

# INFLUENCE OF SOCIAL MEDIA ADDICTION ON ACADEMIC ACHIEVEMENT IN DISTANCE LEARNING: INTERVENING ROLE OF ACADEMIC PROCRASTINATION

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## ABSTRACT

Using Partial Least Squares-Structural Equation Modeling with WarpPLS, this study examines the indirect effect of the relationship between learners' social media addiction and academic achievement in distance learning as mediated by academic procrastination. The study participants were 223 Filipino students at a secondary school in Cagayan, Philippines, who were chosen using convenience sampling. Sample sizes were calculated using the inverse square root and gamma-exponential methods. The findings indicated a positive and significant relationship between social media addiction and academic procrastination. There is also a negative and significant relationship between academic procrastination and learners' academic achievement. In terms of the indirect effects of the mediation model, the relationship between social media addiction and academic achievement is fully mediated by academic procrastination. This indicates that academic procrastination substantially impacts the strength of the correlation between social media addiction and academic achievement. The findings of the undertaking were discussed regarding their implications for institutions and future research.

**Keywords:** Social media addiction, academic achievement, academic procrastination, distance learning, PLS-SEM.

## INTRODUCTION

COVID-19 is having a tremendous effect on the educational system worldwide. As a result of these difficulties, academic officials resolved to establish a new normal education. The Department of Education Philippines adopted the distance learning modality for K to 12 learners. Despite the pandemic, the department ensures that all students receive a high-quality and accessible education. Given that the mode of instruction provides learners with flexibility and other advantages, school dropout, low retention, educational success, and academic procrastination continue to be quite prevalent (Cerezo et al., 2017; Ucar et al., 2021; Baccal & Ormilla, 2021). This is because the educational learning modality leaves all responsibility for learning and achievement to students virtually. Students are given self-learning modules, take-home assignments, activities, and self-discovery exercises (Caratiquit & Pablo, 2021). Because this is the digital era, most students rely on getting information via the internet or the web.

Nevertheless, it is frequent to observe students so engaged in social media that they neglect their academic responsibilities. The negative influence of social media could be characterized as a misdirected priority in time management, which is required for students to pay close attention to their educational responsibilities. The enjoyment of social media use might cause learners' academic assignments to be delayed significantly during this new normal education, which, if not appropriately managed, can result in academic procrastination (Anierobi et al., 2021).

Several studies have discovered that procrastination relates to discomforts such as worry, self-regulating failure, and low self-efficacy (Hen, 2018; Hailikari et al., 2021; Hajifathali et al., 2021). Many of these studies have been conducted on adolescent students, suggesting that academic procrastination has a detrimental effect on students' academic progress (Goroshit, 2018; Alih & Alvarez, 2021). Academic procrastination happens when students put off performing or completing an academic task for an extended period of time without a valid reason. This occurs when students redirect their attention away from their academic responsibilities. Moreover, academic procrastination, for instance, arises when students become engaged in social media and become sidetracked from finishing academic obligations on time. According to Ipem and Okwara-Kalu (2020), students spend an excessive amount of time on social media, which causes them to become distracted from their academic activities.

The researchers scrutinized these previous studies by proposing a structural equation model to examine the intervening effect of academic procrastination in the relationship between social media addiction and academic achievement. Additionally, the proposed model was evaluated using Partial Least Squares – Structural Equation Modeling.

### **Academic Procrastination**

Academic procrastination is most defined as actively delaying or deferring work that must be performed in an academic setting (Schraw et al., 2007). It is becoming an increasing source of concern in the educational sector, especially in light of the present pandemic (Hong et al., 2021). It may be worsened in a digital learning environment because students' behavior is not expected (Elvers et al., 2003). Additionally, a previous study discovered that students who procrastinate are more likely to use social media during lectures, which could be a factor in problematic digital use (Rozgonjuk et al., 2018). This is because learners choose to spend their time interacting online and making new acquaintances on social media platforms during their distance learning sessions rather than reading instructional materials.

According to previous research, low self-efficacy, disorganization, low intrinsic motivation, inadequate effort control, and ineffective time management are all significant predictors of academic procrastination among students (Howell & Watson, 2007; Wolters et al., 2017, as cited by Melgaard et al., 2022). Students who struggle with these indicators are significantly more likely to be identified, particularly in this time of distance education. Academic procrastinators exhibit a diminished capacity for self-regulation, which impairs their success in distance education.

Students' self-regulation and time management skills are inferior in remote education, and they demonstrate lower levels of motivation and self-regulation than in traditional education (Klingsieck, 2013; Garcia-Perez et al., 2020). It is because self-regulation becomes even more critical in this situation, and one of the primary concerns of students is inadequate time management. Lack of a timetable, excessive distractions, and multitasking during homeschooling can contribute to ineffective time management. Hence, academic procrastinators have a lower capacity for self-regulation, which has a detrimental effect on performance in online courses (Rasheed et al., 2020).

Also, many studies reported that academic procrastination has been associated with poor learning outcomes and psychological difficulties (Hussain & Sultan, 2010; Klingsieck et al., 2012; Dikmen & Bahadir, 2021; Rajapakshe, 2021) and may also affect assignment completion times and dropout rates from distance learning courses (Grunschel et al., 2012). Furthermore, when academic procrastinators are learning at a distance, they are often inspired to begin but then want to quit after some time (Michinov et al., 2011).

## **Social Media Addiction**

Social media addiction has been a growing issue, with a notably high prevalence among learners (Yakut & Kuru, 2020; Marengo et al., 2022). A variety of advantages are provided by social media, such as making it easy for undergraduates to communicate information and supporting collaborative learning (Adjin-Tettey et al., 2022). Likewise, previous research indicates that social media allows learners to share instructional resources more quickly. When utilized properly, this can assist the learning process of learners (Okeke & Anierobi, 2020; Adjin-Tettey et al., 2022). According to a previous study, social media and the internet positively affect students' learning outcomes and social well-being (Sandeep et al., 2019).

On the other hand, some studies oppositely reported that students' excessive use of social media had been found to have a negative impact on a range of aspects of their lives (Brailovskaia et al., 2021). Previous studies discovered that social media addiction had a negative effect on students' academic performance, health, interpersonal connections, and general well-being (Alaika et al., 2020; Whelan et al., 2020).

Social media addiction could also result in bad eating habits, insomnia, brain drain, despondency, and academic failure (Haand & Shuwang, 2020). Besides, during this new normal education, students perceived an inability to manage their time spent on social media platforms and the amount of time spent on platforms for academic purposes.

Furthermore, internet addiction was connected with academic procrastination among learners (Karatas, 2015; Azizi et al., 2019; Nwosu et al., 2020). Meanwhile, Hayat et al. (2020) also discovered a significant association between internet addiction and academic procrastination among Shiraz University medical students. Male students use the internet at a higher rate than female students. Uztermur (2020) study discovered that social media addiction is negatively associated with academic achievement but positively associated with academic procrastination.

## **Academic Achievement**

Academic achievement results from getting a quality education, and it continues to be vital to the development of the learners and society. Crede et al. (2015) defined academic success as the intellectual accomplishment measured by the General Average (GA) reported on students' most recent report cards. The grades were tallied and averaged as measures of academic proficiency based on the marks received in each course within that quarter.

Poor academic performance is generally associated with academic procrastination in the prior literature (Akinsola et al., 2007; Elvers et al., 2003; Moon & Illingworth, 2005; Karatas, 2015). Previous research indicates that students' reports of procrastination suggest a significant negative association with their academic performance. The more students procrastinate, the lower their grades are, and procrastinators have less motivation to succeed (Moon & Illingworth 2005; Steel 2007, Karatas, 2015).

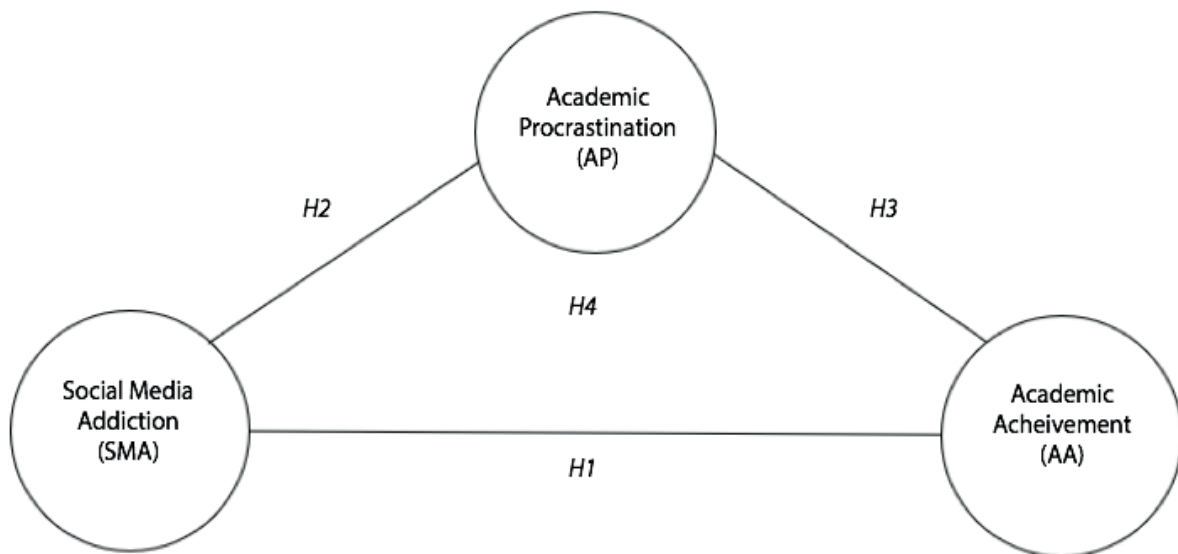
Also, numerous research established a correlation between social media addiction and students' academic performance (Anierobi et al., 2021, Ipem & Okwara-Kalu, 2020; Kolhar et al., 2021; Durak et al., 2022). Another study discovered that academic institutions might use social media to increase student involvement, enhance communication, foster a positive attitude toward learning, and inspire students to learn (Kabilan et al., 2010, Cao & Tian, 2020). Additionally, it was positively associated with academic success among learners (Al-Rahmi et al., 2018). On the other hand, some study suggests that social media addiction has no correlation with academic success (Rashid & Asghar, 2016). Thus, the relationship between social media addiction and academic achievement intervened by academic procrastination is the focus of this study.

## **PURPOSE OF THE STUDY**

This study examined the indirect effect of the relationship between learners' social media addiction and academic achievement in distance learning as mediated by academic procrastination. As a result, relevant literature and studies established the following hypothesized relationships.

- Hypothesis 1. Social media addiction is significantly related to academic performance.
- Hypothesis 2. Social media addiction is significantly related to academic procrastination.
- Hypothesis 3. Academic procrastination is significantly related to academic performance.
- Hypothesis 4. Academic procrastination mediates the relationship between social media addiction and academic performance.

Additionally, the following research structural equation model was developed considering the analyzed literature and investigations.



**Figure 1.** Proposed Structural Equation Model of the Study

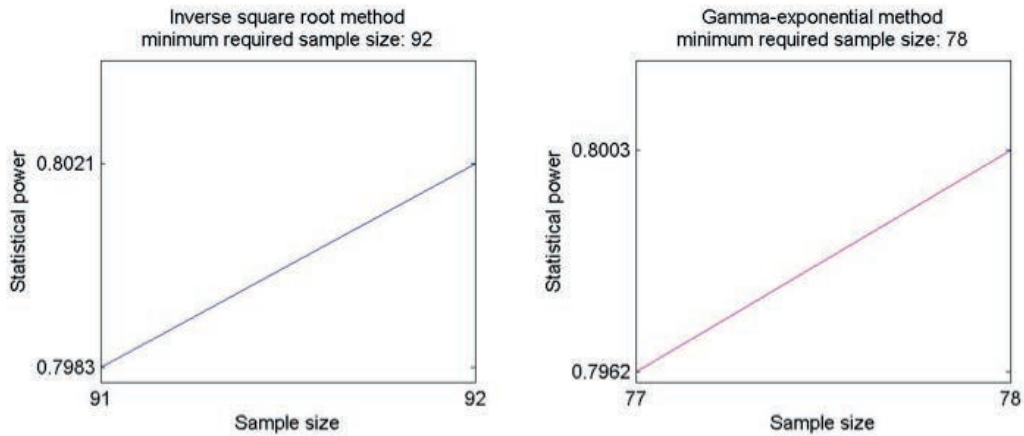
## METHOD

The study was quantitative, and it employed a causal research approach. It investigates the indirect effect of the relationship between social media addiction and achievement through academic procrastination. Additionally, the Partial Least Squares – Structural Equation Modeling (PLS-SEM) method was used in conjunction with the WapPLS 7.0 software package to estimate the parameters of the mediation model. The software is also a tool for evaluating the reliability and validity of structural equation models using the Partial Least Squares technique.

## Participants

The respondents were the 223 K to 12 Filipino students enrolled in an outstanding secondary school in the Division of Cagayan, located in Lal-lo, Cagayan, Philippines. The respondents of the study were chosen through the convenience sampling method. The data collection period began in September 2021 and concluded in January 2022.

The inverse square root and the gamma-exponential methods were used to estimate the required minimum sample size of the model based on the following elements: the minimal absolute significant path coefficient, the significance level used for hypothesis testing, and the power level of the model. The inverse square root method overestimates the required sample size, but the gamma-exponential method provides a more precise estimation, making it necessary to report both results. (Kock, 2017). Using WarpPLS 7.0, the inverse-square root method recommended 92 samples, whereas the gamma-exponential method proposed 78 samples. As a result, the required sample size for the PLS model must be 92–78. The study has 223 respondents; thus, the sample size is sufficient to explain the structural model's conclusions (See Figure 2).



**Figure 2.** Sample Size Estimation using Inverse square root and Gamma-exponential method

As illustrated in Table 1, the majority of the respondents were female (59.6 %). In addition, 56.5 % of respondents were 17-18 years of age. In terms of track, most respondents (90.1 %) are on the academic track. In terms of class sections, most respondents were in HUMSS 1 (22.4 %) and STEM 1 (21.5 %). Moreover, most respondents have less than 10, 000 (74.4 %) family monthly income.

**Table 1.** Demographic Characteristics of the Respondents

Levels	Frequency	Percent	Levels	Frequency	Percent
Sex			Class Section		
Female	133	59.6	ABM	36	16.1
Male	90	40.4	HUMSS 1	50	22.4
Age			HUMSS 2	35	15.7
16-below	85	38.1	STEM 1	48	21.5
17-18	126	56.5	STEM 2	34	15.2
19-20	8	3.6	TVL - CSS	20	9.0
21-above	4	1.8	Family Monthly Income		
Track			10,000-29,999	43	19.3
Academic Track	201	90.1	30,000- 59,000	10	4.5
Arts and Design Track	2	0.9	60,000 and above	4	1.8
TVL Track	20	9.0	Less than 10, 000	166	74.4

### Data Collection and Analysis

The data collected for this study were analyzed regarding social media addiction, academic procrastination, and academic achievement. The WarpPLS 7.0 software package was employed to estimate the parameters of the mediation model. Partial Least Squares is the second-generation statistical analysis, allowing for correlations between a large number of variables, including latent constructs (Chin et al., 2003; Haenlein & Kaplan, 2004; Oluyinka et al., 2021). PLS-SEM is a variance-based estimating technique used to determine the reliability and validity of constructs while also evaluating their correlations (Reinartz et al., 2009). Additionally, PLS-SEM has been a highly successful tool for establishing causal associations between variables (Hair et al., 2011; Hair et al., 2012). It is a technique for developing structural equation models based on the variance that is fast gaining prominence in social sciences (Issa & Hamm, 2017). Meanwhile, the Jamovi 2.2.2 software package was used for supplementary purposes, most notably in the summary of participant measures. The proposed mediation analysis procedure of Preacher and Hayes (2008) was employed in the study.

## The Scale

### *Social media addiction scale*

The social media addiction of the learners was measured using the Bergen Social Media Addiction Scale (BSMAS) developed by Andreassen et al. (2016). The scale comprised six items which were proposed by Griffiths (2005) and classified into six core components, namely: salience, mood, modification, tolerance, withdrawal conflict, and relapse (e.g., “I use a lot of time thinking about or planning using social media.”). It utilized a 5-point Likert scale rated 5 (Very Rarely) and 1 (Very Often). The scale is a well-known instrument to assess social addiction over the past years. The Bergen Social Media Addiction Scale (BSMAS) is a redesigned version of the Bergen Facebook Addiction Scale (BFAS) (Andreassen et al., 2012; Andreassen et al., 2016). The BFAS has been translated into several languages and has been shown to have good psychometric properties in several studies (Andreassen et al., 2013; Andreassen et al., 2012; Andreassen, 2015; Ulke et al., 2017; Ahmed & Hossain, 2018; Mahmood et al., 2020). The adaptation of BSMAS replaces the term “social media” with “Facebook and the like.” In the original study, the BSMAS demonstrated a high degree of Cronbach’s alpha reliability coefficient of 0.88. Thus, the scale is both relevant and reliable for assessing the social media addiction of the students.

### *Academic procrastination scale*

The students’ academic procrastination was measured using the Academic Procrastination Scale-Short Form (APS-S) (McCloskey, 2011, as cited by Yockey, 2016). The scale is a widely used 5-item scale for assessing students’ academic procrastination (e.g., “I get distracted by other, more fun, things when I am supposed to work on schoolwork.”) with an internal consistency reliability estimate of 0.87. It utilized a 5-point Likert scale rated 5 (Agree) and 1 (Disagree). Yockey (2016) validated the instrument with other measures of procrastination, the 16-item Tuckman Procrastination Scale of Tuckman (1991) and the 12-item Procrastination Assessment Scale–Students of Solomon and Rothblum (1984), and the results suggested that the shorter APS-S has a strong association with PASS and Tuckman Scale. Thus, the scale is valid and reliable for assessing students’ academic procrastination.

### *Academic achievement*

The learners’ academic performance was determined using their General Average (GA) from the first quarter of the school year 2021-2022. Reliability and validity tests were also performed using WarpPLS to ensure the instruments were acceptable and trustworthy for the current study (See Tables 2 & 3).

## FINDINGS

### **Reliability and Validity Measurements**

Convergent and discriminant validity are two often utilized types of validity assessment in PLS-based data analysis. As Barclay et al. (1995) defined, discriminant validity is the degree to which constructs inside a model differ. For each variable, the Average Variation Extracted (AVE) square root should be greater than the square root of any of the variables’ correlations. (Fornell & Larcker, 1981; Rasoolimanesh, 2022). AVE square roots and cross-loadings tests are widely employed to assess the discriminant validity of a PLS model.

Internal consistency is a concept that refers to the evaluation of a hypothesis’s convergent validity. Correlation loadings between items and their variables validate the item’s reliability (Barclay et al., 1995; Rasoolimanesh, 2022). A factor loading should be higher than 0.6 to indicate that the factor takes an acceptable variance from the variable. Nevertheless, an item loading of 0.5 is acceptable as long as the loading of other factors within the same construct is high (Chin, 1998; Keil et al., 2000). Composite reliability is frequently used in structural equation modeling to measure build dependability (Fornell and Larcker, 1981).

Additionally, the Average Variation Extracted (AVE) measurement compares variance explained by items to variance produced by measurement error (Chin, 1998). Fornell and Larcker (1981) established that convergent validity could be assured if AVE is higher than 0.5; however, we can accept 0.4 when the

composite reliability is more than 0.6. As seen in Table 2, the results show that the measures utilized in the study had discriminant validity. Additionally, Table 3 reveals that the variables are inside the convergent validity ranges.

**Table 2.** Results of the Square Roots of AVE Coefficients and Correlation Coefficients

	SMA	AP	AA
SMA	(0.715)		
AP	0.431	(0.737)	
AA	0.015	-0.188	(1.000)

*Non-diagonal elements represent construct correlation, while diagonal elements are AVE square roots.*

**Table 3.** Results of the Item Loadings, Average Variation Extracted, and Reliability of the Variables

Constructs/Items	Item Loading	AVE	CR	Cronbach Alpha
<b>Social Media Addiction (SMA)</b>				
1. I spent a lot of time thinking about social media or planned use of social media	0.680	0.511	0.862	0.808
2. I felt an urge to use social media more and more.	0.692			
3. I used social media to forget about personal problems.	0.706			
4. I tried to cut down on the use of social media without success.	0.754			
5. I become restless or troubled if you have been prohibited from using social media.	0.753			
6. I used social media so much that it has had a negative impact on your job/studies.	0.700			
<b>Academic Procrastination (AP)</b>				
1. I put off projects until the last minute.	0.624	0.500	0.543	0.787
2. I know I should work on schoolwork, but I just don't do it.	0.802			
3. I get distracted by other, more fun, things when I am supposed to work on schoolwork.	0.768			
4. When given an assignment, I usually put it away and forget about it until it is almost due.	0.714			
5. I frequently find myself putting important deadlines off.	0.764			
<b>Academic Achievement (AA)</b>				
GA First Quarter	1.000	1.000	1.000	1.000

*Each item is significant at ( $p < .001$ ). AVE stands for average variance extracted, and CR stands for composite reliability*

### Model Fit and Quality Indices

The Goodness of Fit Model can be employed to evaluate the structural equation model. The model's value is determined by comparing it to its standard deviation. Several different measures were employed to determine the model's goodness of fit using the WarpPLS analysis (Wardhani et al., 2020). Table 4 illustrates that the structural equation model is fit and that the quality index requirements were met using the criteria provided. Through the results, it can assume that the model's Goodness of Fit was acceptable. Thus, the proposed model that has been developed can be utilized to test hypotheses.

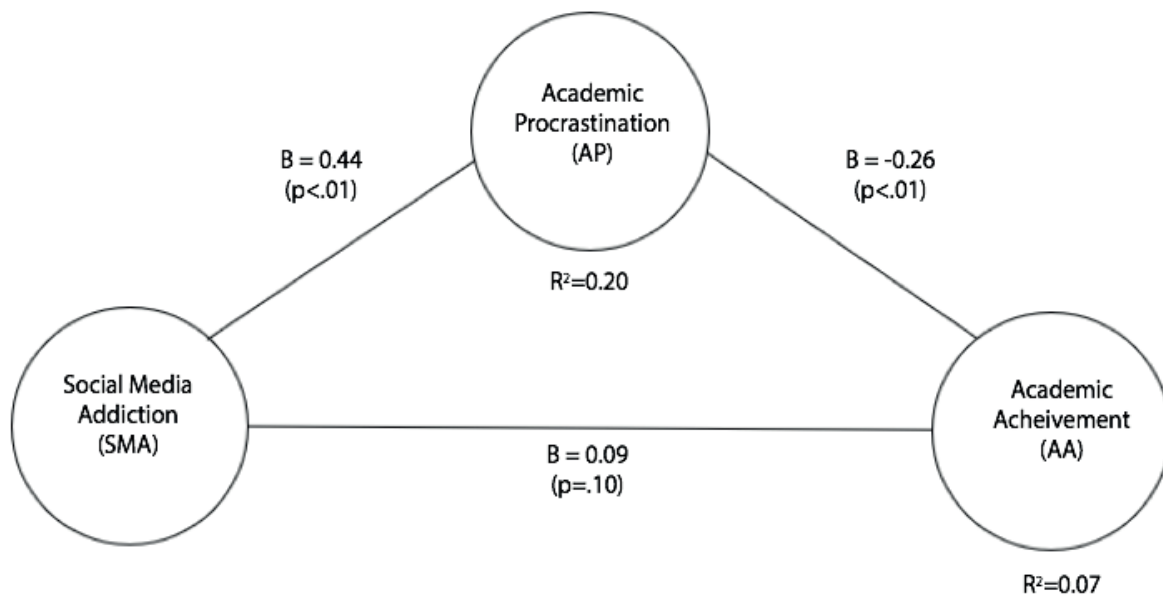
**Table 4.** Results of the Model Fit and Quality Indices

Model Fit and Quality Indices	Criteria	Value	Interpretation
Average Path coefficient (APC)	Accepted if $p < 0.05$	0.262, $p < 0.001$	Acceptable
Average R-squared (ARS)	Accepted if $p < 0.05$	0.131, $p = 0.012$	Acceptable
Average adjusted R-squared	Accepted if $p < 0.05$	0.125, $p = 0.015$	Acceptable
Average block VIF (AVIF)	Accepted if $\leq 5$	1.026	Acceptable
Average full collinearity VIF	Accepted if $\leq 5$	1.193	Acceptable
Tenenhous GoF (GoF)	Small $> 0.1$ , Medium $> 0.25$ , Large $> 0.36$	0.299	Medium

### Mediation Model Results

The path coefficients, coefficient of determination ( $R^2$ ), and effect sizes are calculated to assess the structural equation model. Figure 3 depicts the PLS path model in more detail. It is represented by the beta coefficients ( $\beta$ ), which are path coefficients in the mediation model.

The beta coefficient of the direct relationship between social media addiction and academic achievement is positive and not significant ( $\beta = 0.09$ , NS). Also, the beta coefficient of the relationship between social media addiction and academic procrastination is positive and significant ( $\beta = 0.44$ ,  $p < .01$ ). On the other hand, academic procrastination and academic achievement have a negative and significant relationship ( $\beta = -0.26$ ,  $p < .01$ ).



**Figure 3.** Results of the Mediation Model

### Full Collinearity VIFs Assessment

Multiple regression models with a high degree of multicollinearity make determining the correlation between independent and dependent variables difficult. According to a rule of thumb obtained for SEM analyses, full collinearity variance inflation factors (VIFs) of 3.3 or less suggest that the model is not multicollinear and that no common method bias exists (Kock & Lynn, 2012; Kock, 2015; Lacap, 2019). On the other hand, prior studies mentioned that VIFs should be fewer than 5, although less than 10 is still acceptable and a more critical criterion (Hair et al., 1987; 2009; Kline, 1998; Kline, 2015; Kock, 2014). According to the results in Table 5, the VIFs of the variables are within acceptable ranges. This indicates that the model is not multicollinear and does not show common method bias.



**Table 5.** Results of Full Collinearity VIFs Assessment

SMA	AP	AA
1.242	1.287	1.049

### Direct and Indirect Effects

Table 6 depicts the results of the direct and indirect effects of the structural equation model. The analyses show that the direct relationship between social media addiction and academic achievement has no significant effect ( $\beta = 0.086$ , NS) with the effect size of small (Cohen's  $f^2 = 0.004$ ). Hence, H1 is not supported. A positive and significant association exists between the two constructs regarding the relationship between social media addiction and academic procrastination ( $\beta = 0.442$ ,  $p < .001$ ). The effect size of path SMA  $\Rightarrow$  AP is medium (Cohen's  $f^2 = 0.195$ ). Thus, H2 is supported. Likewise, the relationship between academic procrastination and academic achievement has a negative and significant result ( $\beta = -0.257$ ,  $p < .001$ ) with an effect size of small (Cohen's  $f^2 = 0.062$ ). Therefore, H3 is supported.

In terms of the indirect effect of the structural equation model, the analyses show that the relationship between social media addiction and academic achievement is mediated by academic procrastination ( $\beta = -0.113$ ,  $p = .008$ ). The effect size of path SMA  $\Rightarrow$  AP  $\Rightarrow$  AA is small (Cohen's  $f^2 = 0.005$ ). Therefore, H4 is supported.

**Table 6.** Results of the Direct and Indirect Effects

Type	Effect	$\beta$	SE	p-value	$f^2$
Indirect	H4: SMA $\Rightarrow$ AP $\Rightarrow$ AA	-0.113	0.046	0.008	0.005
Component	H2: SMA $\Rightarrow$ AP	0.442	0.062	<0.001	0.195
	H3: AP $\Rightarrow$ AA	-0.257	0.064	<0.001	0.062
Direct	H1: SMA $\Rightarrow$ AA	0.086	0.066	0.096	0.004

$\beta$ =standardized path coefficient,  $f^2$  = Cohen's (1988) effect size: 0.02=small, 0.15=medium, 0.35=large; SE = standard error

## DISCUSSIONS AND CONCLUSION

The study revealed that social media addiction is not directly related to academic achievement. This implies that academic procrastination as the intervening variable causes the relationship between the two constructs. (Moon & Illingworth, 2005; Karatas, 2015; Azizi et al, 2019; Abbasi et al., 2021; Zimmer, 2022). Pekpazar et al. (2021) discovered that procrastination functions as a mediator between social media addiction, such as Instagram, and academic accomplishment. Procrastination hinders students from exhibiting their real potential throughout their academic careers. Meanwhile, Khalifa (2021) and Uztermur (2020) found that procrastination affects the relationship between social media addiction and educational aspirations. Students who excelled academically but were prone to procrastination could not arrange themselves and fulfill their academic goals. With this, academically disadvantaged students may exhibit poor academic performance, poor learning habits, and a lack of drive to gain new skills and knowledge. Academic achievement declines when a student is unable to regulate procrastination.

Furthermore, social media addiction significantly influences academic procrastination. This means that when learners spend too much time on social media are likely to have academic procrastination. Due to distance learning and homeschooling, learners are addicted and distracted by social media. The higher the social media addiction, the higher the tendency of learners to procrastinate their academic responsibilities in this new normal education. Learners who procrastinate lose their educational priorities, self-regulation, and time management (Melgaard et al., 2022, Lewis, 2022; Gokalp et al., 2022). Prior studies discovered that social media addiction had an unfavorable effect on students' academic performance and overall well-being (Alaika et al., 2020; Whelan et al., 2020; Navarro-Martinez & Pena-Acuna, 2022). Additionally, Haand and Shuwang (2020) assert also that social media addiction might result in sleep problems, depression, and academic failure. This finding is supported by other studies (Li et al, 2020; Aalbers et al., 2021; Wartberg et al, 2021).

Moreover, the study found that academic procrastination negatively influences learners' academic performance. This implies that the more learners procrastinate their educational responsibilities, the lower their academic grades. When the deadline for an academic task approaches, students who procrastinate experience heightened frustration and worry, resulting in low scores, decreased motivation and productivity, incompletion with academic assignments, and low quality of intellectual outputs. Prior studies also found that this can also lead to severe difficulties such as low self-esteem and depression in some cases (Kurtovic et al., 2019). Academic procrastination has previously been linked to various academic concerns, including lower grades, increased academic misconduct, increased course failures, increased course withdrawals, and a greater likelihood of dropping out (Sarid et al., 2021). Other studies support this finding (Baars et al., 2021; Scheunemann et al., 2021; Khalifa, 2021).

According to Preacher and Hayes (2008), a statistically and practically significant indirect effect is a fundamental component of mediation. Despite the insignificant direct effect, the study revealed a significant indirect effect on the relationship between social media addiction and academic achievement. This means that the relationship between the two constructs is fully mediated by academic procrastination. The results imply that social media addiction influences learners' academic procrastination, leading to poor academic achievement. The more learners spend their time on social media, the more they procrastinate their educational tasks, thus getting low grades. Academic procrastination plays a significant role in the context of social media addiction among students in this new normal education, which impacts their educational progress. Other studies are related to this finding (Uztermur, 2020; Nwosu et al., 2020; Anierobi et al., 2021; Koppenborg & Klingsieck, 2022; Kryshko et al., 2022; Cemiloglu et al., 2022).

In conclusion, the undertaking discovered that social media addiction of learners leads to academic procrastination. When students spend excessive time on social media, they are more prone to academic procrastination. In addition, the current study revealed that academic procrastination impacts the educational accomplishment of learners in distance learning. As a result, the more students put off academic work, the lower their grades. As the educational deadline approaches, students who procrastinate face increased aggravation and anxiety, resulting in low grades, performance, and non-compliance with academic responsibilities. Furthermore, the undertaking showed that academic procrastination fully mediates the relationship between social media addiction and the learners' academic achievement in this time of new normal education.

According to the findings and conclusion of the study, the researchers recommend that future research be conducted to determine the additional factors that influence social media addiction, academic procrastination, and academic achievement. Similarly, future studies may replicate the study and increase the number of participating students.

Despite social media distractions, students should improve their self-regulation, time management skills, and ability to create and attain educational goals to lessen academic procrastination. Additionally, teachers should assign homework with reasonable due dates and hold students accountable for doing it on time. Apart from the fact that remote learning is a self-paced mode of instruction, teachers should consider the level of difficulty and quantity of educational activities assigned to students to reduce procrastination and increase learners' motivation to complete the assignments on time. Together with the guidance counselor, the classroom advisers should help the students overcome academic procrastination due to social media addiction. On the other hand, parents should teach their children about the adverse effects of social media addiction, which may cause them to procrastinate and lose concentration on their academic activities.

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