Academic Procrastination of Pre-Service Student-Teachers of Professional Education Program

Dahlia Novarianing Asri[1*], Asroful Kadafi[2], Noviyanti Kartika Dewi[3], Augusto Da Costa[4]

[1,2,3]Universitas PGRI Madiun, Madiun, Indonesia
[4]Institute Superior Cristal, Dili, Timor Leste

Sections Info	ABSTRACT
	Objective: Low human resource levels, particularly with relation to teacher quality, are one of the issues facing Indonesian education. In order to provide aspiring teachers with the knowledge and abilities necessary to become professional teachers, the Indonesian government has recently established a policy through a professional teacher education program. Professional teacher education students must submit assignments as part of their coursework, and they must transmit their completed assignments to the Learning Management System by the deadline. Students experience academic procrastination, or the inability to finish tasks on time, due to the workload of their integrated practical learning at school. The purpose of this study is to look at professional teacher education students' academic procrastination. **Method:** This study employs a quantitative methodology that includes the examination of descriptive data and the survey technique. Purposive sampling was the approach employed, and the sample consisted of ninety-seven pupils. The academic procrastination scale was utilized to collect data. **Results:** The analysis's findings demonstrate that students' levels of academic procrastination are quite high. Most participants scored highly on the feature of the desire to avoid labor and uncomfortable situations because they found it difficult to accomplish anything unpleasant. **Novelty:** Academic procrastination has been widely studied, but many problems of academic procrastination are still found in students. This study provides an overview that students in the teacher professional education program are still procrastinating so that, in the future, appropriate interventions can be given.

INTRODUCTION

One of the many issues Indonesia is now dealing with in the field of education is a shortage of qualified teachers. Darling-Hammond, (2017) defines teacher quality as the collection of traits, skills, and personal understanding that an individual brings to the teaching process. One of the primary issues for raising the standard of education is the caliber of teachers, as they are acknowledged as a decisive factor in the outcome of a student's education and the success or failure of the learning process (Engel et al., 2014). UNESCO figures from the 2016 Global Education Monitoring (GEM) Report (Utami, 2019 ; Susiani & Abadiah, 2021) rank Indonesia as having the 10th-best teacher quality in the world out of 14 developing nations. According to Nilsen & Gustafsson, (2016), it is feasible to improve the quality of instructors in terms of work experience, professional development, self-confidence, teaching readiness, and teacher education.

Nowadays, the Indonesian government provides resources through professional teacher education programs to improve the competencies and skills of teachers. Nowadays, the Indonesian government provides resources through professional teacher education programs to improve. The goals of professional teacher education are

to raise the bar for teaching staff qualifications, develop critical thinking and problem-solving skills, and boost innovative teaching practices. Students pursuing professional teacher education must use a learning management system (LMS) platform to emphasize student-centered learning for the purpose of accomplish this goal. Practical field experience, inquiry-based learning, reflection as a habit, and integration with campuses, schools, and society through digital technology in the LMS system are the main foci of teacher professional education courses.the competencies and skills of teachers.

Cognitive elements predominate in the many activities that comprise teacher professional education, and students' attachment to the deadlines set for completing projects in the LMS leads to additional issues, such as delaying academic work. Academic procrastination is the practice of putting off tasks associated with assignments. Academic procrastination is the act of putting off tasks associated with assignments. The intentional delaying of beginning or finishing a task until the very last minute or until a set deadline is known as procrastination (Freeman et al., 2011; Gupta et al., 2012; Rozental & Carlbring, 2013). Additionally, procrastination causes poor time management, diminished performance, delayed learning, task avoidance, and an inability to control negative emotions (Ferrari & Díaz-Morales, 2014; Schubert & Stewart, 2000). Academic procrastination is a behavior that has a detrimental effect on behavior by avoiding learning-related duties and activities. It is done purposefully and unreasonably. (Gargari et al., 2011; Haghbin et al., 2015; Islas, 2018; Kim et al., 2017 ; Laeus, 2015; Langton, 2016 ; Steel & Klingsieck, 2016).

Academic procrastination is a prevalent issue that still affects students. Procrastination is reported to affect 80% of students, and among postgraduate students, it affects 10% to 70% of them regularly. According to a study on academic procrastination among American students, 95% of pupils engaged in the practice (Schubert & Stewart, 2000; Steel & Ferrari, 2013; Chehrzad et al., 2017). Academic delays affect 55.14% of aspiring teachers in Indonesia (Abbasi & Alghamdi, 2015). In Indonesia, 55.14% of prospective teachers have academic delays (Sartika & Nirbita, 2021). Many experts have examined procrastination using diverse approaches (Klingsieck, 2013; Steel, 2007; Van Eerde, 2003), utilizing a spectrum of research participants with varying levels of education (Steel, 2007). Academic procrastination is linked to several predictor variables, including gender, age, education, marital status, culture, personality, genetic and neurobiological characteristics, motivation, and others, according to the findings of earlier studies (Steel & Ferrari, 2013; Abbasi & Alghamdi, 2015).

Numerous cognitive, affective, and behavioral factors have been linked to academic procrastination (Pychyl & Flett, 2012; Rakes & Dunn, 2010). These factors include: inability to regulate oneself (Sirois, 2007; Steel, 2007); lack of motivation; inability to focus at work; low self-efficacy; low self-esteem; perfectionism; fear of failure; influence of personality (Adesina et al., 2011; Schouwenburg & Groenewoud, 2001); personal issues; unrealistically high expectations; and perfectionist (Abbasi & Alghamdi, 2015). Academic procrastination can be attributed to a variety of social factors, including the educational environment, academic culture, teacher teaching styles, task characteristics, and digital distractions during the learning process (Ackerman & Gross, 2005; Nordby et al., 2017; Vermeulen, 2021). As a result, procrastination behavior can lead to reduced productivity at work, mental health issues, such as depression, stress, and psychological well-being, as well as academic failure (Akpur, 2020; Maiyo & Siahi, 2015; Badiger & Aiholli, 2017; Balkis, 2013; Moon & Illingworth, 2005).

Compared to other forms of learning, professional teacher education learning has distinct task features. Many students suffer from tension and worry when they are given assignments that demand them to evaluate in-depth by connecting the subject matter and issues they are studying with pertinent theories. They have to work more alone and study more as student instructors, which makes them more likely to put off doing projects. Because of the hybrid learning system's requirement for digital competency, this academic delay is made worse. Research indicates that students who struggle with digital literacy put off their online learning (Delaval et al., 2017; (Sage et al., 2021; Witt et al., 2021; López-Meneses et al., 2020). One of the reasons why students put off their education is the use of the Learning Management System in professional education courses. Students are required to adjust and put off study since the learning system presents them with novel and hybrid content.

There is still a lot we need to know about the prevalence of academic procrastination, even though it is a common occurrence in students and can be harmful. This is especially true for professional teacher education students who are already pursuing higher education and are aspiring teachers. Several studies on academic procrastination in students have been conducted. This study focuses on academic procrastination's students in professional teacher education. The novelty of this study is that academic procrastination is not only experienced by students, but also experienced by students at a higher level, namely professional teacher students. Professional teacher students who have activities at work are responsible for work at home, and on the other hand, they are required to carry out academic tasks as prospective professional teachers. This situation requires students to do all their work and allows for academic procrastination. For this reason, it is necessary to conduct research on academic procrastinations' students in professional teacher education. This study thus seeks to: (1) characterize and assess professional teacher education students' academic procrastination; (2) analyzing the level of academic procrastination in terms of academic procrastination aspects, and (3) identify gender-based disparities in the degree of academic procrastination among these students.
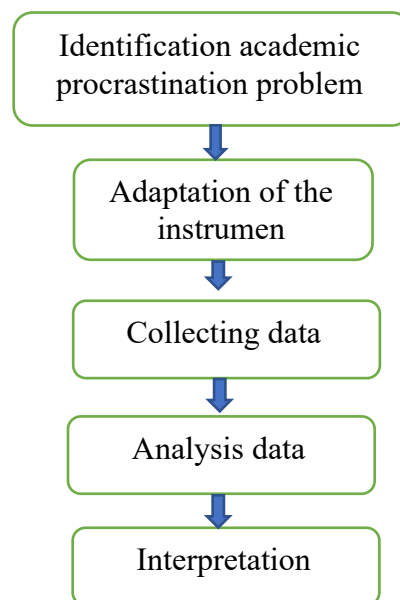
This research questions are:
1. What is the level of academic procrastination among professional teacher education students?.
2. What is the level of academic procrastination in terms of academic procrastination aspects?
3. What is the level of academic procrastination of professional teacher education students in terms of gender?

RESEARCH METHOD

This study employs a quantitative methodology, namely a survey method. According to Damian et al., (2022), the survey technique in quantitative research is the most common strategy in the social sciences since it offers a picture of current situations. This study focused on students enrolled in the 2023 PGRI Madiun University Professional Teacher Education Study Program, which includes six disciplines of study: Guidance and Counseling, Elementary School Class Instructors, Mathematics, Indonesian, Pancasila and Civic Education, and History. The proportionate random sampling approach was used to choose sample members, and sample members were chosen at 10% of the total number of students in each field of study, yielding a sample of 97 students, 78 females and 19 males.

The data collecting approach employs Google Form as a simple and flexible data collection procedure utilizing an internet system, so there is no time commitment to spend filling out the essential data. The data requested in this research is an academic procrastination scale derived from the Procrastination Scale established by Tuckman, (1998), relating to three components of academic procrastination, which are: (1) overall self-image about the tendency to delay work; (2) the inclination to avoid work and uncomfortable situations due to problems in doing unpleasant tasks; and (3) the tendency to blame others for one's own circumstances. Academic procrastination scale, with references to important theory and research findings. Based on the validity test, 31 valid items were found, and the Cronbach's alpha formula yielded a reliability coefficient of 0.897. The data analysis technique employs descriptive statistics to identify the level of academic procrastination between students in teacher professional education programs, as well as the T-test to determine variations by gender in academic procrastination rates among these students. Figure 1 shows the research stages.

Figure 1. Research Flowchart

RESULTS AND DISCUSSION

Results

The study found that most of professional teacher education students (75.3%) had a high degree of academic procrastination, including students with an extremely high rate of procrastinate were 19.6% and those with a moderate level of procrastination 5.1%. The percentage of professional teacher education students that procrastinate academically across all categories is given. A detailed description of each component of academic procrastination and the percentage level of procrastination among professional teacher education students can be found in Table 1 below.

Table 1. Academic Procrastination of Teacher Professional Education Students.

Aspects of Academic Procrastination	Percentage (%)			
	Very high	**High**	**Low**	**Very Low**
Academic Procrastination	19,6	75,3	5,1	-
1. The general self-image of procrastination in the workplace.	19,7	72,3	8	-

Aspects of Academic Procrastination	Percentage (%)			
	Very high	High	Low	Very Low
2. The tendency to avoid tasks and settings that are uncomfortable because they have difficulties accomplishing anything unpleasant.	21,7	75,3	3	-
3. The tendency to blame others for one's own situation	18	71	11	-

According to Table 1 above, the scores are high and very high on the aspect of the tendency to avoid tasks and unpleasant things because they experience difficulty in doing something unpleasant (97%), followed by the image aspect of themselves in general regarding the tendency to postpone work (92%), and the tendency to blame others for their own situation (89%), respectively.

The study also found gender differences among professional teacher education students who engage in academic procrastination. Compared to female students, male students procrastinate more often. This is demonstrated by p (0.021) > 0.000, as seen in Tabel 2.

Table 2. Academic Procrastination of Teacher Professional Education Students in View of Gender.

	Levene's Test for Equality of Variances					Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)			Lower	Upper
Equal variances assumed	5.485	.021	-9.627	95	.000	-18.91430	1.96475	-22.81482	-15.01379
Equal variances notassumed			-14.574	62.345	.000	-18.91430	1.29783	-21.50835	-16.32026

Discussion

Prospective teacher candidates must participate in a variety of activities as part of their professional teacher education program, including two days of on-campus lectures and four days of field work at the school. A blended learning lecture system with assignments uploaded to the Learning Management System (LMS) by predefined deadlines causes a high degree of academic procrastination among students aspiring to become teachers. Research findings demonstrating that 75.3% of students enrolled in professional teacher education programs exhibit significant levels of academic procrastination attest to this. In the meantime, 5.1% of students procrastinated in their academic work at a low level and 19.6% of students at a very high level. This is seen by the amount of students who fail to turn in their assignments by the designated deadlines on the LMS. Numerous pupils have been observed to put off doing their academic obligations. According to research, between 70% and 90% of students procrastinate by being unorganized, forgetting things, being tardy for assignments, and acting inflexibly overall (Chehrzad et al., 2017; Schubert & Stewart, 2000; Steel & Ferrari, 2013).

Students' procrastination is correlated with the kind of assignments they are required to complete. Students usually put off assignments that require them to think critically and analytically about facts and issues they encounter in class because they find the work challenging and tedious. This is due to students' illogical resources and poor time management, which makes it difficult to manage their own time and learning process, especially because professional teacher education students are postgraduate students, the majority of whom are married with children. On the other hand, having to deal with the campus and school environments, where learning practices make students feel uncomfortable, makes it increasingly difficult for students to divide their time and complete assignments in professional teacher education. Researchers have found that there are a number of reasons why students put off completing their assignments, including: the assignment's attractiveness, interdependence, rewards, degree of difficulty, and impulsiveness that makes it easy for them to switch to other, more pleasurable activities (Miklyaeva et al., 2018; Ilchenko, 2017; Peerzada & Dar, 2019). Some researchers have also linked tardiness to these factors.

The results of this study indicate that the postponement of completing academic assignments occurs in professional teacher education students. The results of this study are supported by Akdemir's (2019) research, which states that some professional teacher students postpone academic assignments, are irresponsible, have negative perceptions of instructors, and have academic perfectionism. Balkis & Duru (2009) showed results that professional teacher students have procrastination behavior, take longer to complete assignments and exams, and have a negative correlation with academic achievement.

Procrastinators experience higher levels of stress and perform worse than those who don't, according to study by Seaward (2011). According to Goff (2011), anxiety, sadness, and procrastination are linked to decision-making. An someone feels stressed when they believe that expectations are more than their capacity. Stress can interfere with students' ability to study (Kuftyak & Samokhvalova, 2015). Professional teacher education students go through something similar. Demands include completing assignments at schools where field learning is practiced, fulfilling blended learning requirements through an LMS system that must meet deadlines, and bearing the moral weight of obtaining a government scholarship, which places an obligation on students to perform to expectations while also bearing some responsibility. Professional teacher education students have significant levels of stress and often put off academic assignments due to their responsibility for taking care of the home. According to Bandura (1986), procrastinating behavior is influenced by one's marital status and overall standing in life. Kuftyak (2021) study findings, however, indicate that there is a correlation between high degrees of academic procrastination and high stress, high difficulty, and unpleasant emotional reactions.

As opposed to professional teacher education students, who have a low academic procrastination rate of 5.1%, this data indicates that a tiny proportion of students exhibit self-regulated learning and strong time discipline when it comes to posting assignments on the LMS. Pupils who exhibit self-regulated learning are highly motivated to learn, capable of allocating their time and resources efficiently, and actively participate in the learning process by concentrating on the subject matter at hand and putting in a try to avoid outside distractions. both mental and emotional Azar (2013). Numerous studies demonstrate that people with strong self-efficacy can effectively finish projects before the deadline (Haider et al., 2022; Mandap, 2016).

Regarding the subject of academic procrastination, study findings indicate that students perceive themselves as generally having a strong propensity to put off tasks. 92% of students who prefer to postpone had really high marks, demonstrating this. The cognitive-behavioral perspective holds that students who procrastinate develop a habit out of it and see it as one of their "Big Five" personality traits, which include behavior, hope for success, self-control, timing management, and work discipline. postponement. Fear of failing, worry, learning stress, sadness, and emotional instability are additional expressions of the propensity to put off work (Balkis, 2013; Grunschel et al., 2013; Fayda-Kinik, 2023).

The data analysis results indicate that 97% of people have a tendency to avoid unpleasant chores and activities because they find them difficult to complete. This demonstrates that professional teacher education students avoid work because they view it as unpleasant or difficult. Instead, they choose to express their frustrations by engaging in enjoyable activities like playing, watching movies, or visiting interesting locations (Laeus, 2015). According to (Kaur, 2023), students often put off doing important duties in favor of enjoyable activities and less essential ones, which causes them to put off doing such jobs until later.

Following data analysis, it was shown that 89% of students enrolled in professional teacher education programs tended to assign blame for their personal circumstances to others. He views this other individual as an outside source for his predicament, which eventually leads to procrastination. According to Patrzek et al., (2015), postponement may be caused by a lack of social support as well as college-related issues including academic culture and instructor quality. Parenting style is one of the external variables that is predictive of postponing, as demonstrated by Zakeri et al., (2013). People sometimes attribute procrastinating behavior to the parenting style that their parents used with them.

The data analysis's findings indicate that professional teacher education students who put off their employment differ in terms of gender. Male students tend to put things off more than female students do. This is because male professional teacher education students put more pressure on themselves to provide for their families and are more impulsive, which causes them to put off finishing the requirements of completing activities in the learning management system. Many studies agree with the study's findings, claiming that males are more likely than women to put off tasks because they exhibit higher levels of impulsivity, worse self-control, and lower self-efficacy (Abbasi & Alghamdi, 2015; Balkis & Duru, 2009; Mandap, 2016; Pala et al., 2011; Steel & Ferrari, 2013).

CONCLUSION

Fundamental Finding : The results of the study indicated that professional teacher education students had a high level of academic procrastination. Judging from the three aspects of academic procrastination, the highest academic procrastination of professional teacher education students was in the aspect of the tendency to avoid work or something unpleasant and an uncomfortable environment, followed by the aspect of general self-image towards the tendency to postpone work and the tendency to blame others for their own circumstances. The high level of academic procrastination among students is caused by the high burden of academic assignments in professional teacher education, still having duties and responsibilities at home to take care of the household, and the existence of perfectionism, which causes a moral burden because educational costs are obtained from government scholarships. **Implication :** Students in the teaching

profession program are required to manage their time effectively. This is because to minimize academic delays, such as delays in completing assignments, uploading assignments to the learning management system, and assignments outside of lectures, they can also run well without delay. **Limitation :** The study's results lack representativeness due to their limited student sample, making them inapplicable to other populations. **Future Research :** Additional demographic characteristics, such as the science topic followed in professional teacher education and the history of the students, should be included in future research.

REFERENCES

Abbasi, I. S., & Alghamdi, N. G. (2015). The Prevalence, Predictors, Causes, Treatment, and Implications of Procrastination Behaviors in General, Academic, and Work Setting. *International Journal of Psychological Studies*, *7*(1), 59-66. https://doi.org/10.5539/ijps.v7n1p59

Ackerman, D. S., & Gross, B. L. (2005). My instructor made me do it: Task characteristics of procrastination. *Journal of Marketing Education*, *27*(1), 5–13. https://doi.org/10.1177/0273475304273842

Adesina, F. T., Aremu, A. O., & Williams, T. M. (2011). Influence of academic procrastination and personality types on academic achievement and efficacy of in-school adolescents in Ibadan. *IFE Psychologia*, *19*(1), 93. https://10.4314/ifep.v19i1.64591

Akdemir, O. A. (2019). Academic Procrastination Behaviors of Preservice Teachers in Turkish Context. *World Journal of Education*, *9*(2), 14–21. https://doi.org/10.5430/wje.v9n2p13

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

Azar, F. S. (2013). Self-efficacy, Achievement Motivation, and Academic Procrastination as Predictors of Academic Performance. *US-China Education Review B*, *3*(11), 847–857. https://www.davidpublisher.com/Public/uploads/Contribute/553ef14021115.pdf

Badiger, J. K., & Aiholli, V. D. (2017). A study on academic achievement of secondary school students in relation to their social status. *International Journal of Advanced Research in Education & Technology*, *4*(3), 59–61. www.ijaret.com

Balkis, M. (2013). the Relationship Between Academic Procrastination and Students' Burnout. *Journal of Education]*, *28*(1), 68–78. https://www.researchgate.net/publication/256627310

Balkis, M., & Duru, E. (2009). Prevalence of Academic Procrastination Behaviour Among Pre-Service Teachers, and Its Relationship with Demographics and Individual Preferences. *Journal of Theory and Practice in Education*, *5*(1), 18–32. http://eku.comu.edu.tr/index/5/1/mbalkis_eduru.pdf

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Incm Englewood Cliffs, NJ.

Chehrzad, M., Ghanbari, A., Rahmatpour, P., Barari, F., Pourrajabi, A., & Alipour, Z. (2017). Academic procrastination and related factors in students of Guilan University of Medical Science. *Journal of Medical Education Development*, *11*, 352–362.

Damian, E., Meuleman, B., & van Oorschot, W. (2022). Transparency and Replication in Cross-national Survey Research: Identification of Problems and Possible Solutions.

Sociological Methods and Research, *51*(2), 499–526. https://doi.org/10.1177/0049124119882452

Darling-Hammond, L. (2017). *Empowered Educators*. Jossey-Bass.

Delaval, M., Michinov, N., Le Bohec, O., & Le Hénaff, B. (2017). How can students' academic performance in statistics be improved? Testing the influence of social and temporal-self comparison feedback in a web-based training environment. *Interactive Learning Environments*, *25*(1), 35–47. https://doi.org/10.1080/10494820.2015.1090456

Engel, M., Jacob, B. A., & Curran, F. C. (2014). New Evidence on Teacher Labor Supply. *American Educational Research Journal*, *51*(1), 36–72. https://doi.org/10.3102/0002831213503031

Fayda-Kinik, F. S. (2023). The Impact of Digital Competences on Academic Procrastination in Higher Education: A Structural Equation Modeling Approach. *Pegem Journal of Education and Instruction*, *13*(3), 25–35. https://doi.org/10.47750/pegegog.13.03.03

Ferrari, J. R., & Díaz-Morales, J. F. (2014). Procrastination and mental health coping: A brief report related to students. *Individual Differences Research*, *12*(1), 8–11. www.idr-journal.com

Freeman, E. K., Cox-Fuenzalida, L. E., & Stoltenberg, I. (2011). Extraversion and Arousal Procrastination: Waiting for the Kicks. *Current Psychology*, *30*(4), 375–382. https://doi.org/10.1007/s12144-011-9123-0

Gargari, R. B., Sabouri, H., & Norzad, F. (2011). Academic procrastination: The relationship between causal attribution styles and behavioral postponement. *Iranian Journal of Psychiatry and Behavioral Sciences*, *5*(2), 76–82.

Goff, A. (2011). International Journal of Nursing Learned Resourcefulness in Baccalaureate Nursing Students Learned Resourcefulness in Baccalaureate Nursing Students. *International Journal of Nursing Education Scholarship*, *8*(1), 1–22.

Grunschel, C., Patrzek, J., & Fries, S. (2013). Exploring reasons and consequences of academic procrastination: An interview study. *European Journal of Psychology of Education*, *28*(3), 841–861. https://doi.org/10.1007/s10212-012-0143-4

Gupta, R., Hershey, D. A., & Gaur, J. (2012). Time Perspective and Procrastination in the Workplace: An Empirical Investigation. *Current Psychology*, *31*(2), 195–211. https://doi.org/10.1007/s12144-012-9136-3

Haghbin, N., Spelt, J. K., & Papini, M. (2015). Abrasive waterjet micro-machining of channels in metals: Comparison between machining in air and submerged in water. *International Journal of Machine Tools and Manufacture*, *88*, 108–117. https://doi.org/10.1016/j.ijmachtools.2014.09.012

Haider, A., Najam, S., Sherazi, S. N., & Akmal, T. (2022). SELF-Regulated Learning and Academic Procrastination among Young Adult E-Learners: Moderating Role of Self-Regulated Learning and Academic Procrastination Among Young Adult E-Learners: Moderating Role Of Gender. *Gender ASEAN Journal of Psychiatry*, *23*(3), 1–7.

Ilchenko, A. M. (2017). Psychological predicates of students' procrastination. *Smalta*, *4*, 20–24. https://doi.org/10.3897/ap.5.e0965

Islas, M. S. (2018). *An exploration of the triadic model of procrastination: arousal, avoidant, and decisional procrastination in adults*. California State University. Fresno.

Kaur, H. (2023). Procrastination in Relation to Academic Achievement among College Students. *International Journal For Multidisciplinary Research*, *5*(4), 1–10. https://doi.org/10.36948/ijfmr.2023.v05i04.4380

Kim, S., Fernandez, S., & Terrier, L. (2017). Procrastination, personality traits, and academic performance: When active and passive procrastination tell a different story. *Personality and Individual Differences*, *108*, 154–157. https://doi.org/10.1016/j.paid.2016.12.021

Klingsieck, K. B. (2013). Procrastination when good things don't come to those who wait. *European Psychologist*, *18*(1), 24–34. https://doi.org/10.1027/1016-9040/a000138

Kuftyak, E. (2022). Procrastination, stress and academic performance in students. *VII International Forum on Teacher Education*, *1*, 965–974. https://doi.org/10.3897/ap.5.e0965

Kuftyak, E. V, & Samokhvalova, A. G. (2015). Features of Children Adaptive Behavior in Situations of School and Communication Difficulties. *Clinical Psychology and Special Education*, 4(4), 50–90. https://doi.org/10.17759/cpse.2015040404

Laeus. (2015). An Analysis of Teachers' General Tendency to Procrastinate, Perception of Professional Efficiency/ Self Efficiency. *Journal of Economic Literature*, 47, 315–321.

Langton. (2016). Procrastinating. *Journal for the Theory of Social Behavior*, 11, 207–221.

López-Meneses, E., Vázquez-Cano, E., González-Zamar, M. D., & Abad-Segura, E. (2020). Socioeconomic effects in cyberbullying: Global research trends in the educational context. *International Journal of Environmental Research and Public Health*, *17*(12), 1–31. https://doi.org/10.3390/ijerph17124369

Maiyo, J. K., & Siahi, E. A. (2015). Study of the relationship between study habits and academic achievement of students: A case of Spicer Higher Secondary School, India. *International Journal of Educational Administration and Policy Studies*, *7*(7), 134–141. https://doi.org/10.5897/ijeaps2015.0404

Mandap, C. M. (2016). Examining the Differences in Procrastination Tendencies among University Students. *International Journal of Education and Research*, 4(4), 431–436.

Miklyaeva, A. V, Bezgodova, S. A., Vasilyeva, S. V, Rumyantseva, P. V, & Solntseva, N. V. (2018). Academic Procrastination in the Structure of Learning Activity Styles in Students. *Psychological Science and Education*, *23*(4), 61–69. https://doi.org/https://doi.org/10.17759/pse.2018230406

Moon, S. M., & Illingworth, A. J. (2005). Exploring the dynamic nature of procrastination: A latent growth curve analysis of academic procrastination. *Personality and Individual Differences*, *38*(2), 297–309. https://doi.org/10.1016/j.paid.2004.04.009

Nilsen, Trude & Gustafsson, J.-E. (2016). Teacher Quality, Instructional Quality and Student Outcomes. Relationships Across Countries, Cohorts and Time (A Series of In-depth Analyses Based on Data of the International Association for the Evaluation of Educational Achievement (IEA)). In *Comparative Education* (Vol. 52, Issue 4).

Nordby, K., Klingsieck, K. B., & Svartdal, F. (2017). Do procrastination-friendly environments make students delay unnecessarily? *Social Psychology of Education*, *20*(3), 491–512. https://doi.org/10.1007/s11218-017-9386-x

Pala, A., Akyildiz, M., & Bagci, C. (2011). Academic Procrastination Behaviour of Pre-service Teachers' of Celal Bayar University. *Procedia-Social and Behavioral Sciences*, 1418–1425. https://doi.org/10.1016/j.sbspro.2011.11.381

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

Peerzada, D. N., & Dar, J. A. (2019). Academic Procrastination: The Thief Of Time And An Enemy Of Success. *Elementary Education Online*, *18*(4), 2471–2480. https://doi.org/10.17051/ilkonline.2019.641242

Pychyl, T. A., & Flett, G. L. (2012). Procrastination and Self-Regulatory Failure: An Introduction to the Special Issue. *Journal of Rational - Emotive and Cognitive - Behavior Therapy*, *30*(4), 203–212. https://doi.org/10.1007/s10942-012-0149-5

Rakes, G. C., & Dunn, K. E. (2010). The impact of online graduate students' motivation and self-regulation on academic procrastination. *Journal of Interactive Online Learning*, *9*(1), 78–93. www.ncolr.org/jiol

Rozental, A., & Carlbring, P. (2013). Internet-Based Cognitive Behavior Therapy for Procrastination: Study Protocol for a Randomized Controlled Trial. *JMIR Research Protocols*, *2*(2), e46. https://doi.org/10.2196/resprot.2801

Sage, K., Jackson, S., Fox, E., & Mauer, L. (2021). The virtual COVID-19 classroom: surveying outcomes, individual differences, and technology use in college students. *Smart Learning Environments*, *8*(1). https://doi.org/10.1186/s40561-021-00174-7

Sartika, S. H., & Nirbita, B. N. (2021). Prokrastinasi Akademik Mahasiswa Calon Guru Pada Masa Pandemi Covid-19. *Jurnal Ekonomi Dan Pendidikan*, *18*(2), 104–114. https://doi.org/10.21831/jep.v18i2.43429

Schouwenburg, H. C., & Groenewoud, J. T. (2001). My instructor made me do it: Task characteristics of procrastination. *Personality and Individual Differences*, *30*(2), 229–240. https://doi.org/10.1016/S0191-8869(00)00034-9

Schubert Walker, L. J., & Stewart, D. W. (2000). Overcoming the powerlessness of procrastination. *Guidance & Counseling*, *16*(1), 39.

Seaward, B. L. (n.d.). *Managing Stress: principles and strategies for health and wellbeing* (J. and B.).

Sirois, F. M. (2007). "I'll look after my health, later": A replication and extension of the procrastination-health model with community-dwelling adults. *Personality and Individual Differences*, *43*(1), 15–26. https://doi.org/10.1016/j.paid.2006.11.003

Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, *133*(1), 65–94. https://doi.org/10.1037/0033-2909.133.1.65

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

Susiani, I. R., & Abadiah, N. D. (2021). Kualitas Guru Dalam Meningkatkan Mutu Pendidikan Di Indonesia. *Jurnal Modeling*, *8*(2), 293–294.

Tuckman, B. W. (1998). Using tests as an incentive to motivate procrastinators to study. *Journal of Experimental Education*, *66*(2), 141–147. https://doi.org/10.1080/00220979809601400

Utami, S. (2019). Meningkatkan Kompetensi Guru Sma Dan Sederajat Melalui Pelatihan Pembelajaran Berbasis Tik. *ETHOS (Jurnal Penelitian Dan Pengabdian)*, *5*(2), 175. https://doi.org/10.29313/ethos.v5i2.2347

van Eerde, W. (2003). A meta-analytically derived nomological network of procrastination. *Personality and Individual Differences*, *35*(6), 1401–1418. https://doi.org/10.1016/S0191-8869(02)00358-6

Vermeulen, R. (2021). *The influence of educational*. *March*, 0–56.

Witt, T., Klumpp, M., & Beyer, B. (2021). Digital university teaching and learning in management—the gini from the covid-19 bottle and its empirical representations in germany. *Education Sciences*, *11*(11). https://doi.org/10.3390/educsci11110728

Zakeri, H., Esfahani, B. N., & Razmjoee, M. (2013). Parenting Styles and Academic Procrastination. *Procedia - Social and Behavioral Sciences*, *84*, 57–60. https://doi.org/10.1016/j.sbspro.2013.06.509

*Dahlia Novarianing Asri (Corresponding Author)
Department of Guidance and Counseling,
Universitas PGRI Madiun,
Jl. Setiabudi 85, Madiun, East Java, 63118, Indonesia,
Email: novarianing@unipma.ac.id

Asroful Kadafi
Department of Guidance and Counseling,
Universitas PGRI Madiun,
Jl. Setiabudi 85, Madiun, East Java, 63118, Indonesia,
Email: asrofulkadafi@unipma.ac.id

Noviyanti Kartika Dewi
Department of Guidance and Counseling,
Universitas PGRI Madiun,
Jl. Setiabudi 85, Madiun, East Java, 63118, Indonesia,
Email: noviyantibk@unipma.ac.id

Augusto Da Costa
Department of Psychology, Faculty of Teacher Training and Education,
Institute Superior Cristal,
Road Balide, Dili, East Timor, Timor Leste
Email: acostas3bk2015@gmail.com