




Digital Engagement and Sustainability: Analyzing the Impact of Social Media Dependency on Academic Performance, Network Choices, and Influential Factors

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Abstract. This research study aimed to investigate how the workplace well-being has a significance on teaching effectiveness in Arts and Science Colleges in Coimbatore district. The study is essential as it directly influences the teachers' classroom delivery and their overall performance, which ultimately benefits the students. Therefore, to ensure that educators have a dedicated performance, this study was conducted with 510 respondents from Arts and Science colleges in Coimbatore district. The data analysis revealed that workplace well-being has a significance on teaching effectiveness in the said colleges.

Keywords: social media dependency, academic performance, network choices, business sustainability.

1 Introduction

In an era characterized by the omnipresence of digital technologies, the interplay between digital engagement and sustainability has become an area of increasing relevance. This study focuses on a specific aspect of this dynamic landscape, examining how social media dependency can exert an influence on academic performance of students, shape network preferences, and be driven by various influential factors. The proliferation of social media platforms has fundamentally transformed the way individuals, including students, interact with the digital world. These platforms provide a space for connectivity, information sharing, and engagement with diverse networks. Consequently, students find themselves navigating a complex web of academic responsibilities and the allure of social media, often inextricably linked. Academic performance remains a pivotal concern for students and institutions, with its long-term implications extending to their future in the business world. Simultaneously, businesses are increasingly recognizing the significance of sustainability in their operations, not only as a social responsibility but also as a strategic imperative. Understanding the multifaceted relationship between digital engagement, academic performance, and business sustainability is crucial for both educational institutions and the corporate world. By exploring the impact of social media dependency, network preferences, and the influential factors at play, this study endeavors to shed light on this intricate nexus and its implications for the future.

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1.1 Statement of the Problem

In an era where digital engagement is increasingly intertwined with everyday life, understanding its implications on both academic performance and sustainability has become a critical concern. This research aims to address the following key problem areas:

- **Social Media Dependency and Academic Performance:** The pervasive use of social media among students raises questions about how it impacts their academic performance. The problem is to investigate whether excessive reliance on social media platforms hinders concentration, study habits, and ultimately leads to suboptimal academic outcomes.
- **Network Preferences and Digital Engagement:** Social media usage is closely tied to network preferences, both in terms of personal connections and information sources. It is essential to explore how students' network choices on social media platforms affect their digital engagement and whether these networks positively or negatively influence their academic and professional endeavors.
- **Influential Factors in Social Media Dependency:** To address the issue of social media dependency, this research aims to uncover the influential factors that drive students to spend significant time on these platforms. Identifying these factors is crucial for developing effective strategies to mitigate potential negative impacts on academic performance and to harness social media for positive educational and business purposes.

By examining these problem areas, this research seeks to provide insights into the complex relationship between digital engagement, academic performance, and sustainability, offering valuable knowledge for stakeholders.

1.2 Objectives

The objectives of this study are as follows:

- To Assess the Impact of Social Media Dependency on Academic Performance
- To Investigate Network Preferences and Digital Engagement
- To Identify Influential Factors in Social Media Dependency
- To Explore Strategies for Mitigation and Enhancement
- To Contribute to the Understanding of Digital Engagement and Business Sustainability

2 Research Methodology

The present study adopted descriptive research method by using survey methodology. Judgmental sampling technique was considered to be appropriate for the study. A total of 384 respondents were chosen as that would represent the best sample. This study is based on both primary data and secondary data. The primary data was collected from the respondents who are the students of UG Program. To satisfy the objectives of the

study, primary data were collected by using a well-framed questionnaire, from the respondents who are the students of UG Program. The secondary data were taken from different available sources like newspapers, websites, magazines, journals, books, etc., from libraries and websites. The secondary data appropriate to the study were collected from various records. The tools of data analysis included the following:

- Simple Percentage Analysis
- Chi-square analysis
- Henry Garrett's Ranking technique

2.1 Pilot Study

The questionnaire was administrated to 50 students and information was collected. The information collected during the research work has been tested using Cronbach's Alpha for its reliability. The result of the test and validation reveals that the questionnaire possesses the reliability with the value of 0.850. The questionnaire was best fitted in a normal distribution. Therefore, the researcher inferred that the questionnaire used for pilot study was highly appropriate in finding the responses. Based on the experience gained from the pilot study, the questionnaire was restructured to administer for the study.

3 Literature Review

[14] found that students who use social media more frequently tend to have higher GPAs and to be more satisfied with their academic performance. The authors suggest that social media can help students to stay motivated and engaged in their studies. [12] contended that students who use social media more frequently tend to have larger and wider social links. The authors suggest that social media can help students to connect with other students who share their academic interests, which can lead to new opportunities for collaboration and mentorship. [7] argued that social media use mediated the relationship between loneliness and academic performance. The authors suggest that social media can help to reduce loneliness and promote a more positive learning environment, which can lead to improved academic performance. [8] purported that social media usage can have a positive impact on academic performance, especially when used for educational purposes. For example, students who use social media to connect with classmates, share notes, and collaborate on projects tend to perform better academically.

[5] in their meta-analysis of 48 studies found that social media use has a small but positive impact on academic performance. The authors suggest that social media can help students to stay connected with classmates and teachers, to access educational resources, and to develop their digital literacy skills. [3] found that students who use social media more frequently tend to have larger and more diverse social networks. The authors suggest that social media can help students to connect with other students who share their academic interests, which can lead to new opportunities for collaboration and mentorship. [4] asserted that students who use social media more frequently tend

to be more engaged in their studies and to have higher levels of self-efficacy. The authors suggest that social media can help students to develop their academic motivation and to set goals for themselves. [7] established that students who use social media more frequently tend to have larger and more diverse social networks. The authors suggest that social media can help students to connect with other students from different backgrounds and cultures, which can broaden their horizons and help them to learn from others. [1] portrayed that students who use social media more frequently tend to have higher GPAs and to be more satisfied with their academic performance. The authors suggest that social media can help students to stay organized and on track with their studies. Overall, these studies suggest that social media can have a positive impact on academic performance, network choices, and influential factors when used responsibly and thoughtfully. For example, social media can help students to stay connected with classmates and teachers, to access educational resources.

4 Analysis and Interpretation

The data collected from the survey were analyzed using statistical tools.

Table 1. Breakdown of respondents by stream

Stream	No. of Respondents	Percentage
Commerce	167	44
Management	49	13
Science	151	39
Arts	17	4
Total	384	100

The breakdown of respondents from various stream of undergraduate program. 44 % of the respondents are from commerce, 39 % from science, 13% from management and 4 % from arts stream.

Table 2. The influence of social media on student academic performance

Statements	SA	A	N	DA	SDA	Total
Struggling to balance my social media use with my academic work	217	96	30	27	14	384
It's hard for me to focus on my studies when I'm using social media	169	134	21	60	-	384
Reading is much more valuable than spending time online	184	103	57	27	13	384
My grades haven't improved since I started using social media	69	77	34	105	99	384

Total	639	410	142	219	126	1536
Percentage	41.60	26.69	9.24	14.26	8.20	100

The above table depicts the agreeability on the influence of social media on student academic performance through various statements.

Table 3. The influence of social media use on student academic outcomes

Statements	SA	A	N	DA	SDA	TOTAL
My unlimited access to social media has been detrimental to my academic performance	109	186	51	15	23	384
Twitter has helped me to develop my critical thinking and communication skills, which has led to improved academic performance	97	53	139	59	36	384
I use WhatsApp to make knowledge accessible to all of my classmates	88	153	42	84	17	384
I use LinkedIn to know about Job opportunities	85	77	118	63	41	384
Total	379	469	350	221	117	1536
Percentage	24.67	30.53	22.79	14.39	7.62	100

The above table depicts the agreeability on the influence of social media use on student academic outcomes.

Table 4. The Utilization of Social Media and its Impact on the Academic Performance of Students

Statements	SA	A	N	DA	SDA	TOTAL
The internet and social media have been valuable tools for me to learn and improve my grades	89	183	87	99	15	384
Being involved in academic forums slows down my learning process	21	13	59	202	89	384
I use blog posts to supplement my classroom learning	191	82	41	27	43	384
My academic performance is not dependent on my social media use	72	49	111	54	98	384
Total	284	327	298	382	245	1536

Percentage	18.49	21.29	19.40	24.87	15.95	100
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The above table depicts the agreeableness on utilization of Social Media and its Impact on the Academic Performance of Students.

Hypothesis 1: There is no significant correlation between students' social media usage and their academic performance.

Table 5. Chi-square Analysis for the significant correlation between influence of social media use and their academic performance

Variables	N	Df	Ls	Crit X2 value	Calc X2 value	Decision
Correlation between influence of social media use and their academic performance	34	2	0.05	5.991	151.907	Rejected

The above table showed that the calculated chi-square value of 151.907 is greater than the Critical chi-square value of 5.991, hence, the null hypothesis which states that there is no significant correlation between influence of social media use and their academic performance has been accepted

Hypothesis 2: There is no strong relationship between students' social media use and their academic outcomes.

Table 6 Chi-square Analysis for the relationship between students' social media use and their academic outcomes

Variables	N	Df	Ls	Crit X2 value	Calc X2 value	Decision
Relationship between students' social media use and their academic outcomes	384	2	0.05	5.991	75.907	Rejected

The above showed that the calculated chi-square value of 75.907 is greater than the Critical chi-square value of 5.991, hence, the null hypothesis which states that there is no relationship between students' social media use and their academic outcomes is hereby rejected.

Hypothesis 3: There is no significant relationship between social media use and academic performance.

Table 7 Chi-square Analysis for relationship between social media use and academic performance

Variables	N	Df	Ls	Crit X2 value	Calc X2 value	Decision
Use of social media and academic performance	384	2	0.05	5.991	14.130	Rejected

The above shows that the calculated chi-square value of 14.130 is greater than the critical chi-square value of 5.991, hence, the null hypothesis which states that Use of social media do not significantly influence on the academic performance of the students is hereby rejected. This indicates that use of social media has suggestively effect on the academic performance of the students.

Table 6. Ranking of Various Social Media Platforms

S.NO.	SOCIAL MEDIA	RANK
1	Snapchat	IV
2	Instagram	I
3	Twitter	VII
4	Linkedin	VIII
5	Whats app	II
6	Facebook	V
7	Skype	IX
8	Messenger	VI
9	Youtube	III

It is understood from the above table that Instagram is the most preferred social media platform, Whats app stands second, Youtube stands third, Snapchat stands fourth, Facebook stands fifth, Messenger stands sixth, Twitter stands seventh, Linkedin stands eighth and Skype is the least preferred one.

5 Findings

- The analysis reveals that male respondents have the highest satisfaction level regarding the workplace well-being.
- It is disclosed that there is a substantial association amid Gender and satisfaction level towards workplace well-being.
- It is indicated from the analysis that there is a significant relationship for Age and satisfaction level towards workplace well-being.
- It is identified that there is a no significant relationship between Marital Status and satisfaction level towards workplace well-being.
- It is indicated that there is a notable significance among Qualification and satisfaction level towards workplace well-being.
- It is evident that there is a no significant association for Age and satisfaction level towards workplace well-being.
- It is identified that there is a noteworthy association amongst Experience and satisfaction level towards workplace well-being.
- It is found that there is a significant association among Number of members in the family and satisfaction level towards workplace well-being.
- It is found that there is a significance among monthly salary and satisfaction level towards workplace well-being.
- There is important positive correlation for Y1 (Level of satisfaction) with X1(Gender) and X6(Experience) at 1% level and X4 (Educational Qualification) is negatively connected at 5% level.
- There is an association between X2(Age Group) and X4(Educational Qualification), X6 (Experience), X7(Number of members in the family) and X8 (Monthly Salary) at 1% level and X3(Marital Status) is negatively correlated at 5% level. Here is a negative correlation between X2(Organisation type) and X5(Designation) is at 1% level. Here exists a negative correlation between X3 (Marital Status) and X6(Experience) is at 1%. Here exists a substantial and close positive relationship between X4 (Educational Qualification) and X6(Experience) and X7(Number of members in the family) and X8 (Monthly Salary) is at 1% level.

6 Recommendations

6.1 Students:

- Be mindful of their social media use and set limits on how much time they spend on social media each day.
- Use social media for educational purposes, such as following academic accounts, reading blog posts, and participating in academic forums.
- Be selective about the social media platforms they use and focus on platforms that are aligned with their academic goals.

6.2 Parents:

- Talk to the children about the importance of balancing social media use with academic work.
- Help children to develop strategies for using social media responsibly.
- Monitor children's social media use to ensure that they are using social media safely and appropriately.

6.3 Schools:

- Provide students with guidance on how to use social media responsibly and for academic purposes.
- Develop social media policies that promote digital engagement and sustainability in a responsible way.
- Use social media to connect with students and provide them with academic support and resources.

6.4 Social media platforms:

- Develop features and tools that help users to manage time on social media and use social media more responsibly.
- Promote educational content and resources on social media.
- Work with educational institutions to develop educational programs and resources on social media use and digital engagement.
- By implementing these recommendations, we can help students to use social media in a more responsible and productive way, and to minimize the negative impacts of social media dependency on academic performance.

7 Conclusion

Digital engagement and business sustainability are two important concepts in the 21st century. Social media is a powerful tool that can be used to promote both of these concepts, but it is important to be aware of the potential negative impacts of social media dependency. Research on the impact of social media dependency on academic performance, network choices, and influential factors in business sustainability is still in its early stages, but the findings suggest that there is a complex relationship between these variables. More research is needed to identify the causal relationships between these variables and to develop effective interventions to promote digital engagement and business sustainability in a responsible way. In the meantime, it is important for individuals, businesses, and organizations to be mindful of their social media use and to take steps to minimize the negative impacts of social media dependency. For example, individuals can limit their time on social media, be selective about the information they consume, and be aware of the potential for social media to be addictive. Businesses and organizations can develop social media policies and practices that promote digital engagement and business sustainability. Overall, the goal is to create a more sustainable digital environment where everyone can benefit from the positive aspects of social media while minimizing the negative impacts.

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