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Crisis communication for public organizations: Examining Pakistan Railways' use of information technology and social media for image repair

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Abstract

This study examines the induction of information technology and the use of image-repair focused crisis response strategies on social media by Pakistan Railways amid a recent crisis. A mix-method based content analysis (i.e., qualitative and quantitative) to investigate whether and if so, how Pakistan Railways used Benoit's suggested image restoration strategies on social media to repair its image among customers and in print media. Our results show that Pakistan Railways predominantly used *reducing the offensiveness of event* (40%), followed by *corrective action* (34.6%), *evasion of responsibility* (10.6%), *denial* (8%) and *mortification* (6.4%) strategies, respectively. In addition, the use of image-repair focused crisis response strategies significantly varied by social media platform. An analysis of the publics' emotions found in their online comments reveals that, during the course of the organizational crisis communication, negative public emotions gradually subsided into ambivalent ones; and contrary to a highly negative newspaper coverage tone in the beginning of the crisis, the introduction of the Twitter handle has associated with more positive media coverage afterward. Theoretical and practical implications, especially the need for advancing social-mediated crisis response effectiveness in developing countries, are discussed.

KEYWORDS

crisis communication, image repair theory, information technology, public organization, public relations and social media

1 | INTRODUCTION

The study of information and communication technologies (ICTs) and the role of social media in ongoing crisis communication is an emerging field in public relations and communication management scholarship (Cheng & Cameron, 2018; Tan et al., 2017). Prior studies that examined the use of social media for crisis communication

purposes have indicated several noticeable gaps in the crisis communication literature. For instance, two meta-analyses (e.g., Cheng, 2016; Eriksson, 2018) reported that Twitter, Facebook and blogs are the major crisis information-sharing platforms, while calling for further exploration the use of other social media platforms in organizational crisis communication. Particularly, the potential of YouTube—despite being the largest global online video information

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system with 2.6 billion active global users and being more popular among millennials of developing countries (Duffett et al., 2019)—has barely been examined in crisis communication focused scholarly publications. Most importantly, these studies included in the two meta-analyses pointed out that the majority of recently analysed crisis cases were developed world-centric and advocated the need for expanding the current scholarship on social-mediated crisis management on a global scale (Cheng & Cameron, 2018; Cheng, 2016). To answer this call, our study examines a recent social-mediated organizational crisis (i.e., Pakistan Railway crisis) in one of the developing countries where geopolitical and culturally specific crisis research has been lacking.

Similarly, although scholars have found a positive correlation between agenda-building and traditional information subsidies (including news releases, news conferences, scheduled interviews, speeches, videos) and resulting mass media coverage (Harmon & White, 2001; Kiousis et al., 2006, 2011), no empirical research has been conducted to the media agenda-building potential of social media platforms as crisis communication tools in organizational crisis management in developing countries. Some studies—while considering political tweets as information subsidies—analysed the agenda building potential of Twitter (Brands et al., 2018; Broersma & Graham, 2012; Metag & Rauchfleisch, 2017; Parmelee, 2014; Wells et al., 2016) in political public relations domain with a focus on the developed countries, which further indicates a research gap when it comes to understanding the mass media agenda-building role, via using their social media (e.g., tweets), in organizational crisis management in a developing country's context.

Prior literature reveals that studies on crisis communication with a focus on organizational crisis cases in Global South remains scarce. Among few existing Global Southern organizational crisis studies, Dhanesh and Sriramesh's (2018) research reported that Nestle India failed to adapt to the evolving societal norms and did not adjust its responses to align with the culture and environment, indicating that private organizations in Global South fumbling in similar ways are likely to encounter these problems that can exacerbate a crisis situation. In another Asian cultural context, Zhu et al. (2017) examined McDonald's and KFC's crisis management on social media in China and eventually found that understanding local and cultural contexts is crucial for effective crisis communication strategies. In a similar vein, Olsson (2014) claimed that despite an abundance of prior studies examining crisis communication by private organizations around the world, there is a significant gap in research regarding the evaluation of image repair strategies employed by public organizations during crises. This gap becomes more pronounced when focusing on Pakistan, where public organizations have swiftly adopted social media to influence both internal and external audiences (Ud Din et al., 2017). In this regard, our study aims to make a significant contribution to the scholarly literature by examining (1) the utilization of information technology and social media by public organizations from a non-Western perspective, and (2) the extent to which and how public organizations in Pakistan employ different image repair strategies on various social media platforms during times of organizational crisis.

Furthermore, many crisis studies have examined natural disasters, man-made disasters and health crises such as pandemics (e.g., Abbas et al., 2021; Burhan et al., 2021; Thelwall & Stuart, 2007) as public crises in the Global Southern context, suggesting that such crises do not only pose economic challenges, but also result in reduced tourism, damage to reputation, and ineffective communication (Ali et al., 2018; Gani & Singh, 2019). To tackle these challenges, several studies have focused on developing approaches to effectively mitigate potential crises. For instance, considering the prevalence of terrorism in Pakistan, which has subsequently deterred the influx of tourists, Ali et al. (2018) suggested that the Pakistani government should bolster the physical security measures for tourists, foster positive social media representation, encourage international trade, and promote cultural exchanges. Similarly, applying crisis communication framework to analyse the online communities that emerged as a result of the 2015 Nepal earthquake, Arora (2022) found that these online communities have emerged as significant effective communicators, providing support to both citizens and intervention agencies in the distribution of humanitarian aid. This highlights the evolving role of social media communities as active contributors in disaster response and relief efforts in developing countries. While these studies have predominantly examined social media use during natural disasters (e.g., earthquakes, Tsunamis, bushfires and floods) man-made crises (e.g., terrorist attacks, political crisis and economic crunch), and health crises (e.g., pandemics), there is dearth of research examining the role of mainstream and social media during a man-made organizational crisis in the Global Southern context.

To contribute to filling the above gaps in crisis management literature, we studied a recent crisis communication case from a developing country by exploring the role of social media (i.e., Facebook, Twitter and YouTube) in helping restore the image of Pakistan Railways, a government organization, by providing timely information to its target publics. This study contributes to crisis communication theory via (1) detecting the image repair focused crisis response strategies used by Pakistan Railways on social media to regain its customers' confidence, (2) identifying the primary crisis issues and public sentiments as expressed in comments and (3) examining effectiveness of mass media agenda building by examining the tone of mainstream newspapers before and after Pakistan Railways' launch of its official Twitter account during the crisis. Our findings provide theoretical and practical implications for advancing organizational crisis management in Pakistan and other developing countries.

2 | CASE BACKGROUND AND LITERATURE REVIEW

2.1 | Pakistan Railways crisis

Being as the sole public sector freight and passenger transportation carrier, Pakistan Railways currently owns 7791 km route, 473 locomotives, 1375 passenger coaches and 14,448 freight wagons (Pakistan Railway, 2020). Both of its broad-gauge and meter-gauge

tracks are extended throughout Pakistan, which eventually 'reduces transportation cost and promotes rural development and national integration' (Asim & Nafees, 2014, p.1728). Pakistan Railways significance is perpetuating particularly in the wake of China Pakistan Economic Corridor (Yousafzai, 2017). Although, this premier mode of transportation 'has a definite edge over road transport for long haul and mass scale traffic movement both for passenger and freight in addition of providing a safe, economical and environment friendly mode of transport' (Government of Pakistan, 2017, p.213) Yet, this public entity is currently facing a tough competition with private road transporters including truck and bus service owners.

The then government of Pakistan was marred by a series of mega scandals of financial corruption, bad governance, nepotism, lack of professional expertise, political interference, competition, and oil and the locomotives shortage between 2008 and 2013 (Abbasi, 2012; Haider, 2015; Li et al., 2018). Among the government departments, which suffered the most from these menaces included Pakistan Railways—at the top. During these 5 years, hundreds of train routes were closed, and millions of passengers were left at the mercy of private road transporters or expensive car journeys. The Pakistan Railways crisis did not align with the traditional definition of a crisis as an unforeseen and sudden event (Coombs, 2007). Instead, it developed gradually over a prolonged period, exerting in a slow but steady impact. However, referring to Coombs' (2007) classification of different crisis types, we can classify it as a preventable-cluster crisis, in which organizations deliberately put people at risk by taking inappropriate actions or violating laws and regulations. In the case of Pakistan Railways, the management neglected to purchase new locomotives and oil reserves, engaged in nepotism, allowed political interference, and permitted ticketless journeys (Tahir, 2013). All these impeding factors were extensively highlighted by analysts and experts in the mainstream news media (Haider, 2015; Khan & Khaliq, 2020; Li et al., 2018). As a result, a significant number of passengers and freight trains reduced and some top officials were even charged with corruption offenses (Khan & Khan, 2021). The timeline of the Pakistan Railways crisis gradually started engulfing passenger and freight trains by the end of the Year 2009. However, the peak of the trouble started in April 2010 and declined by the end of 2013, during which 128 nonrevenue generating passenger trains ("Railway to Shut," 2010) and all freight trains were finally shut down (Rao, 2011). Contrary to 81 million passengers in the fiscal year 2008–09 (Pakistan Railway, 2009, p.139), Pakistan Railways carried 41 million passengers in the fiscal year 2011–12 (Railways, 2011–12). Moreover, from 11 million tons of freight in 1986, the volume was down to 1.6 million tons (in 2011). Despite the drastic decline in services, railways still carried a workforce of 72,000 employees (Haider, 2015). The crisis striking Pakistan Railways was acknowledged by the management in 2013, prompted by the government manager at the time accepting responsibility and attributing the crisis to the government itself ("Bilour blames govt", 2013). Following this admission, a new management team assumed their positions after the general elections in May 2013 and initiated several projects, particularly on digital transformation Rafique determined to improve

Pakistan Railways, 2013), which eventually facilitated this comparatively cheap and safe mode of public transportation moving towards a journey of revival. Though, the said initiatives helped many of ceased trains back on track within a short period of time (Maqsood, 2016), Pakistan Railways had still been facing the crisis of bringing back the diverted skeptical passengers and freight forwarders. It also needed to improve the negative media coverage tone.

2.2 | Internet users and Pakistan Railways' digital transformation journey

Since 2016, Pakistan saw a phenomenal rise in internet penetration and social media usage, with more people spending more time online than ever before (see Table 1). Particularly, social media received a greater public attention, for instance, YouTube and Facebook have emerged as the second and third, while Twitter has become the sixth most popular platforms in the country (Kemp, 2023). In the past, individuals in Pakistan relied on publicly accessible mailboxes to file complaints against public or private officials, organizations, or institutions. However, with the increasing availability of the internet, the use of social media has surged in recent years. Nowadays, a significant number of people opt for online portals, such as the Pakistan Citizens' Portal (PCP), which can be accessed via mobile applications, emails, or Facebook accounts, to lodge complaints about public management. A recent report indicates that since its launch in 2018, the PCP has received over 4 million complaints, with one of the complaint categories specifically aimed at addressing corruption and malpractice in an effort to improve the performance of bureaucracy (Raza, 2021). As time passes, more and more individuals in Pakistan are turning to social media and online portals to file complaints.

It is an emerging trend that 'social media platforms are seeing increasing adoption by public transport agencies, as they provide a cost-effective, reliable and timely mechanism for sharing information with passengers and other travelers' (Cottrill et al., 2017, p.421). To get on this bandwagon, the Pakistan Railways management not only

TABLE 1 Internet and social media users in Pakistan (2016–2023).

Year	Internet users	Active social media users	Internet penetration
2016	26.19 million	29 million	16%
2017	35.10 million	31 million	18%
2018	44.60 million	35 million	22%
2019	44.61 million	37 million	22%
2020	76.38 million	37 million	35%
2021	61.34 million	46 million	28%
2022	82.90 million	72 million	37%
2023	87.35 million	72 million	37%

Source: Kemp (2023).

restructured its in-house *public relations (PR)* and *information technology (IT)* departments but further established a collaboration between them. On the one hand, the former was expanded by converting it into a full-fledged Directorate of Public Relations (DPR), duly equipped with latest paraphernalia and headed by a Director General Public Relations with relevant academic qualification and professional experience. The refurbished DPR was primarily assigned the tasks to regain positive media coverage and restore the rail users' confidence through social media. On the other hand, the latter was also restructured and converted into a state-of-the-art Directorate of Information Technology (DIT) with a mission to automate organization's manual and obsolete operational procedures and communication practices. On top of that, a number of expert professionals from both of the directorates were combined together to form a team DPR-DIT, which has subsequently been launching multiple e-projects since 2014 till date. For instance, they introduced e-ticketing system, purpose-built mobile phone app, new official website with more security controls, and official social media accounts on Facebook, Twitter and YouTube. To strengthen customer relations, this team responds to various queries and complaints on social media regarding a rail service or journey, e-ticketing frauds, online reservations and e-payments through cash applications (e.g., Easypaisa and Jazzcash), refund of customers' online ticketing payments, updates about the new train routes and stopovers, and issues concerning login problems regarding the PR mobile phone application. According to the Pakistan Railways new strategic plan, this team uses official Twitter stream to act as a form of information subsidy to gratify journalists' information needs and eventually get positive media coverage.

With a new vision to bridge the gap between PR and its potential publics, the rejuvenated DPR-DIT team had set three broad objectives including to bring the diverted passengers back home, to engage customers on social media platforms, and to get positive mass media coverage by providing timely information. To attain these objectives, an official Twitter account, a Facebook page, and a YouTube channel were created to provide e-facilitation to each relevant key publics of the digital age (S.I. Shah, personal communication, March 20, 2022).

The following sections review the relevant literature and posit research questions in the context of this Pakistan Railways crisis case on how this public sector organization used informational technology and social media to deploy image repair focused crisis response strategies.

2.3 | Social media and image repair strategies

An organization's crisis response strategies can be examined by what does the organization say and how does it act in the time of crisis (Coombs, 2004). To effectively manage a crisis, many remarkable theories and models offering a number of crisis response strategies have so far been presented by the public relations researchers. Out of that dominant paradigm, Benoit's (1995) image repair theory provides practitioners with a comprehensive strategic framework (see Table 2)

TABLE 2 Typology of image restoration strategies.

Strategy	Key characteristics
1. Denial	
Simple denial	Did not perform act
Shift the blame	Act performed by another
2. Evasion of responsibility	
Provocation	Responded to act of another
Defeasibility	Lack of information or ability
Accident	Act was a mishap
Good intentions	Meant well in act
3. Reducing offensiveness of event	
Bolstering	Stress good traits
Minimization	Act is not serious
Differentiation	Act is less offensive
Transcendence	More important considerations
Attack accuser	Reduce credibility of accuser
Compensation	Reimburse victim
4. Corrective action	Plan to solve/prevent recurrence of problem
5. Mortification	Apologize for act

Source: Benoit (1997); Zhang and Benoit (2004).

to understand how organizations and individuals can effectively respond to a crisis to revive their tarnished image.

Although the image repair theory evolved before the advent of the latest new media disruptions, the set of suggested crisis response strategies, with a focus on restoring crisis-damaged organizational image, have been widely used by crisis scholars to recognize the role of social media in crisis management (Chon & Kim, 2022; Liu & Fraustino, 2014). For instance, Muralidharan et al. (2011) found that British Petroleum employed *corrective action* as the dominant image restoration strategy in its Facebook, Twitter, YouTube, and Flickr pages. Similarly, Allison et al. (2020) reported that the use of *evading responsibility* and *reducing offensiveness* strategies on Maria Sharapova's Facebook page helped the Russian tennis player make her fans accept her excuse, after confession of a failed dope test. In another study, Grimmer (2017) investigated how and why the selected supermarkets in Australia avoided employing *mortification* strategy and tried to address the crisis by using the rest of four image repair strategies in their Facebook page, which is in contrast from Moody's (2011) finding that the use of *mortification* strategy via Jon Gosselin's Twitter handle helped this American TV personality regain an eventual positive media image. The findings of all these studies suggested that organizations and celebrities frequently make the use of various image restoration strategies, which was found to be effective in reviving the crisis-damaged image at the end.

Social media have several particular advantages for crisis scholars to study the use of image repair strategies as evidenced in crisis-stricken organizations' public communication messages. Social media have superseded traditional media as the primary loci for communicating image repair efforts for individuals and organizations (Allison et al., 2020). The interactive nature of social media in the form of likes, shares, comments, and views features has given organizations the ability to communicate openly, quickly, honestly, truthfully, and directly with various audience groups such as passengers in the case of public transportation system for image repair purpose. Finally, social media have overturned top-down element of communication processes allowing publics to become information producers as well. Social media users do not just read, but also respond to image repair strategies, even multiple times, engaging with others to debate crisis issues concerning to the public (Howard, 2020). Those issues are not only important for an organization involved in a crisis but also for crisis researchers to identify major issues in the social media users' comments to gauge the wider public discourse on such issues. Through social media, users post their grievances and register their complaints in the comments section. Meantime, organizations can monitor comments sections to understand users' behaviour for analytical purposes and are able to eventually make strategic decisions towards customer satisfaction, particularly during crisis situations (Narayanaswami, 2018).

The revival of an organization depends at large on how swiftly it responds to the crisis (Benoit, 1997). As Ki and Nekmat (2014) noted, Facebook can best serve this purpose owing to its unique features including 'real-time messaging and message linking to networks of users numbering in the hundreds, thousands, and possibly millions' (p.141). Similarly, people frequently use YouTube to receive rapid information because around 24000 h of video content are uploaded on this platform per hour (Duffett et al., 2019). Also, researchers found that people tend to prefer YouTube as it is a visually engaging platform and they tend to consider its information credible especially when it is offered by government departments (Madathil et al., 2015).

Owing to these important and effective characteristics of social media and to be in line with the previous studies in social-mediated organizational crisis communication, it is worthwhile to identify which particular image repair focused crisis response strategies were used by Pakistan Railway's on social media. The first research question of this study is asked to uncover the crisis response strategies used by Pakistan Railways to bring back passengers/freight forwarders after the launch of e-projects:

RQ1: *Which of the image repair focused crisis response strategies were applied by Pakistan Railways on Facebook, Twitter, and YouTube?*

2.4 | Audience feedback in crisis communication

Audience feedback is one of the most important factors that decide the effectiveness of a public relations campaign (Chung &

Taneja, 2016). With the advent of ICTs, organizations have preferred to engage with audience through social media to maintain reputation, avoid crisis, and assess potential public feedback (Muralidharan et al., 2011). Each social media platform has its own mechanisms for users to express their appreciation or revulsion. Likes, retweets, shares, and audience comments are currently the most popular metrics being used to measure the social media engagement by an organization (Perreault & Mosconi, 2018).

Emotional expression is another important audience feedback on social media regarding crisis information and topics. For instance, social media users' comments are commonly examined to assess audience emotions and are defined by Khan (2017) as 'expression of text-based communication to express opinions about a topic' (p.238). As posited in the integrated crisis mapping (ICM) model (Jin et al., 2012), primary negative emotions among publics are essential in predicting their responses to crisis situations and organizational crisis response strategies. Jin et al. (2014) further expanded the ICM-based crisis emotion inventory to include additional negative emotions and positive emotions, which can be examined according to varied degree of organizational crisis responsibility attribution. Jin and Austin (2022) further highlighted the need to understanding the role of emotions in social-mediated crises across organizational, health, and disaster arenas.

In light of the research foundation laid on audience feedback and crisis emotions during social-mediated crisis communication, according to the Pakistan Railway book (2018), one of the basic goals of practicing various crisis strategies on Pakistan Railway's social media pages was to help release passengers' negative emotions and make them receptive to the uploaded content and information. Therefore, determining a list of dominant issues and emotions found in the audience comments to Pakistan Railways' official Facebook posts, Twitter tweets, and YouTube videos may help to determine for what purposes audience mostly used comments space and to understand to what extent they used crisis response strategies were successful to positively engage the audience. Some research studies claim that social media has changed organizations and stakeholders communicate patterns. In addition, the incorporation of social media users' feedback into crisis management and communication organizations to optimize social media integration into their communication strategy (Cheng, 2016). Therefore, in the context of the Pakistan Railways crisis, we ask:

RQ2: *What are the leading issues and public emotions found in the audience comments to Pakistan Railways' social media pages?*

2.5 | Twitter as a tool of mass media agenda-building

Media agenda-building theory seeks to answer the question of who sets the media agenda (Kiousis et al., 2006). Even though there are many factors that eventually shape the media agenda, public relations

activities are considered dominant in this regard (Berger, 2001; Curtin, 1999). In Kiousis et al.'s (2006) estimation, 'public relations impact anywhere from 25% to 80% of news content' (p.267). According to Parmelee (2014) 'during the agenda-building process, those who wish to shape journalists' stories and public perception [e.g., public relations practitioners] often disseminate information subsidies' (p.434), which are defined by Berkowitz and Adams (1990) as 'efforts of news sources to intentionally shape the news agenda by reducing journalists' costs of gathering information' (p.723). In other words, organizations use information subsidies (e.g., news releases, news conferences, media-kits, social media platforms, and other similar tools) to positively impact the news agenda by making information more rapidly and economically available to media outlets. Among social media platforms, Twitter-based information represents a valuable subsidy to the mass media owing to its prompt and cost-effective accessibility. Despite the fact that 'the text of Twitter posts is limited to 140 characters, but users can attach multimedia or share links to Web content' (Russell, 2015, p.189). Owing to this unique feature of Twitter, traditional information subsidies (i.e., news releases, interviews, speeches, videos) are now capable of being attached to a tweet that eventually helps to satisfy specific information needs of the mass media. Previous studies examined the impact of information subsidies on media coverage during a crisis or election campaigns found a positive impact in this regard (Seethaler & Melischek, 2019; Sweetser & Brown, 2008). Moreover, several other studies particularly recommend organizations to use Twitter (and other digital platforms) because such platforms have the ability to respond to a crisis in the fastest and more direct manner, which ultimately prohibits journalists, who may report fabricated stories in the absence of true information from the entities under crisis (Ki & Nekmat, 2014; Moody, 2011). Based on this argument, it would be important to assess the tone of relevant news stories of Pakistani newspapers before and after the launch of Pakistan Railways' official Twitter handle. In this study, the term 'tone' is defined as the overall impression conveyed by news stories, as originally coined by Berelson in 1952. To assess tone, the coders identified various phrases, words, idioms, images, and adjectives present in the sample content (see more details in Section 3), a technique also employed in previous studies (Gever, 2019; Kamboh & Ittefaq, 2019). Research shows that tone can significantly affect attitudes towards a given topic, with negatively framed content leading to more negative attitudes and vice versa (Gever, 2019). Therefore, we further ask:

RQ3: *What is the overall tone of newspaper stories before and after the launch of Pakistan Railways' official Twitter account?*

3 | METHODOLOGY

This study seeks to examine how Pakistan Railways used social media as a mean to restore its customer and print media image and consequently how effective this effort was. To meet these objectives, we primarily used a mix-method approach (i.e., both quantitative and qualitative) content analysis, which is one of the most widely used

methods for measuring and analysing media texts (Kerlinger, 1973; Wimmer & Dominick, 2003). We used this method to measure frequency and direction characteristics of the sample content. In Neuman's (2005) words 'frequency simply means counting whether or not something occurs and, if it occurs, how often. Direction is noting the direction of messages in the content along some continuum (e.g., positive or negative, supporting or opposed)' (p.294). We answered RQ1 by applying quantitative content analysis to measure and compare the frequency of various image restoration strategies being used by the team DPR-DIT on Facebook, Twitter, and YouTube. Whereas, to answer RQ2, first, we applied inductive qualitative content analysis to identify major issues in the audience comments corresponding to the posts, tweets and videos; second, we used its deductive approach to assess the tone of passengers' emotions in the audience comments. Finally, we responded to RQ3 by again using the deductive approach of qualitative content analysis to assess the tone of the news stories published in selected mainstream Pakistani newspapers. While applying this method, we followed Wimmer and Dominick's (2003) defined procedures.

For print media, we selected the news contents of seven mainstream national English language newspapers including *The News*, *Dawn*, *The Nation*, *The Express Tribune*, *Pakistan Today*, *Daily Times*, and *Pakistan Observer* published from 1 January 2010 to 31 December 2019 (almost 6.5 years before, and 3.5 years after the launch of Pakistan Railways' official Twitter handle) as *first sample* of the study. To begin with their guidelines for social media, we considered the contents of Pakistan Railways' official social media pages (i.e., Facebook, Twitter, and YouTube) and corresponding audience comments—collected over a period of 3 years from 1 January 2017 to 31 December 2019—as *second sample* of the study. As this study aims to examine the tone of newspaper reporting both before and following the introduction of social media channels, this specific timeframe is chosen for data collection. For instance, the timeframe for collecting newspaper data was selected based on the emergence of the Pakistan Railways crisis, which gained newspaper attention around 2009, as indicated by newspaper reports ("Railway to Shut," 2010; Rao, 2011). Similarly, social media data collection was prompted by the recognition of the crisis by Pakistan Railways' management, who not only acknowledged the situation but also took steps towards crisis recovery. They recognized the growing prevalence of internet access and social media penetration in the country and consequently established a presence on social media platforms Pakistan Railways to introduce free WiFi, e-ticketing, 2016).

The news media in Pakistan can be broadly categorized into two groups, namely the Urdu media and the English media. Previous studies indicate that the English news media is favoured by the liberal population and targets policymakers, politicians, the affluent class, civil and military bureaucracy, professionals, and educated individuals. Conversely, the Urdu press has a broader readership, particularly among the lower middle class who have primary to secondary education levels (Ejaz et al., 2022; Kamboh & Ittefaq, 2023). It is worth noting that despite limited press freedom in Pakistan, the news media has been actively investigating various scandals, ranging from real estate to public

health and from rape cases to financial corruption, which often involve politicians and civil servants (Ghani, 2022). Research has also suggested that Pakistani journalists consider their primary responsibility to be the defense of national sovereignty, the preservation of national unity, and the promotion of societal development (Pintak & Nazir, 2013). The rationale behind this selection was that, unlike their Urdu language competitors, English dailies are considered more critical of government policies and departments (Ahmad Kamboh & Yousaf, 2020).

We operationalized three sets of units of analyses to answer RQ1, RQ2, and RQ3 respectively: (1) individual Facebook posts, Twitter tweets, and YouTube videos; (2) individual audience comments corresponding to the Facebook posts, Twitter tweets, and YouTube videos; (3) one entire news story published in the selected newspapers. Afterward, to measure the frequency of the first sample of the study, we constructed five major categories. These categories were extracted from the image restoration strategies as described in Benoit's (1995) image repair theory (see Table 2). Subsequently, we operationalized the constructed categories as follows:

3.1 | Category A: Denial

This category includes all such unit of analyses in which 'team DPR-DIT' simply denied any crisis happened in the organization; or shifted the blame of the crisis to some other reason/s (e.g., fuel price hike, lack of locomotives, ticketless journeys).

3.2 | Category B: Evading responsibility

This category contains unit of analyses posted to persuade the audience that Pakistan Railways had to shut down its train routes; to avoid excessive ticketless journeys (*Provocation*), or due to lack of required amount of funds, locomotives, or professional expertise to keep trains on track (*Defeasibility*), or shortage of locomotives and wagons owing to recent recurrent train accidents (*Accidents*), or to save the public money being spent on oil imports in the wake of increased international petroleum prices (*Good intentions*).

3.3 | Category C: Reducing offensiveness

It includes all such unit of analyses posted to reduce the extent of negative audience emotions e.g. reminding positive acts done in the past or being done at present (*Bolstering*); just a few nonrevenue generating train routes were shut down but not all the others (*Minimization*); in similar adverse conditions, many other countries permanently terminated or somewhat postponed their railway journeys for a longer duration (*Differentiation*); train halts eventually reduced the number of human casualties in train accidents, reduced national greenhouse gas (GHG) emissions, reduced oil import bill, and reduced unnecessary passenger journeys (*Transcendence*); accusing passengers that owing to their ticketless journey attitude, the train

routes had to shut down (*Attacking accuser*); the passengers/freight forwarders would be given special discounts or other benefits on new bookings (*Compensation*).

3.4 | Category D: Corrective action

This category consists of unit of analyses posted to restore the state of affairs existing before the Pakistan Railways crisis or promising to prevent its recurrence in the future by taking necessary corrective actions.

3.5 | Category E: Mortification

This category includes any of the unit of analyses posted to admit the crisis responsibility and asked the audience for forgiveness.

After the operationalization of content categories, we trained two coders (university graduate students) to carry out manifest, inductive and latent coding. Manifest coding is defined by Neuman (2005) as a process of placement of observable, countable surface data (i.e., unit of analyses) into a relevant category. In light of this guideline, we asked our coders to put such unit of analysis (belonging to first set) into a relevant category having 'sentences' or 'paragraphs' or 'captioned photographs' or 'video clips' about that category. Eventually, we counted the coded content from all five categories to answer RQ1. To identify major issues in the audience comments (RQ2), we trained our coders to apply inductive coding method on audience comments corresponding to Facebook posts, Twitter tweets, and YouTube videos. According to Chandra and Shang (2019) inductive coding is a data analysis technique by which the coders develop concepts and themes after reading and interpreting raw textual data. While following these criteria, we trained our coders as how to read and interpret each unit of analysis (belonging to second set), draw various themes and eventually narrow them down to a fewer number of dominant issues.

The second part of RQ2 assesses the tone of passengers' emotions found in the audience comments on PR's social media channels and RQ3 examines the tone of newspaper stories before and after the launch of Pakistan Railways Twitter account. We used Neuman's (2005, p.296) recommended latent coding technique, which reveals that unlike manifest coding 'a researcher using latent coding looks for the underlying, implicit meaning in the content of a text'. Based on this guideline, coders judged the overall tone of each unit of analysis (i.e., an audience comment or a newspaper story) against any of the three directions (positive, negative, and ambivalent) by using Berelson's (1952) devised technique, called the totality of impression. To determine the overall impression, we trained our coders to judge different words, phrases, idioms, or adjectives present in the texts of an audience comment or a newspaper story. For a better understanding of the coders, the operationalized definition to judge the direction of the sample content for audience comments and newspaper stories were distinctly developed (see Tables 3, 7, 8, and 9).

TABLE 3 Description of newspaper coverage tone of the Pakistan Railways crisis.

Tone	Definition	Example	Keywords
Positive	Includes a news story favoring the Pakistan Railways management plans, projects, actions, or policies	Rafique determined to improve Pakistan Railways	New trains; revenue increased; train route revived; digitalization of ticketing system; good governance initiatives
Negative	Includes a news story highlighting financial corruption, mismanagement, or passive behaviour in the organization	Political expediency: Report on railway land fraud 'dropped'	Ticketless journeys; leasing scam; political interference; lack of professional expertise; poor infrastructure
Ambivalent	Includes a news story of informative in nature having no pro or anti-government slant	PM offered me to be info minister: Sh Rashid	Ministers' visit; oath taking ceremony; new chairman appointed; notifications; employee appreciation messages

For instance, coders were asked to attach a 'positive' appraisalment to those audience comments that appeared to applaud a restorative act by the Pakistan Railways management. A 'negative' appraisalment to those that appeared to raise baseless allegations, criticism or seem an act of releasing personal frustration. Finally, an 'ambivalent' assessment was given to those that intended to seek information or representing genuine complaints related to the services being offered/not offered. On the other hand, a news story was coded as positive, negative, or ambivalent (see Table 3). The coding scheme was developed based on the theory and literature to the help the coders. By following Muralidharan et al. (2011) approach, a total of 1849 posts, tweets, videos, and 13,706 audience comments were coded to answer RQ1 and RQ2 respectively (see Table 4).

To get a representative sample of the large set of audience comments, the coders coded every third comment if the total comments for that particular post were above 20 and coded the entire set of audience comments if the total were below 20. For Twitter, a total of 224 tweets and 770 replies were coded. Official YouTube channel had a total of 610 videos and 2856 audience comments and used the same coding guidelines as the official Facebook page. Before the actual coding, a pretest was conducted which helped the coders to better operationalize different variables (e.g., themes, audience issues, and emotions). During the nine meetings held with coders, we responded to their questions regarding the coding process. Initially, coders remained open to create all possible themes. The coding sheet was regularly checked by the authors to examine if the coding sheet is being followed by the coders. Next, NVivo software was used to identify the most frequently occurring themes in the comments. By the end of this phase, coders created 15 themes. During the nine meetings held between the research team and coders, we finalized nine themes (i.e., three for each platform) and named them accordingly. The intercoder reliability was obtained using Cronbach Alpha for all themes (see Table 5).

4 | RESULTS

To answer RQ1, the data in Table 6 illustrates that from a sample of 1849 posts/tweets/videos, 40.4% ($n = 809$) used *reducing offensiveness of event* and 34.6% ($n = 416$) employed *corrective action* as the top two most preferred image restoration strategies. On the other

TABLE 4 Number of posts, tweets, videos, and comments included in analyses.

Social media	Posts/tweets/videos	Audience comments
Facebook	1015	10,080
Twitter	224	770
YouTube	610	2856
Total	1849	13,706

TABLE 5 Cronbach Alpha scores for all themes.

Issue	Cronbach Alpha (α)
Appreciation	0.85
Information seeking	0.89
Criticism	0.86
Complaints	0.90

hand, *evasion of responsibility*, *denial*, and *mortification* were the least preferred ones, which constituted 10.6% ($n = 280$), 8% ($n = 214$) and 6.4% ($n = 130$) of the total first sample content of the study, respectively. Interestingly, each Pakistan Railways social media pages used different image restoration strategies. For instance, contrary to Twitter ($n = 27$; 12.1%), both YouTube ($n = 490$; 80.3%) and Facebook ($n = 292$; 28.8%) applied *reducing offensiveness of event* as the most preferred image restoration strategy. Similarly, unlike on YouTube ($n = 58$; 9.5%), *corrective action* was a preferred strategy on Twitter ($n = 170$; 75.9%).

While answering the first part of RQ2—that is, to identify dominant issues in the audience comments posted on Pakistan Railways' Facebook page ($n = 10,080$)—the data in Table 7 reveals that the audience mostly used comments space for seeking information ($n = 3,427$; 34%), lodging complaints ($n = 2,722$; 27%) or appreciating digital transformation and other similar initiatives ($n = 2,117$; 21%). However, *others* category constituted ($n = 1,814$; 18%) of the total comments. The leading issues in this category were personal attacks on existing political regime or country's railway minister/officials.

TABLE 6 Frequency of crisis strategies employed by team DPR-DIT on social media (2016–2019).

Strategy	Facebook	Twitter	YouTube	Total
Denial	18.7% (190) ^a	2.2% (5) ^a	3.1% (19) ^a	8% (214) ^a
Evasion of responsibility	24.1% (245)	3.1% (7)	4.6% (28)	10.6% (280)
Reducing offensiveness of event	28.8% (292)	12.1% (27)	80.3% (490)	40.4% (809)
Corrective action	18.5% (188)	75.9% (170)	9.5% (58)	34.6% (416)
Mortification	9.9% (100)	6.7% (15)	2.5% (15)	6.4% (130)
Total	100% (1015)	100% (224)	100% (610)	100% (1849)

^aNumber of posts/tweets/videos.

TABLE 7 Dominant issues in the audience comments on Facebook ($n = 10,080$).

Issue	Comments (%age)	Example
Appreciation	2117 (21%)	Good efforts to reach out to people little by little one walks far (22 February 2019).
Information seeking	3427 (34%)	When will you people update Rawalpindi express seats? (10 October 2019). Sir, Gujranwala shuttle trains are not following the stoppages properly as per the notifications, when will it start? (26 February 2017).
Complaints	2722 (27%)	Pakistan Railway mobile App is not responding properly. Please release the update to fix the issue please (25 April 2018).
Others	1814 (18%)	(1 November 2019). جب ملک پر جابر زانی بدکار حکمران مسلط کیے جائیں تو ایسے ہی حادثات رونما ہوتے ہیں۔ similar accidents happen when cruel, adulterer and wicked rulers are imposed on a country.

Note: Urdu language was used in some of the comments.

TABLE 8 Dominant issues in the social media users' replies on Twitter ($n = 770$).

Issue	Comments (%age)	Example
Complaints	(408) 53%	Example 34DN - Pak Business Express LAHORE JN. to KARACHI CANTT Coach # 8 Air conditioning system isn't working at all! And it has literally become too HOT to bear! Kindly fix the issue: PLEASE ☹️ (20 May 2017). Pakistan Railways is a bad experience always a bad experience. I Booked 3 tickets and the coaches were not available at the time of travelling and we got too much embarrassment. no refunds no recovery no one ready to listen our problem. idiot and ugly App (23 February 2018).
Criticism	(362) 47%	It is not going to be better due to corrupt government ministers; Railway is suffering due to incompetency (5 February 2019). Pakistan railways is heading to nowhere, nobody knows how it is going to become good mode of public transportation like in old days (14 March 2016).

Whereas, on Twitter, more than half of the issues were categorized as complaints that constituted 53% of the total comments, while remaining 47% fell in the category of criticism (see Table 8). It was worth noting that unlike YouTube and Facebook that received plenty of appreciative audience comments, tweets hardly received any similar response from the users.

Data in the Table 9 reveals that, on YouTube, majority of the issues fell in the *Appreciation* category which constituted ($n = 1970$; 69%) of the total sample content, contrary to a mere ($n = 343$; 12%) such comments that represent audience criticism.

The second part of RQ2 reviewed the dominant emotions found in the audience comments posted on Pakistan Railways' Facebook ($n = 10,080$), Twitter (770), and YouTube ($n = 2856$) pages. The data in

Table 10 reveals that there is a difference in the audience emotions between the first year (2016–17) and the latest year (2018–19) of the launch of different Pakistan Railways' social media pages. For instance, a comparatively higher negative trend, that is, 37% on Facebook, 55% on Twitter, and 23% on YouTube was later reduced to 06%, 41%, and 08% respectively for each of the account. Similarly, a relatively lower ambivalent trend, that is, 48% on Facebook, 45% on Twitter, and 09% on YouTube was subsequently increased to 70%, 58%, and 22% respectively for each platform. However, data showed a very little variation in positive emotions trend in this regard. These results show that the use of various image restoration strategies was quite effective in changing the attitudes of the social media users in favour of Pakistan Railways and its services.

TABLE 9 Dominant issues in audience comments on YouTube ($n = 2,856$).

Issue	Percentage	Example
Appreciation	1970 (69%)	Super video bro, please continue uploading beautiful videos of various train routes (15 October 2019).
Information seeking	543 (19%)	What is the purpose of these videos? What are you trying to show? (9 January 2017).
Criticism	343 (12%)	Pakistan railway is still in the 1960s and nothing has changed so far, these videos does not make any sense (28 June 2018).

TABLE 10 Year-wise analysis of emotions in audience comments (2016–2019).

SNS account	Ambivalent				Negative				Positive			
	16–17 ^a	17–18	18–19	Avg ^b	16–17	17–18	18–19	Avg	16–17	17–18	18–19	Avg
Facebook	48%	60%	70%	59%	37%	14%	06%	19%	15%	26%	24%	22%
Twitter	45%	47%	58%	50%	55%	51%	41%	49%	00%	02%	01%	01%
YouTube	09%	20%	22%	17%	23%	11%	08%	14%	68%	69%	70%	69%
Average	34%	42%	50%	42%	38%	25%	18%	27%	28%	32%	32%	31%

^aDuring the year 2016–17.

^bThree years average percentage.

TABLE 11 Comparison of the English press tone during pre- and post-Twitter handle periods ($N = 152$).

Tone of the news stories	Pre-Twitter period (2010–2015)	Post-Twitter period (2016–2019)
Positive	08(12.1%) ^a	72(84%)
Negative	56(84.9%)	09(10%)
Neutral	02(03%)	05(06%)
Total	66(100%)	86(100%)

^aNumber of news stories (percentage).

Data in Table 11 indicates that before the launch of Twitter, a highly negative tone 84.9% of Pakistan Railways' related news stories was observed in mainstream Pakistani English newspapers. However, later the overall tone of the stories was assessed to be turned into overwhelmingly positive 84%, once the mass media had been provided with tweet-based information subsidies by the team DPR-DIT.

5 | DISCUSSION

This study investigated to what extent the coupling of information technology and public relations practices have delivered to improve Pakistan Railways' customer and media relations, and eventually repaired the public sector organization's image initially tarnished by the crisis. In this regard, the results show that the use of various image restoration strategies and Twitter-based information subsidies were helpful in changing the attitudes of social media users in favour of Pakistan Railways and its services. For instance, the data of the

audience emotions in social media comments indicate that an earlier highly negative emotions trend has gradually been turned into an ambivalent one; though enough positive emotions is still a distant dream, particularly on Facebook and Twitter. Moreover, contrary to a highly negative tone in newspaper coverage amid the peak of the crisis, the introduction of Twitter handle has subsequently contributed to get an ample positively toned newspaper coverage.

5.1 | The right strategy on the right platform: A right step towards image repair

Results indicate that team DPR-DIT applied different image repair strategies on different sites. For instance, *reducing offensiveness of event* was the most used set of strategies on Facebook and YouTube platforms. Specifically, from the given set of strategies (Table 2), on YouTube, *bolstering*; whereas on Facebook, *bolstering*, *minimization*, and *compensation* were the most applied image repair strategies. The team DPR-DIT wanted to bring the skeptical and enraged passengers back on the trains. For this purpose, both these platforms were introduced as customer engagement tools. Therefore, oftentimes, Pakistan Railways purposely shared such content on these platforms to help release community rage and frustration. This purposeful content shared on social media helped Pakistan Railways in two ways. First, it helped them to understand the public reaction about the crisis. Second, posting timely, accurate, and positive information, team DPR-DIT has engaged with audiences which eventually served them to adopt audience-based communication strategies (Veil & Yang, 2012). Some studies show that organizational interaction with audience could effectively prevent a look-like crisis (Taylor & Kent, 2007). During the age of social media, organizations monitor

social media reactions such as likes, shares, comments, and views and devise right strategy for the right platform to manage the crisis (Fearn-Banks, 2011).

To exploit young passengers' fascination attached with rail journey, Pakistan Railways has frequently uploaded such videos on YouTube, depicting a train passing through some beautiful part of the country. Similarly, for working class customers, Pakistan Railways have been regularly posting ticket discount offers, new train journeys, and photos of newly purchased luxurious train coaches on Facebook. Initially, the audience outrightly rejected all such content in comments section or reacting with laughing or angry face smileys, however, slowly but gradually they had started taking interest by liking or sharing or further inquiring about the posted information. For Pakistan Railways, social media acted as ventilation windows to reduce audience annoyance. These strategies eventually earned positive reaction from the public. Indeed, improving organizational reputation is a complex process, but it can certainly help positively shaped audiences' perceptions of the organization (Coombes & Holladay, 2009).

Corrective action was the dominant image repair strategy used on Twitter, that is, most of the content posted there aimed at assuring journalists to inhibit recurrence of any similar information crisis in future. Before joining Twitter, team DPR-DIT conducted a journalists engagement survey, whose results revealed that the previous administration's nonresponding behaviour to the mass media queries was precisely one of the major causes of negative media coverage. Consequently, the idea behind commencing an official Twitter account was primarily to meet the journalists' information needs. Since then, Pakistan Railways has been sending latest information subsidies (news releases, speeches, video clips) to the mass media via tweets, which has proved to be a time and resource-efficient practice. Conversely, the users' replies helped Pakistan Railways mend its media relations and improve its services. Prior literature also testifies that Twitter is a useful information resource for the professional journalist fraternity. For instance, Artwick (2013, p.212) asserts that "Twitter has been heralded as a 'game changer' for newsrooms, with 'the power to connect reporters and sources, as well as readers, like never before". Similarly, scholars suggest that organizations should use interactivity features of social media to pay more attention to user-generated content and share picture and videos for organizational legitimacy (Veil & Yang, 2012).

5.2 | Audience comments: A digital alternative to posting information and complaints

Certain information needs are imperative for the existence of a society (Dominick's (2005). Such needs are met by various media of mass communication, which perform four diverse functions. One of them is linkage function that is carried out by the mass media to join different elements of society that are otherwise not directly connected. On social media, official accounts are apt examples,

where organizations can readily connect with their customers and general audience (Facebook, n.d.). Particularly, for crisis communication purposes, organizations apply various image retrieval strategies by posting and uploading important information on these platforms and reciprocally get audience feedback in the audience comments (Cheng, 2016). In this connection, findings of this study reveal that comments space of Pakistan Railways social media pages are predominantly being used for information seeking and complaints lodging purposes by the audience. The recent departmental e-innovations couldn't have been publicly diffused if they did not have Facebook page. Particularly, the audience comments provided Pakistan Railways a precise interactivity option to guide customers that how to benefit from various online services. In addition, it has become an effective substitute of the former manual wooden/metal complaint boxes (which were once fixed inside the railway stations and seldom opened to respond).

Social media provides an opportunity to organizations to engage with multiple stakeholders on social media in real time. Researchers argue that due to informational and emotional needs of the audiences, social media can shape organizational reputation through criticisms and instant negative or positive feedback which usually organizations do not expect and eventually effects their reputation (Pfeffer et al., 2014; Vignal Lambret & Barki, 2018). In the case of Pakistan Railways, team DPR-DIT incorporated social media into crisis management and communications, which has been suggested by many studies and eventually achieved one of the main objectives, that is, to provide timely information to various audiences including passengers and journalists (Brummette & Fussell Sisco, 2015; Ott & Theunissen, 2015; Vignal Lambret & Barki, 2018) to counter unnecessary criticism from social media users and negative media reporting from journalists. Contrary to the popular social media platforms such as Facebook, YouTube, and Instagram, Twitter is an elite medium mostly used by professionals (e.g., journalists, lawyers, doctors, and educators) who prefer to make use of it with a purpose, mostly to put up a complaint or criticize an action or service (Canter, 2015; Fuller & Allen, 2016; Veletsianos, 2012).

Furthermore, our findings reveal that following its adoption of social media, Pakistan Railways' organizational image witnessed improvement in both news media presence and public perception. This positive transformation might be attributed to several potential factors, individually and combined. First, given the considerably long crisis duration in this case, the efforts of the DPR-DIT team to actively engage with social media users and address their concerns might have had sufficient time to yield accumulatively positive communication outcomes. Second, the improved accessibility of information for journalists on social media might have led to more favourable reporting in newspapers. Third, since our data were collected longitudinally, it is possible that the initial anger and other negative sentiments expressed by social media users gradually subsided over time. Overall, our study underscores the usefulness of Benoit's image restoration strategies, serving as valuable tools in managing a public organization's crisis by repairing its image in the age of social media.

5.3 | Theoretical and practical implications

Theoretically, the results of this explorative study suggest the potential benefits of employing Benoit's image restoration strategies on social media to enhance crisis management effectiveness for public organizations in the Global South. For instance, among a set of six methods of *reducing offensiveness* strategy (see Table 2), *bolstering* was the most effective one for Facebook and YouTube. On the other hand, *corrective action* was quite helpful for positively engaging Twitter users. Several crisis communication case studies from sports, public, and corporate sectors also found similar findings (Allison et al., 2020; Grimmer, 2017; Muralidharan et al., 2011), which consequently indicates the widespread applicability of image repair theory globally. In the era of digital media, organizations are capable to disseminate information directly to various publics. Through ICTs, organizations control narratives and monitor audience emotions, which eventually serve them to manage their image during the crisis. To contribute into existing literature, our study shows that team DPR-DIT used different strategies for different social media platforms because initially they joined various social media platforms to target a variety of populations. For instance, Twitter for journalists, Facebook and YouTube to engage with laypeople to channelize their emotions and to meet their informational and emotional needs during the crisis. On YouTube, sharing videos of beautiful places while travelling on train displayed a different persona of Pakistan Railways as the premier public transportation medium in the country. This social media affordability is only available on Facebook and YouTube to post long videos. While watching these videos, user may be less likely to pose critical question for the crisis as our results show that user reactions was positive towards Pakistan Railways during second half. In terms of positive news media coverage, Twitter has become a major source of news for journalists. Journalists use computer-mediated communication outlets to seek information and when organizations employ image repair strategies that also function as information sources for them (Hambrick et al., 2015).

From the management perspective, the results suggest numerous practical implications for public relations practitioners. First, IT-dependent strategic initiatives in organizations have changed the entire scope of conventional customer relations practices. Our findings reveal that audience make effective use of social media of an organization mostly to seek technical information or lodge complaints about ill-functioning of various e-projects. Therefore, there is a dire need to establish a collaboration between IT and PR experts to timely and effectively respond to the audience queries on social media pages of the organization. Furthermore, considering the rise in social media users and internet accessibility, it would be advantageous for Pakistan Railways to recruit a strategic communication specialist who could enhance the organization's image through effective communication. In developed countries, it is a common practice for organizations to employ social media managers to post content on various social media platforms. Nevertheless, due to limited resources, organizations in developing countries, such as Pakistan Railways, may find it challenging to hire a content manager

who can regularly post content on social media, respond to public inquiries, and ultimately boost engagement. Second, our findings sensitize media managers and practitioners to the importance of organizational Twitter handles as public relations tools (tweets as information subsidies), because journalists not only pick tweets and use their text for developing news stories but also make the use of attached multimedia files to find more information or sources to add depth to their stories (Broersma & Graham, 2013). Lastly, our study intends to motivate the Global Southern researchers to replicate its findings in their respective countries. Any such attempts would help to add on perspectives from historically marginalized countries in terms of crisis communication knowledge generation and eventually enrich the scholarship on the use of ICTs in public relations practices.

5.4 | Limitations and future research

There are some limitations to this study. First, only three social media pages of Pakistan Railways were explored to understand emotions and issues of passengers. Questionnaires duly filled in by the passengers and focus group studies can give even a more comprehensive picture in this regard. Second, only English newspapers were analysed to note down journalists' tone before and after the crisis. We did not consider broadcast media or journalists' Twitter accounts to get a broader perspective. Third, a combination of Benoit (1997) and Coomb's (2004) suggested crisis response strategies as a theoretical framework can give a more depth to the final analysis. Even though, these limitations have not curtailed the timely importance of this study, rather have opened new doors to future research, particularly in understanding and advancing public sector crisis communication in the Global South.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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REFERENCES

- Facebook. (n.d.) *Differences between profiles, pages and groups on Facebook*. <https://www.facebook.com/help/337881706729661>
- Bilour blames govt for railway crisis. (2013). Dawn. <https://www.dawn.com/news/795772/bilour-blames-govt-for-railway-crisis>

- Abbas, J., Wang, D., Su, Z., & Ziapour, A. (2021). The role of social media in the advent of COVID-19 pandemic: Crisis management, mental health challenges and implications. *Risk Management and Healthcare Policy*, 14(14), 1917–1932. <https://doi.org/10.2147/RMHP.S284313>
- Abbasi, A. (2012). Rs 8,500 bn corruption mars Gilani tenure: Transparency. *Geo News*. <https://www.geo.tv/latest/39122-rs-8-500-bn-corruption-mars-gilani-tenure-transparency>
- Ahmad Kamboh, S., & Yousaf, M. (2020). Human development and advocacy journalism: Analysis of low editorial coverage in Pakistan. *Development Policy Review*, 38(5), 646–663. <https://doi.org/10.1111/dpr.12443>
- Ali, Y., Shah, Z. A., & Khan, A. U. (2018). Post-terrorism image recovery of tourist destination: A qualitative approach using Fuzzy-VIKOR. *Journal of Tourism Analysis: Revista de Análisis Turístico*, 25(2), 129–153. <https://doi.org/10.1108/JTA-05-2018-0016>
- Allison, R., Pegoraro, A., Frederick, E., & Thompson, A. J. (2020). When women athletes transgress: An exploratory study of image repair and social media response. *Sport in Society*, 23(6), 1023–1041. <https://doi.org/10.1080/17430437.2019.1580266>
- Arora, S. (2022). Post-disaster communities on social media: Citizen participation in crisis communication after the Nepal earthquake, 2015. *Journal of Applied Communication Research*, 50(1), 1–18. <https://doi.org/10.1080/00909882.2021.1964572>
- Artwick, C. G. (2013). Reporters on Twitter: Product or service? *Digital Journalism*, 1(2), 212–228. <https://doi.org/10.1080/21670811.2012.744555>
- Asim, M., & Nafees, Q. I. (2014). Pakistan Railways at the verge of collapse: A case study. *International Review of Management and Business Research*, 3(3), 1728–1739.
- Benoit, W. L. (1995). *Accounts, excuses, and apologies: A theory of image restoration strategies*. State University of New York Press.
- Benoit, W. L. (1997). Image repair discourse and crisis communication. *Public Relations Review*, 23(2), 177–186. [https://doi.org/10.1016/S0363-8111\(97\)90023-0](https://doi.org/10.1016/S0363-8111(97)90023-0)
- Berelson, B. (1952). *Content analysis in communication*. Free Press.
- Berger, B. K. (2001). Private issues and public policy: Locating the corporate agenda in agenda-setting theory. *Journal of Public Relations Research*, 13(1), 91–126. https://doi.org/10.1207/S1532754XJPRR1302_1
- Berkowitz, D., & Adams, D. B. (1990). Information subsidy and agenda-building in local television news. *Journalism & Mass Communication Quarterly*, 67(4), 723–731. <https://doi.org/10.1177/107769909006700426>
- Brands, B. J., Graham, T., & Broersma, M. (2018). Social media sourcing practices: How Dutch newspapers use tweets in political news coverage. In J. Schwanholz, T. Graham, & P. T. Stoll (Eds.), *Managing democracy in the digital age: Internet regulation, social media use, and online civic engagement* (pp. 159–178). Springer. https://doi.org/10.1007/978-3-319-61708-4_9
- Broersma, M., & Graham, T. (2012). Social media as beat: Tweets as a news source during the 2010 British and Dutch elections. *Journalism Practice*, 6(3), 403–419. <https://doi.org/10.1080/17512786.2012.663626>
- Broersma, M., & Graham, T. (2013). Twitter as a news source: How Dutch and British newspapers used tweets in their news coverage, 2007–2011. *Journalism Practice*, 7(4), 446–464. <https://doi.org/10.1080/17512786.2013.802481>
- Brummette, J., & Fussell Sisco, H. (2015). Using Twitter as a means of coping with emotions and uncontrollable crises. *Public Relations Review*, 41, 89–96. <https://doi.org/10.1016/j.pubrev.2014.10.009>
- Burhan, M., Salam, M. T., Hamdan, O. A., & Tariq, H. (2021). Crisis management in the hospitality sector SMEs in Pakistan during COVID-19. *International Journal of Hospitality Management*, 98, 103037. <https://doi.org/10.1016/j.ijhm.2021.103037>
- Canter, L. (2015). Personalised tweeting: The emerging practices of journalists on Twitter. *Digital Journalism*, 3(6), 888–907. <https://doi.org/10.1080/21670811.2014.973148>
- Chandra, Y., & Shang, L. (2019). *Qualitative Research Using R: A Systematic Approach*. Springer.
- Cheng, Y. (2016). How social media is changing crisis communication strategies: Evidence from the updated literature. *Journal of Contingencies and Crisis Management*, 26(1), 58–68. <https://doi.org/10.1111/1468-5973.12130>
- Cheng, Y., & Cameron, G. (2018). The status of social-mediated crisis communication (SMCC) research: An analysis of published articles in 2002–2014. In L. Austin & Y. Jin (eds.), *Social Media and Crisis Communication* (pp. 9–20). Routledge.
- Chon, M. G., & Kim, S. (2022). Dealing with the COVID-19 crisis: Theoretical application of social media analytics in government crisis management. *Public Relations Review*, 48(3), 102201. <https://doi.org/10.1016/j.pubrev.2022.102201>
- Chung, S., & Taneja, H. (2016). Reassessment of audience in public relations industry: How social media reshape public relations measurements. *Asia Pacific Public Relations Journal*, 17(1), 60–77.
- Coombs, W. T. (2004). Impact of past crises on current crisis communication: Insights from situational crisis communication theory. *Journal of Business Communication*, 41(3), 265–289. <https://doi.org/10.1177/0021943604265607>
- Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review*, 10, 163–176. <https://doi.org/10.1057/palgrave.crr.1550049>
- Coombs, W. T., & Holladay, S. J. (2009). Further explorations of post-crisis communication: Effects of media and response strategies on perceptions and intentions. *Public Relations Review*, 35(1), 1–6. <https://doi.org/10.1016/j.pubrev.2008.09.011>
- Cottrill, C., Gault, P., Yeboah, G., Nelson, J. D., Anable, J., & Budd, T. (2017). Tweeting Transit: An examination of social media strategies for transport information management during a large event. *Transportation Research Part C: Emerging Technologies*, 77, 421–432. <https://doi.org/10.1016/j.trc.2017.02.008>
- Curtin, P. A. (1999). Reevaluating public relations information subsidies: Market driven journalism and agenda-building theory and practice. *Journal of Public Relations Research*, 11(1), 53–90. https://doi.org/10.1207/s1532754xjpr1101_03
- Dhanesh, G. S., & Sriramesh, K. (2018). Culture and crisis communication: Nestle India's Maggi noodles case. *Journal of International Management*, 24(3), 204–214. <https://doi.org/10.1016/j.intman.2017.12.004>
- Dominick, J. R. (2005). *The Dynamics of mass communication: Media in the digital age* (8th ed.). McGraw-Hill.
- Duffett, R. G., Edu, T., & Negricea, I. C. (2019). YouTube marketing communication demographic and usage variables influence on Gen Y's cognitive attitudes in South Africa and Romania. *The Electronic Journal of Information Systems in Developing Countries*, 85(5), 1–13. <https://doi.org/10.1002/isd2.12094>
- Ejaz, W., Ittefaq, M., & Arif, M. (2022). Understanding influences, misinformation, and fact-checking concerning climate-change journalism in Pakistan. *Journalism Practice*, 16(2–3), 404–424. <https://doi.org/10.1080/17512786.2021.1972029>
- Eriksson, M. (2018). Lessons for crisis communication on social media: A systematic review of what research tells the practice? *International Journal of Strategic Communication*, 12(5), 526–551. <https://doi.org/10.1080/1553118X.2018.1510405>
- Fearn-Banks, K. (2011). *Crisis communications: A casebook approach* (4th ed.). Routledge.
- Fuller, M. Y., & Allen, T. C. (2016). Let's have a tweetup: The case for using Twitter professionally. *Archives of Pathology & Laboratory Medicine*, 140(9), 956–957.

- Gani, A., & Singh, R. (2019). Managing disaster and crisis in tourism: A critique of research and a fresh research agenda. *African Journal of Hospitality, Tourism and Leisure*, 8(4), 1–25.
- Gever, C. V. (2019). When solution triggers more conflicts: frames and tone of media coverage of the anti-open grazing law of Benue State, Nigeria. *Media, War & Conflict*, 12(4), 468–482. <https://doi.org/10.1177/1750635218810908>
- Ghani, A. (2022). Editor's pick: 2021's best investigative stories from Pakistan. *Global Investigative Journalism Network*. <https://gijn.org/2022/01/04/editors-pick-2021s-best-investigative-stories-from-pakistan/>
- Government of Pakistan. (2017). Economic Survey of Pakistan 2016–17. Report for the Economic Adviser's Wing, Finance Division. https://www.finance.gov.pk/survey_1617.html
- Grimmer, L. (2017). Is it so hard to say sorry? Revisiting image restoration theory in the context of Australian supermarkets. *Asia Pacific Public Relations Journal*, 18, 17–32. <https://eprints.utas.edu.au/26104/>
- Haider, M. (2015). Putting railways back on track in Pakistan. *Dawn*. <https://www.dawn.com/news/1201004>
- Hambrick, M. E., Frederick, E. L., & Sanderson, J. (2015). From yellow to blue: Exploring lance Armstrong's image repair strategies across traditional and social media. *Communication & Sport*, 3(2), 196–218. <https://doi.org/10.1177/2167479513506982>
- Harmon, M. D., & White, C. (2001). How television news programs use video news releases. *Public Relations Review*, 27(2), 213–222. [https://doi.org/10.1016/S0363-8111\(01\)00081-9](https://doi.org/10.1016/S0363-8111(01)00081-9)
- Howard, J. M. (2020). Trains, Twitter and the social licence to operate: An analysis of Twitter use by train operating companies in the United Kingdom. *Case Studies on Transport Policy*, 8(3), 812–821. <https://doi.org/10.1016/j.cstp.2020.06.002>
- Jin, Y., & Austin, L. (2022). *Social media and crisis communication (2nd Ed.)*. Routledge.
- Jin, Y., Liu, B. F., Anagondahalli, D., & Austin, L. (2014). Scale development for measuring publics' emotions in organizational crises. *Public Relations Review*, 40(3), 509–518. <https://doi.org/10.1016/j.pubrev.2014.04.007>
- Jin, Y., Pang, A., & Cameron, G. T. (2012). Toward a publics-driven, emotion-based conceptualization in crisis communication: Unearthing dominant emotions in multi-staged testing of the integrated crisis mapping (ICM) model. *Journal of Public Relations Research*, 24(3), 266–298. <https://doi.org/10.1080/1062726X.2012.676747>
- Kamboh, S. A., & Ittefaq, M. (2019). Newspaper suicide reporting in a Muslim country: Analysis of violations and compliance with international guidelines. *Journal of Media Ethics*, 34(1), 2–14. <https://doi.org/10.1080/23736992.2019.1568252>
- Kamboh, S. A., & Ittefaq, M. (2023). Advocacy journalism and climate justice in a Global Southern country. *Local Environment*, 28(4), 412–432. <https://doi.org/10.1080/13549839.2022.2155937>
- Kemp, S. (2023). Digital 2023: Pakistan. <https://datareportal.com/reports/digital-2023-pakistan>
- Kerlinger, F. N. (1973). *Foundations of behavioral research: Educational, psychological and sociological inquiry*. Holt Rinehart and Winston.
- Khan, K., & Khaliq, A. (2020). Pakistan Railways: Why not on rails? A revisit. *PIDE Blog*. <https://pide.org.pk/blog/pakistan-railways-why-not-on-rails-a-revisit/?fbclid=IwAR2Q8er8oeEToHUQbVEQ>
- Khan, M. L. (2017). Social media engagement: What motivates user participation and consumption on YouTube? *Computers in Human Behavior*, 66, 236–247. <https://doi.org/10.1016/j.chb.2016.09.024>
- Ki, E. J., & Nekmat, E. (2014). Situational crisis communication and interactivity: Usage and effectiveness of Facebook for crisis management by Fortune 500 companies. *Computers in Human Behavior*, 35, 140–147. <https://doi.org/10.1016/j.chb.2014.02.039>
- Kiousis, S., Laskin, A., & Kim, J. Y. (2011). Congressional agenda-building: Examining the influence of congressional communications from the speaker of the House. *Public Relations Journal*, 5(1), 1–14.
- Kiousis, S., Mitrook, M., Wu, X., & Seltzer, T. (2006). First-and second-level agenda-building and agenda-setting effects: Exploring the linkages among candidate news releases, media coverage, and public opinion during the 2002 Florida gubernatorial election. *Journal of Public Relations Research*, 18(3), 265–285. https://doi.org/10.1207/s1532754xjpr1803_4
- Li, X., Alam, K. M., & Wang, S. (2018). Trend analysis of Pakistan railways based on industry life cycle theory. *Journal of Advanced Transportation*, 2018, 1–10. <https://doi.org/10.1155/2018/2670346>
- Liu, B. F., & Fraustino, J. D. (2014). Beyond image repair: Suggestions for crisis communication theory development. *Public Relations Review*, 40(3), 543–546. <https://doi.org/10.1016/j.pubrev.2014.04.004>
- Madathil, K. C., Rivera-Rodriguez, A. J., Greenstein, J. S., & Gramopadhye, A. K. (2015). Healthcare information on YouTube: A systematic review. *Health informatics journal*, 21(3), 173–194. <https://doi.org/10.1177/1460458213512220>
- Maqsood, F. (2016). Pakistan Railways starts moving towards complete revival. *Business Recorder*. <https://www.brecorder.com/news/302171>
- Metag, J., & Rauchfleisch, A. (2017). Journalists' use of political tweets: Functions for journalistic work and the role of perceived influences. *Digital Journalism*, 5(9), 1155–1172. <https://doi.org/10.1080/21670811.2016.1248989>
- Moody, M. (2011). Jon and Kate Plus 8: A case study of social media and image repair tactics. *Public Relations Review*, 37(4), 405–414. <https://doi.org/10.1016/j.pubrev.2011.06.004>
- Muralidharan, S., Dillistone, K., & Shin, J. H. (2011). The Gulf Coast oil spill: Extending the theory of image restoration discourse to the realm of social media and beyond petroleum. *Public Relations Review*, 37(3), 226–232. <https://doi.org/10.1016/j.pubrev.2011.04.006>
- Narayanawami, S. (2018). Digital social media: Enabling performance quality of Indian Railway services. *Journal of Public Affairs*, 18(4), e1849. <https://doi.org/10.1002/pa.1849>
- Neuman, W. L. (2005). *Social research methods: Quantitative and qualitative approaches*. Allyn and Bacon.
- Olsson, E. K. (2014). Crisis communication in public organisations: Dimensions of crisis communication revisited. *Journal of Contingencies and Crisis Management*, 22(2), 113–125. <https://doi.org/10.1111/1468-5973.12047>
- Ott, L., & Theunissen, P. (2015). Reputations at risk: Engagement during social media crises. *Public Relations Review*, 41(1), 97–102. <https://doi.org/10.1016/j.pubrev.2014.10.015>
- Pakistan Railway (2009). Yearbook 2008–2009. Lahore: Ministry of Railways. Government of Pakistan. <http://www.finance.gov.pk/publications/yearbook200809.pdf>
- Pakistan Railway. (2018). Yearbook 2017–2018. Lahore: Ministry of Railways. Government of Pakistan. <https://www.railways.gov.pk/PublicationDetail/YWJzZXJhc2Ug>
- Pakistan Railway. (2020). Yearbook 2020–2021. Lahore: Ministry of Railways. Government of Pakistan. Accessed July 03, 2020. <https://www.pakrail.gov.pk/images/yearbook/ybook201516.pdf>
- Pakistan Railways to introduce free WiFi, e-ticketing. (2016). *The News International*. <https://www.thenews.com.pk/latest/150810-Pakistan-Railways-to-introduce-free-WiFi-e>
- Parmelee, J. H. (2014). The agenda-building function of political tweets. *New Media & Society*, 16(3), 434–450. <https://doi.org/10.1177/1461444813487955>
- Perreault, M. C., & Mosconi, E. (2018). Social media engagement: Content strategy and metrics research opportunities. In: *Proceedings of the 51st Hawaii International Conference on System Sciences*. <https://doi.org/10.24251/HICSS.2018.451>
- Pfeffer, J., Zorbach, T., & Carley, K. M. (2014). Understanding online firestorms: Negative word-of-mouth dynamics in social media networks. *Journal of Marketing Communications*, 20(1), 117–128. <https://doi.org/10.1080/13527266.2013.797778>

- Pintak, L., & Nazir, S. J. (2013). Pakistani journalism: At the crossroads of Muslim identity, national priorities and journalistic culture. *Media, Culture & Society*, 35(5), 640–665. <https://doi.org/10.1177/0163443713483654>
- Rafique determined to improve Pakistan Railways. (2013). *Dawn*. https://www.dawn.com/news/1046503?fbclid=IwAR1hv9Jdj2Rl8inEO0uXxVktD9_m73TFZOm-SBe0ZZj51Zl67Zr7N05B00w
- Railway to Shut Down 8 Trains. (2010). *The express tribune*. <https://tribune.com.pk/story/19501/railway-to-shut-down-8-trains>
- Rao, I. (2011). Pakistan Railways shuts down goods trains. *Pakistan Today*. <https://archive.pakistantoday.com.pk/2011/09/09/pakistan-railways-shuts-down-goods-trains/>
- Raza, S. I. (2021). Number of complaints on Citizen Portal crosses 4m mark. *Dawn*. <https://www.dawn.com/news/1663115>
- Russell, F. (2015). Journalists, gatekeeping, and social interaction on Twitter. *International Symposium on Online Journalism*, 6(1), 188–207.
- Seethaler, J., & Melischek, G. (2019). Twitter as a tool for agenda building in election campaigns. The case of Austria. *Journalism*, 20(8), 1087–1107. <https://doi.org/10.1177/1464884919845460>
- Sweetser, K. D., & Brown, C. W. (2008). Information subsidies and agenda-building during the Israel–Lebanon crisis. *Public Relations Review*, 34(4), 359–366. <https://doi.org/10.1016/j.pubrev.2008.06.008>
- Tahir, N. (2013). Efficiency analysis of Pakistan Railway in comparison with China and India. *International Journal of Transport Economics*, 40(1), 71–98. <http://www.libraweb.net/articoli.php?chiave=201306701&rivista=67>
- Tan, M. L., Prasanna, R., Stock, K., Hudson-Doyle, E., Leonard, G., & Johnston, D. (2017). Mobile applications in crisis informatics literature: A systematic review. *International Journal of Disaster Risk Reduction*, 24, 297–311. <https://doi.org/10.1016/j.ijdrr.2017.06.009>
- Taylor, M., & Kent, M. L. (2007). Taxonomy of mediated crisis responses. *Public Relations Review*, 33(2), 140–146. <https://doi.org/10.1016/j.pubrev.2006.11.017>
- Thelwall, M., & Stuart, D. (2007). RUOK? Blogging communication technologies during crises. *Journal of Computer-Mediated Communication*, 12(2), 523–548. <https://doi.org/10.1111/j.1083-6101.2007.00336.x>
- Ud Din, I., Xue, M. C., Abdullah, Ali, S., Shah, T., & Ilyas, A. (2017). Role of information & communication technology (ICT) and e-governance in health sector of Pakistan: A case study of Peshawar. *Cogent Social Sciences*, 3(1), 1308051. <https://doi.org/10.1080/23311886.2017.1308051>
- Veil, S. R., & Yang, A. (2012). Media manipulation in the Sanlu milk contamination crisis. *Public Relations Review*, 38(5), 935–937. <https://doi.org/10.1016/j.pubrev.2012.08.004>
- Veletsianos, G. (2012). Higher education scholars' participation and practices on Twitter: Scholars' participation and practices on Twitter. *Journal of Computer Assisted Learning*, 28(4), 336–349. <https://doi.org/10.1111/j.1365-2729.2011.00449.x>
- Vignal Lambret, C., & Barki, E. (2018). Social media crisis management: Aligning corporate response strategies with stakeholders' emotions online. *Journal of Contingencies and Crisis Management*, 26(2), 295–305. <https://doi.org/10.1111/1468-5973.12198>
- Wells, C., Shah, D. V., Pevehouse, J. C., Yang, J., Pelled, A., Boehm, F., Lukito, J., Ghosh, S., & Schmidt, J. L. (2016). How Trump drove coverage to the nomination: Hybrid media campaigning. *Political Communication*, 33(4), 669–676. <https://doi.org/10.1080/10584609.2016.1224416>
- Wimmer, R. D., & Dominick, J. R. (2003). *Mass media research: An introduction* (7th ed.). Wadsworth.
- Yousafzai, F. (2017). Work on \$8b CPEC railway project to start this year. *The Nation*. <https://www.nation.com.pk/24-Jun-2017/work-on-8b-cpec-railway-project-to-start-this-year>
- Khan, M. Z., & Khan, F. N. (2021). A dynamic analysis of rail travel demand in Pakistan. *Case Studies on Transport Policy*, 9(2), 860–869. <https://doi.org/10.1016/j.cstp.2021.04.006>
- Zhang, J., & Benoit, W. L. (2004). Message strategies of Saudi Arabia's image restoration campaign after 9/11. *Public Relations Review*, 30(2), 161–167. <https://doi.org/10.1016/j.pubrev.2004.02.006>
- Zhu, L., Anagondahalli, D., & Zhang, A. (2017). Social media and culture in crisis communication: McDonald's and KFC crises management in China. *Public Relations Review*, 43(3), 487–492. <https://doi.org/10.1016/j.pubrev.2017.03.006>

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