower than critical  $\chi^2$  (Field, 2005).

## Results

In line with the aim of the study, which was to investigate the role of personal factors in predicting student success, the findings are presented in two sections: the relevant descriptive statistics (means and standard deviations), and the findings of the Multiple Linear Regression Analysis [the effect size (adjusted  $R^2$ ) of the overall regression model, the associated significance test value ( $p$ ), and the individual contribution of each predictor ( $\beta$ )]. Descriptive statistics of model showed that the mean of the English Proficiency Exam is 62.88 with a standard deviation of 10.51. Among personal variables, the mean of academic self-efficacy is 57.41 with a standard deviation of 6.47; organization and attention to study  $M=25.27$ ,  $SD=5.76$ ; stress and time press  $M=18.78$ ,  $SD=4.23$ ; involvement in college activities  $M=27.52$ ,  $SD=5.53$ ; emotional satisfaction  $M=21.89$ ,  $SD=3.58$ ; and classroom communication  $M=21.32$ ,  $SD=3.45$ . The highest mean was academic self-efficacy and the lowest was stress and time press. Then, Pearson's correlation coefficients between independent

variables were analyzed and the level of correlations was suitable for the required limits as indicated in Table 2.

**Table 2**

*Means and Standard Deviations of Subscales and Correlations Between Variables*

Variables	M	SD	1	2	3	4	5	6	7
Proficiency	62.88	10.51							
Academic Self-Efficacy	57.41	6.47	.21	1.00	.63	.46	.30	.63	.41
Organization and Attention to Study	25.27	5.76	.13	.63	1.00	.47	.08	.55	.29
Stress and Time Press	18.78	4.23	.36	.46	.49	1.00	.05	.46	.41
Involvement in College Activities	27.52	5.53	.12	.30	.08	.05	1.00	.32	.28
Emotional Satisfaction	21.89	3.58	.26	.63	.55	.46	.32	1.00	.40
Classroom Communication	21.32	3.45	.28	.41	.27	.41	.28	.40	1.00

In terms of correlations, all independent variables were positively correlated with academic success. While the highest correlations were related to stress and time press ( $r = .36, p < .05$ ) and classroom communication ( $r = .28, p < .05$ ), correlations for involvement in college activities ( $r = .12, p < .05$ ) and organization and attention to study ( $r = .13, p < .05$ ) dimensions were rather low.

Finally, a Multiple Linear Regression Analysis was conducted to examine the relationship between personal factors (academic self-efficacy (ASE), organization and attention to study (OAS), stress and time press (STP), involvement in college activities (ICA), emotional satisfaction (ES) and class communication (CC)) and students' academic success. The results of the analysis are summarized in Table 3.

**Table 3**

*Results of the Multiple Regression Predicting Academic Success*

Predictors	B	SE	$\beta$	T	P	$\Delta R^2$	$\Delta F$
Model						.16*	10.16
Academic Self-Efficacy	.02	.13	.01	.13	.09		
Organization and Attention to Study	-.21	.13	-.11	-1.59	.11		
Stress and Time Press	.75	.16	.30	4.70*	.00		
Involvement in College Activities	.08	.11	.04	.76	.45		
Emotional Satisfaction	.31	.21	.11	1.45	.15		
Class Communication	.39	.19	.13	2.08*	.04		

Note. Dependent Variable = English Proficiency Exam. \* $p < .05$

The regression model was significant as shown in Table 2. Overall, 16% of the variance of the scores can be accounted by the personal factor variables in predicting student success. Results of the multiple regression analysis indicated that personal variables significantly predicted student success,  $\Delta R^2 = .16$ ,  $\Delta F(6, 310) = 10.16$ ,  $p < .05$ . The stress and time pressure ( $\beta = .30$ ,  $p < .05$ ) and class communication ( $\beta = .13$ ,  $p < .05$ ) appeared as significant predictors of student success. However, academic self-efficacy ( $\beta = .01$ , *ns*), organization and attention to study ( $\beta = -.11$ , *ns*), involvement in college activities ( $\beta = .04$ , *ns*), and emotional satisfaction ( $\beta = .11$ , *ns*) were not found to be significant predictors in the model.

### Discussion and Conclusion

The purpose of the current study was to examine the role of personal variables in predicting students' academic success. The results showed that 16% of the variance in the criterion variable was explained by the model through personal variables. Furthermore, stress and time pressure and classroom communication appeared as significant predictors of success. Contrary to expectations, academic self-efficacy, organization and attention to study, involvement with college activities, and emotional satisfaction were not found as significant predictors.

The variance explained by the model showed that while the model was significant in terms of predicting academic success of students, the explained variance was not good enough. Consequently, the results should be discussed with caution. First, there might be some problems related to the inventory. The Cronbach Alpha of the Turkish version was similar to the original scale, and they were rather low. Similar to the current study, Leung, Ng, and Chan (2011) found the reliability of the subscales to be a little bit lower, as .71 (ASE), .40 (OAS), .43 (STP), .73 (ICA), .45 (ES), and .43 (CC) with college students. This finding may indicate that the inventory might have some problems within itself, or there could be some cultural aspects that cannot be reflected in adaptation studies into other languages.

According to the results, classroom communication, including asking questions in a relaxed classroom environment, offering new ideas, and sustaining good relations with peers and faculty members are positively correlated with academic achievement among the personal variables. This finding was in line with the literature stating that students who had better communication skills found it easy to express themselves and behaved in a more relaxing manner, which led to higher achievement (Reason et al., 2006; Rubin et al., 1990). In addition, the study indicated surprising results for the second personal predictor, which was stress and time pressure. Although the literature stated the adverse effect of stress over student academic success (Alzaeem, Sulaiman & Wasif Gillani, 2010; Bland, Melton, Welle & Bigham, 2012), the findings of the present study showed that stress was a significant positive predictor of students' academic success. It means a higher level of stress results in higher achievement. This finding was partially consistent with the literature underlying the benefit of an appropriate rate of stress for motivation and performance (Cahir & Moris, 1991) and perceived stress resulting in academic success (Jepson & Forrest, 2006). According to Heikkila, Niemivirta, Nieminen and

Lonka (2011), stress can help people survive in critical situations and should not always be considered as negative. Furthermore, the study provided an interesting result to the literature: when stress is balanced and kept at a tolerable level, it might bring success, or when students experience time pressure, they may learn more effectively. Overall, it can be inferred that an appropriate level of stress might be necessary for higher achievement.

The findings of the study did not reveal the other personal variables, such as academic self-efficacy, organization and attention to study, involvement in college activities, and emotional satisfaction, to be significant predictors of academic success in the model, contrary to the literature (Komarraju et al., 2010; Kuh, Kinzie, Schuh, & Whitt, 2005). The study provided surprising results in terms of the insignificant relationship between academic self-efficacy and academic success. Whether students had the belief that they could succeed or not did not correlate to their academic success. Although the positive influence of self-efficacy on academic achievement was underlined in various research studies (Landis, Altman & Cavin, 2007; Linnenbrink & Pintrich, 2002; Margolis, 2005; Zimmerman, 2000), this study provided adverse results compared to previous research. The reason may be because preparatory students participated in the current study; that is, their academic self-efficacy should be considered from the view of language learning self-efficacy and, specifically, their English self-concept should have been studied, as well. As the students were freshmen who recently started college life, they might not have finished the adjustment process. Furthermore, it was found that academic self-efficacy can be influenced by other variables (Peguero & Shaffer, 2015). Additionally, the findings of the present study indicated that students' academic success was not correlated with organization and attention to study. This finding was very surprising because the literature pointed out underachievement as a result of inadequate knowledge of how to study (Balduf, 2009), and that students should pay attention to their studies and responsibilities, concentrate better while studying, and be organized in order to be successful (Pauk & Owens, 2011).

The current study did not provide significant results in terms of the relationship between involvement in college activities and academic success. As another indicator of personal variables, attending college activities was not associated with students' academic success. In the literature, it is highly possible to find a great amount of research supporting that, as the proportion of participation in college activities increased, college students became more successful (Kuh et al., 2005; Pascarella & Terenzini, 2005; Reason et al., 2006). Similar to the findings of the current study, Aitken (1982) found involvement in extracurricular activities as an insignificant predictor of academic success. It is crucial to mention that Aitken (1982) highlighted that the impact of involvement in college activities could be seen in the second year; that is, the first year might not reflect student involvement. This result might be valid for the current study, as well. As the preparatory school building is not close to the center of the university, where most of the extracurricular activities take place, the language preparatory school students might not have been informed about the possibilities and activities around campus, or how to participate in the activities. In

addition, they may also be struggling with other variables, such as loneliness, homesickness, etc.

The personal variable of emotional satisfaction covers the interest of faculty in students' academic success, enjoying the courses and university, instructors' behaviors, and feeling satisfied about future career plans. Unlike the literature (Pritchard & Wilson, 2003; Pascarella & Terenzini, 2005), emotional satisfaction was not found as a significant predictor of academic success in the present study. Literature has stated that when students feel cared for by faculty, they believe in their capacity to achieve more and increase academic self-efficacy (Komarraju et al., 2010). Hence, according to Decker et al. (2007), this belief should be considered as a better indicator of emotional satisfaction than academic success. The reason of the insignificance of emotional satisfaction as a predictor of success might be understandable considering Umbach and Wawrzynski's (2005) suggestion. According to the researchers, students might be prone to ask support not from faculty, but from other sources like friends or family.

Finally, as a newly adapted instrument was utilized within the study, the findings related to the instrument should also be discussed. It was found that reliability results were lower than the original scale, but similar to psychometric properties of the scale adapted into other languages (e.g., Saeed, 2014). One reason might be the nature of the sample that participated in the study. As preparatory school students are the newcomers at the university, they might have not acquired effective learning strategies at college yet, due to the lack of experience and having another major concern, namely learning a foreign language, which requires other competences such as reading, listening, speaking, etc. That is, the scale might not be valid for this group of participants, or there may be some problems related to the Turkish version of the scale. In addition, another reason may be some concerns related to item reflection in the original scale, because the findings of the study were similar to the study that was conducted with the same type of sample, i.e., preparatory school students (Aydin, 2012). The College Learning Effectiveness Inventory was adapted and used for the first time in that study, and although there were other significant affective variables in the study, among personal variables, communication and stress were found as the significant predictors, similar to this study. Due to attaining nearly the same results in both studies, it can be recommended that the instrument should be used with university students in other grades rather than preparatory students in order to attain a clearer picture about personal variables of success regarding concerns for item reflection.

The results of this study can provide some information regarding personal factors related to the academic success of preparatory students. As language preparatory school takes place during the first year of college, possible personal factors can be investigated as the starting point. It is expected that the findings may offer valuable information to language preparatory school administrators, instructors, and university counseling centers who provide psychological help to students. The positive influence of classroom communication over students' academic success might suggest that, when students have a good relationship with each other, feel relaxed while asking questions, and contribute with different ideas to the topic, they

are more likely to attain academic success. Instructors at preparatory school can use this information to create a classroom or outside environment in which students can work and study together with their friends and provide a place to work collaboratively for activities such as group projects, role plays, or other performance studies. In addition, this finding can shed a light for faculty not to use direct instruction methods, as students learn better when they interact among themselves.

University counseling centers can view the invaluable finding of stress and time pressure as a predictor of student success into consideration while preparing activities. The impact of stress can be included in student seminars about stress and academic studies so that students do not put so much pressure on themselves when they feel stressful about their courses or academic studies. Contrary to the literature, the positive relationship between stress and academic success contributes to the literature in a way that perceived stress can influence academic success in a positive way, as well. Instructors at preparatory school may employ this finding, that a balanced level of stress is not always something to fear during studies. Not only the instructors, but also faculty at universities can be informed about the possible positive effect of stress.

In conclusion, in the present study, a newly adapted instrument into Turkish, the CLEI, was used to measure the personal factors of effective learning. The reliability results of the scale demonstrated that the results could have been influenced by the grade level of the participants. Contrary to the hypothesis in the beginning, collecting information about personal variables that influence effective learning might not reflect accurate results when the participants have not yet adapted to university life. Therefore, for further research, the inventory should be used with other grade levels (such as juniors and seniors) in different departments as well as at different universities to explore information about effective learning, as undergraduate students may provide more valuable information related to their experiences at university more than preparatory students who are freshmen and have less experience both academically and socially. As the very similar study indicated nearly the same results, there should be extra studies regarding this inventory. The CLEI can be used to reveal students' profiles about personal factors (organization and attention to study, stress and time press, classroom communication, etc.) that impact their achievements at colleges since it includes a wide range of psycho-social factors.

The current study had also some limitations. The first one was related to generalizability of the results because only the language preparatory students enrolled in a state university participated in this study. Therefore, the results cannot be generalized to the entire population of college students. Although the sample was chosen on purpose that the students were freshmen at the college, enrollment in the language learning preparatory school caused other variables to be taken into consideration. Moreover, the self-reporting nature of the study is another limitation, as the students may have not provided accurate responses to the items. Finally, although the inventory was composed of different psycho-social variables, the low reliability of subscales might have indicated possible problems related to the inventory. Therefore, the inventory should be used by taking all these aspects into consideration.

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## Üniversite Öğrencilerinin Başarısını Yordayan Kişisel Faktörler

### Atf:

Aydın, G. (2017). Personal factors predicting college student success. *Eurasian Journal of Educational Research*, 69, 93-112. <http://dx.doi.org/10.14689/ejer.2017.69.6>

### Özet

*Problem Durumu:* Günümüzde yükseköğrenim derecesine sahip olmak yalnızca seçkin mezunlar açısından değil aynı zamanda ekonomi, bilim, teknoloji ve kişisel gelişim için önemlidir. Yükseköğretim kurumları, en önemli misyonlarından biri olarak öğrenci başarısının altını çizmektedir. Farklı teoriler başarı söz konusu olduğunda akademik ve sosyal uyum, beklenti ve motivasyon, hedefleri belirleme gibi noktalara vurgu yapmaktadır. Öğrenci başarı pek çok farklı biçimde tanımlanmasına rağmen, modern eğitim sistemindeki değişen bakış açısıyla birlikte, başarının notlardan çok daha öte bir anlam ifade ettiği görülmektedir. Bu da, öğrencinin bütün olarak gelişiminin, bilişsel ve akademik boyutlarının yanı sıra duygusal ve sosyal boyutlarının da olduğuna işaret etmektedir. Yani öğrenci başarısı üniversite öncesi deneyimler ve üniversite yaşamına katılım gibi pek çok unsurla şekillenmektedir. İlgili alan yazın, diğer etkenlerin yanı sıra, akademik öz-yeterlilik, çalışmaya dikkatini verme ve organize olma, sınıf iletişimi, stres ve zaman baskısı, duygusal etkenler ve öğrencilerin üniversite yaşamına katılımları gibi öğrencilerin kendi kontrolleri altında olan kişisel değişkenlerin öğrenci başarısını etkileyen en önemli faktörler olduğuna işaret etmektedir. Kişisel faktörler bireysel farklılıklardan oluşmaktadır ve her birey kendi yaşamını geliştirme ya da değiştirme kapasitesine sahiptir. Bu nedenle, başarı söz konusu olduğunda "psiko-sosyal faktörler" olarak da adlandırılan kişisel faktörler araştırmacıların odak noktası olmaktadır. İlgili alan yazında etkili öğrenme üzerindeki kişisel faktörleri belirlemede kullanılacak Türkçe bir ölçme aracının olmaması sebebiyle geliştirilen kapsamlı ölçme araçlarının uyarlanarak yeni örneklemde kullanılması ve ayrıca etkili öğrenmeyi üzerindeki faktörlerin belirlenerek bu kapsamda yapılabilecek önleyici rehberlik hizmetleri geliştirilmesi açısından bu çalışma önem taşımaktadır.

*Araştırmanın Amacı:* Bu çalışmanın amacı, üniversitede etkili öğrenme üzerindeki kişisel faktörlerin (akademik öz-yeterlilik, çalışmaya dikkatini verme ve organize olma, sınıf iletişimi, stres ve zaman baskısı, duygusal etkenler ve öğrencilerin üniversite yaşamına katılımları) öğrenci başarısını yordamadaki rolünü araştırmaktır.

*Araştırmanın Yöntemi:* Bu çalışmada, ilişkisel tarama modeli kullanılmıştır. Çalışmanın örneklemini Türkiye'de bir devlet üniversitesinde öğrenim gören 317 İngilizce Hazırlık Okulu öğrencisi (161 kadın, 156 erkek) oluşturmaktadır. Veri toplama aracı olarak demografik bilgi formu ve Üniversitede Etkili Öğrenme Envanteri kullanılmıştır. Demografik bilgi formu, yaş, cinsiyet, dil seviyesi gibi bilgilerden oluşmaktadır. Üniversitede Etkili Öğrenme Envanterinin Türkçe formu

5'li dereceleme ölçeği (1. Asla, 5. Her zaman) üzerinde 49 madde ve 6 alt boyuttan oluşmaktadır. Bu alt boyutlar, akademik öz-yeterlilik, çalışmaya dikkatini verme ve organize olma, stres ve zaman baskısı, öğrencilerin üniversite yaşamına katılımları, duygusal etkenler ve sınıf iletişimidir. Ölçekte sorulan sorulara verilen yüksek puanlar başarıyla ilgili beklentinin ve hedeflerin olduğunu, etkili planlama yapılabildiğini, erteleme gibi akademik baskılarla baş edilebildiğini, kampüsteki etkinliklere katılımını ve öğretim elemanı ve öğrencilerle iyi bir iletişimi göstermektedir. Ölçeğin alt boyutlarının güvenilirlik katsayıları .87 ile .68 arasındadır.

*Araştırmanın Bulguları:* Çalışmanın amacına uygun olarak yapılan Çoklu Regresyon Analizi sonuçları kişisel değişkenlerin öğrenci başarısını anlamlı şekilde yordadığını göstermektedir,  $\Delta R^2 = .16$ ,  $\Delta F(6, 310) = 10.16$ ,  $p < .05$ . Sonuçlar, bu modelin toplam varyansın % 16'sını açıkladığını göstermiştir. Stres ve zaman baskısı ( $\beta = .30$ ,  $p < .05$ ) ve sınıf iletişimi ( $\beta = .13$ ,  $p < .05$ ) öğrenci başarısını anlamlı şekilde yordarken, akademik öz-yeterlilik, çalışmaya dikkatini verme ve organize olma, duygusal doyum ve öğrencilerin üniversite yaşamına katılımları başarıyı anlamlı ölçüde yordamamıştır. Üniversitede etkili öğrenme üzerindeki kişisel faktörler arasında stres ve zaman baskısı ile sınıf iletişiminin yer aldığı görülmektedir ve iki değişkenin de başarıyla pozitif yönde ilişkili olduğu bulunmuştur.

*Araştırmanın Sonuçları ve Önerileri:* Bu çalışmaya göre, sınıfla iletişim, stres ve zaman baskısı öğrenci başarısını yordayan değişkenlerdir. Diğer bir deyişle, sınıf içi iletişimi iyi olan ve çalışmalarını sırasında stres ve zaman baskısı hisseden öğrencilerin üniversitede etkili öğrenmede daha başarılı olduğu bulunmuştur. Ancak akademik öz-yeterlilik, çalışmaya dikkatini verme ve organize olma, öğrencilerin üniversite yaşamına katılımları başarıyı yordamamaktadır. Seçilen örneklemin üniversitenin hazırlık okulunda öğrenim gören, yani üniversitede henüz ilk yılını geçiren öğrencilerden oluşması, bu durumun kaynağı olarak düşünülebilir. Yani öğrencilerin henüz üniversite yaşamına alışmadıklarından, bu yeni yaşama etkin bir şekilde katılmadıkları ve üniversitede nasıl çalışacaklarına dair ders çalışma becerilerini henüz geliştirememiş oldukları düşünülebilir. Öğretim elemanları bu sonuç ışığında, derslerinde öğrencilerin sınıf içi iletişimi geliştirebilecekleri rol oynama, takım çalışmaları gibi etkinliklere yer verebilirler. Araştırmanın sonucu ayrıca, düz anlatım tekniği kullanan öğretim elemanlarına kullandıkları bu yöntemin öğrenmede etkili olmayabileceği yönünde bir bilgi verebilir. Ayrıca öğretim elemanlarına ve üniversite psikolojik danışmanlarına, stres ve akademik başarı arasındaki pozitif ilişkiye dikkat etmeleri önerilebilir çünkü bazen dengeli bir stres, çalışmalar sırasında her zaman korkulacak bir durum olarak karşımıza çıkmayabilir. Öğrencilere yönelik hazırlanan akademik başarı ve stres hakkındaki seminerlerde ilgili bu sonuçlardan bahsedilerek, öğrencilere kendi üzerlerinde kurdukları baskıyı azaltma yönünde yardımcı olunabilir. Bunun yanı sıra, Türkçeye uyarlanan Üniversitede Etkili Öğrenme Envanterinin yapılan güvenilirlik hesaplamaları ve bu çalışma sonucunda elde edilen bulgular, ölçme aracıyla ilgili bazı sorunların olabileceğine ve dikkatle yaklaşılması gerektiğine vurgu yapmaktadır. Gelecekteki araştırmalar açısından, hazırlık sınıfından ziyade birinci, ikinci ya da son sınıf öğrencileri seçilerek üniversiteye uyumunu sağlamış bir örneklem üzerinde çalışılması önerilebilir. Bu doğrultuda,

uyarlanan ölçme aracı, üniversitenin ilk yılı ve dil öğrenme odaklı bir grubunu yansıtan hazırlık öğrencileri dışında farklı sınıf düzeyleri ve farklı üniversitelerde de kullanılarak ilgili alan yazına katkıda bulunulabilir. Ölçme aracı, öğrencilerin etkili öğrenmelerini etkileyen kişisel faktörler açısından oldukça zengin değişkenleri bir arada bulundurması açısından kullanışlı ve yeni bir ölçme aracı olarak düşünülebilir ancak ölçeğin kendi içinde ya da Türkçesi üzerinde bazı sorunlar olabileceği göz ardı edilmemelidir. Son olarak, farklı örneklerde kullanılarak uygun sonuçlar elde edilmesi halinde, üniversite psikolojik danışma merkezleri tarafından öğrenci başarısını etkileyebilecek değişkenleri bulmada kullanılacak pratik bir envanter olarak görülebilir.

*Anahtar sözcükler:* Etkili öğrenme, öğrenci başarısı, üniversite öğrenimi, kişisel değişkenler.