

READING THE PUBLIC PULSE: SENTIMENT ANALYSIS OF OVERCLAIM CRISIS IN INDONESIA

Estri Khidmatul Husniyah¹, Bambang Dwi Prasetyo², Fitri Hariana Oktaviani³

^{1,2,3} University of Brawijaya

1estrinia@student.ub.ac.id

Keyword

Sentiment Analysis, Overclaim, Crisis Communication, Beauty Brand

Abstract

The objective of this study is to analyze public sentiment regarding two local beauty brands in Indonesia, Azarine and The Originote, which were involved in an overclaim crisis on social media. The primary objective of this study is to ascertain the distribution of positive, negative, and neutral sentiments. Additionally, it seeks to elucidate how these sentiment patterns are influenced by the crisis communication strategies implemented by each brand during and after the crisis. A descriptive quantitative method employing sentiment analysis was utilized to collect data from user comments on Instagram and TikTok during the crisis period. The findings indicate that The Originote is more likely to elicit a higher proportion of positive sentiments in comparison to Azarine, a discrepancy attributable to The Originote's strategic emphasis on transparency, acknowledgment of missteps, and dedication to ongoing enhancement. In contrast, Azarine exhibits a diminished prevalence of positive sentiment, signifying a potential for persuasion among audiences who have not yet formed a definitive opinion. These findings indicate that brand response patterns directly influence public sentiment distribution, which in turn affects post-crisis image recovery. This study offers practical implications for local brands to integrate crisis mitigation strategies with proactive public sentiment management. It also opens avenues for further research on the relationship between sentiment intensity and consumer loyalty in the beauty industry.

INTRODUCTION

The beauty industry in Indonesia has undergone substantial expansion in recent decades. An analysis of the cosmetics and body care industry in Indonesia reveals an approximate annual growth rate of 6%, propelled by trends in self-care, e-commerce penetration, and the influence of social media in shaping consumer preferences (Dio et al., 2023). Intense competition between local and international brands has also prompted companies to continuously innovate in terms of products, marketing, and services (Ferdinand & Ciptono, 2022). In this competitive landscape, brands are engaged in a race to highlight product differentiation, one of which is through the communication of specific and persuasive benefit claims. However, this strategy carries inherent risks, particularly when claims are deemed excessive (overclaim) or not scientifically substantiated. Overclaim has the potential to mislead consumers and engender unhealthy business competition, which may result in companies facing legal liability under the principles of strict and product liability as outlined in Indonesia's consumer protection regulations (Pitra Regina Sipahutar et al., 2025). Furthermore, overestimation of a brand's capabilities can adversely impact consumers' perceptions of that brand's credibility, potentially engendering disappointment and a subsequent decline in trust if the brand fails to meet consumers' expectations (Virdi, 2021).

Overclaim crises have the potential to exert a direct impact on brand credibility, a phenomenon that is especially salient in the digital age, when information disseminates

expeditiously through social media platforms. The overclaim issues that have affected two local skincare brands, Azarine and The Originote, are a clear example of how public perception can change drastically in a short period of time. This issue has incited extensive discourse on social media, underscoring the sensitivity of consumers to the precision of product claims, particularly within the beauty industry, which is intricately linked to skin health and consumer safety (Macheka et al., 2024; Senalasarri et al., 2025). In instances where product claims lack substantiation by scientific evidence or are found to be deceptive, consumers often respond with critical scrutiny, demanding transparency and accountability from the brands in question. Social media has been shown to function not only as a conduit for communication but also as a public forum for discussion, thereby shaping and influencing collective opinion (Akram et al., 2023; Kothari et al., 2025). In the context of a crisis, social media can serve as a conduit for disseminating information that is both positive and negative. The narratives that emerge within this ecosystem frequently influence public perception, which in turn impacts purchase interest, brand loyalty, and long-term reputation. Consequently, it is incumbent upon brands to ensure the veracity of product claims and to cultivate transparent communication to maintain consumer trust in the digital age (Baisakhi Mitra Mustaphi, 2025).

Sentiment analysis is a computational approach to identifying and classifying public opinion as positive, negative, or neutral. The main data sources for this research include text data generated by consumers from social media platforms, product reviews, and other online forums. This method utilizes natural language processing (NLP), machine learning, and deep learning techniques to automatically extract and classify sentiment, thereby facilitating rapid and large-scale understanding of consumer reactions (Iqbal et al., 2022; Jain et al., 2021; Kaur & Sharma, 2023). Additionally, sentiment analysis provides deep insights into consumer behavior, preferences, and satisfaction, helping businesses make strategic decisions, develop products, and improve services. Various approaches have been developed to address this issue, ranging from lexicon-based methods to deep learning models such as LSTM and IndoBERT, which have proven to enhance sentiment classification accuracy. Thus, sentiment analysis can be used to monitor public opinion trends in real-time and identify emerging issues in society (Montaser et al., 2025). As such, sentiment analysis has become a crucial tool for brands, enabling them to understand and proactively address changes in consumer sentiment with precision and measurable results.

Previous studies have proven the effectiveness of sentiment analysis in predicting consumer behavior and evaluating the effectiveness of crisis communication. However, most of these studies have focused on the food, transportation, or political sectors, with limited attention to the beauty industry, particularly in Indonesia. Given the high emotionality and sensitivity to reputation among beauty industry consumers, there is an urgent need to apply sentiment analysis in this context (Mouyassir et al., 2024; Park, 2020). Additionally, research on crisis communication in the beauty industry faces methodological challenges. Public perception is influenced not only by objective facts but also by subjective interpretations, user interactions, and online community dynamics (Suteja et al., 2024). This study explores the implications of organizational comparisons and stakeholder interactions on social media, emphasizing the potential of these comparisons to significantly influence emotions and reputation perceptions. This highlights the importance of understanding subjective and social factors in crisis communication within lifestyle-based industries, such as the beauty industry (X. Zhang & Nekmat, 2023)

The cases of Azarine and The Originote provide an ideal context for researching the distribution of public sentiment in the local beauty industry. Both brands have significant market share and loyal consumer bases; however, they have taken different approaches to handling the overclaim crisis. The variation in communication strategies, ranging from transparency to defensiveness, provides an opportunity to evaluate their impact on public perception. The analysis of social media data can facilitate the identification of trends in public reactions to each approach, while concurrently measuring their effectiveness in mitigating negative sentiment and rebuilding trust. The findings from this study can also provide strategic insights for other local brands in designing adaptive crisis responses in the digital age. The novelty of this research lies in the application of sentiment analysis as the primary evaluation tool for measuring public

perception of crises in the local beauty industry. This study addresses a significant gap in the existing Indonesian literature by offering practical insights for industry professionals seeking to develop data-driven communication strategies. The research findings suggest that managing public sentiment necessitates a combination of transparency, consistency, and alignment of messages with brand values.

The purpose of this study is to answer the following research questions: How is public sentiment distributed on social media platforms related to Azarine and The Originote during a period of excessive claims? The main question in this study is whether significant differences in public sentiment trends can be linked to each brand's response strategy. This research is highly relevant in the context of the emergence of social media as a primary platform for public opinion formation, where consumer perceptions are formed and spread rapidly. This study uses sentiment analysis to measure the proportion of positive, negative, and neutral sentiments. In addition, this study also explores the relationship between these sentiment patterns and the characteristics of the crisis responses adopted by each brand. These findings are expected to contribute theoretically to the existing literature on sentiment analysis in the context of brand crisis management, particularly in the local beauty industry. Furthermore, the findings of this study can provide practical guidance for industry practitioners in designing responsive, measurable, and aligned communication strategies that meet the expectations of a dynamic digital audience.

METHOD

This study uses a descriptive quantitative approach with sentiment analysis to measure public perception of Azarine and The Originote during the overclaim crisis on social media. Data was collected through web crawling based on n8n integrated with the Apify API, taking comments from Instagram and TikTok of both brands as well as the account that triggered the crisis, @DokterDetektif. From a total of 28,786 comments, a sample of 394 comments was selected using the Slovin formula ($e=5\%$) and purposively selected based on relevance to the overclaim issue. Additionally, a filtering process was conducted to include only comments in the form of opinions, perceptions, or emotional expressions toward the brand (Stieglitz et al., 2018). Data coding was performed using Python with three main approaches: Lexicon-Based Baseline for word polarity classification, Unsupervised Clustering with IndoBERTweet for comment grouping based on semantic similarity, and Few-Shot LoRA Fine-Tuning to adapt the model to the overclaim crisis context in the beauty industry. Comments are classified into positive, negative, and neutral sentiments following the framework (Bing, Liu, 2012). To maintain the reliability and validity of the classification results, cross-checking is performed on a sample. Reliability and validity are ensured through cross-checking between automatic classification results and manual interpretation to minimize errors and ensure the accuracy of the meaning of public comments.

RESULTS

Sentiment Analysis of Azarine in Experiencing Overclaim Issues

The discourse surrounding Azarine's serum products was initiated by a detective doctor who conducted laboratory tests on one of the products. This post garnered a total of 7,310 public comments. From this data set, 133 comments were sampled for further analysis after undergoing a thorough scraping and data cleaning process.

Table 1. Azarine Overclaim Crisis Sentiment Analysis Results

Sentiment	Amount	Percentage
Positive	11	8%
Negative	89	67%
Neutral	33	25%
Total	133	100%

As illustrated in Table 1, Azarine's experience with overclaim evokes predominantly negative public sentiment, with a proportion of 67%. This finding suggests that the majority of consumers responded to the issue with strong feelings of disappointment, anger, and dissatisfaction. This

condition aligns with the prevailing literature on the subject (Bing. Liu, 2012), which indicates that negative opinions tend to emerge when consumers perceive a discrepancy between their expectations and the brand's actual performance. In this context, the pervasive negative sentiment reflects a trust deficit between the brand and consumers, with the potential to exert a long-term effect on brand loyalty and image. The issue of "overclaim" has led to public perceptions that Azarine is not fully transparent in communicating its product claims, thereby casting doubt on the brand's integrity. As indicated by the following assertion (Coombs, 2019), the failure to address negative perceptions in a timely manner can serve to reinforce prevailing crisis narratives and thereby impede the process of reputation recovery. Consequently, Azarine is confronted with a strategic challenge to regain public trust, which has been compromised. In order to successfully execute this effort, it is essential to implement a consistent and transparent communication strategy, accompanied by the presentation of concrete evidence. This will serve to convince consumers that the brand possesses the capacity to implement substantial improvements. Absent an adequate recovery strategy, the pervasive prevalence of negative sentiment may result in the protracted consequences of the crisis and the subsequent impediment of future business performance (Purworini et al., 2025; N. Zhang et al., 2024). Following the implementation of a crisis communication strategy, a substantial discrepancy in public response was observed. This discrepancy will be further delineated in Table 2.

Table 2. Hasil Analisis Sentimen Pasca Krisis Overclaim Azarine

Sentiment	Amount	Percentage
Positive	7	68%
Negative	1	10%
Neutral	2	22%
Total	9	100%

As illustrated in Table 2, following Azarine's clarification on their official Instagram account, a total of 21 public responses to the issue were documented. The data was subsequently extracted and refined, yielding 9 responses that were deemed suitable for utilization as exemplars. The results of the study indicate a substantial shift in public sentiment in comparison with the preceding period. The data indicates a predominant positive sentiment, with a percentage of 68%, suggesting public acceptance and appreciation of the clarification. The proportion of respondents expressing negative sentiments decreased dramatically, from 50% to 10%, indicating that the majority of the public disappointment was successfully mitigated. Concurrently, neutral sentiment, recorded at 22%, signified the presence of an audience segment that adopted a circumspect stance, opting to withhold definitive judgment until more substantial information became available. These findings suggest that the crisis communication strategy employed was reasonably effective in restoring the company's image and regaining public trust. However, there is still room for improvement in converting neutral sentiment into positive sentiment through consistent follow-up communication. (Y. Liu & Duarte, 2025; Zheng, 2023).

Sentiment Analysis of The Originote in Experiencing Overclaim Issues

The emergence of overclaim issues, precipitated by review content conducted by dokter detektif has engendered a deluge of negative public sentiment directed toward The Originote. The subsequent elucidation will be delineated in Table 3.

Table 3. Results of Sentiment Analysis of The Originote Overclaim Crisis

Sentiment	Amount	Percentage
Positive	20	9%
Negative	115	53%
Neutral	81	38%
Total	216	100%

As illustrated in Table 3, of the total 216 comments that were subjected to analysis, 53% were of a negative nature, indicating that the majority of the audience expressed criticism or disagreement with the brand. Conversely, 38% of the comments were neutral, suggesting that a segment of the audience primarily conveyed factual information or awaited official clarifications.

The proportion of positive comments was minimal, at 9%, suggesting that public support was limited in the aftermath of the crisis. These findings suggest that The Originote's crisis communication strategy should prioritize the restoration of consumer trust and the mitigation of negative sentiment through responses that are more transparent, accountable, and convincing. (M.-R. Yang et al., 2025). In this context, the pervasive negative sentiment signifies a crisis of public trust in The Originote. This discrepancy may be attributed to the perception that the brand's expectations, as established through its product claims, do not align with the actual content presented in the review by the detective doctor. A substantial proportion of the comments, amounting to more than half, expressed sentiments of disappointment, anger, and skepticism regarding the brand's credibility. These negative sentiments suggest that the issue has provoked a strong reaction, characterized by a sense of disillusionment, displeasure, and a questioning of the brand's credibility (Purworini et al., 2025).

Consequently, The Originote is confronted with significant strategic challenges in its endeavor to regain public trust, which has been substantially eroded as a result of concerns regarding overclaim. The implementation of a consistent and transparent crisis communication strategy is imperative for the successful execution of the recovery process. This strategy must be accompanied by empirical evidence of the corrective measures that have been taken. This approach is necessary to strengthen consumer confidence in the brand's commitment to ensuring product quality and the accuracy of the information provided (Che et al., 2022; Ndone et al., 2022). A substantial discrepancy emerged subsequent to The Originote's provision of elucidation through the implementation of a crisis communication strategy, as delineated in Table 4.

Table 4. Results of Sentiment Analysis After The Originote's Overclaim Crisis

Sentiment	Amount	Percentage
Positive	38	66%
Negative	3	5%
Neutral	17	29%
Total		100%

As demonstrated in Table 4, public response to The Originote following the clarification of the overclaim issue was predominantly favorable. A total of 66% of public sentiment was positive, indicating that the majority of the audience accepted the clarification well and viewed the steps taken as a form of responsibility and seriousness on the part of the brand in handling the crisis. The minimal percentage of negative sentiment, recorded at only 5%, signifies that the likelihood of opposition or rejection of the clarification is relatively low. Concurrently, 29% of the responses were neutral, indicating the presence of a demographic that, while not directly engaged in the emotional discourse, demonstrated a degree of attentiveness to the subject matter. This outcome suggests that The Originote's crisis communication strategy was effective in mitigating the escalation of the crisis and in restoring the brand's image. This success is indicative of the efficacy of the messages conveyed in terms of transparency, response speed, and narrative consistency, which effectively guided public opinion toward a more positive perception. (MacKay et al., 2021; Wang et al., 2021).

DISCUSSION

According to the sentiment analysis approach proposed by Bing Liu (2012), public opinion can be classified into three primary categories: positive, negative, and neutral. The positive category is indicative of support or acceptance for the object under discussion, the negative category signifies dissatisfaction or criticism, and the neutral category denotes an attitude that is not clearly supportive or rejective. The analysis of the Azarine case reveals a marked prevalence of negative sentiment during the crisis phase, indicative of a public perception that is skeptical of the product claims following the emergence of the "overclaim" issue. This finding aligns with Bing Liu's framework, which posits that a high proportion of negative sentiment serves as an indicator of perceptual issues necessitating an immediate response through corrective communication and the presentation of factual evidence. (Purworini et al., 2025; J. Yang et al., 2025). Following the provision of clarifications, there was a substantial decrease in negative sentiment toward Azarine.

As posited by Bing Liu, a decline in negative sentiment can serve as an indicator of the efficacy of a clarification strategy in mitigating public resistance and curtailing the development of unfavorable perceptions. However, the presence of a substantial amount of neutral sentiment suggests the existence of an audience group that has not been fully influenced by the clarification message. This group has the potential to become a strategic target for Azarine, as it could help the company strengthen its brand image through more persuasive and evidence based follow up communication.

Concurrently, in the case of The Originote, during the crisis, the initial public response exhibited a potential decline in trust in the brand. However, the results of a subsequent sentiment analysis indicate that the crisis communication strategy implemented was successful in significantly restoring the brand's image. The Originote's success in altering public perception is attributable to the prevailing positive sentiment. (Iqbal et al., 2022; Jain et al., 2021). Furthermore, the elevated level of positive sentiment that ensued, subsequent to the clarification, signifies that the messages communicated were effective in addressing consumer concerns while reinforcing the company's dedication to product quality and integrity. In future research, a longer monitoring period could be employed to observe changes in sentiment from the beginning to post crisis. The multimodal sentiment analysis approach, which integrates text, images, and video, along with the implementation of state of the art deep learning models, is anticipated to enhance the accuracy of the analysis. Moreover, cross industry or cross country comparisons could offer insights into the influence of cultural factors and market characteristics on public responses.

CONCLUSION

Preliminary findings from sentiment analysis of Azarine and The Originote indicate that the two brands employed crisis communication strategies, exhibiting varying degrees of effectiveness in addressing the overclaim issue. The Originote demonstrated a more substantial degree of success, characterized by the predominance of positive sentiment following the clarification process. This sentiment constituted the predominant proportion, while negative sentiment remained at a minimal level. This outcome is indicative of the company's efficacy in regaining public trust through a prompt, transparent, and consistent response. In contrast, although Azarine also received positive sentiment after clarification, the percentage was not as high as that of The Originote. This finding suggests the need for the refinement of communication strategies, with a particular emphasis on the presentation of substantial evidence demonstrating enhancements and the augmentation of the impact of these messages on the general public. In essence, the findings of this study lend support to the notion proposed by Bing Liu (2012) that public perception in the aftermath of a crisis is significantly influenced by the quality of communication and the credibility of the messages conveyed. It has been demonstrated that companies that respond promptly, with transparency and credibility, are better able to mitigate the adverse consequences of crises and sustain customer loyalty.

ACKNOWLEDGEMENT

The author expresses his deepest appreciation to his supervisor lecturer for the guidance, support, and valuable input that have been instrumental in the success of this research. Thanks are also extended to fellow colleagues for their support and intellectual contributions that facilitated the smooth progress of the research process. Special thanks are also extended to the Master's Program in Communication Science at Brawijaya University for providing an inspiring academic environment. The success of this study is the result of collaboration, dedication, and support from all parties involved.

REFERENCES

- Akram, U., Lavuri, R., Ansari, A. R., Parida, R., & Junaid, M. (2023). Havocs of social media fake news! Analysing the effect of credibility, trustworthiness, and self-efficacy on consumer's buying intentions. *Journal of Strategic Marketing*, 1-15. <https://doi.org/10.1080/0965254X.2023.2253801>

- Baisakhi Mitra Mustaphi. (2025). Social media marketing and its impact on consumer perception with respect to beauty and personal care products. *Journal of Information Systems Engineering and Management*, 10(36s), 29–43. <https://doi.org/10.52783/jisem.v10i36s.6309>
- Che, S., Nan, D., Kamphuis, P., Zhang, S., & Kim, J. H. (2022). Examining crisis communication using semantic network and sentiment analysis: A case study on NetEase Games. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.823415>
- Coombs, W. T. (2019). *Ongoing crisis communication: Planning, managing, and responding* (4th ed.). SAGE Publications.
- Dio, R., Dermawan, A. A., & Putera, D. A. (2023). Application of market basket analysis on beauty clinic to increasing customer's buying decision. *Sinkron*, 8(3), 1348–1356. <https://doi.org/10.33395/sinkron.v8i3.12421>
- Ferdinand, M., & Ciptono, W. S. (2022). Indonesia's cosmetics industry attractiveness, competitiveness and critical success factor analysis. *Jurnal Manajemen Teori dan Terapan*, 15(2), 209–223. <https://doi.org/10.20473/jmtt.v15i2.37451>
- Iqbal, A., Amin, R., Iqbal, J., Alroobaea, R., Binmahfoudh, A., & Hussain, M. (2022). Sentiment analysis of consumer reviews using deep learning. *Sustainability*, 14(17), 10844. <https://doi.org/10.3390/su141710844>
- Jain, P. K., Pamula, R., & Srivastava, G. (2021). A systematic literature review on machine learning applications for consumer sentiment analysis using online reviews. *Computer Science Review*, 41, 100413. <https://doi.org/10.1016/j.cosrev.2021.100413>
- Kaur, G., & Sharma, A. (2023). A deep learning-based model using hybrid feature extraction approach for consumer sentiment analysis. *Journal of Big Data*, 10(1), 5. <https://doi.org/10.1186/s40537-022-00680-6>
- Kothari, H., Choudhary, A., Jain, A., Singh, S., Prasad, K. D. V., & Vani, U. K. (2025). Impact of social media advertising on consumer behavior: Role of credibility, perceived authenticity, and sustainability. *Frontiers in Communication*, 10. <https://doi.org/10.3389/fcomm.2025.1595796>
- Liu, B. (2012). *Sentiment analysis and opinion mining*. Springer.
- Liu, Y., & Duarte, H. (2025). Repairing public trust through communication in health crises: A systematic review of the literature. *Public Management Review*, 27(5), 1292–1312. <https://doi.org/10.1080/14719037.2023.2284224>
- Macheka, T., Quaye, E. S., & Ligaraba, N. (2024). The effect of online customer reviews and celebrity endorsement on young female consumers' purchase intentions. *Young Consumers*, 25(4), 462–482. <https://doi.org/10.1108/YC-05-2023-1749>
- MacKay, M., Colangeli, T., Gillis, D., McWhirter, J., & Papadopoulos, A. (2021). Examining social media crisis communication during early COVID-19 from public health and news media for quality, content, and corresponding public sentiment. *International Journal of Environmental Research and Public Health*, 18(15), 7986. <https://doi.org/10.3390/ijerph18157986>
- Montaser, M. A. Al, Ghosh, B. P., Barua, A., Karim, F., Das, B. C., Shawon, R. E. R., & Chowdhury, M. S. R. (2025). Sentiment analysis of social media data: Business insights and consumer behavior trends in the USA. *Edelweiss Applied Science and Technology*, 9(1), 515–535. <https://doi.org/10.55214/25768484.v9i1.4164>
- Mouyassir, K., Fathi, A., & Assad, N. (2024). Elevating aspect-based sentiment analysis in the Moroccan cosmetics industry with transformer-based models. *International Journal of Advanced Computer Science and Applications*, 15(6). <https://doi.org/10.14569/IJACSA.2024.0150654>
- Ndone, J., Warner, B., & Duffy, M. E. (2022). Emotional crisis communication: The effects of CEO's expression of guilt and anger on organizational reputation. *International Journal of Strategic Communication*, 16(5), 685–699. <https://doi.org/10.1080/1553118X.2022.2085574>
- Park, J. (2020). Framework for sentiment-driven evaluation of customer satisfaction with cosmetics brands. *IEEE Access*, 8, 98526–98538. <https://doi.org/10.1109/ACCESS.2020.2997522>
- Pitra, R. S., Nababan, R., & Simamora, S. F. T. (2025). Legal responsibility of skincare companies for overclaim-based marketing strategies (misleading benefits). *Journal of Legal and Cultural Analytics*, 4(1), 489–500. <https://doi.org/10.55927/jlca.v4i1.13936>
- Purworini, D., Chasana, R. R. B., & Anggoro, D. A. (2025). Public opinion towards organisational crisis: Insights from the cognitive appraisal theory. *Journal of Creative Communications*. <https://doi.org/10.1177/09732586251335714>
- Senalasarini, W., Maulidani, R. N., & Setiawati, L. (2025). From reviews to purchase intention: The interplay of customer review, influencer review, and trust in Indonesian skincare products. *Journal of Marketing Innovation (JMI)*, 5(1). <https://doi.org/10.35313/jmi.v5i1.184>

- Stieglitz, S., Mirbabaie, M., Ross, B., & Neuberger, C. (2018). Social media analytics – Challenges in topic discovery, data collection, and data preparation. *International Journal of Information Management*, 39, 156–168. <https://doi.org/10.1016/j.ijinfomgt.2017.12.002>
- Suteja, R. S. A., Veritasia, M. E., & Umar, U. (2024). From Sehun EXO to crisis and public trust: An evaluation of Whitelab's crisis communication strategies. *Jurnal Komunikasi: Malaysian Journal of Communication*, 40(4), 107–129. <https://doi.org/10.17576/JKMJC-2024-4004-06>
- Virdi, I. (2021). Effect of exaggerated claims on brand evaluation. In *Entrepreneurship and regional development* (pp. 243–257). Springer International Publishing. https://doi.org/10.1007/978-3-030-45521-7_13
- Wang, Y., Zhang, M., Li, S., McLeay, F., & Gupta, S. (2021). Corporate responses to the coronavirus crisis and their impact on electronic word-of-mouth and trust recovery: Evidence from social media. *British Journal of Management*, 32(4), 1184–1202. <https://doi.org/10.1111/1467-8551.12497>
- Yang, J., Basile, K., & Zhao, X. (2025). Examining CSR communication on social media during a victim crisis: A machine learning based text analytics approach. *Journal of Research in Interactive Marketing*, 19(5), 840–860. <https://doi.org/10.1108/JRIM-05-2024-0268>
- Yang, M.-R., Pathak, S., & Huang, S.-Z. (2025). Warmth and competence: An empirical investigation of the dual impact of corporate apologies on repairing brand trust. *Journal of Human, Earth, and Future*, 6(1), 95–114. <https://doi.org/10.28991/HEF-2025-06-01-07>
- Zhang, N., Wang, X., Guo, X., Cheng, X., & Pang, Z. (2024). How organization response influences public sentiment and behavior in online crises: The role of response strategies, tenor of discourse and executives. *Public Relations Review*, 50(1), 102395. <https://doi.org/10.1016/j.pubrev.2023.102395>
- Zhang, X., & Nekmat, E. (2023). Incorporating competition and comparisons into crisis communication: How competing organizations respond to industry crises. *Public Relations Review*, 49(3), 102324. <https://doi.org/10.1016/j.pubrev.2023.102324>
- Zheng, Q. (2023). Restoring trust through transparency: Examining the effects of transparency strategies on police crisis communication in Mainland China. *Public Relations Review*, 49(2), 102296. <https://doi.org/10.1016/j.pubrev.2023.102296>