

# An Examination of Academic Procrastination Levels among Undergraduate Kuwait University Students and their Effect on some Demographic Variables.

## **Abstract**

The present research is aimed to investigate the academic procrastination levels among undergraduate Kuwait University students and to explore the effect of some demographic variables namely gender, and academic achievement. The sample consisted of 300 students (150 males and 150 females) from the college of education, Kuwait University. They ranged in age from 18 to 27 (M = 19.51, SD= 1.77)

An academic procrastination scale was developed by the author and used for the collection of data. The results showed that the overall mean of academic procrastination of the whole sample reached 3.68 which means that the participants in the study exhibited high procrastination tendency. The results also indicated significant gender differences among males and females on academic procrastination. Male students procrastinate more than female students.

The results further showed that high level procrastinators tend to achieve low academic achievement than lower level procrastinators, and therefore the academic procrastination is related to lower levels of academic achievement. The findings were discussed in the light of the relevant literature and some suggestions for further studies were formulated

**Keywords**: Academic Achievement, Academic Procrastination, Kuwait University, Procrastination.

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#### لملخص

تهدف الدراسة الحالية إلى الكشف عن مستويات التسويف الأكاديمي لدى عينة من طلاب جامعة الكويت، وأثر بعض المتغيرات الديمغرافية هي نوع الجنس، والتحصيل الدراسي على تلك المستويات. وتكونت العينة الدراسة من 300 طالب (150 من الذكور والإناث 150) من كلية التربية، جامعة الكويت. أو قد تراوحت أعمارهم بين 18 و27 بمتوسط حسابي يساري 186 وانحراف معياري يساوي يساوي 1965.

## Introduction

Procrastination is a ubiquitous and pernicious phenomenon which is prevalent among people from all walks of life, and in all domains of human activities. The word procrastinate itself takes its origin from the Latin "pro" which means forward to or in favour of, and "cratis" meaning tomorrow, and thus, the combination of the two words refers to avoiding performing a task together or

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deferring it to a later unspecified time[1] و لتحقيق أهداف الدراسة قام الباحث بتصميم [2].

صدقه وأظهرت النتائج أن المتوسط الحسابي لمستوى التسويف الأكاديمي للعينة كلها بلغ 3.68 و هي قيمة تعكس مستوى عال من التسويف.

وبينت النتائج أيضا فروق كبيرة بين الجنسين فيما بين الذكور والإناث على التسويف الأكاديمي. الطلاب الذكور المماطلة أكثر من الطالبات.

وأظهرت النتائج كذلك أن المماطلون عالية المستوى وتميل إلى تحقيق انخفاض التحصيل الدراسي من المماطلون مستوى أدنى، وذلك التسويف الأكاديمية مرتبط بانخفاض مستويات التحصيل الدراسي. ونوقشت النتائج في ضوء الأدبيات ذات الصلة، ووضع بعض اقتراحات الحراء المزيد من الدراسات.

الكلمات المفتاحية: التسويف ، التحصيل الدراسي، التسويف الأكاديمي، جامعة الكويت.

Procrastination is defined as an intentional postponement of a task in spite of the procrastinator awareness of negative outcomes which very often results inlow perfermance [3][4] [5] [6].

It can be also defined as the postponement of an activity or leaving it to the last moment. Procrastinators usually prefer enjoyableactivities and perform less urgent tasksinstead of more urgent ones which leads to the accumulation of unfinished tasks.[7] . On the other hand, Urdan and Midgely defined procrastination as a voluntary tendency to postpone an important and timely activity to alater unspecified time, which causes impediments to success[8].

Perhaps the best definition for procrastination is the delaying of a task that was originally planned despite expecting to be worse off for the delay. Procrastination, in terms of postponing a completion of an assignment, delaying studying for an examination or writing essays is a quite common habit among acdemic students . Research claims that 80-95% of college students [9] or at least half of all students [10] engage in procrastination which is a prevalent and widespread phenomenon, particularly among university students [11].

## Academic procrastination.

One kind of procrastination which has beenmuch researchedis labelled academic procrastination. It concerns the awareness of posponing an academic task that needs to be accomplished timely, such as preparing a project, writing school essays and reports, or studying for examination. However, for one reason or another, failing to perform an academic task within a limited period of specified time leads to academic procrastination [12].

Academic procrastination is described as leaving the academic tasksunaccomplished until the last moment [13] and usually occurs among individuals who have problems in academic studies.[16] [17]. A great deal of research has shown that academic procrastination is a widely spread phenomenon in students population, and mostly among undergraduate students [14] [15]

Academic procrastination is often refered to as a failure in fulfilling an academic task within the expected time. It involves academic activities that are persistently

postponed including postponing studying for exams, submitting assignments late, and failing to register in courses in time [18].

Academic procrastination taken as a voluntary tendency to postpone academictasks within the expected and specified time[2] [19] is acommon phenomenonamong university students. Research estimates that 30% to 60% of undergraduate students exhibit this behaviour expressed by delaying learning activities, to the point where optimal performance becomes highly unlikely [20][21][22][5]. Recent research reveals that more than 50% of students procrastinate[23] [24].

Among the most variables widely researched in academic procrastination, gender and academic achievement. The relationship between procrastination and gender isquite unclear. Three different views are encountered: Some of them claim that procrastination does not differ in terms of gender[25] [22] [26]. Others indicate that female students procrastinate more than males [27] while still others show that male students exhibit more procrastinationbehaviour than females[28] [29] [30] [31]. Considering these conflicting results in past research, gender was thought to be an important variable in thispresent study.

Another important area of academic procrastination is its relationship to achievement. There is a considerable body of empirical research on the relationship between procrastination and academic performance. Many studies havefound a negative correlation between academic procrastinationand academicachievement [32][33]. In other words, when students show a higher academic procrastination tendency, lower academic achievement goes along with it.

Other studies, however, have failed to detect any association between procrastination and academic performance [34] [5] or even reported that procrastination had a positive effect on academic achievement [35]. It has been suggested that students of greater ability procrastinate more than those with lower ability [36].

The conflicting results of the previous studies may refer to the impact of several factors such as the demographic factors of the sample, the measure of the study, and the role of self-report assessment adopted in many such studies.

# Research questions:

Despite the increasing importance in studying the phenomenon related to students engaging in academic procrastination all over the globe, no empirical research has been conducted to determine the levels of academic procrastination among Kuwaiti students in the context of higher education setting.

The purpose of the present study was to explore the levels of academic procrastination among undergraduate university students and their effect on some demographic variables, namely gender- academic achievement. Thus, the present study seeks to answer the following research questions:

1. What are the levels of academic procrastination among the university students?

- 2. Are there gender differences in the levels of academic procrastination of the university students?
- 3. Is there a relationship between the levels of academic procrastination and academic achievement of the students?

#### II. METHOD

# **Participants**

The present research employed a convenience sample of undergraduate students from the college of education, Kuwait University .Three hundred undergraduate students both males (n=150) and females (n=150) participated in the study. All participants were enrolled in the college of Education. They were between 18 and 27 years with a mean age of 19.51.

# **Instruments and Procedure**

The Academic procrastination scale: Based on the past research related to academic procrastination, the present author designed an instrument to collect data on academic procrastination. The instrument consists of 13 items, a self-report measure rated on a 5-point Likert scale with higher scores indicating greater agreement. Hence, the higher the score, the higher is the tendency for students to procrastinate on academic matters. For example, a participant who strongly agrees to the item "I postpone working on my academic assignments until the last minute" would be indicative of an individual who procrastinates to a greater extent. To assess the reliability of the instrument, Cronbach Alpha reliability coefficientwas computed. It reached .76, a coefficient whichis considered to be within the accepted range for a reliable instrumentdesigned for research.

The Academic achievement variable: Academic achievement of students in this present study was gathered on an open-ended question. The students were asked to provide their GPA score was based on a self-reported question: "What was your grade point average last year?"

## Data analysis

Data analysis was carried out by means of SPSS. Means and standard deviations were used to measure the levels of procrastination of the participants. Pearson's product moment's correlation coefficient test was used to assess the relationship between academic procrastination and academic achievement. Finally, independent t-test and one-way ANOVA were used to determine the significant differences in the level academic procrastination according to the demographic characteristic of participants, namely Gender and academic departments. The Significance level of the results was set at a minimum of 0.05.

#### III.RESULTS AND DISCUSSIONS

Research Question One: What are the levels of academic procrastination among the university students?

The first research question this study addressed was on the levels of students' academic procrastination. In order to answer this question, the means and the standard deviations of the responses of the study sample were computed as illustrated in Table 1.

**Table 1: Levels of Academic Procrastination** 

TABLE I LEVELS OF ACADEMIC PROCRASTINATION

Order	≠Items	Items	X	SD	level
1	2	I do not begin to study because I think I have much time later.	3.85	0.88	High
2	3	I stop studying early to do things more pleasant and enjoyable.	3.82	0.94	High
3	4	I engage myself in recreational activities so that I have not enough time left to study.	3.82	0.86	High
4	11	I find excuses to justify the non-performance of the required school assignments.	3.79	0.93	High
5	12	I waste time in a dramatic way.	3.78	0.98	High
6	13	I occupy myself by doing other things while performing my academic tasks.	3.78	0.84	High
7	5	I feel uncomfortable just by thinking about the need to start the academic tasks.	3.72	0.94	High
8	10	I postpone working on my academic assignments until the last minute.	3.69	0.98	High
9	8	I defer accomplishing their academic tasks without justification, even though they are very important.	3.63	0.96	moderate
10	7	I believe that the difficult assignments I face should be postponed.		0.92	moderate
11	6	I intend to complete my studies and then retract.	3.53	0.88	moderate
12	1			moderate	
13	9	I delay the completion of my academic tasks often, whether or not are enjoyable.	3.43	0.84	moderate
		The overall mean of Academic procrastination level.	3.68	0.61	High

According to the results in the table above, the overall mean of academic procrastination was 3.68 with a standard deviation of = 0.61. The mean items on the scores ranged from 3.43" ("I delay the completion of my academic tasks often, whether or not are enjoyable.") to 3.85 ("I do not begin to study because I think I have much time later") (M= 3.43, SD=0.84, To M= 3.85, SD= 0.88).

Thus, the statistical analysis of the data revealed that the participants in the study exhibited high procrastination tendency. This result can be explained by the fact that university students usually have many academic tasks such as home assignments, studying for their lessons, and preparing for the exams; and at the same time they may spend a lot time on the internet and on their electronic devices namely, phones, delaying their academic tasks to a later time. In this vein, the related literature to university students' academic procrastination indicate that approximately 70% of

university students postpone starting or completing their academic[37] Other studies, reported that 95 % of students procrastinate on their academic work, 50% often, and 35% occasionally postpone their academic works [37] [5].

Research Question 2:Are there gender differences in the levels of academic procrastination of the university students? To deal with this question, means and standard deviations of the responses of the study sample were computed as illustrated in Table 2.

Table II GENDER DIFFERENCES AND PROCRASTINATION LEVELS

Gender	N	Mean	SD	t-value	df	p- value
Male	150	3.81	0.54	2.35	298	0.02
Female	150	3.56	0.65			

Table 2 indicates significant differences in the procrastination scores of male and female students (t=2.35, p<0.05). Male students procrastinate more (M= 3.81, SD=0.54) than female students (M=3.56, SD=0.65). These findings are congruent with a number of studies [37] [7][38] [39][40] [31][41][42][43]: they all confirmed the differences on levels of procrastination due to the gender, where males made much more academic procrastination compared to females.

However, when the past literature is reviewed, a great number of studies revealed no gender differences on academic procrastination levels [44][45][46]. Related literature revealed mixed results concerning gender differenceson academic procrastination.

Many studies resulted in the same direction as the current research concluding that academic procrastination is more commonly found in male students than females. Some other gender based studies on procrastination demonstrated that female students procrastinate more frequently than males [47] [48].

Research is inconclusive with regard to whether academic procrastination is related to students' gender [6] [9]. Although several studies have reported higher levels in males [49] [50][51], many other studies on the other hand, have reported no such gender differences [52] [53] [54][55]. Further research, preferably meta-analysis research is needed to detect factors that might have been moderating the effect of gender variable in academic procrastination research.

# Research Question 3: academic procrastination and academic performance (GPA),

To answer this question Pearson Product-Moment Correlations between Academic Procrastination, and Academic Achievement (as expressed by Grade Point Average (GPA) were computed as illustrated in Table 3.

TABLE. III Pearson Product-Moment Correlations between Academic Procrastination, and Academic Achievement

GPA	AP		
GPA		17	
AP	17		

Results from Table 3 showed that a significant negative correlation was found between academic procrastination and academic performance (r = -.17, p<0.01), in other words, students with tendency of procrastination were more likely to have a lower Grade Point Average (GPA). Consistent with the previous findings in the relevant literature, which were conducted mainly on college or undergraduate levels, the present results also revealed a negative relationship between Kuwait undergraduate students' procrastination levels and their academic achievement [41] [56] [57] [58]. In a very recent study, Semprebon, et al[59] found that procrastination exerts a negative and significant influence on undergraduate students' academic performance.

The results of this current study were also congruent with the findings of Wesley (1994). He found that college students with high tendency of procrastination were more prone to attain lower GPA. In addition, a number of studies reported that university students who were low procrastinators scored significantly better in terms of GPA than moderate and high procrastinators [30]. However, other studies found that academic procrastination has little effect on academic achievement [60] [61] [62].

Research on academic procrastination is similarly inconclusive regarding academic achievement, while some studies reported negative correlationsbetween academic achievement and academic procrastination. [63] [9] [64][65].

Perhaps it might be useful to state at the end of this discussion that further research can be conducted, preferably meta-analysis research to explore the causal factors that might have been moderating the effect of academic achievement variable in academic procrastination research among men and women.

## IV. LIMITATIONS AND SUGGESTIONS OF THE STUDY

Finally, In the light of this study, possible limitations could be provided:

- 1- First, the scope of the study is limited to the data collected from a convenient undergraduate students sample enrolled at the college of education, Kuwait University. Hence, further research with larger samples with random selection would strengthen the findings of the study.
- 2- The relatively small sample of the study may not allow us to generalize well the results to other student's populations. The generalizability of these findings must be examined in samples that consist of a vast number of university students from various faculties.

- 3-The data in this study were collected only through self-report scale as the sole indicators of procrastination rather than actual observation of behaviour. As typical with self-report surveys, social desirability may be present in participants' responses. Thus, the instrument may not be appropriate for reflecting the actual level of academic procrastination of the participants.
- 4- This study has employed GPA as a measure of academic achievement, however, recently findings indicated that GPA is a sensitive measure that is clearly affected by personality traits and motivational variables. [66] [67].

#### REFERENCES

- [1] E. Klein, A comprehensive etymological dictionary of the English language. New York: Elsevier, 1971.
- [2] H. C. Schouwenburg," Trait procrastination in academic settings: An overview of students who engage in task delays". In H.C. Schouwenburg, C. Lay, T. Pylchyl, & J. Ferrari, (Eds.), Counselling the procrastinator in academic settings (pp. 3-18). Washington: American Psychological Association, 2004.
- [3] J, R. Ferrari, Still procrastination: The no-regrets guide to getting it done. New Jersey: Wiley, 2010.
- [4] J.R. Ferrari & S.J, Scher, "The procrastination of academic and non-academic tasks" Psychology in the Schools, vol. 37, pp.359-366, 2000.
- [5] L. J., Solomon, &, E. D. Rothblum, "Academic procrastination: frequency and cognitive-behavioral correlates". <u>Journal of Counseling Psychology</u>, vol.31, pp. 503–509,1984.
- [6] P. Steel, 'The nature of procrastination: a meta-analytic and theoretical review of quintessential self-regulatory failure". Psychological Bulletin, vol.133, No.1, pp.65-94, 2007.
- [7] M. J Khan, H. Arif, S. Noor, & S. Muneer, "Academic Procrastination among Male and Female University and College Students". Journal of Social Sciences, 8 (2), 65-70, 2014.
- [8] T. Urdan, & C. Midgley,"Academic Self-Handicapping: What We Know, What More There is to Learn." Educational Psychology Review.Vol. 13, No 21, pp. 15- 138, 2001.
- [9] W. Van Eerde, "A meta-analytically derived monological network of procrastination." Personality and Individual Differences, Vol.35, No.pp. 1401–1418, 2003.
- [10] B.Özer, A., Demir, & J. Ferrari," Exploring academic procrastination among Turkish students: possible gender differences in prevalence and reasons". Journal of Social Psychology, Vol.149, No.2, pp. 241–257. 2009.
- [11] J.J. Savithri, "Interactive effect of academic procrastination and academic performance on life satisfaction". International Journal of Science and Research. Vlo.3, No. 3. Pp.377-381. 2014.
- [12] D. S., Ackerman, & B. L. Gross," My instructor made me do it: Task characteristics of procrastination. Journal of Marketing Education," Vol. 27, pp. 5-13, 2005.
- [13] C. Lay," At last, my research article on procrastination". Journal of Research in Personality, 20, 474–495.1986.
- [14] S. Dewitte, & H. C. Schouwenburg, "Procrastination, temptations, and incentives: The struggle between the present and the future in procrastinators and the punctua". European Journal of Personality, Vol.16, No.6, pp.469–489, 2002.
- [15] G., Schraw, T., Wadkins, & L. Olafson, "Doing the things we do: A grounded theory of academic procrastination". Journal of Educational Psychology, Vol. 99, No, pp.12-25, 2007.

- [16] L. C., Senécal, R., Koestner, &, R. J. Vallerand, "Self-regulation and academic procrastination." The Journal of Social Psychology, Vol.135, No, pp. 607-619, 1995.
- [17] G. Schraw, T., Wadkins, & L. Olafson, "Doing the things we do: A grounded theory of academic procrastination". Journal of Educational Psychology, VI.99, No.1, 12-25, 2007.
- [18] B. Tuckman," The development and concurrent validity of the procrastination scale." Educational and Psychological Measurement, 51, 473–480. 178 Psychological Reports, Vol. 118, No.1, 1991.
- [19] H. A., Ziesat, T. L., Rosenthal, &, G. M. White," Behavioral self-control in treating procrastination of studying". Psychological Reports, Vol.42, pp 56–69, 1978.
- [20] T. Janssen, &, J. S. Carton,"The effects of locus of control and task difficulty on procrastination". Journal of Genetic Psychology, 160, 436–442, 1999.
- [21] M. M., Kachgal, L. S., Hansen, & K. J. Nutter, "Academic procrastination prevention/intervention: Strategies and recommendations". Journal of Developmental Education, Vol. No. 25, pp.14-24, 2001.
- [22] A.J. Onwuegbuzie ,"Academic procrastination and statistics anxiety". Assessment & Evaluation in Higher Education, Vol.29, No.1.pp. 3-19, (2004).
- [23] P. F Bendicho, C.E Mora, B. Añorbe-D áz& P. Rivero-Rodríguez," Effect on Academic Procrastination after Introducing Augmented Reality". Journal of Mathematics Science and Technology Education. Vol. 13. No.2, pp.319-330, 2017.
- [24] M. Terada," Effect of Individual Differences in Construal Level on Procrastination: Moderating Role of Intelligence Theories. Psychology, Vol.8, pp.517-525. 2017.
- [25] D.C Watson, "Procrastination and the five factor model: a facet level analysis" Personality and Individual Differences Vol.30, pp. 149-158, 2001.
- [26] E. S. Alexander&, A. J Onwuegbuzie. "Academic procrastination and the role of hope as a coping strategy". Personality and Individual Differences, 42(7), 1301–1310, 2007.
- [27] D. C. Watson, "Procrastination and the Five-Factor Model: A Facet Level Analysis". Personality and Individual Differences, Vol.30, No.1, pp. 149-158.2001.
- [28] W. Van Eerde," A meta-analytically derived monological network of procrastination" Personality and Individual Differences, Vol. 35, pp. 1401-1418, 2003
- [29 M. Balkis," Academic procrastination, academic life satisfaction and academic achievement: The mediation role of rational beliefs about studying." Journal Cognitive and Behavioural Psychotherapies, Vol. 13, No. 1, pp. 57–74, 2013.
- [30] M. K., Akinsola, A., Tella, &, A. Tella, "Correlates of academic procrastination and mathematics achievement of university undergraduate student". Eurasia Journal of Mathematics, Science & Technology Education, 3(4), 363-370, 2007.
- [31]M. Balkis&, E. Duru, "Prevalence of Academic procrastination behavior among preservice teachers, and its relationship with demographic and individual preference". Journal of theory and practice in education 5(1), 18-32, 2009.
- [32] K. M. T., Collins, A. J., Onwuegbuzie, & Q. G. Jiao, "Reading ability as a predictor of academic procrastination among African American graduate students". Reading Psychology, 29(6), 493–507, 2008.
- [33] B. A., Fritzsche, B. R., Young & K. C. Hickson, "Individual differences in academic procrastination tendency and writing success". Personality and Individual Differences, Vol. 35, No.7, pp. 1549–1557, 2003.

- [34] E. H. Seo, "Self-efficacy as a mediator in the relationship between self-oriented perfectionism and academic procrastination." Social Behavior and Personality: an international journal, Vol. 36, No. 6, pp. 753-764, 2008.
- [35] T, M., Brinthaupt, &, C. M. Shin, "The relationship of cramming to academic flow". College Student Journal, Vol. 35, pp. 457-472, 2001.
- [36] J.R. Ferrari, "Procrastination as self-regulation failure of performance: Effects of cognitive load, self-awareness, and time limits on "working best under pressure". European Journal of Personality, Vol. 15, No.5, pp.391-406, 2001.
- [37] A., Ellis&, W. Knaus, Overcoming procrastination. New York: Institute for Rational Living. 1977.
- [38] H., Motie, M., Heidari, &, M. A. Sadeghi, "Predicting academic procrastination during self-regulated learning in Iranian first grade high school students" Procedia-Social and Behavioral Sciences, Vol. 69, pp. 2299-2308, 2012.
- [39] N. Bekleyen, "Understanding the academic procrastination attitude of Language learners in Turkish universities. Educational Research and Reviews. Vol. 12, No.3 pp. 108-115, 2017.
- [40] B. OzerDemir A, & J.R, Ferrari, "Exploring academic procrastination among Turkish students: Possible gender differences in prevalence and reasons". Journal of Social Psychology. Vol.149, No.2., pp. 241-257, 2009.
- [41] M. Balkis, &, E. Duru, "Prevalence of Academic procrastination behavior among preservice teachers, and its relationship with demographic and individual preference". Journal of theory and practice in education. Vol. 5, No.1, pp. 18-32, 2009.
- [42] P. Morrill, P., Atiles, I., &, A. Perez, "Academic procrastination by non-traditional students. Journal of Social." Behavior and Personality, Vol.15, pp. 125-134., 2000.
- [43] P., Steel&, J. R. Ferrari, "Sex, Education and Procrastination: An Epidemiological Study of Procrastinators' Characteristics from a Global Sample". European Journal of Psychology, Vol. 27, pp. 51–58, 2013.
- [44] S.S. Seker, "Review of the variables that predict academic procrastination of university students". European Scientific Journal, Vol. 1, No.31, 16-31m 2005.
- [45] B. Hess, M. F., Sherman&, M. Goodman "Eveningness predicts academic procrastination: The mediating role of neuroticism". Journal of Social Behavior& Personality, 15(5), 61-74, 2000.
- [46] B. Ozer, & B. U Ferrari," Gender Orientation and Academic Procrastination: Exploring Turkish High School Students" Individual Differences Research. Vol. 9, No.1, 33-40, 2011.
- [47] J.A. Washington, "The Relationship between Procrastination and Depression among Graduate and Professional Students across Academic Programs: Implications for Counseling. Unpublished PhD Dissertation". Ed.D., Texas Southern University. Texas 2004.
- [48] B. Rodarte-Luna, &, A. Sherry "Sex differences in the relation between statistics anxiety and cognitive learning strategies". Contemporary Educational Psychology, 33(2):327–344, 2008.
- [49] N. Milgram, S. Marshevsky, & C. Sadeh," Correlates of academic procrastination: discomfort, task aversiveness, and task capability". Journal of Psychology, 129(2), 145–155, 1995
- [50] B., Özer, A., Demir, & J. Ferrari, "Exploring academic procrastination among Turkish students: possible gender differences in prevalence and reasons". Journal of Social Psychology, 149(2), 241–257, 2009.
- [51] J. R. C., Senécal, R., Koestner& R. J. Vallerand," Self-regulation and academic procrastination." The Journal of Social Psychology, 135(5), 607-619, 1995

- [52] J. R. Ferrari, "Procrastination as self-regulation failure of performance: effects of cognitive load, self-awareness, and time limits on 'working best under pressure'. European Journal of Personality, 15(5), 391-406, 2001.
- [53] L. A., Haycock, P., McCarthy, & C. L Skay, "Procrastination in college students: the role of selfefficacy and anxiety". Journal of Counseling and Development, 76, 317–324, 1998.
- [54] B. Hess, M. F., Sherman, & M. Goodman, "Eveningness predicts academic procrastination: The mediating role of neuroticism". Journal of Social Behavior& Personality, 15(5), 61-74, 2001.
- [55] M. M., Kachgal, L. S., Hansen, & K. J. Nutter, "Academic procrastination prevention/intervention: Strategies and recommendations". Journal of Developmental Education, 25, 14-24, 2001.
- [56] B. F. Filiz, "Academic procrastination and gender as predictors of science achievement". Journal of education and instructional studies in the world, (3)2, 64-68, 2013.
- [57] K. Ocal, "Predictors of academic procrastination and university life satisfaction among Turkish sport schools students". Educational Research and Reviews, 11(7), 482-490, 2016.
- [58] R.D.Yockey, "Validation of the short form of the academic procrastination scale". Psychological Reports, 118(1) 171–179, 2016.
- [59] E., Semprebon, H. D., Amaro, & I. M. Beuren, "The procrastination influence on academic performance and the moderating role of personal sense of power" ArquivosAnalíticos de Pol ficasEducativas, 25(20), 1-21, 2017.
- [60] B. L., Beck, Koons, S. R., & D. L. Milgrim, "Correlates and consequences of behavioural procrastination: The effects of academic procrastination, self-consciousness, self-esteem and self-handicapping [Special issue]." Journal of Social Behaviour & Personality, 15 (5), 3-13, 2000.
- [61 C. H. Lay, "The relationship of procrastination and optimism to judgments of time to complete an essay and anticipation of setbacks". Journal of Social Behavior and Personality, 3, 201-214, 1988.
- [62] P, Timothy; L. Jonathan M.; T. Rachelle; B. Allan," Five days of emotion: An experience sampling study of undergraduate student procrastination". Journal of Social Behavior and Personality, 15, 239–254, 2000.
- [63] V. Prohaska, P., Morrilll, I. Atiles, & A. Perez, "Academic procrastination by non-traditional students.' Journal of Social Behavior and Personality, Vol. 15, pp. 125-134, 2000.
- [64] L. A., Haycock, P., McCarthy, & C. L. Skay, "Procrastination in college students: the role of self efficacy and anxiety". Journal of Counseling and Development, Vol.76, pp. 317–324, 1908
- [65] A. J., Howell, & D. C. Watson, "Procrastination: associations with achievement goal orientation and learning strategies." Personality and Individual Differences, 43, 167–178, 2007.
- [66] J. M., Harackiewicz, K. E., P. Barron, R Pintrich. A. J., Elliot, & T. M. Thrash, "Revision of achievement goal theory: Necessary and illuminating". Journal of Educational Psychology, Vol. 94, 638-645, 2002.
- [67] M. O'Connor, & S.V. Paunonen. "Big Five personality predictors of post-secondary academic performance". Personality and Individual Differences, Vol. 43, pp. 971–990, 2007.