

# **SOCIAL MEDIA USAGE PATTERNS AND ACADEMIC PERFORMANCE OF MANAGEMENT GRADUATES: A MEDIATING ROLE OF STUDY HABITS**

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## **Abstract**

The study was intended to assess the mediation effect of study habits in the link between social media usage patterns and academic performance. A total of 406 students were selected conveniently to collect the data from different colleges in the state of Andhra Pradesh. a structured questionnaire was developed with the established scales for the variables. structural equation Modeling has been adopted for the analysis and interpretation using SPSS and AMOS. The results of the study stated that social media usage patterns were significantly influencing study habits, and negatively influencing academic performance. While academic performance was influenced by the study habits of the students largely. Further, study habits were mediating the relationship between social media usage patterns and academic performance.

**Keywords:** Social Media Usage Patterns, Student Study Habits, Academic Performance, SEM, CFA.

## **INTRODUCTION**

At present, the forthcoming innovations/ technologies have attempted to satisfy their parts in students' academic outcomes by prompting the generous medium of collaboration in the present world and in educating and learning. Throughout the years' experts in education have investigated the energizing opportunities, presented to institutions, educators, instructors, and students through online social media sites. Social media sites have changed the manner of student cooperation and had realized the rise of an open social stage, for example, different social media sites that enable the occupants to interface with one another and make the world a worldwide town. Social media sites, for example, are being utilized for learning with the end goal of helpful collaboration with different students and conceivably with others outside classes, for example, students of a similar theme and subject specialists. The mechanism of these sites affected the learning concept of students and the teaching methods of educators. In today's world of education, has influenced educators, students, and others to participate with one another in the undertakings of information development in learning and instructing situations (Knight-McCord et al., 2016).

Social media can reinforce the class materials and accordingly affect the dialogues, community work, and creating teachers and analysts are always experimenting with different things with upcoming technologies, wanting to inculcate basic reasoning abilities, coordinated effort, and information that these social media sites provide by and large to the entire world, suggests a need to practically think about its advantages, effects, and dangers of transparency and requirement for progressing collaboration with students, with the end goal to address their worries and manage issues during the utilization of social media sites as they emerge (Asiedu, 2017).

In the universe, the use of social media among consumers continues to involve a major part in student life, and the use of this media among students continues to expand in the future. In particular, most students spend almost all of their time on social media, while paying less attention to their educational obligations and spend a lot of time in these locations, studying or communicating with each other. The direction is dangerous because parents are very worried that their children are addicted to using social media sites that they usually pay to socialize. And talk to whomever they really require. The use of social media by students in a class (Education) is aggregate (knowledge about doing many activities at one time). This type of participation distorts thinking, as some students use social media to send text messages, explore their books, or do homework that distracts them from their educational activities. It has also turned out the character of a large number of students who walk on the streets connected to mobiles beyond actually being aware of the current situation. The next problem for students involved in using social media is the motivation for their academic activities. These students choose to be in the world of potential rather than see some general curriculum such as academic forums and group gatherings (Mpungose, 2020).

Young students tend to experience mood swings and self-control on a regular basis which automatically influences their appearance and often triggers anxiety or suffering in their personality as individuals. Thinking this way can sometimes cause dissatisfaction. Most university professors and the wider community are concerned that there are strict procedures or misuse of high-tech facilities developed by many institutional authorities. In this case, this study will explore the impact of social media on mental behavior and student academic performance (Ahn, 2011).

This study explores the link between social media usage patterns, study habits, and student academic performance. This study is important for understanding the relationship between social media usage patterns, and the impact of social media usage patterns, on academic performance to determine student attitudes in education.

## LITERATURE REVIEW

### **Interrelationships among social media usage patterns, Study Habits, and Academic Performance**

Alghizzawi et al., (2018) have explored the impact of social media networking sites on academic performance through their personal observation and follow-ups of these sites

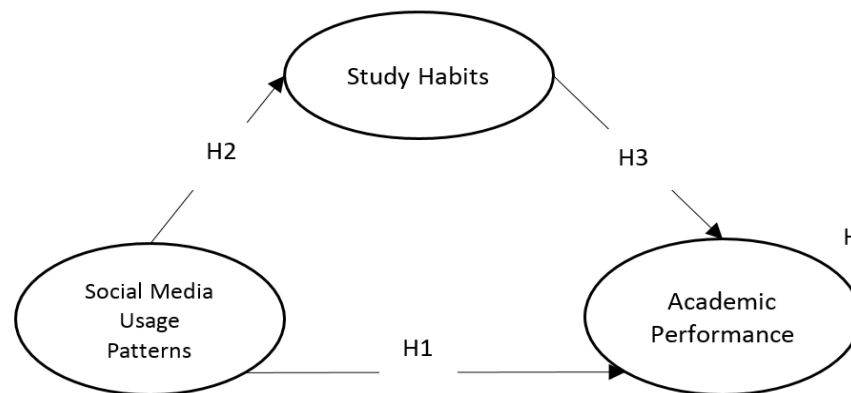
especially Facebook in the Middle East and the world. They revealed that most numbers of university students were addicted to Facebook and there was a negative effect of these networks on their academic performance. Paul et al., (2012) have conducted a study on the impact of social networking sites on the academic performance of business students at state universities. SEM was used to analyze direct and indirect effects. The results stated that there was a significant negative effect of social media networking sites on the student's academic performance. Additionally, an inverse relationship was found between time spent on social media increase and the academic performance of the students.

(van Vu, 2021), have made an investigation to identify the impact of social networking sites on student habits by taking the student responses from different universities of Hanoi. A total of 225 student responses were found valid to make an analysis. Analysis of the data was carried out using frequencies, percentages, means, *t*-tests, and Pearson correlation statistics. The findings revealed that students' level of using social networking sites had a negative influence on their study habits and their interpersonal relationships. Similar results were found Tezci & Icen, (2018). Even a study Ezeji & Ezeji, (2018), which has examined the impact of social media on the study habits of students of Alvan Ikoku Federal College of Education, Owerri. The data were collected using a structured questionnaire with suitable statistical techniques like frequencies, descriptive and Spearman's Rho were used. The results showed that there was an impact of social media on the study habits of the students in the study area. These results were matched to the study of Gok, (2016), which was carried out to test the negative and positive effects of social media on students' study habits by conducting a study on a total of 220 students from vocational higher education. A standard questionnaire was designed and distributed to collect the data from the students. The results indicated that social media networking negatively influenced the study habits among the students.

(Tus, 2020), have tested the impact of students' study habits on their academic performance. Data were collected from 130 student respondents related to Catholic senior Schools in Bulacan, Philippines. Results were analyzed and described as there was an influence of students' study habits on their academic performance. (Chuks Danie, 2017) have investigated the effect of reading habits on the academic performance of students of Afe Babalola University, Ado-Ekiti, Nigeria. The study used a structured questionnaire to collect the data and analyzed it with frequency, descriptive and inferential tools. The study result revealed that the majority of the students were studying only at the examination time. Further, the study proved the impact of reading habits on the academic performance of the students. Rabia et al., (2017) examined the association between students' study habits and academic performance. A total of 270 responses were collected from two reputed colleges in Sialkot. A Chi-square test was applied to assess the data. The results postulate that there was an association between study habits and academic performance. The results were proved by Owusu-Acheaw & Larson, (2014), who studied reading habits among students and their effects on student academic performance. The data were collected from 1000 student respondents located Eastern Region of Ghana. A questionnaire was used for the data collection. The study confirmed

that reading habit has an influence on academic performance and there is a relationship between reading habit and academic performance.

Many studies were found on the relationship between social media and study habits (Ezeji & Ezeji, 2018; Gok, 2016; Tezci & Icen, 2018; van Vu, 2021). Studies also existed that explained the relationship between social media usage and academic performance (Alghizzawi et al., 2018; Paul et al., 2012). studies on the relationship between study habits and academic performance (Chuks Danie, 2017; Owusu-Acheaw & Larson, 2014; Rabia et al., 2017) were found in the literature. But no study was found with the intervention of student study habits in the relationship between social networking sites and academic performance. Hence, the research model is proposed with all the interconnections.



**Figure 1: Hypothesized Conceptual Model**

- H1: Social Media Usage patterns positively influence students' academic performance*
- H2: Social Media Usage patterns positively influence student's study habits*
- H3: Student's study habits positively influence student's academic performance*
- H4: Study habits mediate the relationship between social Media Usage patterns and academic performance*

## **MATERIALS AND METHODS**

### **Methods:**

The study adopted a mixed approach for assessing the impact of social media on academic performance with the mediation of study habits. The researcher implemented a Convenience sampling technique for the collection of the sample data.

### **Participants:**

A total of 450 student respondents were approached and 406 responses were identified as suitable to execute the analysis.

**Instruments:**

The questionnaire was designed on a 5-point Likert scale ranging from strongly disagree to strongly agree. Suitable scales were adopted from established sources.

*Social Networking Usage Questionnaire:* A 25-item scale developed by (Gupta & Bashir, 2018) was adopted for the study to measure mobile learning practices among student respondents.

*Student study habits scale:* A eight-item scale established by (Magulod, 2019) was adapted and slightly adjusted to suit the present study requirement.

*Academic performance scale:* A eight-item scale developed by (Ramprathap & Sriram, 2017) was adopted to assess the student’s academic performance.

**RESULTS AND DISCUSSION**

The data analysis was carried out using different statistical tools and techniques. Reliability for assessing the internal consistency, validity for assessing the predictability of the measure, and Structural equation modeling for assessing the direct and indirect effects with model fit values were applied using SPSS and AMOS.

**Model fit, Reliability, and Validity Measures**

A model was developed by constructing the study variables such as social networking site dimensions, study habits, and academic performance. This model is then verified with fitness, reliability, and validity. The model fit was adjudged with the help of various important fit indices like Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Root Mean Square Error Approximation (RMSEA), and chi-square/df ratio.

**Table 2: Model fit measures**

Measure	$\chi^2$	Df	$\chi^2/df$	GFI	CFI	RMSEA
Estimate	427.860	74	5.68	0.958	0.976	0.045
Threshold			1-8	>0.90	>0.95	<0.08

The results of the model fit measures show that the GFI value of 0.958 and RMSEA value of 0.045 are meeting requirements of >0.9 and <0.045 denotes that the sample is the approximation of the total population. The resulted CFI value of 0.976 was also found greater than 0.95 indicating that the model is a better fit and the chi-square/df value of 5.69 reflects the model acceptance (Hair Jr. et al., 2014; Hu L.-T. & Bentler P. M., 1999).

**Convergent and discriminant validity**

**Table 3: Convergent and discriminant validity**

Variables	CR	AVE	MSV	SN_S	S_H	A_P
SM_U	0.919	0.739	0.224	<b>0.860</b>		
S_H	0.887	0.610	0.505	0.474	<b>0.781</b>	
A_P	0.877	0.589	0.505	0.066	0.711	<b>0.768</b>

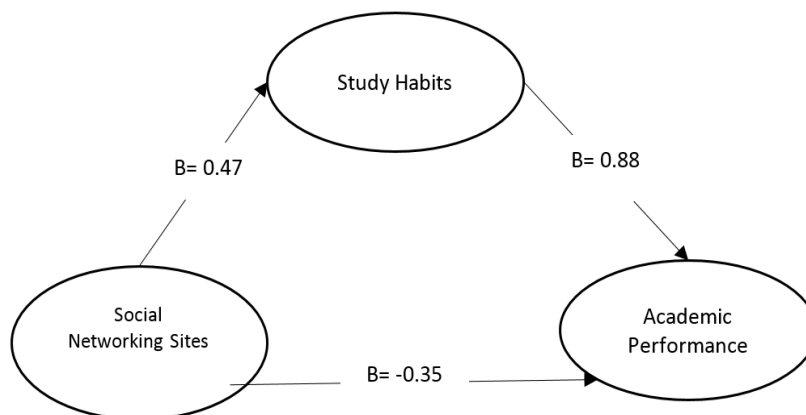
**Construct Reliability** sometimes called composite reliability is a measure of internal consistency of a particular scale (Netemeyer et al., 2003). The construct reliability values for all the constructs like social networking sites, study habits, and academic performance are above the standard requirement of  $>0.70$ . It denotes that the measurement model possesses reliability.

**Convergent Validity** was assessed through standardized factor loadings and Average Variance Extracted (AVE). The resulted standard estimates of all the items of the measurement model and AVE values of the constructs range between 0.58 to 0.73 and 0.50 to 0.70 respectively, also meeting the minimum requirement of 0.50. It indicates that measured variables of concern construct share a high proportion of variance in common (Byrne & van de Vijver, 2010; Hair Jr. et al., 2014).

**Discriminant Validity** was judged through comparison of Maximum Shared variance (MSV) with AVE or Square root of AVE with Inter construct correlations. The MSV values for all the constructs were found greater than the AVE values of the concerned constructs and the square root of the AVE values of all the constructs were greater than inter-construct correlations. This indicates that the constructs were dissimilar in the model (Byrne & van de Vijver, 2010; Hair Jr. et al., 2014).

### Structural Equation Modeling Results

The structural model explains the relationship among constructs. The model explains the correlational links among observed variables like social media usage patterns and study habits and academic performance. Social media usage patterns are treated as an exogenous variable, academic performance as an endogenous variable and study habits are treated as mediating variables.



**Figure 2: Validated Model**

### Direct Effects

The direct effects are the paths from the independent variable to the dependent variable without any intervention variable. The direct effects and hypotheses results connected to the structural model are presented in Table 4.



**Table 4: Direct effects**

Path	Estimate	SE	CR	P-Value	Result
SM_U --> A_P	-.351	.051	-6.266	***	Supported
SM_U --> S_H	.470	.043	8.662	***	supported
S_H --> A_P	.880	.079	12.861	***	Supported

The standardized coefficient value -0.317 for the paths from social media usage patterns to academic performance (p-value 0.000) denotes that the social media usage patterns were having a direct negative effect on academic performance. Hence, H1 is not supported. While the standard coefficient value of 0.369 for the path SM\_U --> S\_H was found significant (p-value 0.000) indicates that social media usage patterns have a significant positive effect on the study habits of students. Hence, hypothesis H2 is supported. The path weight value from study habits to academic performance (0.880), was significant (0.000) and so, hypothesis H3 is also supported.

### Mediation of student's study habits

Mediation effect is the intermediary effect in the causal relationship between exogenous and endogenous variables. Study habits (HA) is assumed as a mediator in the link between social media usage patterns and academic performance.

**Table 5: Indirect Effects**

Indirect Path	Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate
SM_U --> S_H --> A_P	0.376	0.268	0.511	0.000	0.415

The unstandardized coefficient values for the indirect path from social media usage patterns to academic performance through study habits (0.376) is significant (0.000) and hence, hypothesis H4 was also supported.

## DISCUSSION AND CONCLUSION

The present study was initiated with the aim of assessing the impact of social media usage patterns on students' academic performance through their study habits. The structural equation Modeling was applied for this purpose and executed with software like Amos. The study results revealed that social media usage patterns affect student performance negatively. Social media usage patterns also affect the study habits of students. Study habits of the students mediate the link between social media usage patterns and academic performance.

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