

Improving Employee Performance through Empowering Leadership: Managing the Impact of Information Overload and Social Media Fatigue

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ABSTRACT

Objective: This study aims to analyse the effect of information and communication overload on social media fatigue, and its impact on employee performance, by considering the moderating role of empowering leadership.

Methodology: This study uses a quantitative approach with a survey method and data collection through questionnaires distributed to permanent employees at universities in Indonesia. The data analysis technique uses linear regression and moderation test to test the relationship between variables.

Findings: The results show that information and communication overload has a significant influence on social media fatigue, which in turn negatively impacts employee performance. Moreover, empowering leadership can mitigate such negative impacts, by providing support and autonomy to employees.

Conclusion: The findings provide insights for organisations in designing more efficient communication policies and supporting empowering leadership development to improve employee well-being and performance in the digital age.

Keywords: Information Overload; Communication Overload; Social Media Fatigue; Empowering Leadership; Employee Performance.

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INTRODUCTION

In the era of digital transformation, information and communication technology (ICT) has become the backbone of universities, encouraging integrity between lecturers, students, and administration, as well as building a borderless academic environment (McGrath & Charan, 2023). In Indonesia, internet penetration continues to grow, university employees are increasingly required to adapt to the high-speed digital ecosystem to remain responsive and competitive.

However, existing digital connections also bring a negative side that is often associated with technostress. Employees in higher education institutions are exposed to so much information, that it is difficult to process large amounts of data and communicate effectively, mainly due to the continuous disruption and increased volume of messages through various digital channels (Yu et al., 2018). Unlike in the past, lecturers and staff now face a constant stream of academic messages, emails, and notifications, which require a quick response, and this makes it difficult to draw the line between working hours and break time.

Excessive digital demands often lead to a condition called Social Media Fatigue (SMF), which is a psychological state that makes a person feel tired and tends to withdraw due to the pressure to stay connected. As burnout continues to build up, employees can experience decreased focus, decreased self-regulation, and lower quality of work, which can ultimately damage their performance. Although previous research has acknowledged that digital fatigue can disrupt productivity (Brooks & Califf, 2017), there are still two important gaps. Empirically, evidence on how certain stressors, especially information overload and overcommunication, impact SMF in the Indonesian higher education environment is limited. This is due to its unique context, with very dense communication networks, demands involving many stakeholders, and increasingly intense digital work norms. Theoretically, although leadership is often viewed as a factor that directly affects performance or well-being, there is little research on leadership as a borderline condition that can modify the negative relationship between fatigue and performance in a digital work environment.

To address this gap, this research proposes Empowering Leadership as an important organizational resource. By utilizing the Job Demands-Resources (JD-R) model, empowering leaders through autonomy support, participative decision making, and development guidance can be a buffer that reduces the negative impact of Future Stressors (SMF) on employee performance. Thus, this research contributes in three aspects, namely: (1) expanding empirical evidence regarding the mechanism of performance → overload → burnout in higher education in Indonesia, (2) advancing theory by proving empowering leadership as a moderator in the relationship between SMF and performance, namely a more complex buffering effect than a simple direct effect, and (3) offering practical efficiency for leadership-based interventions in reducing digital fatigue through clearer communication norms, boundary management, and supportive empowerment practices.

Therefore, this study aims to explore the influence of information overload and overcommunication on social media fatigue (H1 & H2), as well as to study how social media fatigue affects employee performance (H3). In addition, this study also wants to find out the role of leadership empowerment moderation (H4). The results of this research are expected to help university management in understanding how to maintain employee performance amid increasing demands for digital communication.

LITERATURE REVIEW

Social Media

Social media is a digital platform that allows people to interact, share types of content, and establish social relationships online. As a communication tool that continues to grow, social media is now playing a major role in personal and work life. According to Ellison et al. (2022), social media can help speed up and strengthen interactions between people and provide access to various information and cooperation opportunities despite being in different places.

In the workplace, including in the world of higher education, social media is increasingly used to facilitate internal and external communication and the exchange of ideas. However, according to Liu et al. (2023), excessive use of social media can make it difficult to focus and reduce work results. For academics and administrative staff, access to social media during working hours can interfere with the research and teaching performance process (Raza et al., 2023).

Social Media Fatigue

Social media fatigue refers to physical and mental fatigue caused by continuous and intensive use of social media. This is closely related to technostress, which is stress that arises due to excessive interaction with technology (Ayyagari et al., 2021). In the global technostress model developed by Tarafdar et al. (2007), digital fatigue can come from various sources of pressure, such as information overload, time pressure, and the need for continuous connectivity.

Whelan et al. (2020) found that this condition can reduce work motivation and disrupt the balance between personal and professional life. For university lecturers and staff who face high work pressure, digital distractions through social media can exacerbate work stress and lower the quality of academic engagement (Gupta & Kumar, 2023).

Employee Performance

Employee performance reflects a person's ability to complete assigned tasks as well as achieve targets set by the organization. In the field of higher education, this includes various activities such as teaching, conducting research, collaborating in the field of science, and participating in community service (Tufail et al., 2022). In this context, the Job Demands-Resources (JD-R) model developed by Bakker and Demerouti (2007) provides a broad frame of reference for understanding how the demands of the job as well as the resources available in the organization affect employee performance.

Burnout due to social media use can be an energy-draining workload, which has the potential to harm morale and reduce productivity levels (Smith et al., 2023). Instead, a leadership style that supports and authorizes employees serves as a resource that helps reduce that pressure and improve work outcomes.

Empowering Leadership

Empowering leadership gives employees autonomy in decision-making as well as encouraging active participation in the organization (Seibert et al., 2021). This leadership style aligns with empowerment theory as well as transformational leadership principles, which have been shown to be effective in increasing employee engagement and reducing work stress in various global contexts (Simmons et al., 2022; Bass & Riggio, 2006).

According to Lee and Joo (2023), by empowering leaders, employees can overcome the high pressure of digital communication through the establishment of a flexible and supportive work environment. This approach is essential in the higher education sector to assist academic staff in managing workload complexity and digital pressures. Raza et al. (2023) show that leaders who encourage collaboration and provide positive feedback can improve academic performance while strengthening employee well-being.

HYPOTHESIS AND RESEARCH FRAMEWORK

Information and Communication Overload as Antecedents of Social Media Fatigue.

The use of social media in the workplace has a two-sided impact. On the one hand, this facilitates collaboration between colleagues, but on the other hand it also causes quite a lot of stress. Information overload occurs when the amount of information received exceeds a person's ability to process it effectively. In addition, overcommunication can also occur when the frequency of communication requests, such as constant notifications from WhatsApp groups or emails, becomes too high to be difficult to manage (Cho et al., 2014).

Using the Stimulus Organism Response (S-O-R) framework, these overload factors act as environmental stimuli that trigger negative responses from individuals, especially in the form of fatigue due to social media use. When university employees are constantly bombarded with excessive information and are often distracted, they tend to experience decreased cognitive capacity and anxiety (Whelan et al., 2020). This mental fatigue then encourages them to want to withdraw from digital interactions to save energy.

- H1: *Information overload has a positive effect on social media fatigue.*
- H2: *Communication overload has a positive effect on social media fatigue.*

The Impact of Social Media Fatigue on Employee Performance.

Social media fatigue is not just a psychological feeling, but it also has a real impact on a person's behavior. This fatigue is defined as subjectively perceived fatigue due to social media use, which leads to a depletion of mental resources needed to perform key tasks (Zhang et al., 2016). In the context of higher education, where tasks often require intense focus and thought, this situation is particularly impactful.

According to the Resource Conservation (COR) theory, when a person feels tired, they tend to try to conserve the remaining energy. As a result, people who experience social media fatigue often minimize work effort, procrastinate work, or exhibit lower levels of engagement, which overall leads to a decrease in work performance (Tufail et al., 2022; Raza et al., 2023).

- H3: *Social media fatigue has a negative effect on employee performance.*

The Moderating Role of Empowering Leadership.

While social media fatigue can reduce performance, the extent of damage that occurs can vary depending on the condition of the organization, especially on the leadership style applied. Empowering leadership is described as a form of leadership that involves subordinates, provides space for initiative, and provides assistance in career growth (Seibert et al., 2021).

The Job Demands-Resources (JD-R) model explains that resources in the workplace, such as supportive leadership, can provide a buffer against negative pressures stemming from job demands, such as burnout. Empowered leadership empowers employees to set their own work schedules and communication boundaries, making it easier for them to overcome digital fatigue (Lee & Joo, 2023). When employees feel valued and empowered, they become stronger in the face of challenges. Therefore, despite the fatigue of social media, employees who work under empowered leadership can maintain their performance better than those who do not have such support.

- H4: *Empowering leadership moderates the negative effect of social media fatigue on employee performance.*

METHOD

This research uses a descriptive quantitative research design with a survey approach (Yakin et al., 2023). This design was chosen because this research aims to explore the influence of existing variables, namely social media fatigue, empowering leadership, and employee performance. The data obtained will be analysed using statistical techniques to test the hypotheses that have been formulated previously. The survey approach was chosen because it allows researchers to collect large amounts of data efficiently through questionnaires that can be distributed online (Creswell, 2014).

Population and Sample

The population in this study were all permanent employees at universities in Indonesia in the central, western and eastern regions. The sample of this study consisted of 258 permanent employees selected using purposive sampling technique. Purposive sampling was chosen because the researcher set certain criteria for respondents in accordance with the research objectives. The criteria for respondents were permanent lecturers who had worked for more than two years, had at least two social media accounts, and used social media for at least 3 hours a day and opened social media at least 10 times during work.

The online questionnaire was distributed to 258 respondents through a Google Form link sent through WhatsApp private messages distributed by representatives at each university. The survey resulted in 141 respondents who met the criteria (response rate 54.65%). The data collected from these respondents will be used to analyse the relationship between the variables mentioned. This purposive sampling technique allows researchers to select respondents who are most relevant to the research topic, so that the data obtained is more representative (Sekaran & Bougie, 2016).

Data Collection Technique

Data were collected through a survey using a questionnaire distributed online. The research instrument used was a questionnaire consisting of statements related to each variable studied. This questionnaire was sent via the WhatsApp platform with a Google Form link that could be accessed by respondents.

The questionnaire instruments used to measure the variables in this study are as follows:

- 1) Information Overload and Communication Overload: These dimensions are measured using statements developed by Rasool et al. (2022) in (Yu et al., 2018).

- 2) Social Media Fatigue: This variable was measured using three statements developed by Ayyagari et al. (2011) and Moore (2000) in Yu et al. (2018).
- 3) Empowering Leadership: This variable is measured using ten statements developed by Ahmed et al. (2022).
- 4) Employee Performance: This variable is measured by four statement items developed by (Yu et al., 2018).

Each statement on the questionnaire was measured using a 5-point Likert scale, consisting of:

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

Respondents were asked to rate the statements based on their experiences and views on social media use and workplace performance.

Research Instruments

This research instrument is a questionnaire that contains statements to measure the variables studied. Each item in the questionnaire relates to a specific dimension of the variables measured, namely social media fatigue, information overload and communication, leadership empowerment, and employee performance. The Likert scale is used to measure the degree to which respondents agree or disagree with each statement in the questionnaire. These instruments have been tested for validity and reliability to ensure that the data collected is trustworthy and provides valid results. The validity of the instrument was tested using factor analysis, while the reliability was tested using Cronbach's alpha (Sekaran & Bougie, 2016).

Data Analysis Technique

The collected data will be analyzed using descriptive and inferential statistical analysis methods. At the descriptive analysis stage, data will be presented in the form of frequency and percentage to explain the characteristics of respondents and the spread of answers to each statement given.

Furthermore, in the inferential analysis, testing is carried out on the hypothesis that has been determined. Linear regression test techniques and moderation analysis were used to evaluate the impact of fatigue due to social media use on employee performance as well as the role of leadership deception in moderating relationships. Moderation analysis in particular was used to find out whether an empowering leadership style reinforces or alters the influence of social media fatigue on employee performance (Tojiri et al., 2023). In addition, validity and reliability tests were also carried out to ensure the consistency and accuracy of the measurement instruments used in this study. All data analysis processes are carried out using statistical software such as SPSS or AMOS to ensure that the results obtained are accurate and reliable.

RESULTS AND DISCUSSION

Respondent Characteristics

The following table shows the distribution of respondents based on the demographic characteristics relevant in this study, including gender, age, length of employment, and type of social media used.

Table 1 Characteristics of Respondents

Characteristics	Frequency (n = 141)	Percentage (%)
Gender		
Male	67	47.5
Women	74	52.5
Age		
25-35 years old	51	36.2
36-45 years old	55	39.0
46 years and above	35	24.8
Length of Service		
2-5 years	58	41.1
6-10 years	48	34.0
10 years or more	35	24.8
Social Media Used		
WhatsApp, Instagram	96	68.1
Facebook, Twitter	63	44.7
YouTube, TikTok	45	31.9

This table illustrates the distribution of respondents' characteristics, which mostly consisted of female lecturers (52.5%) and the age group of 36-45 years (39%). The most common uses of social media are WhatsApp and Instagram, followed by Facebook and Twitter.

Validity and Reliability

Table 2 Validity and Reliability Results

First-Order Construct	Second-Order Construct	Items	Loadings	α	CR	AVE
Information Overload (IO)		IO.1	0,744	0,725	0,842	0,641
		IO.2	0,823			
		IO.3	0.832			
		CO.1	0.770	0.740	0.852	0.658
		CO.2	0.816			
		CO.3	0.836			
		CO.4	0.781			
Social Media Fatigue (SMF)		SMF.1	0.791	0.875	0.914	0.728
		SMF.2	0.874			
		SMF.3	0.875			
		SMF.4	0.869			
Empowering Leadership (EL)	Encouraging employee independent behavior	EL.1	0.759	0.908	0.913	0.639
		EL.2	0.793			
		EL.3	0.799			
		EL.4	0.759			
	Encouraging	EL.5	0.724			

Employee	employee	EL.6	0.766	0.839	0.903	0.756
	opportunism	EL.7				
	thinking		0.779			
	Encouraging	EL.8	0.857			
	employee	EL.9	0.860			
	cooperation	EL.10				
	action		0.863			
		EP.1	0.876			
		EP.2	0.825			
		EP.3	0.865			

This table presents the measurement results of the variables used in this study, which include five main constructs: Information Overload, Communication Overload, Social Media Fatigue, Empowering Leadership, and Employee Performance. Measurement of each variable is done through several indicators or items that have been tested for validity and reliability. The validity test was conducted using factor analysis, while reliability was tested with Cronbach's Alpha coefficient (α), Composite Reliability (CR), and Average Variance Extracted (AVE). These values provide an overview of how consistent and valid the measurement instruments used in this study are.

Firstly, Information Overload (IO) is measured by three items that indicate that the excess information received by employees can affect their performance. The results show that all items have high loadings, with a Cronbach's Alpha (α) value of 0.725, Composite Reliability (CR) of 0.842, and Average Variance Extracted (AVE) of 0.641. These values indicate that the information overload variable has good reliability and validity, and plays a significant role in influencing employee performance.

Second, Communication Overload (CO) was measured by four items, and the results showed that excessive communication in the workplace has an effect on employee performance. The reliability test results show a CR value of 0.852 and an AVE of 0.658, which indicates that this construct also has good reliability and validity. In other words, communication overload can contribute to a decrease in performance due to the distraction it causes.

Furthermore, Social Media Fatigue (SMF) is measured by four items that indicate how excessive use of social media can cause fatigue that impacts employee productivity. All items on this construct have loadings above 0.7, with a CR value of 0.914 and an AVE of 0.728. These values indicate that social media fatigue is a highly reliable and valid construct, and an important factor affecting employee well-being and performance in this digital age.

The Empowering Leadership (EL) variable measures the influence of empowering leadership on employee performance, with three main sub-dimensions: granting autonomy in independent behaviour, opportunistic thinking, and cooperative action. The analysis results show a CR value of 0.913 and an AVE of 0.639, which indicates that empowering leadership has excellent reliability and validity. This empowering leadership has a significant impact on employee performance, by giving them room to grow and manage their work more independently.

Finally, Employee Performance (EP) is measured by three items that indicate employee performance related to work quality and productivity. The measurement results show a CR value of 0.903 and an AVE of 0.756, indicating that the employee performance construct has excellent reliability and validity. With high CR and AVE values, this variable can well predict employee performance in the higher education sector.

Overall, the measurement results show that all variables tested in this study have excellent reliability and validity, with high CR and AVE values on each construct. This indicates that the measurement model used in this study is reliable for further analysis, and provides a strong understanding of the influence of factors such as information overload, communication overload, social media fatigue, and empowering leadership on employee performance.

Correlation Test

Table 3 Correlation

Constructs	CO	EP	EL	IO	SMF
Communication Overload (CO)	0.811	-0.328	-0.072	0.629	0.728
Employee Performance (EP)	-0.328	0.870	0.371	-0.251	-0.368
Empowering Leadership (EL)	-0.072	0.371	0.799	-0.041	-0.151
Information Overload (IO)	0.629	-0.251	-0.041	0.801	0.497
Social Media Fatigue (SMF)	0.728	-0.368	-0.151	0.497	0.853

This table presents the results of the correlation analysis between the variables used in this study, which include Communication Overload (CO), Employee Performance (EP), Empowering Leadership (EL), Information Overload (IO), and Social Media Fatigue (SMF). This correlation analysis aims to understand the relationship between the variables tested, and provide insight into how these factors influence each other in the context of work and social media use.

The correlation results show that Communication Overload (CO) has a significant positive correlation with Information Overload (IO) ($r = 0.629$) and Social Media Fatigue (SMF) ($r = 0.728$). This indicates that the higher the communication burden felt by employees, the greater the information overload received and the level of fatigue caused by the use of social media. In this context, the communication overload that occurs in the workplace can affect the mental stress of employees, who have to manage an abundance of information as well as maintain communication effectiveness, which in turn can increase fatigue.

Employee Performance (EP) shows a moderate positive correlation with Leadership Empowering (EL) ($r = 0.371$), which suggests that employees who feel more empowered by their leaders tend to show better performance. On the other hand, the weak negative correlation between Communication Overload (CO) ($r = -0.328$) and Social Media Fatigue (SMF) ($r = -0.368$) with Employee Performance signifies that communication overload and social media fatigue to some extent reduce employees' work effectiveness. This indicates that although employees feel empowered, external factors such as information overload and fatigue from social media can reduce their performance.

The correlation between Empowering Leadership (EL) and Employee Performance (EP) shows a very strong relationship ($r = 0.799$). This finding confirms that empowering leadership has a significant influence in improving employee performance. By giving greater autonomy, as well as supporting employees to make decisions, empowering leaders can improve work quality and productivity. Conversely, the weak negative correlation between Empowering Leadership and Communication Overload (-0.072) and Social Media Fatigue ($-$

0.151) suggests that providing greater support from leaders can help reduce the negative impact of communication overload and social media fatigue faced by employees.

Information Overload (IO) also showed a significant positive correlation with Communication Overload (CO) ($r = 0.629$) and Social Media Fatigue (SMF) ($r = 0.497$). This means that the more information employees receive, the higher the likelihood of them feeling information overload and social media fatigue. Employees who experience information overload tend to feel more burden in managing their work, which exacerbates the mental and physical stress they feel, especially with the constant use of social media.

Social Media Fatigue (SMF), which reflects fatigue due to excessive social media use, showed a positive correlation with Communication Overload (CO) ($r = 0.728$) and Information Overload (IO) ($r = 0.497$). High social media fatigue may be exacerbated by communication and information overload received by employees. On the other hand, the negative correlation with Employee Performance (EP) ($r = -0.368$) indicates that social media fatigue hurts employee performance. When employees feel exhausted and overwhelmed by social media, their performance will suffer, affecting their productivity and the quality of their work. Overall, the findings from this correlation analysis provide a clear picture that Communication Overload, Information Overload, and Social Media Fatigue are closely interconnected and have a significant impact on Employee Performance. In addition, Empowering Leadership plays an important moderating role by helping to reduce the negative impact of communication overload and social media fatigue on employee performance. These results emphasise the important role of empowering leadership in mitigating digital stress factors in the workplace and improving employee performance.

Hypothesis Test

Table 4 R-Square Value

Hypotheses	R-Square
Employee Performance	0.237
Social Media Fatigue	0.533

This table presents the R-square values for the two main hypotheses in this study, namely Employee Performance (EP) and Social Media Fatigue (SMF). The R-square value is used to measure how much variability in the dependent variable can be explained by the independent variables in the model. In this study, R-square provides important information about the extent to which the proposed model is able to explain the variations that occur in the two dependent variables.

For Employee Performance (EP), the R-square value obtained is 0.237, which indicates that this research model can only explain about 23.7% of the variability in employee performance. This suggests that although some of the variables in this model have an effect on employee performance, there are still other factors not detected in this study that also affect performance. These may include external factors that are not measured in the model, such as personal motivation, working conditions, or other social factors that may affect productivity and performance quality.

In contrast, Social Media Fatigue (SMF) has a higher R-square value of 0.533. This indicates that the model can explain about 53.3% of the variability in social media fatigue experienced by employees. This higher R-square value indicates that the factors tested in this

study have a greater influence on social media fatigue compared to employee performance. This indicates that the model is more effective in explaining what influences the level of burnout caused by social media use, such as information or communication overload, which is increasingly common in the digital age.

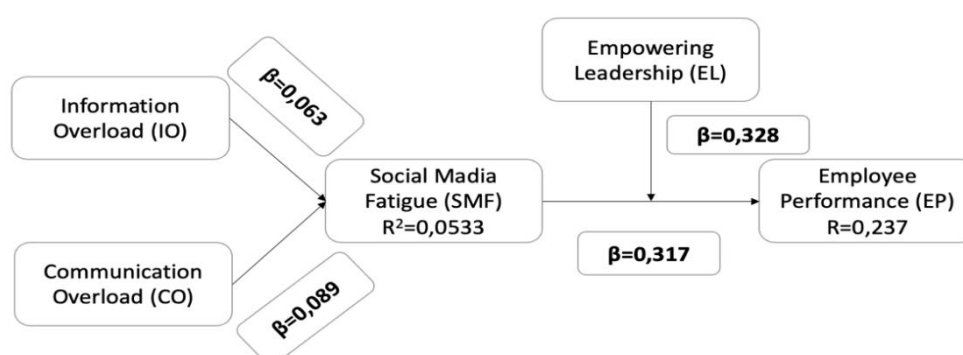
Overall, these findings provide useful insights into how Social Media Fatigue is more influenced by the variables tested in this study than Employee Performance. The greater influence of social media fatigue suggests that digital fatigue may be a major challenge for employees, while other factors outside of this model may contribute more to variations in their performance. This highlights the importance of paying more attention to external factors that may affect performance, as well as the need for managerial policies and strategies to address the negative impact of social media in the work environment.

Path Analysis

Table 5 Path Analysis Results

Hypotheses	Path Coefficient	T-statistic (t)	P value	Decision
H1: Information overload positively affects social media fatigue.	0.663	6.635	0.000	supported
H2: Communication overload positively affects social media fatigue.	0.689	7.725	0.000	supported
H3: Social media fatigue negatively affects employee performance	-0.317	4.528	0.000	supported
H4: Leadership empowering moderates the negative effect of social media fatigue on employee performance	0.328	3.360	0.001	supported

Figure 1 Path Diagram



This table and figure present the results of the hypothesis tests used to examine the relationship between the variables in this study. Each hypothesis was tested using the path coefficient, t-statistics, and p-value to determine whether the proposed relationship between the variables is significant or not. The decision to accept or reject a hypothesis is determined

based on a p-value smaller than 0.05, which indicates that the relationship is significant at the 95% confidence level.

Description of Findings:

- 1) H1: Information overload positively affects social media fatigue The first hypothesis tested whether information overload positively affects social media fatigue. Based on the test results, the path coefficient obtained is 0.663, t-statistics 6.635, and p-value 0.000. These results indicate a highly significant positive relationship between information overload and social media fatigue. Thus, the first hypothesis is accepted, indicating that the higher the information overload received, the higher the level of fatigue felt due to social media.
- 2) H2: Communication overload positively affects social media fatigue The second hypothesis tested the effect of communication overload on social media fatigue. The test results show a path coefficient of 0.689, t-statistics of 7.725, and p-value of 0.000. This indicates that communication overload has a highly significant influence on social media fatigue. This hypothesis is accepted, which indicates that communication overload can increase the fatigue felt by employees due to social media use.
- 3) H3: Social media fatigue negatively affects employee performance The third hypothesis tested whether social media fatigue has a negative impact on employee performance. The analysis results show a path coefficient of -0.317, t-statistics of 4.528, and p-value of 0.000, confirming a significant negative relationship between social media fatigue and employee performance. The higher the level of social media fatigue experienced by employees, the lower the performance shown. Therefore, this hypothesis is accepted.
- 4) Empowering leadership moderates the negative effect of social media fatigue on employee performance The fourth hypothesis tested the moderating role of empowering leadership in reducing the negative impact of social media fatigue on employee performance. The test results show a path coefficient of 0.328, t-statistics of 3.360, and p-value of 0.001. This indicates that empowering leadership has a significant moderating role in reducing the negative impact of social media fatigue on employee performance. In other words, empowering leaders can help employees manage social media fatigue and improve their performance.

The overall hypothesis in this study proved to be significant and accepted, showing strong evidence that excessive information and communication have a significant impact on social media fatigue, thus affecting employee performance. In addition, empowering leadership also plays an important role in reducing the negative impact of social media fatigue on performance. The results of this study provide important insights for managers and organizational leaders to pay attention to these factors in an effort to improve employee productivity and well-being amid the ever increasing development of the digital era. By implementing the right leadership strategy, organizations can help employees manage digital pressure and achieve optimal performance.

Discussion

Information overload positively affects social media fatigue.

The findings confirm that information overload positively affects social media fatigue ($\beta = 0.663$; $p < 0.001$), indicating that when employees are exposed to excessive information, they are more likely to feel digitally exhausted and disengaged. In Indonesian higher education,

information overload is often experienced through overlapping institutional sources formal circular letters, faculty directives, accreditation-related reminders, LMS announcements, and administrative dashboards where the same issue may be repeated across different channels and formats. This accumulation increases cognitive processing demands and reduces employees' perceived control over what deserves immediate attention, which is a core mechanism of technostress and overload-related strain (Yu et al., 2018; Ayyagari et al., 2011). Importantly, the magnitude of the coefficient ($\beta \approx 0.66$) suggests a substantively strong effect, meaning information overload is not a marginal annoyance but a major driver of fatigue in this setting (Ayyagari et al., 2011).

Communication overload positively affects social media fatigue

The results also showed that excessive communication had a positive impact on social media fatigue ($\beta = 0.689$; $p < 0.001$). This supports the argument that burnout is not only driven by the amount of information, but also by the disruptive nature and proximity pressures of digital communication. In many universities in Indonesia, employees are embedded in several WhatsApp/Telegram groups including departmental groups, faculties, programs, research teams, class coordination, committees, where messages come continuously and implicitly demand a quick response even outside of office hours. Such constant interruptions break up attention, disrupt recovery time, and create always-on expectations, which are in tune with overload-driven technostress mechanisms (Yu et al., 2018; Ayyagari et al., 2011). A slightly higher coefficient for over communication compared to over-information ($\beta = 0.689$ vs. 0.663) suggests that, in this context, interruptions and response expectations may be more exhausting than information volume alone, a pattern consistent with the idea that boundary erosion is central to digital fatigue (Ayyagari et al., 2011).

Social media fatigue negatively affects employee performance

The analysis showed that social media fatigue negatively impacted employee performance ($\beta = -0.317$; $p < 0.001$). This suggests that once employees become tired, their capacity to maintain attention, manage tasks efficiently, and maintain the quality of work decreases. In college, performance is not limited to routine administrative outputs. It also includes cognitively demanding tasks such as preparing for lectures, grading, supervising students, and completing research/administrative reporting. Therefore, fatigue can translate into slower task completion, lower responsiveness quality, and reduced accuracy especially during peak academic periods. For example, end-of-semester assessments, accreditation submissions, or reporting deadlines. These findings are consistent with previous evidence that digital fatigue and excessive social media demands can impair productivity and work outcomes (Brooks & Califf, 2017). In terms of magnitude, $\beta \approx -0.32$ represents a moderate practical effect, implying that fatigue is a significant performance risk factor, although performance is also affected by other determinants outside the model (Brooks & Califf, 2017).

Empowering leadership moderates the negative effect of social media fatigue on employee performance

The moderation test supports the hypothesis that leadership empowerment buffers the negative impact of social media fatigue on performance (β interaction = 0.328 ; $p < 0.01$). This suggests that the performance decline associated with fatigue is less severe when employees feel a higher level of empowerment leadership. In practice, leadership empowerment at HE Indonesia can emerge through the clear priority of granting autonomy to manage communication time, providing decision-making flexibility in handling student or

administrative demands, and protecting employees from unnecessary disruption through agreed communication norms. Such leadership behaviors can help employees maintain functional resources such as focus, self-regulation, and perceived control, even under high digital pressure, which strengthens their ability to maintain performance despite burnout (Seibert et al., 2011). The magnitude of the interaction ($\beta \approx 0.33$) showed a significant buffering effect, positioning leadership not as a peripheral factor but as a strategic lever to reduce fatigue-related performance loss in a digital-intensive environment (Seibert et al., 2011).

This research has several limitations. First, the design is cross-sectional, which limits strong causal inferences between overload, fatigue, and performance. Although the proposed relationship is theoretically based, future studies should use longitudinal design to capture how digital demands and burnout accumulate across the academic cycle e.g., part-time, final, peak accreditation or reporting and to test temporal bookings more rigorously (Ayyagari et al., 2011). Second, the study relied on self-reported measures, which could introduce general method bias and inflate associations due to the context of shared measurements. Future research should incorporate procedural or statistical improvements and use multi-source performance indicators e.g., supervisor ratings, objective task indicators, or triangulation with administrative outputs to improve resilience (Podsakoff et al., 2003). Third, the sample is limited to the context of higher education, which can limit generalization to sectors with different digital communication norms and task structures. Further research should replicate this model across industries such as healthcare, banking, public administration, or technology companies, and compare whether communication norms for example, an always-on messaging culture can reinforce or weaken overload mechanisms (Yu et al., 2018). Finally, future research may use experimental or quasi-experimental approaches to evaluate actionable interventions such as leadership training empowerment, institutional digital communication norms, or boundary management policies to test whether communication leadership and governance can causally reduce social media fatigue and protect performance under high digital demands (Seibert et al., 2011).

CONCLUSION

This study aims to investigate the influence of information and communication overload on social media fatigue and its impact on employee performance, considering the moderating role of empowering leadership. Based on the findings, this study successfully confirmed that information and communication overload significantly contributes to social media fatigue, which in turn negatively impacts employee performance. The results also indicate that empowering leadership plays an important role in reducing the negative impact of social media fatigue on performance by providing support and autonomy to employees.

Organizations can apply several practical recommendations based on the results of this study to address the challenges of an increasingly digitalized work environment. First, organizations must conduct an internal digital communication audit to identify repetitive or inefficient communication channels and utilize information management systems such as email prioritization rules, intranet updates, or centralized notification dashboards to reduce information overload. Second, implementing healthy social media usage policies is essential, including restricting access during working hours and educating employees on productive social media usage. Third, organizations are advised to conduct digital stress management and time management training so that employees can manage their exposure to social media and

communication pressures more wisely. Fourth, empowering leadership is also crucial through training that teaches leaders to delegate tasks effectively, provide constructive feedback, and support work-life balance; even leadership performance assessments can include aspects of support for employee digital well-being. Finally, the integration of supporting technologies such as AI-based email filters, internal chatbots, and task management applications should be considered to help filter out irrelevant information and facilitate more efficient and focused work prioritization.

This study paves the way for further research on the influence of other digital factors on employee well-being and performance. Future research could expand the scope by examining specific interventions that organisations can implement to reduce digital stress and improve performance, including the use of smart technology to manage information overload and improve workplace communication systems. Thus, this study provides a strong foundation for the development of better policies to address the challenges of an increasingly digitalised workplace.

REFERENCES

- Ahmed, M., Zhang, L., & Wong, T. (2022). The role of empowering leadership in enhancing employee engagement and performance. *Journal of Organizational Behaviour*, 43(5), 789-805. <https://doi.org/10.1002/job.2516>
- Atmaja, H. E. (2018). The Importance of Human Resource Management to Improve Small and Medium Enterprises. *Journal of REKOMEN (Management Economics Research)*, 2(1), 21-34 <https://doi.org/10.31002/rn.v2i1.818>
- Ayyagari, R., Grover, V., & Purvis, R. (2011). Technostress: Technological antecedents and implications. *MIS Quarterly*, 35(4), 831-858. <https://doi.org/10.2307/41409963>
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328. <https://doi.org/10.1108/02683940710733115>
- Bass, B. M., & Riggio, R. E. (2006). *Transformational Leadership* (2nd ed.). Lawrence Erlbaum Associates Publishers. <https://doi.org/10.4324/9781410617095>
- Brooks, S., & Califf, C. (2017). Social media-induced technostress: Its impact on the job performance of IT professionals and the moderating role of job characteristics. *Computer Networks*, 114, 143-153. <https://doi.org/10.1016/j.comnet.2016.08.020>
- Ch'ng, S., & Soo Hoo, P. (2022). Empowering leadership and its role in reducing technostress and improving employee performance. *Journal of Leadership & Organizational Studies*, 29(1), 99-115. <https://doi.org/10.1177/15480518221104202>
- Cho, J., Ramgoo, J., & Wu, H. (2014). Coping with information overload in the mobile era: A theoretical framework. *International Journal of Mobile Communications*, 12(3), 268-291. <https://doi.org/10.1504/IJMC.2014.061460>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2022). The benefits of Facebook "friends": Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168. <https://doi.org/10.1111/j.1083-6101.2007.00367.x>

- Journal of Educational Technology Systems, 51(1), 27-43. <https://doi.org/10.1177/00472395221092738>
- Lee, Y., & Joo, B. K. (2023). The impact of empowering leadership on adaptive performance: The mediating role of psychological empowerment. *Leadership & Organization Development Journal*, 44(2), 235-251. <https://doi.org/10.1108/LODJ-01-2022-0043>
- McGrath, R. G., & Charan, R. (2023). Digital transformation and its effects on organisational dynamics: Shaping new identities in the workplace. *Harvard Business Review*, 101(3), 56-64.
- McGrath, R., & Charan, R. (2023). The permissionless corporation: Technology is empowering employees to make their own decisions. *Harvard Business Review*, 101(1), 86-95. <https://hbr.org/2023/01/the-permissionless-corporation>
- opinion on health issues. *Social Media Studies*, 12(1), 34-48. <https://doi.org/10.1080/2163249X.2024.1876733>
- performance. *Journal of Applied Psychology*, 106(3), 442-453. <https://doi.org/10.1037/apl0000502>
- Pindek, S., Koustelios, A., & Sideridis, G. D. (2023). Social media use and its impact on work-life balance: A comprehensive model of technostress. *International Journal of Stress Management*, 30(2), 89-106. <https://doi.org/10.1037/str0000169>
- productivity. *Journal of Business Research*, 79(2), 213-227. <https://doi.org/10.1016/j.jbusres.2017.10.004>
- Rahayu, A., Ratnawati, S., Idayanti, R. W., Santoso, B., & Luthfiana, N. A. (2020). Effect of intensive and semi-intensive rearing systems on Magelang ducks. *Journal of Indonesian Animal Science*, 15(4), 355-359
- Rasool, S. F., Zia-ur-Rehman, M., & Rehman, S. U. (2022). The impact of information overload on employee performance: Evidence from Pakistan. *Journal of Information & Knowledge Management*, 21(3), 204-214. <https://doi.org/10.1142/S0219649222500259>
- Ratnawati, S., & Atmaja, H. E. (2020). The Importance of Competence, Motivation and Job Satisfaction to Drive Job Performance. *BBM (Business & Management Bulletin)*, 6(01), 10-18. <http://dx.doi.org/10.47686/bbm.v6i01.283>
- Raza, M., Khan, S., & Hussain, R. (2023). Impact of social media usage on employees' work-life balance: A case study of the higher education sector. *Journal of Applied Psychology*, 45(3), 322-335. <https://doi.org/10.1037/apl0000734>
- Raza, M., Khan, S., & Zubair, S. (2023). The role of empowering leadership in mitigating social media fatigue. *Educational Management Administration & Leadership*, 51(4), 522-537. <https://doi.org/10.1177/17411432221115680>
- Raza, S. A., & Yousufi, S. Q. (2023). Transformational leadership and employee's career satisfaction: Role of psychological empowerment, organizational commitment, and emotional exhaustion. *Asian Academy of Management Journal*, 28(2), 207-238. <https://doi.org/10.21315/aamj2023.28.2.8>
- Rusdian, S., & Rismayani, N. (2020). The Effect of Incentives on Employee Engagement (Study at Cv. Asstro Tarogong Garut). *Business Economics*, 26(2), 398-410. Retrieved from
- Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment: A meta-analytic review. *Journal of Applied Psychology*, 96(5), 981-1003. <https://doi.org/10.1037/a0022676>

- Seibert, S. E., Wang, G., & Courtright, S. H. (2021). Antecedents and consequences of empowering leadership: A meta-analytic review. *Journal of Applied Psychology*, 96(5), 987-1003. <https://doi.org/10.1037/a0022676>
- Simmons, J. R., Haynie, J., & Muenich, J. A. (2022). Empowering leadership and employee outcomes: A review of the literature. *The Leadership Quarterly*, 33(6), 101-113. <https://doi.org/10.1016/j.leaqua.2022.101717>
- Smith, J., Brown, L., & Carter, A. (2023). The effect of technostress on employee productivity and job satisfaction. *Journal of Organizational Behaviour*, 44(2), 99-115. <https://doi.org/10.1002/job.2766>
- Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The impact of technostress on role stress and productivity. *Journal of Management Information Systems*, 24(1), 301-328. <https://doi.org/10.2753/MIS0742-1222240109>
- Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The impact of technostress on role stress and productivity. *Journal of Management Information Systems*, 24(1), 301-328. <https://doi.org/10.2753/MIS0742-1222240109>
- Theory, Design, and Data Analysis. Takaza Innovatix Labs.
- Tufail, M., Akhtar, M. N., & Rashid, M. (2022). Employee performance and motivation: A study of the impact of organizational support and leadership. *Journal of Human Resource Management*, 60(3), 125-137.
- Tufail, M., Akhtar, M. N., & Rashid, M. (2022). Employee performance and motivation: A study of the impact of organizational support and leadership. *Journal of Human Resource Management*, 60(3), 125-137. <https://doi.org/10.1080/00043700122829711>
- We Are Social. (2024). Digital 2024: The global overview report. We Are Social & Hootsuite. <https://datareportal.com/reports/digital-2024-indonesia>
- We Are Social. (2024). Digital 2024: The global overview report. We Are Social. Retrieved from <https://wearesocial.com/digital-2024>
- Whelan, E., Islam, A. K. M. N., & Brooks, S. (2020). Is boredom prone consumers' social media fatigue affecting their psychological well-being? *Internet Research*, 30(3), 869-887. <https://doi.org/10.1108/INTR-03-2019-0112>
- Yakin, I. H., Supriatna, U., Rusdian, S., & Global Akademia, M. (2023). Research Methodology (Quantitative & Qualitative). Paper Knowledge. Toward a Media History of Documents.
- Yu, L., Cao, X., Liu, Z., & Wang, J. (2018). Excessive social media use at work: Exploring the effects of social media overload on job performance. *Information Technology & People*, 31(6), 1091-1112. <https://doi.org/10.1108/ITP-10-2016-0237>
- Yu, L., Han, J., & Wang, Z. (2018). The relationship between social media use, work-life balance, and employee performance. *Journal of Applied Psychology*, 103(4), 440-457. <https://doi.org/10.1037/apl0000304>