

RESEARCH ARTICLE

Procrastination, well-being, and academic performance among pre-service teachers in blended learning modality

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ABSTRACT

The purpose of the study is to know how pre-service teachers are impacted by procrastination, and how it influences their well-being and academic performance in a blended learning modality. The study used a quantitative approach particularly the descriptive-correlation. The participants were gathered using random sampling. There were a total of 224 students who answered the online survey through Google Forms, but it was found that 32 students did not provide some information that was needed, so the final number of students was 192. The findings show that academic procrastination and academic performance are positively correlated, and there is a significant but very weak relationship between the two variables ($r(190) = .143, p = .48$). The researcher also found that there is no correlation between well-being and academic performance ($r(190) = -.037, p = .612$). Lastly, it also shows another significant finding in which procrastination and well-being have a significant correlation ($r(190) = -.0328, p = .001$). There is a significant but weak relationship between the two variables, and it is negatively correlated. Because said, the more that academic procrastination increases, there is an 11% chance that the well-being of a student will decrease.

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INTRODUCTION

Short-term gains and long-term consequences characterize procrastination, a self-defeating behavior pattern. According to experts like Piers Steel, who stated that it is a deliberate action where someone intentionally postpones their work and does not do it even though it is expected that it could be worse, and Harold Taylor, who stated that it is the deliberate and habitual delay of an essential endeavor that should be completed right away, Regardless of the level of effort involved, many of us are acquainted with the term "putting off" chores that we need to perform. This is how science explains procrastination: when challenged with an unpleasant task or assignment, the limbic system, which includes the pleasure center, and the prefrontal cortex, a much more recently developed portion of the brain that serves as your internal "planner," clash. When the limbic system takes over frequently, the result is that the task will be put off until tomorrow, even though it could and should be done right away. This relieves the uncomfortable sensation of requiring something but not wanting

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to do it (Spencer, 2023). This is how science explains procrastination. Whether a student is in school or studying toward a degree, academic procrastination affects students of all ages. Procrastination is especially common among undergraduate college students. According to research, more than 70% of university students procrastinate regularly (Schraw, Wadkins, and Olafson, 2007).

Positive emotions such as happiness and fulfillment, in addition to realizing one's abilities, having some measure of control over one's life, having a sense of meaning, and having an enriching social network, are all considered indicators of well-being. Feeling well and performing well has also been described as well-being. A steady environment allows an individual or community to grow and thrive. Positive mental health is associated with subjective well-being (Ruggeri et al., 2020). The World Health Organization defines positive mental health as a state of well-being in which an individual recognizes their abilities, can cope with everyday life challenges, work effectively and efficiently, and can contribute to the community in which they live.

When dealing with mental health problems and procrastination, it could be challenging to determine which comes first. When experiencing tiredness and racing thoughts that are signs of mental illness, it may not be easy to finish daily responsibilities. However, delaying duties could lead to stress, which makes mental health problems worse. Procrastination is not characterized by laziness. Procrastination is associated with mental health issues even though it is not considered to be a mental health illness in and of itself. Several studies have linked procrastination to depression, anxiety, and low self-esteem. Even in normal circumstances, procrastination is a significant obstacle for students. The pressures on distance learners have increased due to COVID-19, which has moved many classes online. Online students are at a greater risk of procrastination and all the detrimental repercussions that come with it because they are socially isolated, unsupervised by teachers, and surrounded by distractions.

Graham (2006) defines a blended learning system as combining traditional face-to-face teaching with technology-based instruction. Blended learning is also described as thoughtfully integrating face-to-face classroom instruction with distance learning experiences, as defined by Garrison and Kanuka (2004). Blended learning is a natural evolution of digital learning; it combines e-learning with traditional learning rather than replacing either (Schweizer & Weidenmann, 2003). In 2022, the Department of Education proposed that schools implement blended learning that includes online and face-to-face modalities and change the alternate schedules of the mentioned modalities to solve the growing number of student populations.

This study is inspired by the study of Duru, E., and Balkis, M. (2017), "Procrastination, Self-esteem, Academic Performance, and Well-Being: A Moderated Mediation Model." However, this study has been conducted in a local setting. It includes blended learning to become more relevant, especially now that we live in the new normal in the Philippines.

Over the years, researchers have shown great interest in procrastination, which is a significant topic. The Filipino "*mamaya na*" habit, or procrastination, as we call it, may impact children's academic performance (Tarin & Rio, 2015). It is known as self-regulatory failure (Steel, 2007), frequently leading to unfavorable effects, including poor performance and well-being. According to the American Psychological Association (APA), 80 to 95% of students in college voluntarily procrastinate their routine when it comes to accomplishing their school tasks. This ratio translates to at least four out of every five college students. The younger the age, the more likely they procrastinate compared to older age, as many people surpass their procrastination routine as they get older. A study by Beutel et al. (2016) examined procrastination in various age groups and found that procrastination appears to be highest in the youngest age group of 14 to 29. Considering the amount of research in this area, little

evidence has been found in a survey by StudyMode Student Psyche Report (2014); distraction was determined to be the most common reason for procrastination 48%. Feeling overpowered and unsure of where to begin follows this by 40%. Long-term procrastination has been shown to have negative effects on both physical and mental health, according to a brief study by Drs. Ferrari and Dáz-Morales. The lack of crucial adjustment behaviors increased perceived stress, and inadequate coping mechanisms are to blame. Michinov et al. (2011) concluded that high procrastinators are less successful online learners in online learning than low procrastinators. In the study of Cerezo, Esteban, et al. (2017), there is a potential for enhancing online learning with productive material for further research and to elucidate the relationship between procrastination and performance in open-ended learning environments.

The COVID-19 pandemic significantly disrupted education, leading to the rapid rise of virtual learning (Iglesias-Pradas et al., 2021). As online classes became more prevalent, concerns emerged regarding educational quality and the challenges students and teachers face (Dung, 2020). The new learning environment often leaves students easily distracted, using social media to pass the time and lacking supervision. This has contributed to a growing social media addiction among students (Yakut & Kuru, 2020; Marengo et al., 2022). Despite the flexibility of online learning, challenges such as academic procrastination, high dropout rates, and low retention remain common (Cerezo et al., 2017; Ucar et al., 2021; Baccal & Ormilla, 2021). Students reported feelings of isolation, difficulties managing time, and lack of motivation, negatively impacting their focus and learning. The constraints of online lessons often distract students from the material, highlighting the need for effective teaching methodologies and technology.

Research indicates no direct link between social media addiction and academic success; rather, procrastination acts as an intervening variable in this relationship (Zimmer, 2022; Azizi et al., 2019; Abbasi et al., 2021; Moon & Illingworth, 2005; Karatas, 2015). Students who struggle with procrastination may fail to demonstrate their true abilities, leading to poor academic performance and motivation, particularly among those already disadvantaged academically. Overall, unchecked procrastination significantly undermines students' academic success. Michinov et al. (2011) found that high procrastinators are less successful in online learning than low procrastinators. Further research investigated student behavior in mixed learning environments, revealing that poor time management correlates negatively with academic performance. Students who struggle to allocate their time effectively often fail to meet academic criteria, while those who complete their work promptly tend to perform better. This trend has been supported by numerous studies across different contexts (Tuckman, 2005; Stoeger & Ziegler, 2008; Tan et al., 2008; Liu et al., 2009; Rakes & Dunn, 2010; Baulks, 2011; Michinov et al., 2011; Broadbent & Poon, 2015; Goda et al., 2015; Paule-Ruiz et al., 2015), which demonstrate that lower procrastination is associated with higher general weighted averages (GWA).

Tice and Baumeister (1997) noted that high procrastinators often face lower grades and increased stress levels. Interestingly, achievement goal orientation was not a significant predictor of GWA. In contrast, prior studies (Lane & Lane, 2001; Hsieh, Sullivan, & Guerra, 2007) identified self-efficacy as a strong predictor of academic success. Additionally, self-esteem and procrastination have been shown to influence well-being determinants significantly. The findings suggest that procrastination and academic success mutually reinforce self-esteem, with self-esteem mediating the relationship between procrastination and well-being. Moreover, procrastination's indirect impact on well-being varies with academic success. Data indicate that both positive and negative thoughts lead to increased anxiety levels, with maladaptive cognitive mechanisms treating procrastination as an uncontrollable impulse and a coping tool, contributing to heightened stress around academic performance.

Theoretically, the association between anxiety and academic performance aligns with the understanding that negative thoughts and feelings about one's abilities can distract students from their work (Weinstein & Palmer, 2002). The current study suggests that counseling procedures in academic settings could benefit from this insight. Educators should recognize individual differences and challenges that may hinder students from achieving their academic goals (Monacis et al., 2016; Steel & Klingsieck, 2016). While traditional views deemed procrastination an inappropriate learning practice, planned procrastination can be an effective strategy for high performance. In this context, procrastination may enhance learning outcomes by allowing for better self-regulation and decision-making. Goda et al. (2009) found that high performers usually possess effective time management skills and lead balanced lives. Their research emphasized the importance of time management in e-learning environments, a point echoed by Schunk and Zimmerman (1998) in traditional settings.

The study highlighted that internal values, self-control, and procrastination are crucial in enhancing time management awareness within learning plans. Good time management awareness was linked to timely submission of assignments and proactive academic behaviors, such as submitting reports ahead of schedule. In order to establish a systematic flow for the study, "Procrastination, Well-being, and Academic Performance among Pre-service Teachers in Blended Learning Modality," the researcher formulated a conceptual framework. All the variables fall under the blended learning modality. Procrastination is the continuous and independent variable, connected with the two dependent variables, well-being, a continuous variable, and academic performance, a categorical variable, to know its effect.

The study aims to understand how procrastination impacts pre-service teachers' well-being, academic performance, and relationships with one another. This study aims to understand the relationship between procrastination and students' well-being, especially regarding their academic performance under blended learning modalities.

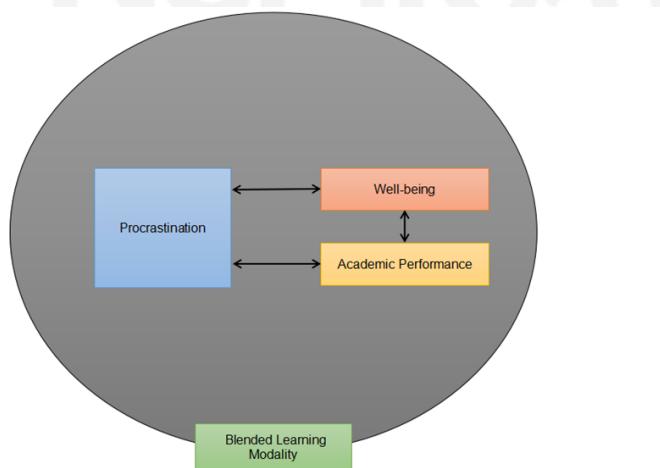


Figure 1. Conceptual framework of procrastination, well-being, and academic performance

METHOD

The study uses a quantitative approach. Under this approach, the study's hypotheses have been tested using descriptive-correlational designs. The required data for the study was gathered through an online survey that was uploaded online. In order to gather data more quickly, the researchers enlisted the aid of other students as well. The researchers aimed to determine the levels of procrastination, well-being, and academic performance of preservice teachers and correlate them.

The study population is made up of Filipino pre-service teachers. The total number of participants is 192, of which biologically 69 males and 123 females. For the sampling technique, the researcher used a simple random sample in which everyone had an equal chance of being selected for the study. For demographics, the pre-service teacher is ages 18 and above, a first- to fourth-year college student, and currently enrolled at Philippine Normal University for the academic year 2022-2023.

The survey questionnaire's collected data has been cleaned, coded, and arranged. The statistical procedure employed in correlation analysis, specifically Spearman's rho correlation, to answer the research questions and hypotheses of the study. The use of Jamovi application software has helped acquire the descriptives and correlations of the study. The researchers will formulate meanings, analyses, and interpretations using the data. As seen in Figure 2, the flowchart of the data collection and analysis processes is presented below;

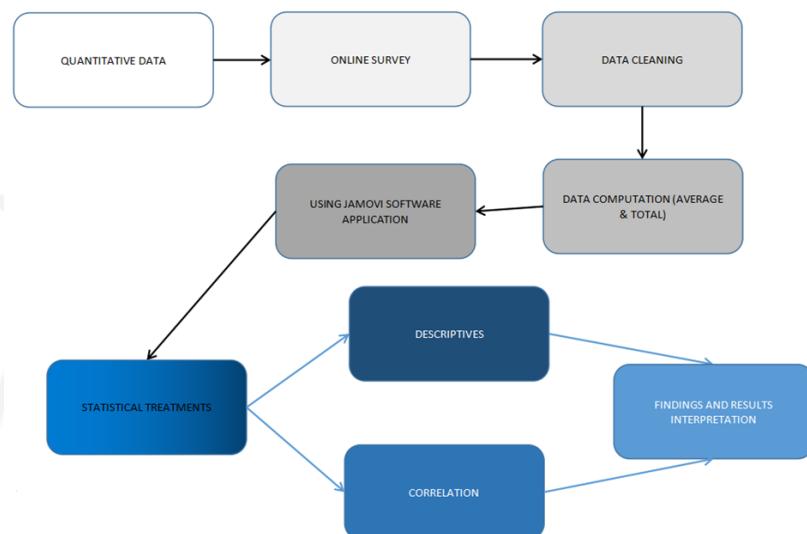


Figure 2. Data gathering procedures of procrastination, well-being, and academic performance among pre-service teachers in Blended Learning Modality

The first variable, procrastination, has been measured using the Academic Procrastination Scale (McCloskey, 2011). Developed by McCloskey (2011), it is a 25-item Likert-type measure. It was created using a multi-phase, thorough validation approach and attempts to meet this need. This scale exhibits superior psychometric properties and more accurately predicts academic outcomes than other current tools. (McCloskey, and Scielzo, 2015). The scores are computed by calculating the total of scale responses.

The short version of the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS), called SWEMWBS, was used to determine well-being as the second variable. The SWEMWBS used seven of the WEMWBS's 14 statements that discuss thoughts and feelings in connection to function more and provide a slightly distinct stand on mental well-being. The seven statements are described with five responses from 'none of the time' to 'all of the time.' Young age groups are asked to detail their experiences for the past two weeks. Although the WEMWBS was not designed to monitor mental well-being at the individual level, the study in adults indicates that WEMWBS could be used to recognize clinically meaningful change (Collins, Gibson, Parkin, Parkinson, Shave, & Dyer, 2012; Maheswaran, Weich, Powell, & Stewart-Brown, 2012). The third variable, academic performance, has been measured by their GWA. The researcher has requested the GWA of the respondents when they answer their surveys and also informed them about it.

The researcher asked the participants whether they would be interested in participating in the study to utilize voluntary participation. Participants have informed consent to collect data, such as name, age, gender, year, and section. In line with this, the collected information has remained confidential in support of Republic Act 10173, the Data Privacy Act of 2012, which protects individual personal information. (National Privacy Commission, n.d.)

The study only allowed pre-service teachers from the Philippine Normal University to participate. However, the study has some limitations. Some students do not have internet access to answer the survey. Thirty-two students answered the study but did not give the needed data, so they were excluded. Additionally, the study focuses only on pre-service teachers, who do not entirely represent all the college students in the Philippines. Second, the respondents cannot elaborate and share their experiences regarding the topic since they only answer the question on a Likert scale. Lastly, the population of pre-service teachers is mostly female.

RESULT

The study aims to know how procrastination impacts pre-service teachers and undergraduate college students enrolled at Philippine Normal University, as well as their well-being, academic performance, and relationships with one another. The data presented here in this part are the analysis procedure and the study results. The data below shows the reliability analysis, descriptive analysis, and inferential statistics with tables.

Cronbach's alpha is a measure of reliability that the researcher uses to assess the reliability of the two variables. Using Jamovi Application Version 2.3.28, the researcher used Cronbach's alpha to examine the internal consistency of the measurements, which are the Academic Procrastination Scale and the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWS). The academic procrastination scale has a score of 0.864, which is suitable for the acknowledged standard for Cronbach's alpha, which is .70. The Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWS) has a score of .875, which also has good internal consistency. These data are presented in the table below:

Table 1. Reliability table for the research variables

Scale	Cronbach's a	Internal Consistency
Academic Procrastination Scale	0.864	Good
Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWS)	0.875	Good

A total of 224 students answered the online survey through Google Forms. When the researcher continued with data cleaning, it was found that 32 students did not provide some information that was needed in the study, so the total number of students that were only included was 192. These students are undergraduate students enrolled in Philippine Normal University from different campuses of the nation during the academic year 2022-2023. The demographics of the participants are shown in Table 2.

The researcher used descriptive statistics to conduct an initial analysis of the variables. The results indicated that procrastination has a mean value of 3.02 ($SD = .599$), indicating that participants were only neutral in procrastinating, wherein they Neither agree nor disagree. While well-being has a mean value of 3.29 ($SD = .757$), this indicates that participants feel that sometimes their mental well-being is impartial or in the middle, wherein it is balanced. In terms of academic performance, it has a mean value of 1.42 ($SD = 0.188$), which indicates that participants have high academic performance. In the transmutation, it is indicated that this type of grade is very good.

Table 2. Demographic profile of the respondents ($n = 192$)

Characteristics	n (%)
Sex	
Male	69 (35.94)
Female	123 (64.06)
Age	
18 years	7 (3.64)
19 years	33 (17.19)
20 years	41 (21.35)
21 years	69 (35.94)
22 years	30 (15.62)
23 years	11 (5.73)
25 years	1 (.52)
Campus Enrolled	
Manila	146 (76.04)
North Luzon	11 (5.73)
South Luzon	5 (2.60)
Visayas	18 (9.38)
Mindanao	12 (6.25)
Level of university education	
Freshmen	43 (22.40)
Sophomore	38 (19.79)
Junior	83 (43.23)
Senior	28 (13.59)

Table 3. Levels of procrastination, well-being, and academic performance

Variables	Mean	Standard Deviation	Interpretation
Procrastination	3.02	0.599	Neither agree nor disagree
Well-being	3.29	0.757	Some of the time
Academic Performance	1.42	0.188	Very Good

A Spearman correlation was conducted to determine the relationship between the two variables, academic procrastination, and academic performance, assessed in a sample of 192 people). When the data is collected and cleaned, using Jamovi, the researcher uses the correlation matrix analysis to ascertain or evaluate how strong and closely related each feature is to the other. As shown in Table 4, Academic Procrastination and Academic performance are positively correlated, and there is a significant but very weak relationship between the two variables ($r(190) = .143$, $p = .048$). Since the two variables are positively correlated, the more academic procrastination increases, there is a 2% chance that Academic performance will also increase. A Spearman correlation has also been conducted to determine the relationship between the two variables, well-being and academic performance. Table 4 shows no correlation between the two variables ($r(190) = -.037$, $p = .612$).

A Spearman correlation has also been conducted to determine the relationship between the two variables; academic procrastination and well-being have a significant correlation ($r(190) = -.0328$, $p < .001$). There is a significant but weak relationship between the two variables, which is negatively correlated. Because of that, the more that academic procrastination increases, there is an 11% chance that the well-being of a student will decrease.

Table 4. Relationship Between Procrastination and Academic Performance

	df	Spearman's r	p-value	R^2
Academic procrastination - Academic performance	190	.143*	.048	.020449
Well-being - Academic performance	190	-.037	.612	.001369
Academic procrastination - Well-being	190	-.328***	< .001	.107584

*Correlation is significant at the 0.048 level (One-tailed)

***Correlation is significant at the 0.001 level (One-tailed)

DISCUSSION

This study suggests that procrastinating students are more likely to have poor academic performance, low self-esteem, and poor well-being, which are connected to my study. The researcher looked into the relationships between Procrastination, Well-being, and Academic Performance of undergrad pre-service teachers who studied at a Philippine Normal University under a blended learning modality, as it was a correlational study. Using two different scales and questionnaires, the researchers obtained the data through an online survey to determine whether the pre-service teachers procrastinate and how it affects their well-being and academic performance.

The results from the correlation analysis confirmed that there is a relationship between Academic Procrastination and Academic performance, which rejected the first hypothesis as the researcher found a significant but very weak relationship between the two variables ($r(190) = .143, p = .048$), indicating that the more academic procrastination increases, there is a 2% chance that Academic performance will also go up. Shokeen (2018) also finds a positive correlation between the two variables; the study suggests that procrastinating students are likelier to have low academic achievement. However, Lakshminarayan, Potdar, and Reddy (2012) also discovered a negative correlation between the two variables and concluded that students with high procrastination scores underperformed academically.

Lastly, to test the second hypothesis, The researcher looked into the relationship between academic procrastination and the well-being of undergrad pre-service teachers who studied at a Philippine Normal University under a blended learning modality. The findings show that Academic Procrastination and Well-being have the most significant correlation of all the variables that have been correlated ($r(190) = -.0328, p < .001$). There is a significant but weak relationship between the two variables, which is negatively correlated. Because of that, the more that academic procrastination increases, there is an 11% chance that the well-being of a student will decrease. Shokeen (2018) also found a significant correlation between procrastination and stress, stating that high stress among students leads to low academic achievement. A student who tends to procrastinate encounter stress, which affects their well-being because of the compiled tasks they need to accomplish. According to the study review by Suhadianto, Arifiana, et al. (2021), Academic procrastination is a common behavior that generally results in lower academic accomplishment (Kim & Seo, 2015). Academic procrastination and stress were revealed to be related in earlier research (Sirois, 2014).

Additionally, procrastination results from irrational thinking, such as believing a task is too tough, which can negatively affect mood and stress (Sirois, 2014). In a brief study by Ferrari and Dáz-Morales (2014), procrastination over a lengthy period can impact physical and mental health. The lack of crucial adjustment behaviors increased perceived stress, and inadequate coping mechanisms are to blame. The study's findings demonstrate that there are still correlations between the different variables, just as in the literature, even though the students are currently enrolled in a blended learning modality. Although the correlation is weak, being in a blended learning environment is risky since procrastination and all the detrimental repercussions that come with it come with being unsupervised by teachers and surrounded by distractions.

CONCLUSION

This study provides key insights into the relationships between procrastination, academic performance, and student well-being among pre-service teachers at the Philippine Normal University in a blended learning context. While the correlations are weak, they reveal a slight positive association between procrastination and academic performance (approximately 2%) and a significant negative

correlation with well-being (an 11% decrease). This indicates that, although students may sustain their academic performance, increased procrastination leads to heightened stress and reduced well-being. The findings highlight interventions needed to help students manage procrastination and improve their overall well-being. Additionally, the study underscores the importance of focusing on student welfare in educational settings. Future research should explore qualitative experiences with procrastination, consider mediating variables like self-esteem and time management, and include a broader participant base. This research not only enriches the literature on educational psychology but also informs teacher education programs, guiding educators to develop effective strategies that motivate and support students, ultimately enhancing the blended learning environment in the Philippines.

DECLARATION

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Dann Aibrielle D. Laureles did all the work on writing and publishing this article.

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Data access statement

The data described in this article can be accessed by contacting the author.

Declaration of Interest's statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this article.

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