

## College Students' Academic Procrastination during the Covid-19 Pandemic: Focusing on Academic Achievement

(Prokrastinasi Akademik Mahasiswa di Masa Pandemi Covid-19: Fokus pada Prestasi Akademik)

Abd. Basith<sup>1\*</sup>, Md. Shahinoor Rahman<sup>2</sup>, Usina Robert Moseki<sup>3</sup>

<sup>1</sup>Department of Guidance and Counseling, Sekolah Tinggi Keguruan dan Ilmu Pendidikan Singkawang, STKIP St., Singkawang, West Kalimantan, 79251 Indonesia

<sup>2</sup>Department of Psychology, University of Chittagong, Chittagong University Rd, Chittagong Division, 4331 Bangladesh

<sup>3</sup>Oodi College of Applied Arts & Tecnology, Private Bag 003 Oodi, Gaborone, Botswana

\*corresponding author, e-mail: [abdullahbasith@gmail.com](mailto:abdullahbasith@gmail.com)

Article received: September 23<sup>rd</sup> 2021; revised: October 18<sup>th</sup> 2021; accepted: October 25<sup>th</sup> 2021

---

**Abstract:** This research aims to describe the level of college students' academic procrastination, analyze differences in academic procrastination among the college students, and analyze the relationship between academic procrastination and academic achievement. This research uses a quantitative method with a survey and correlational design. The research population is 620 Sekolah Tinggi Keguruan dan Ilmu Pendidikan Singkawang (STKIP) Singkawang college students. The sample is taken using a simple random sampling technique as many as 352 college students (76 male and 276 female). The instrument used in data collection is the academic procrastination scale and great point academic. The data are analyzed using descriptive analysis, ANOVA, and correlation. The findings show that college students' academic procrastination is at a moderate level which is dominated by time management skill indicators. Male students and students who are in the middle years have higher levels of academic procrastination. Intercorrelation shows a significant but negative relationship between academic procrastination and academic achievement.

**Keywords:** academic procrastination; academic achievement; Covid-19

**Abstrak:** Tujuan penelitian ini adalah mendeskripsikan tingkat prokrastinasi akademik mahasiswa, menganalisis perbedaan prokrastinasi akademik mahasiswa, dan menganalisis hubungan antara prokrastinasi akademik dengan prestasi akademik mahasiswa. Penelitian ini menggunakan metode kuantitatif dengan desain survei dan korelasi. Populasi penelitian adalah 620 mahasiswa STKIP Singkawang. Sampel diambil dengan teknik *simple random sampling* sebanyak 352 mahasiswa (76 laki-laki dan 276 perempuan). Instrumen yang digunakan dalam pengumpulan data adalah skala prokrastinasi akademik dan indeks prestasi akademik. Data dianalisis menggunakan analisis deskriptif, ANOVA, dan korelasi. Hasil penelitian menunjukkan bahwa prokrastinasi akademik mahasiswa berada pada tingkat sedang yang didominasi oleh indikator keterampilan mengatur waktu. Mahasiswa laki-laki dan mahasiswa yang berada di tahun pertengahan memiliki tingkat prokrastinasi akademik yang lebih tinggi. Interkorelasi menunjukkan adanya hubungan negatif yang signifikan antara prokrastinasi akademik dengan prestasi akademik.

**Kata kunci:** prokrastinasi akademik; prestasi akademik; Covid-19

---

## INTRODUCTION

College students as learners must attend the learning process in class well, then do the tasks given by the lecturers and submit them at the appointed time. However, not all college students are aware of the importance of submitting assignments according to the allotted time. The procrastination made by these students is called academic procrastination (Kandemir, İlhan, Özpolat, & Palancı, 2014; Kirst-Ashman & Hull Jr, 2016). Academic procrastination is one of the students' behaviors studied extensively and has a significant influence on some specific student populations (Rozental & Carlbring, 2014). There are about 70% of students experience academic procrastination and most of them are college students (Agoukei, Ogudu, & Emmanuel, 2019; Muyana, 2018). This finding is supported by some other result studies which reveal that academic procrastination is a common phenomenon that occurs among students and has been proven to trigger unpleasant outcomes, such as failure, anxiety, failing courses, and being absent (Chen, Shi, & Wang, 2016; Kandemir et al., 2014; Patrzek, Sattler, van Veen, Grunschel, & Fries, 2015; Rozental & Carlbring, 2014).

Academic procrastination essentially emphasizes procrastination on academic tasks that have been given (Kandemir et al., 2014), and is done intentionally for irrational reasons (such as assuming that the task is too difficult so that they are unwilling and unable to complete it)(Klingsieck, 2013; Özer, Demir, & Ferrari, 2009; Steel & Klingsieck, 2016; Zacks & Hen, 2018). Essentially, the individual knows that he/she has to complete and submit the given task, but he/she does not do due to a tendency to procrastinate (He, 2017).

Previous researchers have identified specific aspects that underlie academic procrastination, namely: (1) psychological beliefs regarding abilities, (2) distractions of attention, (3) social factors, (4) time management skills, (5) personal initiative, and (6) laziness (McCloskey & Scielzo, 2015). College students who have a high confidence level in their abilities tend to be able to do various assigned tasks, while those with weak confidence, feel that they are helpless with college assignments so that they delay submitting them. Easy-distracted students prefer to prioritize fun activities so and delay what is obligatory to them.

The college students personally think that course works are boring and unpleasant. Those who are generally at the stage of social adjustment and independence tend to delay doing assignments when they prioritize socializing with other people. Those who cannot manage their time well (such as study time, time to do assignments, socialize, and time to rest) have a greater probability of delaying the assignments submission. The students who do not have personal initiative and are lazy to submit their assignments tend to procrastinate more often because there is no internal motivation to complete assignments properly.

Procrastination generally occurs during offline learning, but in terms of vulnerability, it is more frequently found during the implementation of online learning due to the Covid-19 pandemic (Aji, 2020). The college students who are accustomed to carrying out offline learning will feel bored when they must have online lectures so that they decide to delay their academic activities, such as submitting assignments and final project (thesis). For college students who perceive course works as an obstacle that must be avoided (Handaru, Lase, & Paramita, 2014; Uzun, Unal, & Tokel, 2014), online learning will be the main source of academic procrastination. Therefore, it takes motivation, discipline, commitment, and focus in doing assignments to avoid academic procrastination. Based on some of these descriptions, it is important to investigate the level of academic procrastination experienced by the students.

Differences in academic procrastination based on gender are also interesting to study because there are differences in some findings related to these variables. Some previous research showed differences in academic procrastination between male and female students (Mandap, 2016; Zhou, 2018). Some previous research results concluded that there was no significant difference (Azar, 2013; Sepehrian & Lotf, 2011; Şirin, 2011). Besides, the dynamics of academic procrastination in the students with different academic years also play important role. Research by Astuti et al. (2021) in three different academic years (2017, 2018, 2019) show that students' academic procrastination is dominated by the 2018 class and is followed by the 2017 and 2019 classes. It means that junior students have higher academic procrastination than their seniors. Next, research by Handaru et al. (2014) showed a contrast result, where academic procrastination in senior students was higher than junior ones. In contrast to the two

studies, in this research, the students are divided into three categories, namely first year (2<sup>nd</sup> semester), middle year (4<sup>th</sup> and 6<sup>th</sup> semester), and last year (8<sup>th</sup>, 10<sup>th</sup>, 12<sup>th</sup>, and 14<sup>th</sup> semester), which will then be analyzed for differences inexperienced academic procrastination.

Academic procrastination is a serious and dangerous problem for the students (Pychyl & Flett, 2012), because it has negative effects on their academic achievement. Academic procrastination has been found to be associated with negative academic outcomes, such as delays in submitting assignments and preparing for exams, resulting in low scores (Beswick, Rothblum, & Mann, 1988; Semb, Glick, & Spencer, 1979). This is in line with the results of a meta-analysis conducted by some researchers that show academic procrastination has a significant negative relationship with academic achievement (Akpur, 2020; Kim & Seo, 2015; Steel & Ferrari, 2013). Therefore, it is important to do further research on the relationship between academic procrastination and academic achievement in order to identify categories and directions of the relationship among the students as the research subjects.

Based on some explanations above, this research aims to: (1) describe the level of the college students' academic procrastination, (2) analyze differences in academic procrastination among college students, and, (3) analyze the relationship between academic procrastination and academic achievement. This research can provide in-depth information related to academic procrastination experienced by college students and their correlation to academic achievement. Therefore, the results can be used as a source in the implementation of guidance and counseling for college students who experience academic procrastination.

## METHOD

This research was conducted using a quantitative approach supported by a survey and correlation research design. The survey design was used by the researcher to collect data from a certain population in the form of quantitative or numerical, attitudes, or opinions (Creswell & Creswell, 2017). At the same time, correlational research design is a type of research that is used to measure or assess the statistical relationship between two variables without any effort to control for extraneous variables so that it is classified as non-experimental research (Jhangiani, Chiang, & Price, 2015).

### Population and Sample

The research population is STKIP Singkawang college students. Some specific students' characteristics are included in this research population is they already have an academic achievement index, and they have taken online learning. Six hundred twenty students meet the criteria set, and then a sample of 352 students (76 males and 276 people females) is taken using a simple random sampling technique. Table 1 shows the frequency and percentage of demographic information of the research respondents.

**Table 1. Frequency and Percentage of Respondents Demographic Information**

Demographic Information		Frequency	Percentage
Gender	Male	76	21.6
	Female	276	78.4
Years of Study	First Years	125	35.5
	Middle Years	159	45.2
	Last Years	68	19.3

### Instrument of Data Collection

The data instruments used in the research consist of three parts, namely demographic information (gender and years of study), academic procrastination, and academic achievement. The academic procrastination instrument used is the result of an adaptation of the instrument developed by McCloskey and Scielzo (2015) under the name Academic Procrastination Scale (APS). As shown in Table 2, there are 25 items of statements in this scale which consists of several indicators: psychological beliefs regarding abilities, attention distractions, social factors, time management skills, personal initiative, and laziness. The researcher uses a four-point Likert scale as the choices to the statements given on each

**Table 2. Variable and Its Aspect**

Variable	Aspect	Item
Academic Procrastination	Psychological beliefs regarding abilities	1, 2, 3, 4
	Distractions of attention	5, 6, 7, 8, 9, 10
	Social factors	18, 19, 20
	Time management skills	11, 12, 13, 14, 15, 16, 17
	Personal initiative	24, 25
	Laziness	21, 22, 23

instrument, ranging from very appropriate, appropriate, not appropriate and very inappropriate. To test the validity and reliability of the instruments, the researcher firstly conducts a pilot study by distributing the instrument to 50 students who are not taken as the research sample. The results indicate that all items are valid and reliable (Cronbach Alpha = 0.819) to be used for having research. Academic achievement is measured using the students' great point academic (GPA).

### Data Collection and Analysis Procedures

The adjusted scale that has been declared valid and reliable is immediately processed to be inputted into the Google Form, and it is then distributed to the college students as the research sample. Each of them is given a maximum of 30 minutes to fill out the scale according to predetermined guidelines, and they must send the answers that they believe to be the correct ones. The collected data are analyzed using SPSS version 23.0. To analyze the results of the research on the first research objective, the descriptive analysis is used, and the analysis of the second research objective uses the univariate analysis (using two prerequisite tests i.e., normality and homogeneity). The analysis of the third research objective uses correlation. The significance level for all data analyzes is 5%.

## RESULTS

### Level of Academic Procrastination

The descriptive analysis of academic procrastination results in Table 3 show that 11.4% of the students are in the high category, 85.2% in the medium level, and 3.4% in the low class. The analysis of the results based on aspects that make up academic procrastination also shows that each aspect is at a moderate level with a percentage range of 62.2%-85.5%. These indicate that, commonly, the students experience academic procrastination in the moderate category, meaning that most of them still experience academic procrastination during online learning due to the Covid-19 pandemic.

**Table 3. Percentage: Level of Academic Procrastination among Respondent**

Variable	Aspect	Percentage		
		High/More	Middle	Low/Less
Academic Procrastination	Psychological beliefs regarding abilities	7.7	77.8	14.5
	Distractions of attention	25	71.6	3.4
	Social factors	2	62.2	35.8
	Time management skills	9.7	85.5	4.8
	Personal initiative	13.4	84.1	2.5
	Laziness	15.9	69	15.1
	All Aspect	11.4	85.2	3.4

### Differences in Academic Procrastination based on Gender and Years of Study

The results of the Kolmogorov Smirnov and Levene's tests show that the academic procrastination data are in a normal ( $p = 0.379 > 0.05$ ) and homogeneous ( $p = 0.084 > 0.05$ ). The results of the mean, SD, and univariate analysis in Table 4 and Table 5 indicate that on the gender variable, there are significant differences between male and female students related to academic procrastination with a value of  $F(1) = 10.7$ ,  $p < 0.05$ , and partial eta squared = 0.030. On the years of study variable, the results also show that there are significant differences between first, middle, and final year students related to academic procrastination with a value of  $F(2) = 4.9$ ,  $p < 0.05$ , and partial eta squared = 0.027.

**Table 4. Mean and SD of Academic Procrastination Based on Gender and Years of Study**

Variable		Academic Procrastination	
		Mean	SD
Gender	Male	56.4	10.1
	Female	52.7	9.9
Years of Study	First years	50.8	10.7
	Middle Years	55.5	9.7
	Last Years	53.9	8.7

**Table 5. Univariate Analysis: Differences in Academic Procrastination based on Gender and Years of Study**

Effect	SS	df	MS	F	P	Partial Eta Squared
Gender	1030.2	1	1030.2	10.7	0.001	0.030
Years of Study	934.9	2	467.5	4.9	0.008	0.027

### Relationship between Academic Stress and Coping Strategy with Academic Achievement

The results of the correlation analysis in Table 6 show that the relationship between academic procrastination and academic achievement is negative and significant ( $p < 0.05$ ). A negative relationship indicates that academic achievement will decrease significantly if academic procrastination increases.

**Table 6. Intercorrelations: Relationship between Academic Procrastination and Academic Achievement**

Variable	M	SD	1	2
GPA	3.8	2.6	-	
Academic procrastination	53.5	10.1	-0.038	-

## DISCUSSION

The first objective of this research is to describe the level of college students' academic procrastination in online learning during the Covid-19 pandemics. The results show that academic procrastination is in a moderate position. It means that academic procrastination still occurs in most college students and tends to lead to higher levels from time to time. The finding is in line with Chehrzad et al. (2017) who stated that 70% of students experience academic procrastination at a moderate level. Some researchers revealed that academic procrastination is a common problem that occurs in college students (Argiropoulou & Ferrari, 2015; Huda, 2016; Kármén et al., 2015; Purnama, 2014; Saman, 2017) because there are so many academic requirements that must be met and submitted such as papers, projects, and exams (Khan, Arif, Noor, & Muneer, 2014; Mandap, 2016). In addition, the Covid-19 pandemic, which requires students to study online, causes difficulties in finding references that should be available in the library. Next, the minimal internet access also makes it difficult for the students to access information that should be used as a medium to find references that aim to submit their college assignments.

Based on some building aspects of academic procrastination, time management skills and personal initiative have the highest dominance experienced by the students. This shows that most of them have problems in managing their time in one day to study and do assignments, causing academic procrastination (Filipiak, Kaczmarek, & Markiewicz, 2017; Gustavson, Miyake, Hewitt, & Friedman, 2014). A lot of tasks make it difficult to manage their time well, so that they tend to postpone some work to complete others that are considered more important, and in the end, they continuously perform procrastination (Wirajaya, Padmadewi, & Ramendra, 2020). In addition, they also have less initiative to study and do assignments so that they cannot be submitted on time. Personal initiative is very important to help college students to decide what is right without any interventions from others (Muyana, 2018). The students who have strong personal initiative will generate many ideas and ways to complete the various tasks given even though they are in difficult positions and conditions.

The second research objective is to evaluate differences in academic procrastination based on gender and years of study. The results show there is different and significant academic procrastination among male and female students. Male students' academic procrastination is higher than females. It means that male students are more likely to perform academic procrastination than female ones. This finding is supported by some previous studies which also show that men have higher academic procrastination levels than women (Abdi Zarrin, Gracia, & Paixão, 2020; Balkis & Erdiñç, 2017; Khan et al., 2014; Nilufer, 2017; Steel & Ferrari, 2013). This research indicates that male students have a higher risk of experiencing academic procrastination. However, another research shows a different result, where there is no significant difference in academic procrastination between men and women (Ajayi, 2020; Ismail, 2016; Nilakantie & Mastuti, 2014). The difference may be due to the particular characteristics of the respondents, thus causing the results to be slightly different.

The results regarding years of study show that there are significant differences in academic procrastination between early, middle, and final year students. Those who are in the middle year have the highest academic procrastination compared to those in the first and last years. The first-year college students/freshmen still have high enthusiasm for learning so that their academic procrastination is low. During the middle year, the college students' enthusiasm begins to decline along with the increasing number of assignments, difficulty level of learning materials, higher demands for good grades, and greater influence of peers, which trigger stronger academic procrastination. During the last year, they have been burdened with the greatest demand, which is writing a thesis as the final project.

Knaus (2002) revealed that the completion of a lot of tasks can lead to various negative conditions, such as boredom and difficulty in concentrating. For students who have high enthusiasm, they will be able to face various obstacles in learning and writing their thesis, while those having low enthusiasm will assume that the process of completing a thesis is really difficult and scary which ultimately triggers procrastination.

The third objective of this research is to analyze the relationship between academic procrastination and academic achievement. The results show that academic procrastination has a significant but negative effect on academic achievement. It is relevant to previous studies that found a significant negative relationship between academic procrastination and academic achievement (Akpur, 2020; Goroshit, 2018; Kim & Seo, 2015; Nwosu, Okoyoe, & Onah, 2018; Wu & Fan, 2017; You, 2015). A significant and negative relationship means that if students experience academic procrastination, it will be followed by declining academic achievement. Conversely, if their academic procrastination is low, they will perform good academic achievement.

This finding shows that academic procrastination is one of the variables that can influence academic achievement significantly, so it is important to conduct further studies related to the variables that can determine the high or low level of academic procrastination, especially in online learning during Covid-19. The results and findings can assist educators in taking precautions so that academic procrastination in the online learning process during Covid-19 pandemic era can be avoided to reach a high level. Several previous research findings indicate that some variables influence academic procrastination level during offline learning, namely impulsivity, perfectionist attention and concern, low self-efficacy and self-regulation, low self-esteem, and time management (Asri, Setyosari, Hitipeuw, & Chusniyah, 2017; Gustavson et al., 2014; Klassen et al., 2009; Smith, Sherry, Saklofske, & Mushqaush, 2017; Thye,

Mosen, Weger, & Tauschel, 2016). These variables are the results of findings during offline learning, but can also be used as references to investigate online learning conditions during the Covid-19 pandemics more deeply.

The results of this study certainly have implications in the implementation of guidance and counseling, namely: (1) the implementation of guidance and counseling must include academic procrastination material in information services and group guidance as an effort to prevent the occurrence of academic procrastination in students, (2) implementation of guidance and counseling can focus more on male students because they have higher academic procrastination than females, (3) individual counseling and group counseling should be given immediately to students who experience academic procrastination because it will affect academic achievement.

## CONCLUSION

In this study, procrastination has a significant but negative effect on academic achievement. Procrastination during the Covid-19 pandemic in this article is caused by the workload, low internet access, and low time management. Based on gender, male students' academic procrastination is higher than female students. Students in the middle of the study year have higher procrastination than students at the beginning and end of the study year.

## REFERENCES

- Abdi Zarrin, S., Gracia, E., & Paixão, M. P. (2020). Prediction of academic procrastination by fear of failure and self-regulation. *Educational Sciences: Theory and Practice*, 20(3), 34–43.
- Agoukei, R. C., Ogudu, G. N., & Emmanuel, S. O. (2019). Perceived influence of some personological factors on entrepreneurial intentions among graduates with Nysc in Ondo State, Nigeria. *Research and Innovation for National Development (RIND)*, 3(4&5), 57–66.
- Ajayi, O. S. (2020). Academic self efficacy, gender and academic procrastination. *Epiphany*, 13(1), 75–84. <https://doi.org/10.21533/epiphany.v13i1.324>
- Aji, R. H. S. (2020). Dampak Covid-19 pada pendidikan di Indonesia: Sekolah, keterampilan, dan proses pembelajaran. *SALAM: Jurnal Sosial dan Budaya Syar-I*, 7(5), 395–402. <https://doi.org/10.15408/sjsbs.v7i5.15314>
- Akpur, U. (2020). The effect of procrastination on academic achievement: A meta-analysis study. *International Journal of Educational Methodology*, 6(4), 681–690. <https://doi.org/10.12973/ijem.6.4.681>
- Argiropoulou, M. I., & Ferrari, J. R. (2015). Chronic procrastination among emerging adults: Factor structure of the Greek version of the general procrastination scale. *Hellenic Journal of Psychology*, 12(2), 85–104.
- Asri, D. N., Setyosari, P., Hitipeuw, I., & Chusniyah, T. (2017). The influence of project-based learning strategy and self-regulated learning on academic procrastination of junior high school students' mathematics learning. *American Journal of Educational Research*, 5(1), 88–96.
- Astuti, Y., Nisa, H., Sari, K., & Kumala, I. D. (2021). Perbedaan prokrastinasi akademik ditinjau dari jenis kelamin pada mahasiswa. *Seurune: Jurnal Psikologi Unsyiah*, 4(2), 169–184. <https://doi.org/10.24815/s-jpu.v4i2.22108>
- Azar, F. S. (2013). Self-efficacy, achievement motivation and academic procrastination as predictors of academic achievement in pre-college students. *Proceeding of the Global Summit on Education*, 173–178.
- Balkis, M., & Erdiņç, D. (2017). Gender differences in the relationship between academic procrastination, satisfaction with academic life and academic performance. *Electronic Journal of Research in Educational Psychology*, 15(1), 105–125.
- Beswick, G., Rothblum, E. D., & Mann, L. (1988). Psychological antecedents of student procrastination. *Australian Psychologist*, 23(2), 207–217. <https://doi.org/10.1080/00050068808255605>
- Chehrzad, M. M., Ghanbari, A., Rahmatpour, P., Barari, F., Pourrajabi, A., & Alipour, Z. (2017). Academic procrastination and related factors in students of Guilan University of Medical Sciences. *The Journal of Medical Education and Development*, 11(4), 352–362.
- Chen, B.-B., Shi, Z., & Wang, Y. (2016). Do peers matter? Resistance to peer influence as a mediator between self-esteem and procrastination among undergraduates. *Frontiers in Psychology*, 7, 1529. <https://doi.org/10.3389/fpsyg.2016.01529>

- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Filipiak, S., Kaczmarek, B., & Markiewicz, K. (2017). Relationship between procrastination and a university subject in Polish University students. *The New Educational Review*, 49(3), 285–296. <https://doi.org/10.15804/tner.2017.49.3.23>
- Goroshit, M. (2018). Academic procrastination and academic performance: An initial basis for intervention. *Journal of Prevention & Intervention in the Community*, 46(2), 131–142. <https://doi.org/10.1080/10852352.2016.1198157>
- Gustavson, D. E., Miyake, A., Hewitt, J. K., & Friedman, N. P. (2014). Genetic relations among procrastination, impulsivity, and goal-management ability. *Psychological Science*, 25(6), 1178–1188. <https://doi.org/10.1177/0956797614526260>
- Handaru, A. W., Lase, E. P. S., & Paramita, W. (2014). Analisis perbedaan tingkat prokrastinasi ditinjau dari gender, socio-personal, locus of control, serta kecerdasan emosional: Studi pada mahasiswa program studi Manajemen FE UNJ. *JRMSI-Jurnal Riset Manajemen Sains Indonesia*, 5(2), 243–263.
- He, S. (2017). A multivariate investigation into academic procrastination of university students. *Open Journal of Social Sciences*, 5(10), 12–24. <https://doi.org/10.4236/jss.2017.510002>
- Huda, M. J. N. (2016). Perbandingan prokrastinasi akademik menurut pilahan jenis kelamin di UIN Sunan Kalijaga Yogyakarta. *PALASTREN Jurnal Studi Gender*, 8(2), 423–438.
- Ismail, Z. (2016). Psychological well-being and its relationship with active and passive procrastination: A study on students of a business university in Karachi. *Academic Journal of Interdisciplinary Studies*, 5(3), 86–94. <https://doi.org/10.5901/ajis.2016.v5n3p87>
- Jhangiani, R. S., Chiang, I. A., & Price, P. C. (2015). *Research methods in psychology-2nd Canadian Edition*. BC Campus.
- Kandemir, M., İlhan, T., Özpolat, A. R., & Palancı, M. (2014). Analysis of academic self-efficacy, self-esteem and coping with stress skills predictive power on academic procrastination. *Educational Research and Reviews*, 9(5), 146–152.
- Kármén, D., Kinga, S., Edit, M., Susana, F., Kinga, K. J., & Réka, J. (2015). Associations between academic performance, academic attitudes, and procrastination in a sample of undergraduate students attending different educational forms. *Procedia-Social and Behavioral Sciences*, 187, 45–49.
- Khan, M. J., Arif, H., Noor, S. S., & Muneer, S. (2014). Academic procrastination among male and female university and college students. *FWU Journal of Social Sciences*, 8(2), 65–70.
- Kim, K. R., & Seo, E. H. (2015). The relationship between procrastination and academic performance: A meta-analysis. *Personality and Individual Differences*, 82, 26–33. <https://doi.org/10.1016/j.paid.2015.02.038>
- Kirst-Ashman, K. K., & Hull Jr, G. H. (2016). *Brooks/Cole empowerment series: Understanding generalist practice*. Cengage Learning.
- Klassen, R. M., Ang, R. P., Chong, W. H., Krawchuk, L. L., Huan, V. S., Wong, I. Y. F., & Yeo, L. S. (2009). A cross-cultural study of adolescent procrastination. *Journal of Research on Adolescence*, 19(4), 799–811.
- Klingsieck, K. B. (2013). Procrastination. *European Psychologist*, 18(1), 24–34. <https://doi.org/10.1027/1016-9040/a000138>
- Knaus, W. J. (2002). *The procrastination workbook: Your personalized program for breaking free from the patterns that hold you back*. New Harbinger.
- Mandap, C. M. (2016). Examining the differences in procrastination tendencies among university students. *International Journal of Education and Research*, 4(4), 431–436.
- McCloskey, J., & Scielzo, S. A. (2015). *Finally!: The development and validation of the academic procrastination scale*. Unpublished Manuscript.
- Muyana, S. (2018). Prokrastinasi akademik dikalangan mahasiswa program studi bimbingan dan konseling. *Counsellia: Jurnal Bimbingan dan Konseling*, 8(1), 45–52. <https://doi.org/10.25273/counsellia.v8i1.1868>
- Nilakantie, R., & Mastuti, E. (2014). Perbedaan tingkat prokrastinasi akademik ditinjau dari jenis kelamin dan locus of control pada mahasiswa yang mengambil mata kuliah skripsi di Fakultas Psikologi Universitas Airlangga. *Jurnal Psikologi Kepribadian dan Sosial*, 3(1), 9–14.
- Nilufer, B. (2017). Understanding the academic procrastination attitude of language learners in Turkish universities. *Educational Research and Reviews*, 12(3), 108–115. <https://doi.org/10.5897/ERR2016.3122>
- Nwosu, K. C., Okoyoe, C. C., & Onah, U. H. (2018). An interpretive descriptive study of factors affecting academic achievement of underachieving student teachers in Nigeria. *Journal of At-Risk Issues*, 21(2), 20–29.



- Özer, B. U., Demir, A., & Ferrari, J. R. (2009). Exploring academic procrastination among Turkish students: Possible gender differences in prevalence and reasons. *The Journal of Social Psychology, 149*(2), 241–257. <https://doi.org/10.3200/SOCP.149.2.241-257>
- Patrzek, J., Sattler, S., van Veen, F., Grunschel, C., & Fries, S. (2015). Investigating the effect of academic procrastination on the frequency and variety of academic misconduct: a panel study. *Studies in Higher Education, 40*(6), 1014–1029. <https://doi.org/10.1080/03075079.2013.854765>
- Purnama, S. S. (2014). Prokrastinasi akademik (penundaan akademik) mahasiswa Fakultas Ilmu Keolahragaan Universitas Negeri Surabaya. *Jurnal BK Unesa, 4*(3), 682–692.
- Pychyl, T. A., & Flett, G. L. (2012). Procrastination and self-regulatory failure: An introduction to the special issue. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 30*(4), 203–212. <https://doi.org/10.1007/s10942-012-0149-5>
- Rozental, A., & Carlbring, P. (2014). Understanding and treating procrastination: A review of a common self-regulatory failure. *Psychology, 5*(13), 1488–1502. <https://doi.org/10.4236/psych.2014.513160>
- Saman, A. (2017). Analisis prokrastinasi akademik mahasiswa (studi pada mahasiswa Jurusan Psikologi Pendidikan dan Bimbingan Fakultas Ilmu Pendidikan). *Jurnal Psikologi Pendidikan dan Konseling: Jurnal Kajian Psikologi Pendidikan dan Bimbingan Konseling, 3*(2), 55–62. <https://doi.org/10.26858/jpkk.v0i0.3070>
- Semb, G., Glick, D. M., & Spencer, R. E. (1979). Student withdrawals and delayed work patterns in self-paced psychology courses. *Teaching of Psychology, 6*(1), 23–25. [https://doi.org/10.1207/s15328023top0601\\_8](https://doi.org/10.1207/s15328023top0601_8)
- Sepehrian, F., & Lotf, J. J. (2011). The effects of coping styles and gender on academic procrastination among university students. *Journal of Basic and Applied Scientific Research, 1*(12), 2987–2993.
- Şirin, E. F. (2011). Academic procrastination among undergraduates attending school of physical education and sports: Role of general procrastination, academic motivation and academic self-efficacy. *Educational Research and Reviews, 6*(5), 447–455.
- Smith, M. M., Sherry, S. B., Saklofske, D. H., & Mushqaush, A. R. (2017). Clarifying the perfectionism-procrastination relationship using a 7-day, 14-occasion daily diary study. *Personality and Individual Differences, 112*, 117–123. <https://doi.org/10.1016/j.paid.2017.02.059>
- Steel, P., & Ferrari, J. (2013). Sex, education and procrastination: An epidemiological study of procrastinators' characteristics from a global sample. *European Journal of Personality, 27*(1), 51–58. <https://doi.org/10.1002/per.1851>
- Steel, P., & Klingsieck, K. B. (2016). Academic procrastination: Psychological antecedents revisited. *Australian Psychologist, 51*(1), 36–46. <https://doi.org/10.1111/ap.12173>
- Thye, M., Mosen, K., Weger, U., & Tauschel, D. (2016). Meditation and procrastination. *ICEEPSY 2016 : 7th International Conference on Education and Educational Psychology, 65–72*. <https://doi.org/10.15405/epsbs.2016.11.8>
- Uzun, A. M., Unal, E., & Tokel, S. T. (2014). Exploring internet addiction, academic procrastination and general procrastination among pre-service ICT teachers. *Mevlana International Journal of Education, 4*(1), 189–201. <https://doi.org/10.13054/mije.14.18.4.1>
- Wirajaya, M. M., Padmadewi, N. N., & Ramendra, D. P. (2020). Investigating the academic procrastination of EFL student. *Jurnal Pendidikan Bahasa Inggris Indonesia, 8*(2), 67–77. <https://doi.org/10.23887/jpbi.v8i2.3498>
- Wu, F., & Fan, W. (2017). Academic procrastination in linking motivation and achievement-related behaviours: A perspective of expectancy-value theory. *Educational Psychology, 37*(6), 695–711. <https://doi.org/10.1080/01443410.2016.1202901>
- You, J. W. (2015). Examining the effect of academic procrastination on achievement using LMS data in e-learning. *Journal of Educational Technology & Society, 18*(3), 64–74.
- Zacks, S., & Hen, M. (2018). Academic interventions for academic procrastination: A review of the literature. *Journal of Prevention & Intervention in the Community, 46*(2), 117–130. <https://doi.org/10.1080/10852352.2016.1198154>
- Zhou, M. (2018). Effects of personality on procrastination: Does it vary by gender? *International Journal of Management and Applied Science (IJMAS), 4*(4), 54–60.