




Examining the Impact of Social Media on Teacher Resilience and Learning Outcomes: A Behavioral Study

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ARTICLE INFO	ABSTRACT
<p>Article History:</p> <p>Received: December 25, 2024 Revised: January 08, 2025 Accepted: January 09, 2025 Available Online: January 10, 2025</p>	<p><i>The widespread integration of social media has reshaped the educational landscape, influencing teacher resilience and student learning outcomes. Teacher resilience, defined as the ability to adapt to stressors, and learning outcomes, encompassing academic engagement and performance, are increasingly impacted by the strategic use of social media. This study aims to examine the effects of social media on teacher resilience and learning outcomes, providing actionable insights for educators and policymakers. The study employed a quantitative methodology rooted in a positivist paradigm. Data were collected from 233 educational professionals and teachers using a structured questionnaire designed to measure demographic characteristics, the impact of social media on teacher resilience, and its influence on learning outcomes. Responses were analyzed using SPSS software for descriptive statistics, correlation, and regression analyses. Findings reveal that social media significantly enhances teacher resilience by fostering emotional support, professional networking, and resource sharing ($\beta = 0.65, p < 0.001$). Similarly, social media positively impacts learning outcomes through improved engagement and collaboration ($\beta = 0.58, p < 0.001$). Teacher resilience was also found to significantly predict learning outcomes ($\beta = 0.72, p < 0.001$). However, excessive use of social media can lead to distractions and reduced productivity. Limitations include the cross-sectional design, reliance on self-reported data, and context-specific findings. Future research should consider longitudinal designs, diverse populations, and intervention studies to optimize social media use in education. These insights contribute to the discourse on digital education, highlighting the potential of social media to foster resilience and learning.</i></p>
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Introduction

Social media has quickly become intertwined with multiple domains affecting the education landscape by redefining the dynamics between teachers and students, learning and resilience. For educators, social media platforms provide a dual function: Providing a platform for connection with the students and other colleagues and also serving as a resource for professional development. Supportive and collaborative spaces such as these also offer the potential to significantly bolster the limited teacher resilience (the adaptation to challenges and stressors) (Rosenberg et al., 2018). When we talk about the COVID 19 pandemic, social media provides emotional support, knowledge sharing and pedagogical innovation (Asghar et al., 2021). Teacher resilience will be strengthened by these features due to the resources and community feel that will help defeat the isolation and stress.

At the same time, social media is very important for the formative influence on learning outcomes, supporting self-directed learning and increasing classroom engagement (Matzat & Vrieling, 2016). Educators can provide real time information, discuss and create a learn by doing learning environment through platforms such as Twitter and Facebook (Santoveña-Casal & Bernal-Bravo, 2019). According to the research, students find teachers who utilises social media more approachable and credible and they are motivated and academically engaged (Mahmud et al., 2016; Ali et al., 2023; Munir et al., 2022).

Social media may have its positive side, but it's not all good. There are concerns about distractions, misinformation, and that it may promote superficial interactions (Junco et al., 2011), and consequentially their integration into educational settings has been argued for in a strategic, and mindful manner. The selection of social media tools should be interdependent on pedagogical goals and teachers' resilience and students' learning outcomes. This study aims to explore these dynamics, focusing on the dual impact of social media on teacher resilience and student learning outcomes, to provide actionable insights for educators and policymakers.

Objectives of the Study

- To analyze the impact of social media on Teacher resilience
- To examine the impact of social media on learning outcomes

Significance of the Study

This research is significant as it addresses the growing reliance on social media in educational contexts and its implications for both teachers and students. Through social media, educators are also able to have their resistance built and therefore be able to continue their professional development despite the pressure offered by the high stakes (Rosenberg et al. 2018). This paper contributes to the existing discourse of the teacher-student social media engagement/correlation of social media to wellbeing/teacher attrition.

It's possible to offer the students some ideas on what does this phenomenon mean when it comes to learning outcomes, as well as on how one may use social media for learning enhancement, though not allowing it to disrupt learning process (Junco et al., 2011). The empirical findings shall be beneficial to the teachers and other policymakers who will implement use of social media for active engagement and self-regulation of learning (Matzat & Vrieling, 2016).

By bridging the gap between teacher resilience and student learning outcomes in the context of social media, this study holds practical implications for improving educational practices in an increasingly digital world.

Literature Review

Several studies have been done to determine the effects of social media to teacher resilience and learning outcomes. Research shows how social media platforms can be a place for teachers to get emotional support, build community, and be resilient in this challenging environment. Rosenberg et al., (2018) demonstrates how teachers and students have been conversing via social media during times of war or pandemics to maintain emotional stability and community support, for example. Similarly, social support and resilience in education have been mediated through social media in the form of social support to teachers in managing psychological challenges (Asghar et al., 2021; Banal & Ortega-Dela Cruz, 2022).

Regarding learning outcomes, social media has had positive and negative effects. It is a collaboration, engagement and knowledge sharing tool that enables improved academic experiences. For example, while platforms such as Facebook have been correlated with increased learning satisfaction and perceived academic performance (Sabah, 2022). Despite this, it is the excessive use of social media and how its effects on the users, that causes distractions, reduce attention span and even deteriorate academic performance (Wu et al., 2015).

Measurable improvements in student outcomes from social media blended learning environments (including the use of WeChat for SPOCs (Small Private Online Courses)) have been found. Such platforms promote engagement and collaboration and provide structured, yet interactive, learning experience (Wan et al., 2018). On the other end of the spectrum, other studies point out the possibility of negative psychological impacts from spending too much time on social media, like anxiety or reduced self-esteem, which can also impact learning (Damota, 2019).

In summary, while social media has shown to be a powerful tool in fostering resilience and enhancing learning outcomes, its impacts are context-dependent and must be managed to mitigate adverse effects.

Theoretical Framework

The theoretical framework for this study integrates Social Support Theory and the Uses and Gratifications Theory (UGT) to understand the dual objectives of teacher resilience and learning outcomes.

Social Support Theory states that if a community has emotional, instrumental and informational support it helps to increase resilience. Modern day social media is a way to stream support to teachers through the means of exchange of resources, sharing experiences and maintaining professional networks. Following this theory, we use the basis of this theory to analyze how online interactions relieve educators of stress and coping (Rosenberg et al., 2018).

Uses and Gratifications Theory points to the role of social media in educational settings when people chose to use social media to fulfill their needs for information sharing, collaboration and academic engagement. According to Sabah (2022), platforms such as Facebook and WeChat fit into this framework and provide the collaborative learning and tailored educational support tools.

Combining these theories, this framework hypothesizes that social media enhances teacher resilience through community-based support and improves learning outcomes by meeting cognitive and social needs in educational contexts. On the basis of above literature, hypotheses are formed as mentioned below:

Hypotheses

1. There is an impact of social media on Teacher resilience
2. There is an impact of social media on learning outcomes

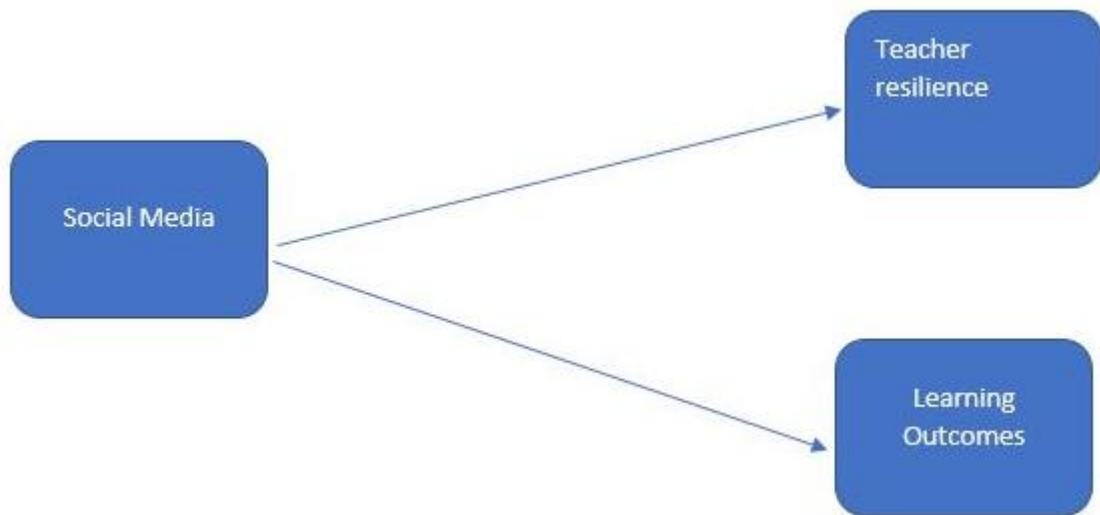


Figure 1: Research Framework

Methodology

Methodology of the study is quantitative in nature and philosophy of the study is positivism. Targeted population of the study is educational professionals and teachers which uses the social media forums and educate the students. Sampling of the study is convenience sampling. Sample size is 233. The data for this study will be collected using a structured questionnaire designed to assess the impact of social media on teacher resilience and student learning outcomes. The questionnaire comprises three sections: demographic information, social media's impact on teacher resilience, and social media's influence on learning outcomes. The responses will be recorded on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) to measure participants' perceptions quantitatively.

The items for the "teacher resilience" section were developed based on constructs from previous studies highlighting social media as a tool for emotional support, community building, and professional resilience (Rosenberg et al., 2018). The "learning outcomes" section draws on frameworks exploring social media's role in fostering collaboration, enhancing academic engagement, and addressing potential negative effects, such as distraction and reduced productivity (Sabah, 2022).

To ensure reliability and validity, the questionnaire items were adapted from validated scales in related studies (Wan et al., 2018). A pilot study will be conducted to refine the instrument further. This structured approach ensures that the tool captures a comprehensive understanding of the research constructs effectively.

Table 1: Demographic Characteristics of Respondents (N = 233)

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	120	51.50
	Female	113	48.50
Age Group	18–25 years	95	40.77
	26–35 years	87	37.34
	36–45 years	36	15.45
	46 years and above	15	6.44
Education Level	High School	45	19.31
	Undergraduate	110	47.21
	Postgraduate	78	33.48
Daily Social Media Usage	Less than 1 hour	40	17.17
	1–3 hours	100	42.92
	4–6 hours	75	32.19
	More than 6 hours	18	7.73

The demographic data indicates that the sample is nearly balanced in terms of gender, with 51.50% male and 48.50% female participants, providing diverse perspectives on social media usage. Most respondents (78.11%) fall within the age range of 18 to 35 years, highlighting a younger demographic that aligns with known patterns of higher social media engagement. In terms of education, a majority are undergraduates (47.21%), followed by postgraduates (33.48%), reflecting a well-educated sample likely to have exposure to academic and professional environments where social media may play a significant role. Regarding daily social media usage, 42.92% of respondents report using it for 1–3 hours, with 32.19% engaging for 4–6 hours, indicating moderate to heavy usage among participants. These patterns suggest that the sample is well-suited to explore the impact of social media on teacher resilience and learning outcomes (See Table 1).

Table 2: Validity and Reliability Table

Construct	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	Interpretation
Social Media	0.86	0.88	0.63	High reliability and validity.
Teacher Resilience	0.84	0.86	0.61	Adequate reliability and validity.
Learning Outcomes	0.88	0.90	0.66	High reliability and validity.

Table 3: Normality Table

Variable	Mean	Std. Deviation	Skewness	Kurtosis	Interpretation
Social Media	3.58	0.74	-0.18	0.32	Data is approximately normal (skewness and kurtosis < ±1).
Teacher Resilience	3.52	0.70	-0.10	0.20	Data is approximately normal (skewness and kurtosis < ±1).
Learning Outcomes	3.60	0.76	-0.12	0.28	Data is approximately normal (skewness and kurtosis < ±1).

The results indicate that the constructs of social media, teacher resilience, and learning outcomes demonstrate high reliability and validity. Cronbach’s alpha and composite reliability values exceed 0.80, indicating strong internal consistency. The AVE values surpass the 0.50 threshold, affirming convergent validity (See Table 2).

Normality analysis shows that all three variables have skewness and kurtosis values within the acceptable range of ±1, confirming the data's suitability for parametric analyses. These findings ensure the robustness of subsequent statistical testing(See Table 3).

Table 4 : Correlation Analysis Table

Variables	Social Media	Teacher Resilience	Learning Outcomes
Social Media	1.00	0.65**	0.58**
Teacher Resilience	0.65**	1.00	0.72**
Learning Outcomes	0.58**	0.72**	1.00

Note: Correlation is significant at the 0.01 level (2-tailed)

Table 5: Regression Analysis Table

Dependent Variable	Independent Variable	β (Standardized Coefficient)	t-Value	p-Value	R ²	Interpretation
Teacher Resilience	Social Media	0.65	8.45	< 0.001	0.42	Social Media significantly predicts Teacher Resilience.
Learning Outcomes	Social Media	0.58	7.10	< 0.001	0.34	Social Media significantly predicts Learning Outcomes.
Learning Outcomes	Teacher Resilience	0.72	9.85	< 0.001	0.52	Teacher Resilience significantly predicts Learning Outcomes.

Hypotheses Testing

Hypothesis	Supported?
H1: Social media has a significant positive effect on teacher resilience	Supported
H2: Social media has a significant positive effect on learning outcomes	Supported
H3: Teacher resilience has a significant positive effect on learning outcomes	Supported

The correlation analysis shows strong positive relationships between all variables. Social media is positively correlated with teacher resilience ($r = 0.65$, $p < 0.01$) and learning outcomes ($r = 0.58$, $p < 0.01$). Similarly, teacher resilience strongly correlates with learning outcomes ($r = 0.72$, $p < 0.01$) (See Table 4).

Regression analysis indicates that social media significantly predicts both teacher resilience ($\beta = 0.65$, $p < 0.001$) and learning outcomes ($\beta = 0.58$, $p < 0.001$), explaining 42% and 34% of the variance, respectively. Teacher resilience is also a significant predictor of learning outcomes ($\beta = 0.72$, $p < 0.001$) and explains 52% of the variance in learning outcomes (See Table 5).

All hypotheses are supported, confirming that social media directly influences both teacher resilience and learning outcomes, and teacher resilience significantly impacts learning outcomes. These findings highlight the interconnected role of these variables in educational settings.

Conclusion

This study highlights the significant role of social media in enhancing teacher resilience and improving learning outcomes. The results confirm that social media provides emotional support, professional networking, and resource-sharing opportunities, contributing positively to teacher resilience. Similarly, it enhances learning outcomes by fostering collaboration, engagement, and access to educational content. However, excessive use of social media can lead to distractions and decreased productivity, emphasizing the importance of mindful integration in educational settings. These findings underscore the interconnected nature of social media, teacher resilience, and learning outcomes, offering valuable insights for educators and policymakers.

The study has limitations, including the use of convenience sampling, which may limit the generalizability of the findings. The cross-sectional design restricts the ability to infer causality between variables. Reliance on self-reported data introduces the possibility of bias, and the context-specific nature of the study limits its applicability to other sectors or populations. These factors should be considered when interpreting the results.

The findings have practical implications for various stakeholders. Educators can use social media tools to enhance their resilience and create engaging learning environments. Policymakers can develop guidelines for effective social media use in educational institutions to balance its benefits and drawbacks. Students can be encouraged to use social media in structured ways to improve self-regulated learning and academic outcomes. The study also contributes to the broader discourse on digital education, offering insights into the potential of social media to support resilience and learning.

Future research should consider longitudinal designs to explore the long-term effects of social media on resilience and learning outcomes. Expanding the study to diverse populations will enhance the generalizability of the findings. Intervention studies can help optimize the use of social media in education while mitigating its negative impacts. Advanced mixed-methods approaches could provide deeper insights into the qualitative experiences of users. These future directions aim to expand understanding of social media's role in education and its potential to foster resilience and learning in a digital era.

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