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Managing Crisis in Education: The Role of Digital Leadership and Social Media Communication

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Abstract:

This study aims to analyze effective leadership strategies and practices in utilizing social media in a responsive, empathetic, and transparent manner during a crisis. Using a qualitative case study approach, the research involved in-depth interviews with 30 informants, direct observation, and documentation. Data were analyzed thematically with reference to theories of transformational leadership, digital communication, and crisis management. The results indicate that principals who actively manage social media communications, such as using quick-response features and delivering honest, empathetic messages, successfully build stakeholder trust and control the narrative amid uncertainty. This responsive and collaborative communication model strengthens social relationships and accelerates the adaptation of school community members. These findings align with the theory that effective crisis communication requires a leader's digital competence and interpersonal skills. This research contributes to the development of digital leadership and crisis management theory in education. It provides practical guidance in developing effective communication policies and training for schools in emergencies.

Keywords: Transformational Leadership, Digital Communication, Social Media

Abstrak:

Penelitian ini bertujuan untuk menganalisis strategi dan praktik kepemimpinan yang efektif dalam memanfaatkan media sosial secara responsif, empatik, dan transparan selama krisis. Menggunakan pendekatan kualitatif dengan jenis studi kasus, penelitian ini melibatkan wawancara mendalam dengan 30 informan, observasi langsung, dan studi dokumentasi. Data dianalisis secara tematis dengan merujuk pada teori kepemimpinan transformasional, komunikasi digital, dan manajemen krisis. Hasil penelitian menunjukkan bahwa kepala sekolah yang aktif dalam mengelola komunikasi media sosial, seperti memanfaatkan fitur respons cepat dan menyampaikan pesan yang jujur serta empatik, berhasil membangun kepercayaan pemangku kepentingan dan mengendalikan narasi di tengah ketidakpastian. Model komunikasi yang responsif dan kolaboratif ini memperkuat hubungan sosial serta mempercepat adaptasi anggota komunitas sekolah. Temuan ini sejalan dengan teori yang menyatakan bahwa komunikasi krisis yang efektif memerlukan kompetensi digital serta keterampilan interpersonal dari seorang pemimpin. Penelitian ini memberikan kontribusi terhadap pengembangan teori kepemimpinan digital dan manajemen krisis di bidang pendidikan, serta memberikan panduan praktis dalam pembentukan kebijakan dan pelatihan komunikasi yang efektif bagi sekolah dalam menghadapi situasi darurat.

Kata Kunci: Kepemimpinan Transformasional, Komunikasi Digital, Media Sosial

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INTRODUCTION

As information technology continues to develop, social media has become an integral part of modern social and educational life (Burbules et al., 2020; Szymkowiak et al., 2021). However, theoretical approaches to leadership during crises, particularly regarding the use of social media, have not been sufficiently developed (Borah et al., 2022; Ogie et al., 2022). Existing leadership theories emphasize traits such as adaptability, effective communication, and decision-making in everyday situations (Dumulescu & Muțiu, 2021; Fernandes et al., 2023). However, they lack a specific exploration of how school leaders manage challenges that arise during emergencies, especially when social media becomes a primary tool for communication and organization (Da'as et al., 2025; Shah et al., 2020). This study addresses this gap by examining effective leadership strategies for navigating schools during social media crises, providing a practical framework that current literature lacks.

The Covid-19 pandemic and other crises show that social media was a primary tool for disseminating information, coordinating activities, and mobilizing resources. For example, a study by Syamnsir & Bhat (2025) found that during the pandemic, 75% of information shared on school-related social media pages was unverified. Additionally, research by Durach et al. (2025) highlights how the rapid spread of inaccurate information, disinformation, and external pressures caused significant tension and confusion for school communities. This reality highlights a gap in current theory, which has yet to sufficiently explain how leadership should adapt and play its role in maintaining stability and effectiveness in the educational process amid these dynamic challenges.

Previous studies have addressed educational leadership in crisis contexts, especially related to the pandemic and digital transformation (Lalani et al., 2025; Striepe & Cunningham, 2022). These studies generally highlight the importance of leaders' competencies in making rapid decisions, utilizing technology for school management, and implementing effective communication strategies. For example, Smith and colleagues (2021) examined digital leadership during the pandemic, primarily focusing on technological aspects rather than the social and complex communication aspects of social media (Dirani et al., 2020; Ghamrawi et al., 2024). Chen and Li (2020) emphasized the importance of leaders in enhancing psychological resilience in schools during crises, offering valuable insights but not extensively discussing how leadership must adapt to the fastpaced, widespread dynamics of social media (Nickerson & Sulkowski, 2021; Schechter et al., 2024). Another study by Zhang (2019) explored social media's influence on school community behavior but did not explicitly address leadership strategies in managing the diversity of information disinformation on digital platforms (Horowitz et al., 2022; Saurwein & Spencer-Smith, 2020).

The novelty of this research lies in its focus on the specific role of leadership in managing the challenges and opportunities presented by social media during educational crises. It aims to develop a new theoretical framework by integrating transformational leadership theory with digital communication theory. This framework introduces new elements critical to a digital crisis, including rapid-response capabilities, legitimacy maintenance, and audience segmentation on social media. This study is expected to fill existing gaps and contribute significantly to the development of educational leadership in the era of digital crises. Therefore, this study is expected to fill these gaps and contribute significantly to the development of educational leadership in the era of digital crises.

The main argument of this study is that successful leadership during social media crises depends on a leader's digital competence. This involves managing the dynamic flow of information and misinformation, effectively framing messages, and building trust within the school community. Therefore, this research proposes a leadership framework to help leaders navigate social media challenges and ensure the continuity of the educational process and the well-being of the school community (Wan et al., 2022; Wardman, 2022). Therefore, a leadership framework capable of navigating social media challenges during crises is crucial to ensuring the continuity of the educational process and the well-being of school community members (Pesnell & McGill, 2025; Tamar et al., 2023).

This research is important because it provides a practical understanding of effective leadership strategies for navigating social media crises. It serves as a guide for leaders and policymakers, helping them build resilience against the challenges of a digitalized world during emergencies. The study also contributes to the international literature on education management in the digital era by offering insights that can improve decision-making, minimize disinformation, and strengthen stakeholder collaboration to ensure the continuity of education.

This research aims to identify and analyze effective leadership strategies for navigating schools during social media crises. By examining how leaders optimally utilize social media in decision-making, communication, and resource management during emergencies, this study seeks to fill a critical gap in the existing literature. The findings will provide a practical framework for educational leaders and policymakers to enhance their preparedness and response capabilities in a digitalized world. Ultimately, this work contributes to the development of more resilient educational systems that can maintain stability and effectiveness even amid the unpredictable nature of social media-driven crises.

RESEARCH METHOD

This research uses a qualitative case study design to gain a deeper understanding of leadership strategies for addressing communication crises in schools. This approach was chosen because it allows researchers to explore the rich, complex details of the phenomenon in the field (Amin et al., 2020; Köhler, 2024; Nielsen et al., 2020) that quantitative methods cannot capture. By focusing on five high schools in Surabaya, this study targets areas with high social media usage intensity and susceptibility to communication challenges. This case study design helps identify best practices and specific challenges faced by school

leaders (Gómez-Leal et al., 2022; Scully et al., 2021). While the findings are not intended to be statistically generalizable, the richness of the data from these individual cases enhances transferability, allowing practitioners and other researchers to apply relevant insights to their own contexts. The primary units of analysis are strategies, digital communication practices, and the relationship dynamics that emerged during the crisis.

This research is based on the triangulation of three primary theoretical frameworks to provide a strong and comprehensive analytical foundation. First, Bass & Riggio's (2006) transformational leadership theory is used to analyze how leaders inspire trust, motivate school communities, and foster positive change during times of crisis. This theory is relevant because social media crises often require leaders who are not only reactive but also visionary and proactive (Bhat & Saba, 2025; Soomro & Khan, 2024). Second, O'Neill and McGrath's (2025) digital communication theory helps explain how leaders manage information flows, counter disinformation, and interact effectively across various digital platforms. This theory is crucial for assessing leaders' digital competencies in a fast-paced environment (Malhotra et al., 2025; Shrivastav et al., 2025). Finally, Boin and Lodge's (2016) crisis management model provides a framework for evaluating the overall response, from the preparation phase to post-crisis recovery, allowing this study to assess how social media leadership strategies are integrated into broader crisis management plans (Chatzipanagiotou & Katsarou, 2023). The combination of these theories ensures a holistic and multidimensional analysis.

Research data were collected from January to June 2024, using data triangulation to ensure the validity and credibility of the findings. The methods used included semi-structured interviews, field observations, and documentary studies (Janis, 2022; McKelvey et al., 2022). In-depth interviews were conducted to gain firsthand perspectives and narratives of experiences from informants, focusing on the communication strategies they employed, the challenges they faced, and the solutions they found. Field observations enabled researchers to observe communication practices on the ground, providing rich contextual data that might not have emerged in interviews. Additionally, documentary studies, including school social media archives, activity reports, and official communication policies, helped verify and contextualize the data from interviews and observations.

A total of 30 informants were selected purposively to ensure a rich diversity of perspectives and achieve data saturation (Bouncken et al., 2025; Pahwa et al., 2023). The distribution of informants was strategically designed to capture perspectives from across levels and roles. A total of 15 principals and management representatives were interviewed as key subjects due to their central role in crisis decision-making. To gain an implementation perspective, 5 teachers and 5 administrative staff were also involved. Their participation is crucial as they are on the front lines of implementing school policies and facing daily communication challenges. Additionally, 5 external stakeholders, such as parent representatives, provided valuable insights into how school communications are received and perceived by the broader community. This

diverse informant selection strategy, combined with data triangulation, ensured a comprehensive and credible analysis (Lim, 2025; Nuchian et al., 2024).

The data analysis process was conducted thematically using NVivo software to assist with data transcription, coding, and categorization. This step facilitated the identification of key themes emerging from interviews and observations (O'Kane et al., 2021; Rosen et al., 2023). To ensure the reliability of the findings, the analysis included inter-coder agreement, in which researchers coded the same data to ensure consistency. Additionally, an audit trail documenting every coding and analysis decision was used to ensure methodological transparency. Findings from all three data sources (interviews, observations, and documents) were triangulated to increase depth and validity.

RESULT AND DISCUSSION Result

Research findings indicate that effective digital communication strategies during a crisis play a critical role in successful school leadership. Based on data analysis, three key interrelated sub-themes emerged: building trust through transparency, implementing strategic responsiveness, and strengthening collaborative communication. These findings are supported by evidence from interviews, observations, and documentary studies.

Building Trust Through Transparency

Building trust through transparent communication was a key factor in the successful leadership of school principals during times of crisis. Principals who prioritized clarity, accuracy, and timeliness in their communication alleviated confusion and reduced anxiety among the school community. One principal emphasized the importance of being "quick, accurate, and clear" to avoid confusion, stating, "Otherwise, the school community will feel confused." Principals actively monitored social media and responded immediately to any questions, recognizing the critical role of responsiveness in maintaining trust.

The use of social media as a communication tool was also a significant strategy employed by principals to keep the school community informed. Principals regularly provided updates on precautionary measures, the rationale for key decisions, and other relevant information. This proactive approach helped reduce speculation and ensured that the community was aligned with the school's actions. In this way, transparency was not only about providing information but also about demonstrating leadership accountability through visible actions.

However, schools that lacked transparency struggled significantly. Data revealed that these schools faced higher levels of misinformation and a decline in trust from both parents and students. Without clear, open communication, the community was left to fill the information gap with assumptions, leading to a breakdown in trust. This was particularly evident when principals failed to address questions or concerns promptly, creating an environment of uncertainty and dissatisfaction.

In interpreting these findings, it becomes clear that transparent communication is essential for building and maintaining trust in a school environment, especially during crises. Schools that effectively used transparent communication, both through direct interactions and social media, were more successful in managing community trust. This pattern indicates that trust-building is not only about delivering information but also about doing so consistently, clearly, and responsively. Thus, leadership accountability through transparency emerges as a key driver of success in crisis management.

Implementing Strategic Responsiveness

Strategic responsiveness, which goes beyond mere speed, plays a crucial role in effective crisis communication within schools. Schools that implemented a systematic approach to responsiveness used social media features strategically, recognizing the power of tools like live streaming and regular status updates. These methods were reported to be highly effective in conveying essential information and responding directly to audience inquiries. Additionally, some schools enhanced responsiveness by using automated replies for frequently asked questions, enabling faster, more efficient communication.

In a documentary study examining social media archives, schools with a rapid response strategy consistently showed higher levels of audience interaction and satisfaction. The study found that schools that employed these strategic tools were able to engage with their communities more meaningfully and promptly. These schools kept their communities informed while also providing a direct channel for communication, which is critical for maintaining trust during crises.

The data also revealed a significant distinction between schools that used social media solely as a platform for announcements and those that viewed it as a two-way communication tool. Schools that embraced a more interactive approach demonstrated greater effectiveness in managing their relationships with the school community. By using social media for real-time engagement, they fostered a sense of inclusion and responsiveness, thereby contributing to a more supportive school environment.

From these findings, it is evident that strategic responsiveness, coupled with the innovative use of social media tools, significantly enhances a school's ability to maintain communication efficiency and audience satisfaction. The pattern that emerges suggests that the most successful schools do not simply use social media for one-way communication but rather as an interactive platform that facilitates a continuous dialogue with their community. This approach ultimately strengthens their crisis management efforts and enhances trust in their leadership.

Strengthening Collaborative Communication

Effective communication during a crisis is a collective effort that involves more than just the principal's leadership. Teachers and administrative staff are essential frontline communicators, playing a critical role in delivering consistent, clear messages to the school community. Interviews with staff revealed that their ability to communicate effectively during a crisis is dependent mainly on the guidance and training they receive from the principal. One administrative staff member shared, "We feel more confident because we've been trained. There are clear guidelines on how to respond, so we don't hesitate." This highlights the

importance of preparation in enabling staff to perform their roles efficiently during high-pressure situations.

The success of communication in schools during crises is also directly tied to the presence of clear and structured internal communication policies. Successful schools have implemented these policies, which provide a framework for disseminating information and handling communication across all levels of the institution. These policies ensure that all team members have the knowledge they need to respond effectively. The consistency of messages across channels is a direct result of these well-defined protocols, which help maintain alignment with the school's overall communication strategy.

In practice, schools with effective communication systems have established strong internal teams that coordinate the flow of information. The coordination among teachers, administrative staff, and the principal ensures that the information shared is not only consistent but also timely and relevant. This structured approach to internal communication helps prevent confusion and miscommunication, which are common pitfalls during a crisis. The organizational guidelines enable all team members to work together seamlessly, ensuring that every message aligns with the school's intended response strategy.

From the data, it is clear that a well-prepared and coordinated communication team, backed by proper training and guidance, plays a crucial role in crisis management. The pattern emerging from these findings indicates that schools with established internal communication policies are better equipped to handle crises. The involvement of all staff members, guided by the principal's leadership, ensures effective communication and keeps the school community informed, reducing the risk of misinformation and enhancing the overall crisis response.

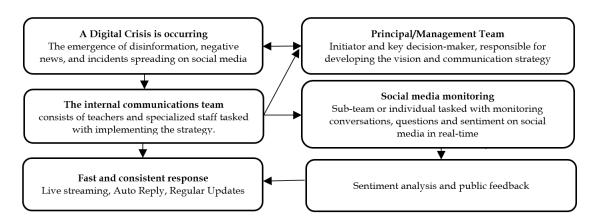


Figure 1. Strengthening Collaborative Communication

Brief Explanation of the Diagram:

This diagram visually illustrates that successful crisis communication is not a one-way process. It is a dynamic, collaborative model in which the leader serves as the strategy architect, while the internal team executes the strategy on the front lines. The diagram highlights the interaction between these two parties, with the feedback loop ensuring that the communication strategy is continuously monitored and adjusted in response to changing circumstances. This ongoing

feedback is essential for maintaining effective communication and building trust with the external audience. Furthermore, it underscores that strong internal policies and structures are the foundation for successful external communication during a crisis.

The data interpretation shows that the effectiveness of crisis communication depends heavily on the strength of an organization's internal structure. When clear policies and structures are in place, organizations can respond to crises quickly, consistently, and in a coordinated manner. In contrast, organizations without clear internal frameworks, such as schools lacking well-defined communication policies, tend to deliver inconsistent messages and experience delays in response. These delays can exacerbate the crisis and erode public trust in the organization's ability to manage the situation effectively.

From this, robust internal policies are likely critical to achieving effective crisis communication. A well-organized internal structure enables organizations to remain adaptable and ensure transparent communication with the public. The feedback loop further highlights the importance of continuous adaptation and responsiveness. Organizations that manage feedback effectively are more likely to maintain their audience's trust, which is especially important during times of crisis.

Finally, comparing schools with strong internal policies to those without clear communication frameworks demonstrates the significance of internal structures in supporting effective external communication. Schools without established policies often struggle with inconsistent messaging, which can worsen public perception during a crisis. This reinforces the idea that well-developed internal policies and structures form the foundation for successful external communication during challenging times.

Discussion

In-depth interviews revealed that the key competency underpinning school principals' success in managing communications during a crisis is their ability to use social media responsively and empathetically. Theoretically, the transformational leadership concept of Bass & Riggio (2006) emphasizes the importance of leaders who can inspire and motivate through effective communication (Lee & Kim, 2021; Men et al., 2022). In this context, principals who can convey clear, honest, and empathetic messages can strengthen trust within the school community, including parents, students, and staff. They act as agents of change, building strong social relationships amidst stress and uncertainty.

Resonates with the principles of transformational leadership that focus on idealized influence and individual consideration (Khan et al., 2022). By actively monitoring social media and personally responding to concerns, principals demonstrate individualized consideration, making every member of the community feel heard and valued. This responsiveness and empathy are fundamentally a manifestation of a leader's effort to inspire through actions, not just words. Therefore, a principal's ability to use social media as a platform for transformational leadership is crucial in building and maintaining trust during times of crisis.

This finding aligns with the digital communication theory by O'Neill and McGrath (2025), which states that success in managing communication in the digital age depends not only on technology but also on the ability to manage messages effectively and ethically (Hagelstein et al., 2021; Lee & Meng, 2021). Principals who optimally utilize social media features such as live streaming, regular posting, and quick-response capabilities succeed in creating a responsive, two-way communication space, helping reduce uncertainty within the school environment. This is consistent with Olson et al (2019) findings that social media facilitates effective two-way communication, enhancing trust and transparency during crises (Li & Lee, 2024; Mansoor, 2021).

From a crisis management perspective, success depends heavily on the speed and consistency of leaders' responses, as emphasized by Boin et al. (2013). Schools that implement systematic internal communication policies, including daily coordination meetings, 24/7 social media monitoring, and standardized response protocols, can coordinate messages effectively. These internal mechanisms enable principals to respond to questions and alleviate concerns quickly, effectively controlling the social and academic narrative (Yeo, 2021; Zhou et al., 2021). Active internal coordination and consistency of messaging are key to success in crises.

However, this success is not always uniform. Some school principals still struggle to manage disinformation or uncertainty circulating on social media. They often respond late or fail to develop a consistent messaging strategy, which can ultimately lead to a loss of trust. For example, in one of the schools we studied, a delayed response to rumors about a health incident led to panic among parents and the broader spread of disinformation, thus eroding trust in school management. These findings highlight the importance of digital competency training for leaders to equip them with the skills to manage disinformation and foster trustworthy communication (Boler et al., 2025; Ismail et al., 2023).

Critically, these findings highlight the need for capacity building and clear internal policies for social media management during crises (Kahveci et al., 2025; Shahbazi & Bunker, 2024). This research makes a concrete contribution by identifying a proven-effective digital transformational communication model, highlighting the role of internal mechanisms, and presenting case comparisons that demonstrate the powerful impact of internal policies. The study confirms that intensive training in crisis management and digital communication is crucial for school principals to effectively manage social media dynamics, as speed, clarity, and message accuracy are key to success.

Overall, these findings affirm that successful leadership during crises depends not only on technical skills or technology but also on interpersonal competencies and adaptive communication strategies. Leaders who demonstrate empathy and transparency via social media can build trust and strengthen social cohesion within the school environment. This aligns with the literature, which emphasizes that responsive and empathetic communication is key to mitigating the negative impacts of crises (Ndone & Park, 2022; Steenkamp & Dhanesh, 2023).

This research makes a significant contribution to the literature on leadership in the context of digital crises and education. It offers practical

recommendations for school principals and policymakers to develop digital communication competencies and formulate effective crisis communication policies. In other words, successful crisis communication management is not solely determined by the level of technology used, but rather depends heavily on the leader's ability to build trust-based relationships and control the narrative in the digital public sphere.

CONCLUSION

This study comprehensively examined leadership strategies and practices for managing social media communications during school crises. Key findings indicate that principals who can implement responsive, transparent, and empathetic communication on social media can strengthen stakeholder trust and navigate social dynamics in emergency situations. A key lesson learned is that digital competence, combined with transformational leadership, is key to success. By integrating theories of transformational leadership, digital communication, and crisis management, this study adds to the literature on how educational leaders can optimize the role of social media as a primary communication tool during crises. This not only strengthens existing theory but also provides practical guidance for schools in addressing emergency communication challenges and accelerating adaptation in the digital age.

However, this study has several limitations. The study was limited to high schools in urban areas, so the generalizability of the findings may be limited to similar settings. Furthermore, the qualitative and subjective nature of the data requires further quantitative studies to measure the impact of strategies more broadly. Therefore, future research is recommended to expand the scope to different levels and geographic regions, and to develop quantitative instruments to assess the effectiveness of communication strategies. Further research could develop a more specific and comprehensive digital leadership model, test its effectiveness across various educational crises, and identify factors that hinder or support its success.

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REFERENCES

Amin, M. E. K., & Desselle, S. P. (2020). Establishing Trustworthiness and Authenticity in Qualitative Pharmacy Research. *Research in Social and Administrative Pharmacy*, 16(10), 1472–1482. https://doi.org/10.1016/j.sapharm.2020.02.005

- Bass, B. M., & Riggio, R. E. (2006). *Transformational Leadership* (0 edn). Psychology Press. https://doi.org/10.4324/9781410617095
- Bhat, Z. H., & Saba, N. (2025). Navigating Turbulence: Leadership Evolution in Crisis Management Through Response–Recovery Frameworks. *International Journal of Organizational Analysis*. https://doi.org/10.1108/IJOA-02-2024-4254
- Boin, A., & Lodge, M. (2016). Designing Resilient Institutions for Transboundary Crisis Management: A Time for Public Administration. *Public Administration*, 94(2), 289–298. https://doi.org/10.1111/padm.12264
- Boler, M., Gharib, H., Kweon, Y.-J., Trigiani, A., & Perry, B. (2025). Promoting Mis/Disinformation Literacy Among Adults: A Scoping Review of Interventions and Recommendations. *Communication Research*, 00936502251318630. https://doi.org/10.1177/00936502251318630
- Borah, P. S., Iqbal, S., & Akhtar, S. (2022). Linking Social Media Usage and SME's Sustainable Performance: The Role of Digital Leadership and Innovation Capabilities. *Technology in Society, 68,* 101900. https://doi.org/10.1016/j.techsoc.2022.101900
- Bouncken, R. B., Czakon, W., & Schmitt, F. (2025). Purposeful Sampling and Saturation in Qualitative Research Methodologies: Recommendations and Review. *Review of Managerial Science*. https://doi.org/10.1007/s11846-025-00881-2
- Burbules, N. C., Fan, G., & Repp, P. (2020). Five Trends of Education and Technology in a Sustainable Future. *Geography and Sustainability*, 1(2), 93–97. https://doi.org/10.1016/j.geosus.2020.05.001
- Chatzipanagiotou, P., & Katsarou, E. (2023). Crisis Management, School Leadership in Disruptive Times and the Recovery of Schools in the Post COVID-19 Era: A Systematic Literature Review. *Education Sciences*, 13(2), 118. https://doi.org/10.3390/educsci13020118
- Da'as, R., Qadach, M., & Schechter, C. (2025). Crisis Leadership: Principals' Metaphors During COVID-19. Educational Management Administration & Leadership, 53(2), 357–379. https://doi.org/10.1177/17411432231170580
- Dirani, K. M., & Majzun, Z. (2020). Leadership Competencies and the Essential Role of Human Resource Development in Times of Crisis: A Response to COVID-19 Pandemic. *Human Resource Development International*, 23(4), 380–394. https://doi.org/10.1080/13678868.2020.1780078
- Dumulescu, D., & Muţiu, A. I. (2021). Academic Leadership in the Time of COVID-19—Experiences and Perspectives. *Frontiers in Psychology*, 12. https://doi.org/10.3389/fpsyg.2021.648344
- Fernandes, V., Wong, W., & Noonan, M. (2023). Developing Adaptability and Agility in Leadership Amidst the COVID-19 Crisis: Experiences of Early-Career School Principals. *International Journal of Educational Management*, 37(2), 483–506. https://doi.org/10.1108/IJEM-02-2022-0076
- Ghamrawi, N., Shal, T., & Ghamrawi, N. A. R. (2024). Exploring the Impact of AI on Teacher Leadership: Regressing or Expanding? *Education and Information Technologies*, 29(7), 8415–8433. https://doi.org/10.1007/s10639-023-12174-w

- Gómez-Leal, R., Holzer, A. A., Bradley, C., Fernández-Berrocal, P., & Patti, J. (2022). The Relationship Between Emotional Intelligence and Leadership in School Leaders: A Systematic Review. *Cambridge Journal of Education*, 52(1), 1–21. https://doi.org/10.1080/0305764X.2021.1927987
- Hagelstein, J., Einwiller, S., & Zerfass, A. (2021). The Ethical Dimension of Public Relations in Europe: Digital Channels, Moral Challenges, Resources, and Training. *Public Relations Review*, 47(4), 102063. https://doi.org/10.1016/j.pubrev.2021.102063
- Horowitz, M., Cushion, S., Dragomir, M., Gutiérrez Manjón, S., & Pantti, M. (2022). A Framework for Assessing the Role of Public Service Media Organizations in Countering Disinformation. *Digital Journalism*, 10(5), 843–865. https://doi.org/10.1080/21670811.2021.1987948
- Ismail, A., Hidajat, T., Dora, Y. M., Prasatia, F. E., & Pranadani, A. (2023). Leading the Digital Transformation: Evidence from Indonesia. *Asadel Publisher*.
- Janis, I. (2022). Strategies for Establishing Dependability Between Two Qualitative Intrinsic Case Studies: A Reflexive Thematic Analysis. *Field Methods*, 34(3), 240–255. https://doi.org/10.1177/1525822X211069636
- Kahveci, E., Avunduk, Z. B., Daim, T., & Zaim, S. (2025). The Role of Flexibility, Digitalization, and Crisis Response Strategy for SMEs: Case of COVID-19. *Journal of Small Business Management*, 63(3), 1198–1235. https://doi.org/10.1080/00472778.2024.2377671
- Khan, I. U., & Saif, N. (2022). Individualized consideration and idealized influence of transformational leadership: Mediating role of inspirational motivation and intellectual stimulation. *International Journal of Leadership in Education*, 1-11. https://doi.org/10.1080/13603124.2022.2076286
- Köhler, T. (2024). Multilevel Qualitative Research: Insights from Practice. *European Management Journal*, 42(4), 503–514. https://doi.org/10.1016/j.emj.2024.03.011
- Lalani, K., Crawford, J., & Butler-Henderson, K. (2025). Academic Leadership During COVID-19 in Higher Education: Technology Adoption and Adaptation for Online Learning During a Pandemic. *International Journal of Leadership in Education*, 28(1), 1–17. https://doi.org/10.1080/13603124.2021.1988716
- Lee, J. J., & Meng, J. (2021). Digital Competencies in Communication Management: A Conceptual Framework of Readiness for Industry 4.0 for Communication Professionals in the Workplace. *Journal of Communication Management*, 25(4), 417–436. https://doi.org/10.1108/JCOM-10-2020-0116
- Lee, Y., & Kim, J. (2021). Cultivating Employee Creativity Through Strategic Internal Communication: The Role of Leadership, Symmetry, and Feedback Seeking Behaviors. *Public Relations Review*, 47(1), 101998. https://doi.org/10.1016/j.pubrev.2020.101998
- Li, J.-Y., & Lee, Y. (2024). Predicting Public Cooperation with Face Covering at the Early Phases of COVID-19: Building Public Trust, Confidence, Knowledge Through Governmental Two-Way Symmetrical Communication. *Health Communication*, 39(12), 2983–2996. https://doi.org/10.1080/10410236.2023.2297496

- Lim, W. M. (2025). What Is Qualitative Research? An Overview and Guidelines. *Australasian Marketing Journal*, 33(2), 199–229. https://doi.org/10.1177/14413582241264619
- Malhotra, A., Evans, N., Gao, J., Du, J. T., & Zheng, C. (2025). The issues caused by misinformation—How workers and organizations deal with it: A systematic literature review. *Journal of the Association for Information Science and Technology*, 1-30. https://doi.org/10.1002/asi.25016
- Mansoor, M. (2021). Citizens' Trust in Government as a Function of Good Governance and Government Agency's Provision of Quality Information on Social Media During COVID-19. *Government Information Quarterly*, 38(4), 101597. https://doi.org/10.1016/j.giq.2021.101597
- McKelvey, M., Weissling, K. S. E., Lund, S. K., Quach, W., & Dietz, A. C. (2022). Augmentative and Alternative Communication Assessment in Adults with Amyotrophic Lateral Sclerosis: Results of Semi-Structured Interviews. *Communication Disorders Quarterly*, 43(3), 163–171. https://doi.org/10.1177/15257401211017143
- Men, L. R., Qin, Y. S., & Jin, J. (2022). Fostering Employee Trust via Effective Supervisory Communication During the COVID-19 Pandemic: Through the Lens of Motivating Language Theory. *International Journal of Business Communication*, 59(2), 193–218. https://doi.org/10.1177/23294884211020491
- Ndone, J., & Park, J. (2022). Crisis Communication: The Mediating Role of Cognitive and Affective Empathy in the Relationship Between Crisis Type and Crisis Response Strategy on Post-Crisis Reputation and Forgiveness.

 *Public Relations Review, 48(1), 102136. https://doi.org/10.1016/j.pubrev.2021.102136
- Nickerson, A. B., & Sulkowski, M. L. (2021). The COVID-19 Pandemic as a Long-Term School Crisis: Impact, Risk, Resilience, and Crisis Management. *School Psychology*, *36*(5), 271–276. https://doi.org/10.1037/spq0000470
- Nielsen, B. B., Welch, C., Chidlow, A., Miller, S. R., Aguzzoli, R., Gardner, E., Karafyllia, M., & Pegoraro, D. (2020). Fifty Years of Methodological Trends in JIBS: Why Future IB Research Needs More Triangulation. *Journal of International Business Studies*, 51(9), 1478–1499. https://doi.org/10.1057/s41267-020-00372-4
- Nuchian, N., Biju, A. V. N., & Reddy, K. (2024). An Investigation on Social Impact Performance Assessment of the Social Enterprises: Identification of an Ideal Social Entrepreneurship Model. *Business Strategy & Development*, 7(1), e305. https://doi.org/10.1002/bsd2.305
- Ogie, R. I., James, S., Moore, A., Dilworth, T., Amirghasemi, M., & Whittaker, J. (2022). Social Media Use in Disaster Recovery: A Systematic Literature Review. *International Journal of Disaster Risk Reduction*, 70, 102783. https://doi.org/10.1016/j.ijdrr.2022.102783
- O'Kane, P., Smith, A., & Lerman, M. P. (2021). Building Transparency and Trustworthiness in Inductive Research Through Computer-Aided Qualitative Data Analysis Software. *Organizational Research Methods*, 24(1), 104–139. https://doi.org/10.1177/1094428119865016

- Olson, M. K., Sutton, J., Vos, S. C., Prestley, R., Renshaw, S. L., & Butts, C. T. (2019). Build Community Before the Storm: The National Weather Service's Social Media Engagement. *Journal of Contingencies and Crisis Management*, 27(4), 359–373. https://doi.org/10.1111/1468-5973.12267
- O'Neill, F., & McGrath, T. J. (2025). Rethinking Self, Presence, and Participation in Online Teaching and Learning During the COVID-19 Pandemic: A Narrative Study in Higher Education. *Australian Review of Applied Linguistics*, 48(1), 78–97. https://doi.org/10.1075/aral.23008.one
- Pahwa, M., Cavanagh, A., & Vanstone, M. (2023). Key Informants in Applied Qualitative Health Research. *Qualitative Health Research*, 33(14), 1251–1261. https://doi.org/10.1177/10497323231198796
- Pesnell, B., & McGill, C. M. (2025). Navigating Remote Learning: Elementary Teachers' Perceptions of Administrative Expectations and Support During the COVID-19 Pandemic. *School Leadership & Management*, 45(2), 174–199. https://doi.org/10.1080/13632434.2025.2474659
- Rosen, R. K., & Levine, A. C. (2023). Use of Framework Matrix and Thematic Coding Methods in Qualitative Analysis for mHealth: The FluidCalc App. *International Journal of Qualitative Methods*, 22, 16094069231184123. https://doi.org/10.1177/16094069231184123
- Saurwein, F., & Spencer-Smith, C. (2020). Combating Disinformation on Social Media: Multilevel Governance and Distributed Accountability in Europe. *Digital Journalism*, 8(6), 820–841. https://doi.org/10.1080/21670811.2020.1765401
- Schechter, C., Da'as, R., & Qadach, M. (2024). Crisis Leadership: Leading Schools in a Global Pandemic. *Management in Education*, 38(4), 164–171. https://doi.org/10.1177/08920206221084050
- Scully, D., Lehane, P., & Scully, C. (2021). 'It Is No Longer Scary': Digital Learning Before and During the Covid-19 Pandemic in Irish Secondary Schools. *Technology, Pedagogy and Education,* 30(1), 159–181. https://doi.org/10.1080/1475939X.2020.1854844
- Shah, A. A., Gong, Z., Pal, I., Sun, R., Ullah, W., & Wani, G. F. (2020). Disaster Risk Management Insight on School Emergency Preparedness A Case Study of Khyber Pakhtunkhwa, Pakistan. *International Journal of Disaster Risk Reduction*, 51, 101805. https://doi.org/10.1016/j.ijdrr.2020.101805
- Shahbazi, M., & Bunker, D. (2024). Social Media Trust: Fighting Misinformation in the Time of Crisis. *International Journal of Information Management*, 77, 102780. https://doi.org/10.1016/j.ijinfomgt.2024.102780
- Shrivastav, S. K., Bag, S., & Bhattacharya, R. (2025). Sustainable Knowledge Management in the Digital Era: Leveraging Natural Language Processing to Identify Trends, Challenges and Future Directions. *Journal of Knowledge Management*. https://doi.org/10.1108/JKM-10-2024-1251
- Soomro, M. A., & Khan, A. N. (2024). Reimagining Resilience: Visionary Leadership, Digital Transformation, and Strategic Flexibility in Small and Medium Enterprises in Construction Sector. *IEEE Transactions on Engineering Management*, 71, 15070–15083. https://doi.org/10.1109/TEM.2024.3477629

- Steenkamp, H., & Dhanesh, G. S. (2023). Care-Based Relationship Management During Remote Work in a Crisis: Empathy, Purpose, and Diversity Climate as Emergent Employee-Organization Relational Maintenance Strategies. *Public Relations Review*, 49(4), 102371. https://doi.org/10.1016/j.pubrev.2023.102371
- Striepe, M., & Cunningham, C. (2022). Understanding Educational Leadership During Times of Crises: A Scoping Review. *Journal of Educational Administration*, 60(2), 133–147. https://doi.org/10.1108/JEA-03-2021-0057
- Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S. (2021). Information Technology and Gen Z: The Role of Teachers, the Internet, and Technology in the Education of Young People. *Technology in Society*, 65, 101565. https://doi.org/10.1016/j.techsoc.2021.101565