Available online at https://asric.africa/social-sciences
ASRIC Journal on Social Sciences and Humanities Vol 5(2) (2024) 98-113

Digital Leadership and Crisis Management: A Study of African Presidents' Facebook Usage During COVID-19

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Received 24 July 2024; revised 02 September 2024; accepted 12 September 2024

Abstract

This study explores how African leaders used Facebook for reactive communication during the COVID-19 pandemic, focusing on five populous countries: Egypt, South Africa, the Democratic Republic of Congo, Ethiopia, and Nigeria. Using a mixed-methods approach, the research analyzed 276 Facebook posts from the presidents' official accounts between February 1 and July 31, 2020. Five key reactive strategies used to analyze the communication include pre-emptive action, offensive response, defensive response, diversionary response, vocal commiseration, rectifying behaviour and deliberate inaction. Findings show that vocal commiseration was often combined with diversionary responses, while rectifying behaviour was used independently. Leaders mainly communicated through text and photos, with minimal use of videos. A significant observation is that African presidents did not engage in two-way communication with followers, despite receiving many comments and reactions. The study highlights the variation in digital communication across African countries and the impact of reactive strategies on public trust and national image. While these strategies addressed psychological and social effects, diversionary responses risked contributing to misinformation. The research calls for more effective digital communication, inclusive information policies, and further studies on African leadership communication during crises.

Keywords: Reactive Communication, Leadership Communication, Social Media, African Leaders, COVID-19, Crisis Communication.

Introduction

The phenomenon of communication is one of the significant leadership subtleties constituted through the need to succeed. Country leaders employ communication as a strategy to gain recognition, build trust, and enhance their image with citizens (Canel & Sanders, 2012). Though non-technical, practical communication skills are essential for leaders' explicit willingness to demonstrate a knack on the job. Country leaders choose various ways to demonstrate response, doggedness and assurance of lasting solutions in crisis situations. A crisis conceived as catastrophe requires a government information response, characterized by value, resolve and inclusivity (Liu & Levenshus, 2012; Saidu, 2024). As crises expose systemic, adversarial and reputation challenges, adopting and localizing standard communication patterns to suit a crisis is crucial (Coombs et al., 2019). Given this value, governments recognize essential expertise in handling emergency response as an effort to extinguish unpleasant situations.

Novel Coronavirus is a Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), otherwise referred to as Coronavirus Disease 2019 (COVID-19). This disease was first reported in China late 2019 and has transmuted into a global pandemic. As of the time of conducting this study, the global cases had reached ninety-six million and recorded over two million deaths (World Health Organization, 2021). Precipitous occurrence led to widespread virus infection (Fakhruddin et al., 2020), as contained in mainstream media coverage and cyberspace. Although country leaders lacked total control over the virus, policy enactment concentrated on moderating the spread and ensuring the welfare of people. Certain encumbering factors that compel the different approaches revolved around countries' distinctive populations, access to information, literacy levels and dissimilarities in COVID-19 cases (Dowd et al., 2020; Dudel et al., 2020; Sheikhi et al., 2020). The confrontation of the COVID-19 pandemic was unprecedented across countries, yet information infrastructure aided the successful implementation of the desired response strategy.

By identifying overall unique elements of a crisis, the government's strategies stand a better chance of addressing the communication needs. Several scholars explored the different methods applied to appropriate information management during the crisis, in which communication between leaders and stakeholders is a focal avi (Kriyantono, 2019). During crises such as COVID-19, leaders maintain high profiling and strive to manage risks while sustaining relations with the public. The sudden surge gave rise to leaders' reactive means to contend with information dispersal prevailing typically on understanding the diseases, spread, symptoms and preventive measures (Wang et al., 2020; Zheng et al., 2020). Despite truncating conventional bureaucratized protocols and replacing them with emergency response tactics for unpremeditated concerns, there appeared to be a direct approach through national addresses, policy briefings, special events, and solidarity messages. Characteristically, the focus is information sharing, public engagement, stakeholder partnership and accelerated message diffusion.

This study corroborates existing debates that communication is central to preparedness and response during the pandemic. Hagen et al. (2020) and Lin et al. (2016) insist that information is needed to respond during a crisis. The pandemic occurred in the era of superfluous details, making it impossible for people to avoid unconventional messages in mainstream media and digital platforms. On the pattern of media representation of COVID-19 and people's preferences, a study (Romano et al., 2020) found that media presentation of information significantly affects the public's interpretation and response to the information. The dynamics of social media platforms offer easy access and sharing can be added to the long list of valuable media during crisis. Rather than stir awareness, this practice has resulted in obstinate disbelief, half-truths and miscommunication. According to Garfin et al. (2020), over-dependence on information updates and exposure during a crisis tends to have unintended consequences. Bansal (2020) acknowledges that the sensationally incredible popularity of news content interfered with the accuracy of information. Adopting a psychological stance, Reddy and Gupta (2020) observed that sociocultural factors such as religious beliefs and gullibility constrain the impact of communication during a crisis.

Social media's real-time impact is essential during the COVID-19 pandemic, especially for stakeholders such as designated community leaders, government agencies and public opinion influencers (Zhao et al., 2019). Since the advent of social media, people have preferences and situational awareness in day-to-day routines (Brynielsson et al., 2018). The pandemic emergency has further strengthened the susceptibility of the government's response using social media platforms. Communication strategies during crisis are crucial for the recipients as much as the message content. For example, apart from sensitizing people on issues surrounding the Coronavirus spread, symptoms and welfare of citizens, communication style largely influenced a reduced impact on society. Trends show that internet-based platforms appear to exert direct information dissemination. Thus, social inclusion in crisis communication management leading to developing crisis policy is justified.

Research on strategy use in country leadership communication is vast (Bakker-Pieper & de Vries, 2013; Scacco et al., 2018; Taras & Davis, 2019). Effective leadership and communication are guided by a strategy

earmarked to meet situational information needs instantly. In the case of a crisis, a leader's approach or relaying message happens to evolve generically to suit different circumstances. Strategy can be likened to a blueprint for adhering to context, purpose and content must be clear-cut. In the event of impropriety, available choices become defensible. To improve debates on effective communication, Smith (2017, p.212) identifies seven main reactive strategies suitable for information stakeholders such as governments. These include (a) preemptive action, (b) offensive response, (c) defensive response, (d) diversionary response, (e) vocal commiseration, (f) rectifying behaviour and (g) deliberate inaction.

Based on the above, the strategies propose that communication can assume an informal and persuasive form, in the case of the current study, to manage crisis. In preemptive action, as the name implies, a leader first observes before proceeding to reveal details about the problem. This action otherwise known as 'seize the day' emphasizes that the public knowledge of the problem is impending and/or inevitable. Offensive response does not necessarily indicate that the message intends to be offending, instead the ingenuity reveals strength in the face of negativity. The responses in this category are attack, shock, embarrassment, threat and standing firm. A leader using both preemptive action and offensive response appears belligerent and employ survival techniques in the face of a crisis. In defensive response, less aggression is used because it reduces negative consequences. The responses show denial, excuse, justification and reversal. Diversionary responses are concession, ingratiation, disassociation and relabeling. Leaders using this strategy provide alternative information to relegate the current situation to the background. In vocal commiseration, empathy is employed in the form of concern, condolence, regret and apology. Empathy fosters attention to the situation by offering motivation, consolation and hope. Rectifying behaviour proffers reassurance and affirmation for possible solutions using corrective action, investigation, restitution and repentance. If damage has occurred, there is room for repair (on say, reputation). Deliberate inaction describes the desire to take action without revealing to the public, by way of strategic silence, ambiguity and inaction respectively.

Building this study on the proof that despite existence of a common crisis, leaders will likely employ unparalleled reactive communication strategies. The three research questions proposed are:

- What are the reactive strategies African presidents used in communicating on Facebook during COVID-19 pandemic?
- How did the reactive strategies of African presidents vary by country?
- What level of association exists among the reactive strategies of African presidents' communication on Facebook during COVID-19 pandemic?

Methodology

Research Design

This study adopted a mixed-method research design, integrating both qualitative and quantitative approaches. The qualitative aspect of the study focused on the interpretive value of presidential posts, while the quantitative component examined the frequency and patterns of communication. The use of mixed methods allowed for a more comprehensive analysis by enabling parallel exploration, validation and comparative assessment of data (Creswell & Creswell, 2017; Leech et al., 2010; Tashakkori & Teddlie, 2010). Apart from mirroring data, there is room for comparison, validation, foundation for generalization and broader conclusions.

Data Collection Tools

Data were gathered using manual content analysis of Facebook posts. This involved coding and categorizing the posts based on predefined variables. A coding framework was developed to analyze both latent and manifest content. IBM SPSS Statistics was used for statistical computations, ensuring accuracy and reliability.

Data Collection Procedures

Purposive sampling was employed to select five African countries (Egypt, South Africa, the Democratic Republic of Congo, Ethiopia and Nigeria) based on high population density, significant COVID-19 case reports and the popularity of Facebook as a communication platform. The study analyzed Facebook posts from February 1, 2020, to July 31, 2020 (26 weeks, 182 days). This period was selected based on the first confirmed COVID-19 case in Africa (February 14, 2020, in Egypt). A total of 276 COVID-19-related posts were retrieved from the official Facebook accounts of the presidents: @AlSisiofficial (Egypt), @CyrilRamaphosa (South Africa), @CdPresidence (Democratic Republic of Congo), @PMAbiyAhmedAli (Ethiopia) and @MuhammaduBuhari (Nigeria). To ensure consistency and reduce bias, two research assistants helped categorize and examine the data. A preliminary coding exercise was conducted over three days to ensure reliability.

Table 1: Description of categories and coding of variables

Variable	Category	Coding unit	Description
1. Reactive Strategies	Pre-emptive action	Pre-buttal	A leader preempts, first by observing before revealing details about the situation. Through 'seize the day' action emphasizes that public knowledge of the impending situation is inevitable.
	Offensive response	attack, shock, embarrassment, threat, standing firm	A leader assumes an offensive stance, but this do not necessarily indicate that the message intends to be offending, rather the ingenuity reveals strength in the face of negativity.
	Defensive response	denial, excuse, justification, reversal	Less aggression is employed because they reduce negative consequences.
	Diversionary response	concession, ingratiation, disassociation, relabeling	Leaders respond by proving alternative information to relegate current situation to the background.
	Vocal commiseration	concern, condolence, regret, apology	A leader uses of empathy is employed in form to foster attention to the situation, by offering motivation, consolation and hope.
	Rectifying behaviour	corrective action, investigation, restitution, repentance	A leader proffers reassurance and affirmation for possible solutions. In the event that damage has occurred, there is room for repair, on say, reputation.
	Deliberate inaction	strategic silence, strategic ambiguity, strategic inaction	A leader employs the desire to take action without revealing to the public, by way of strategic silence, ambiguity and inaction respectively.
2. Post form	Text only		Facebook post in textual form
	Text and video		Facebook post in textual and audiovisual form
	Text and photo		Facebook post in textual pictorial form
	Other		Facebook post containing text, photo, video, weblink; also shared post containing text, photos, videos; cover photo; and image message

3. Content type	National address	speeches, press releases, national broadcast	Nation-wide addresses presented country's president to education citizens about policies and directives during the Coronavirus pandemic. They are lengthy in nature.
	Special event	donation of relief materials, regional meetings	Special events were categorized to include posts which were neither policy-based nor social events. These included events involving the president pertaining to the listed unit for analysis.
	Cabinet meeting/briefing	cabinet members, heads of government parastatals, security agencies,	Meetings involving presidents' briefing about intended and substantive actions.
	Solidarity message	Goodwill message to foreign leaders	Solidarity with foreign counterparts, and citizens.
	Social event	religious event, family	
4. Follower reaction	Emoticon reaction	like, love, care, haha, wow, sad, angry	Use of emojis for quick empathetic reaction to posts, photo, comment and/or reply
	Comment		Written response to posts and/or photo
	Shares		Followers distribute posts made by other Facebook users.

Data Analysis Techniques

A manual content analysis approach was used, focusing on adjectives, phrases and value-laden content in the posts to determine underlying messages. Emergent coding was employed to refine categories. The frequency of reactive communication strategies was measured using unit-based coding (locutions, sentences and paragraphs). The variables and categories (as shown in Table 1) were clearly designed, with specific instructions after a preliminary review of the COVID-19 related Facebook posts. The Facebook accounts of selected African presidents were further coded using standard procedures in content analysis (Krippendorff, 2004). Inter-rater reliability was established using independent coding of 15 posts, yielding Cronbach's Alpha values of .92 for reactive strategies, .85 for content form and .87 for content type, ensuring coding consistency.

Ethical Considerations

All data analyzed in this study were publicly available on official government Facebook accounts, ensuring no breach of privacy or confidentiality. The study did not involve human subjects, minimizing ethical concerns regarding informed consent. To maintain objectivity, posts unrelated to COVID-19 were reviewed but excluded from the final analysis to preserve contextual relevance. The research followed standard content analysis guidelines (Krippendorff, 2004), ensuring methodological rigor and ethical integrity.

Results

In order to examine the reactive communication strategies of the African leaders, the Facebook posts were categorized into month, content type and content form (see Table 2). Majority of the posts were recorded on the Facebook page of Ethiopia's Prime Minister Abiy Ahmed Ali and Democratic Republic of Congo's President [Félix Tshisekedi] accounting for 50.4 and 26.1% respectively. The posts were concentrated in April, which represents 34.4% and March, which accounts for 26.8% primarily attributed to Ahmed Ali. For post content, 43.8% were national addresses while 22.5% covered cabinet meetings and briefings across the countries, mainly from Ahmed Ali and [Félix Tshisekedi]. The content form of posts constituting 45.3% were text

only except South Africa's President Cyril Ramaphosa whose posts 70.4% were mostly text and video. Posts focused on general information awareness about the virus and policy directives were observed to be highly consistent across the countries.

Overall, Ahmed Ali mainly used vocal commiseration and diversionary response, while Félix Tshisekedi used mainly rectifying behaviour. Categorical data shows that preemptive action's only response prebuttal was used by presidents Félix Tshisekedi and Ahmed Ali. Of the offensive responses, 'attack' and 'standing firm' were used by all presidents except Ahmed Ali. Presidents Félix Tshisekedi and Nigeria's President Muhammadu Buhari utilized the justification and excuse defensive strategy response. The diversionary response used mainly by Egypt's President Abdel Fattah El-Sisi, as well as Ramaphosa, Ali and Buhari, are concession and ingratiation responses. Vocal commiseration responses employed by all the leaders, are concern, condolence and regret. The leaders also made use of investigation and corrective action responses categorized as rectifying behaviour, during the Coronavirus pandemic.

Table 2 Descriptive statistics of Facebook posts of African leaders

	Name of Leader					
	Abdel Fattah El-Sisi	**Cyril Ramaphosa**	**Félix Tshisekedi**	**Abiy Ahmed Ali**	**Muhammadu Buhari**	**Total**
Month						
February	0	0	0	1	1	2
March	7	0	16	46	5	74
April	6	5	21	54	9	95
May	1	12	17	24	1	55
June	0	4	18	11	3	36
July	2	8	0	3	1	14
Content type						
National address	8	15	39	47	12	121
Special event	1	1	9	17	3	31
Cabinet meeting/briefing	2	9	12	38	1	62
Solidarity message	4	0	8	30	1	43
Social event	1	4	4	7	3	19
Post form						
Text only	16	0	27	69	13	125
Text+video	0	19	2	6	0	27
Text+photo	0	2	36	56	5	99
Other	0	8	7	8	2	25
Reactive strategy						
Pre-emptive	0	0	2	5	0	7
Offensive response	0	0	5	6	0	11
Defensive response	1	1	1	6	1	10
Diversionary response	7	10	15	31	3	66
Vocal commiseration	5	16	13	64	9	107
Rectifying behaviour	0	0	30	20	3	53
All of the above	3	2	6	7	4	22
Total	**16**	**29**	**72**	**139**	**20**	**276**

Data (as illustrated in Fig. 1) indicates that African leaders mainly used vocal commiseration 38.8%, followed by diversionary response constituting 23.9% and rectifying behaviour representing 19.2%. Offensive responses made up 4%, followed by defensive responses at 3.6% and preemptive actions accounted for 2.5%, with these categories recording the lowest frequencies overall. Posts categorized to contain all the reactive responses consisted of 8%, except deliberate inaction which recorded no frequencies.

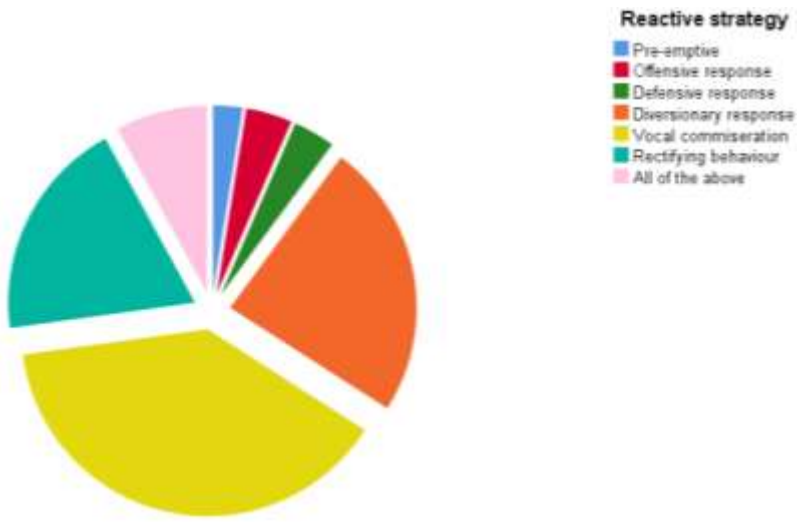

Fig. 1 Reactive strategies identified in Facebook posts

Text only posts showed 40.8% vocal commiseration, 22.4% diversionary response and 14.4% rectifying behaviour (as illustrated in Table 3). The text and photo category showed similar patterns for reactive strategies, though with slightly lower percentages.

Table 3 Descriptive statistics of reactive strategies by post form

Reactive Strategy	Post Form				Total
	Text only	Text and video	Text and photo	Other	
Pre-emptive	1.6	3.7	4.0	0.0	2.5
Offensive response	4.8	0.0	4.0	4.0	4.0
Defensive response	4.0	3.7	4.0	0.0	3.6
Diversionary response	22.4	22.2	26.3	24.0	23.9
Vocal commiseration	40.8	59.3	33.3	28.0	38.8
Rectifying behaviour	14.4	7.4	24.2	36.0	19.2
All of the above	12.0	3.7	4.0	8.0	8.0
Total	100.0	100.0	100.0	100.0	100.0

* Figures presented in percentages (%)

A one-way analysis of variance test was conducted to compare the reactive strategies between the African leaders, by grouping the means for each leader and strategies. The data (as illustrated in Table 4) shows significant differences in means of reactive strategies across the countries studied, with the exclusion of offensive response.

Table 4 One way ANOVA between countries

Reactive strategy	Mean Square	F	Sig.
Pre-emptive	1.442	6.59	.000
Offensive response	.206	0.71	.587
Defensive response	1.133	12.31	.000

Diversionary response	54.001	25.06	.000
Vocal commiseration	18.065	8.67	.000
Rectifying behaviour	25.848	9.10	.000

A Tukey-test (as shown in Table 5) using a harmonic mean sample size of 29.75 indicate that the means of other reactive strategies appeared in at least two groups, whereas offensive strategy means were recorded in only one subset. These tests affirm that African presidents posted at varying frequencies during the period under study.

Table 5 Tukey-test for reactive strategies

		Subset for alpha = 0.05		
	N	**1**	**2**	**3**
Preemptive action				
Abdel Fattah el-Sisi	16	1.2500		
Cyril Ramaphosa	29	1.4483	1.4483	
Muhammadu Buhari	20	1.4500	1.4500	
Abiy Ahmed Ali	139		1.6331	1.6331
Félix Tshisekedi	72			1.7917
Sig.		.467	.548	.687
Offensive response				
Cyril Ramaphosa	29	5.6207		
Félix Tshisekedi	72	5.6389		
Abdel Fattah el-Sisi	16	5.6875		
Abiy Ahmed Ali	139	5.7482		
Muhammadu Buhari	20	5.7500		
Sig.		.887		
Defensive response				
Muhammadu Buhari	20	4.5000		
Félix Tshisekedi	72		4.9722	
Abdel Fattah el-Sisi	16		5.0000	
Cyril Ramaphosa	29		5.0000	
Abiy Ahmed Ali	139		5.0000	
Sig.		1.000	.997	
Diversionary response				
Cyril Ramaphosa	29	2.2414		
Abdel Fattah el-Sisi	16	2.7500	2.7500	
Abiy Ahmed Ali	139		3.3309	
Muhammadu Buhari	20		3.5500	
Félix Tshisekedi	72			5.0000
Sig.		.669	.222	1.000
Vocal commiseration				
Cyril Ramaphosa	29	3.2759		
Abiy Ahmed Ali	139	3.9424	3.9424	
Abdel Fattah el-Sisi	16	4.2500	4.2500	
Muhammadu Buhari	20	4.2500	4.2500	
Félix Tshisekedi	72		4.9306	
Sig.		.073	.066	
Rectifying behaviour				
Félix Tshisekedi	72	2.0417		

Cyril Ramaphosa	29	2.7586	2.7586	
Abiy Ahmed Ali	139		3.3022	3.3022
Abdel Fattah el-Sisi	16		3.4375	3.4375
Muhammadu Buhari	20			4.0000
Sig.		.473	.528	.500

The correlation between the study variables (as shown in Table 6) indicates the heterogeneous nature of the current data. It is noteworthy that the deliberate inaction reactive strategy has been excluded from the list of variables due to the absence of recorded values. The bi-variate analysis reveals that some variables exhibit substantial correlations than others. Specifically, there are four strong correlations in reactive strategies: between leaders' preemptive action and vocal commiseration ($r = .63$, $p < .01$), diversionary response and vocal commiseration ($r = .56$, $p < .01$), preemptive action and diversionary response ($r = .55$, $p < .01$), as well as preemptive action and offensive response ($r = .54$, $p < .01$). Leaders had a strong negative correlation with month ($r = -.22$, $p < .01$), and two reactive strategies identified as diversionary response ($r = .17$, $p < .01$) and rectifying behaviour ($r = .16$, $p < .01$). Other strong corrections were recorded for Offensive response and vocal commiseration ($r = .35$, $p < .01$), offensive and diversionary responses ($r = .24$, $p < .01$), preemptive action and rectifying behaviour ($r = .18$, $p < .01$), preemptive action and defensive response ($r = .17$, $p < .01$), and a negative for content type and diversionary response ($r = -.18$, $p < .01$). The relations between defensive and diversionary responses ($r = .13$, $p < .05$) as well as defensive response and rectifying behaviour ($r = .15$, $p < .05$) were less strong relations but significant.

Table 6 Correlation, means and standard deviation for main study variables

	1	2	3	4	5	6	7	8	9	10
1. Leaders' name	1									
2. Month of the post	-.22**	1								
3. Post form	-.00	-.01	1							
4. Post content type	.06	.12	-.05	1						
5. Preemptive action	.09	.05	-.05	-.12	1					
6. Offensive response	.08	.07	-.11	-.01	.54**	1				
7. Defensive response	-.17**	.03	-.10	.09	.17**	.03	1			
8. Diversionary response	.05	.01	-.02	-.18*	.55**	.24**	.13*	1		
9. Vocal commiseration	-.01	.00	-.06	-.11	.63**	.35**	.01	.56**	1	
10. Rectifying behaviour	.16**	.11	-.05	.02	.18**	.15*	-.07	.08	.10	1
Mean	3.43	3.33	2.09	2.30	1.62	5.70	4.96	3.63	4.17	2.97
Standard Deviation	0.96	1.17	1.08	1.35	0.49	0.54	0.33	1.71	1.52	1.78

N = 276 **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed). Strength of association is moderate > -.3 / < +7.

Notably, leaders' names had a strong negative but insignificant correlation with post form and vocal commiseration, while another occurred between month and form of post. Also, slight positive relation was observed between leaders' names and post content, month and preemptive action, post content and preemptive, as well as defensive response and vocal commiseration, although none of these relationships recorded statistical significance. Concerning the relationship between leaders and reactive strategies, several associations were identified among the reactive strategies, while some cases showed close correlations with leadership. Only two relations occurred between leaders and the reactive responses. Interestingly, a relationship was found between preemptive action and all the other reactive strategies, while offensive response correlated with all except diversionary response. Defensive responses related only to diversionary response, which, in turn recorded relationship solely with vocal commiseration. Notably, there was a specific close relationship between vocal commiseration and rectifying behaviour (r=.100). Overall,

strong relations occurred between the six reactive strategies mostly with preemptive action, more than it did with the leaders' name.

Table 7 Tests of subject effects between reactive strategies, content type and form

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	28.928[a]	19	1.523	.727	.790
Intercept	2593.727	1	2593.727	1238.260	.000
Type	3.633	4	.908	.434	.784
Form	3.976	3	1.325	.633	.594
Type * Form	16.300	12	1.358	.648	.799
Error	536.231	256	2.095		
Total	7188.000	276			
Corrected Total	565.159	275			

a. R Squared = .051 (Adjusted R Squared = -.019). Dependent Variable: Reactive strategy

A two-way analysis of variance test was conducted (using univariate analysis) to examine the independent and interactive effects of content type and content form on the reactive strategy, which served as the dependent variable. Test of between-subject effects indicates (as shown in Table 7) that neither individual statistical significance in the content type at p = .784 level, content form at p = .594 level nor statistical significance in the interaction between content type and content form at p = .799 level. From all indications, no statistical mean difference exists based on the content type of Facebook posts. The content form based on textual and graphical depictions did not influence a significant change in means when tested on the reactive strategies. The significance levels for all the variables are above the test's arbitrary p = .05 threshold for a 95% confidence level, indicating that all three terms demonstrate statistical significance. Based on statistical rule, the closer the value of r^2 is to 1 (0.999) the more accurate the model. At .051, the root squared value explains the level of variance, thereby indicating low accuracy between the observed and predicted values.

Table 8 Correlation, means and standard deviation between reactive strategies and follower reactions

	1	2	3	4	5	6	7	8	9
1 Preemptive action	1								
2 Offensive response	.54**	1							
3 Defensive response	.17**	.03	1						
4 Diversionary response	.55**	.24**	.13*	1					
5 Vocal commiseration	.63**	.35**	.01	.57**	1				
6 Rectifying behaviour	.18**	.15*	-.07	.08	.10	1			
7 Emoticon reaction	-.17**	.05	-.03	-.17**	-.05	.18**	1		
8 Follower comments	-.18**	.01	-.00	-.19**	-.20**	.16**	.51**	1	
9 Follower shares	-.17**	-.06	.04	-.20**	-.23**	.07	.49**	.55**	1
Mean	1.6	5.70	4.96	3.63	4.17	2.97	1.83	1.57	3.28
Standard Deviation	0.4	0.54	0.33	1.71	1.52	1.78	0.76	0.58	1.97

N = 276 **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

Pearson's correlation coefficient indicates strong statistical significance between reactive strategies and follower reactions. As shown in Table 8, emoticons exhibit strong negative correlation with preemptive action (r=-.169, p=.005) and diversionary response (r=-.172, p=.004), as well as strong positive correlation rectifying behaviour (r=.176, p=.003). For follower comments, four strong correlations occurred with preemptive action (r=-.178, p=.003), diversionary response (r=-.191, p=.001), vocal commiseration (r=-.200, p=.001) and rectifying behaviour (r=.158, p=.009). In the case of follower shares, there were three

strong negative correlations with preemptive action (r=-.173, p=.004), diversionary response (r=-.196, p=.001) and vocal commiseration (r=-.230, p=.000). Significant correlation shows that emoticon reactions, follower comments and follower shares are mainly identified for 'less than 1k up to 50k' while only defensive response recorded very few emojis for all three variables.

Table 9 Regression analysis for reactive strategies and follower reactions

Model	**Coefficients**				**Sig.**
	Unstandardized Coefficients		***Standardized Coefficients***		
	B	*Std. Error*	*Beta*	*t*	
(Constant)	-11.718	13.633		-.860	.391
Preemptive action	-7.093	2.228	-.282	-3.183	.002
Offensive response	3.117	1.562	.137	1.995	.047
Defensive response	3.754	2.222	.100	1.690	.092
Diversionary response	-1.007	.524	-.140	-1.920	.056
Vocal commiseration	.013	.636	.002	.021	.983
Rectifying behaviour	.932	.404	.136	2.307	.022

Dependent Variable: Follower Reaction

Additionally, multiple regression analysis (as presented in Table 9) clearly demonstrates that certain reactive strategies significantly predict follower reactions. The regression model, which shows a good fit for the existing data, is used to explore possible relationship between the selected variables. Data shows varied predictions for all reactive strategies except deliberate inaction as well as follower reactions, which are emoticons, comments and shares. For example, a multiple correlation coefficient value of .335 indicates a fair level of prediction; however, the proportion of variance accounts for only 11.2% of the variability in predicting follower reactions. The variations in predictions for each reactive strategy are represented by the unstandardized coefficient values. Based on the p-values, not all coefficient values for the independent variables are statistically significantly different from zero. Although a statistically significant association in mean difference $F(6, 269) = 5.676$ for $p = .000$, only preemptive action p=.002, offensive response p=.047 and rectifying behaviour p=.022 significantly contributed to the prediction.

Discussion

This descriptive analytical study investigated the reactive communication response on the Facebook pages of African leaders during the initial wave of new Coronavirus pandemic. One of the key findings of this exploratory study, based on pandemic-related Facebook posts, is that there is considerable variation in the selection of reactive strategies. Some leaders were more active, posting more frequently, which resulted in a greater number of recorded reactive strategies for those with higher posts counts. For example, President Ahmed Ali posted more about the pandemic than other presidents, and most of the reactive responses were identified from his posts. This finding agrees with assertions about the diverse intricacies of African leadership communication. Essentially, despite the dominant influence in digital communication worldwide, the patterns of adoption vary significantly across the African continent (Adikpo, 2023; Ndemo & Weiss, 2017). This finding also reinforces recent research explorations suggesting that global pandemic has spiraled digital inequalities (Naudé & Vinuesa, 2021; Nguyen et al., 2020), especially regarding usage.

Another finding from this study is that certain reactive strategies were use than others. These include vocal commiseration, diversionary response and rectifying behaviour. African leaders employed various reactive responses; however, Presidents Abdel El-sisi, Cyril Ramaphosa and Muhammadu Buhari did not utilize preemptive action, offensive response or rectifying behaviour. Only deliberate inaction was visibly not used by any leader during the period under review. Among the three most used strategies, vocal commiseration was found to have a significant relationship with diversionary response, but not with rectifying behaviour. This is an indication that the African leaders were more likely to combine both vocal commiseration and

diversionary response, while rectifying behaviour were more likely to combine vocal commiseration with diversionary response, while rectifying behaviour was typically employed independently. Imperatively, communication during a crisis is motivated by the need to inform and persuade the public. This result supports the previous findings that suggest communication in Africa is best understood through the lens of cultural inclinations (Obonyo, 2011; Omotoso, 2013; Shiundu, 2024). In both accounts, the authors build arguments on the manifold intricacies concerning leadership communication using cultural inclinations, personality and leadership styles, respectively.

It was noted that reactive strategies serve as real-time approaches for prevailing situations, concentrating on the value and quality of the messages for response. For example, African leaders' use of vocal commiseration and diversionary response explains the necessity and acknowledging the psychological impact of the health crisis on its populace. Related studies identified changes in socioeconomic routines and health impacts (Agarwal et al., 2021; Stanton et al., 2020) along with increasing patterns of fear and stress (Rodríguez-Hidalgo et al., 2020; Uehara et al., 2021). Several posts did not focus on the current global health dilemma, and for those that employed a diversionary response, the gravity of the impact appeared downplayed. A diversion proves viable, especially in helping the public cope mentally with the effects; however, the result of this approach is that it paves the way for misinformation to thrive (Adikpo, 2019). The use of rectifying behaviour as response to pandemic proves helpful for country's image, leaders' reputations and citizens' trust, which have continued to plague African countries (Poncian, 2015).

According to the other findings, African presidents primarily used Facebook to share information about national addresses and cabinet briefings. The correlation between the content type of the posts and diversionary responses indicate that content type significantly contributed to the response strategy. Moreover, the reactive communication of these leaders reflected mainly in posts in text as well as text and photo form, rather than those text which contained videos. The phenomenon of mediated images has long existed; however, recent technological innovations have simplified content making and distribution (Kareklas et al., 2019; van Rompay et al., 2010). Previous research emphasizes that text, images and audio-visuals depict standard validation of awareness and strong emotion affirmation during communication (Iqani & Schroeder, 2016; Schill, 2012).

Regarding citizens' engagement, the study found that despite sharing information about the new pandemic, African presidents did not respond to followers' comments on the Facebook pages. By implication, the posts failed to qualify as two-way exchanges, which constitutes the core of communication on social networking sites. Although the Facebook posts attracted several reactions in the form of emoticon reactions, comments, shares and views (for posts with videos), the leaders did not respond, even though amplifications were needed. By implication, the numerous follower reactions indicate affirmation of the reactive communication, and at the same time, uphold statistics showing that Facebook is the most popular social media platform across the African continent. This observation supports findings by some scholars that emoticon reactions in digital communication are prevalent and tend to exert effective emotions and acceptance (Coyle & Carmichael, 2019; Kariryaa et al., 2020).

By implication, reactive strategies are suitable for executing communication responses in times of uncertainty. African leaders were poised to carry out two vital activities: save a situation and/or respond as necessary; thus, both approaches were employed. This study found that African presidents failed to initialize early communication on Facebook. Facebook posts rose in March and intensified in April. Although this surge delayed, it is pertinent to state that as crises assume an unexpected nature, so too does the communication strategy intended to sustain them. In fact, the new Coronavirus outbreak halted bureaucratic processes and activities, resulting into a global dilemma. This has reflected certain elements in the communication approach for African leaders. A cursory look at the global regions reveals Africa is prone to various kinds of health adversities long before the new outbreak, which has shown similar discrepancies in the intensity and proportion between the countries. African leaders employ different strategies to provide extraordinary interventions aimed at alleviating crisis, whether or not they have

occurred. Importantly, these strategies also aim to prevent damage and critical situations. It seems reasonable that the leaders expressed different responses during the unexpected situation, which is replete with increased information demand, escalated anxiety and scrutiny to a large extent. In order to manage varying degrees of chaos, the leaders took steps to handle the situation and protect their reputations. This means that leaders' communication has continued to evolve, especially due to advancing technological dynamics.

Conclusion

From the foregoing, the limitations of the current study are admittedly established. Firstly, the data collected from the Facebook pages of five African presidents, based solely on the population index, may not adequately represent the entire continent. It is suggested that factors such as leadership ideology, type of government, literacy level and internet penetration rate can be considered when sampling and studying communication response of other African leaders. Secondly, it is difficult to determine whether the leaders' communication styles will mirror their responses during the first wave of the Coronavirus pandemic. Therefore, further research would ascertain their regular approach to relational communication before the duration under review as well as the second wave of the Coronavirus outbreak.

Given the importance of information during the ongoing global health crises, some aspects of reactive responses indicate a lack of effective messaging. Considering leadership styles and rhetorical strategies could help investigate behavioural characteristics and reveal additional findings that would benefit the advancement of government information policies. In acknowledging the sentimental approaches of leadership, it is possible to explore other sophisticated social media communication using asymmetrical and symmetrical viewpoints. These two practices are widely researched in general contexts and specifically in leadership communication; however, studies for African leaders are either lacking or under-researched.

In each case, reactive responses were effectively utilized, however, further research on the personality traits holds excellent potential for generating insights that are peculiar to leadership in Africa as a whole. African leaders must develop central and all-inclusive information policies to address the prevailing crisis frequently recorded the continent. Additionally, embracing digital platforms for constant communication is essential for accelerating information exchange, transparency, accountability and trust, while fostering citizen participation and changing behaviour. Based on the results of this study, further multidisciplinary research will emerge on issues related to the leadership communication of African leaders—past, present, and future.

Implications and Recommendations

This study highlights the need for African leaders to adopt more interactive and transparent digital communication strategies during crises. While vocal commiseration and diversionary responses managed public emotions, a balanced approach incorporating two-way communication, multimedia content, and fact-based messaging would enhance crisis response effectiveness.

By implication, African leaders primarily used Facebook as a one-way communication tool, limiting public trust and engagement. The lack of real-time interaction, such as comment responses and live discussions, weakened crisis communication. Additionally, while vocal commiseration and diversionary tactics helped manage emotions, they risked misinformation by downplaying crisis severity. Fact-checking and media collaboration are necessary for accurate communication. Crisis communication strategies varied across countries, influenced by leadership styles and governance approaches. This highlights the need for a unified African digital crisis communication framework to ensure consistency and accuracy. Furthermore, leaders relied heavily on text and photos, with minimal use of videos, reducing message clarity and impact. Video content, such as live updates and infographics, enhances public connection and information retention. Future strategies should prioritize multimedia and interactive engagement to improve public trust and crisis response effectiveness.

In order to improve crisis communication, governments should train digital media personnel to enhance engagement. Leaders should conduct live questions and answer sessions and town halls while utilizing AI-driven moderation for efficient public interaction. Government officials require crisis communication training to balance empathy, factual accuracy, and strategic messaging. The African Union and regional blocs should develop a standardized digital crisis response framework. Collaboration between governments, digital platforms, and public health organizations will ensure reliable communication. To combat misinformation, governments should partner with fact-checking organizations and establish crisis response teams. Leaders should also expand video-based communication, including live broadcasts and infographics, to improve message clarity. Investing in digital storytelling techniques will make crisis messaging more engaging and impactful, strengthening public trust and transparency.

Acknowledgment

Informed consent

All authors have consented to the submission of this manuscript.

Funding

No funding was received for conducting this study.

Conflict of interest

The authors have no conflict of interest to declare that are relevant to the content of this article.

Ethical statement

This paper is original, and has neither been published (in part or in full) nor submitted elsewhere to be considered for publication. Authors declare that no harmful text is contained and there was no invasion of privacy.

References

Adikpo, J. A. (2019). Fake online news: Rethinking news credibility for the changing media environment. In Chiluwa, I. E., & Samoilenko, S. A. (Eds.), *Handbook of Research on Deception, Fake News, and Misinformation Online* (pp. 152-166). IGI Global.

Adikpo, J. A. (2023). Adoption of social media during COVID-19 pandemic by African presidents: A cross-sectional study of selected Facebook accounts. *Journal of Communication Inquiry*, *47*(2), 145-167. https://doi.org/10.1177/01968599221144314

Agarwal, P., Kaushik, A., Sarkar, S., Rao, D., Mukherjee, N., Bharat, V., ... & Saha, A. K. (2021). Global survey-based assessment of lifestyle changes during the COVID-19 pandemic. *PLOS One*, *16*(8), 1-18. https://doi.org/10.1371/journal.pone.0255399

Bakker-Pieper, A., & de Vries, R. E. (2013). The incremental validity of communication styles over personality traits for leader outcomes. *Human Performance*, *26*(1), 1-19. https://doi.org/10.1080/08959285.2012.736900

Bansal, P. (2020). COVID-19-the infodemic. *Journal of Family Medicine and Primary Care*, *9*(10), 5388. https://doi.org/10.4103/jfmpc.jfmpc_1797_20

Brynielsson, J., Granåsen, M., Lindquist, S., Narganes Quijano, M., Nilsson, S., & Trnka, J. (2018). Informing crisis alerts using social media: Best practices and proof of concept. *Journal of Contingencies and Crisis Management*, *26*(1), 28-40. https://doi.org/10.1111/1468-5973.12195

Canel, M. J., & Sanders, K. (2012). Government communication: An emerging field in political communication research. *The Sage Handbook of Political Communication*, *2*, 85-96. 10.4135/9781446201015.n7

Coombs, W. T., Holladay, S. J., & Tachkova, E. (2019). Crisis communication, risk communication, and issues management. In Brunner, B. R. (Ed.), *Public Relations Theory: Application and Understanding* (pp. 31-48). John Wiley & Sons.

Coyle, M. A., & Carmichael, C. L. (2019). Perceived responsiveness in text messaging: The role of emoji use. *Computers in Human behaviour*, *99*, 181-189. https://doi.org/10.1016/j.chb.2019.05.023

Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Sage publications.

Dowd, J. B., Andriano, L., Brazel, D. M., Rotondi, V., Block, P., Ding, X., ... & Mills, M. C. (2020). Demographic science aids in understanding the spread and fatality rates of COVID-19. *Proceedings of the National Academy of Sciences*, *117*(18), 9696-9698. https://doi.org/10.1073/pnas.2004911117

Dudel, C., Riffe, T., Acosta, E., van Raalte, A., Strozza, C., & Myrskylä, M. (2020). Monitoring trends and differences in COVID-19 case-fatality rates using decomposition methods: Contributions of age structure and age-specific fatality. *PLOS One*, *15*(9), 1-11. https://doi.org/10.1371/journal.pone.023890

Fakhruddin, B. S., Blanchard, K., & Ragupathy, D. (2020). Are we there yet? The transition from response to recovery for the COVID-19 pandemic. *Progress in Disaster Science*, *7*, 1-5. https://doi.org/10.1016/j.pdisas.2020.100102

Garfin, D. R., Silver, R. C., & Holman, E. A. (2020). The novel coronavirus (COVID-2019) outbreak: Amplification of public health consequences by media exposure. *Health Psychology*, *39*(5), 355-365. https://dx.doi.org/10.1037/hea0000875

Hagen, L., Neely, S., Scharf, R., & Keller, T. E. (2020). Social media use for crisis and emergency risk communications during the Zika health crisis. *Digital Government: Research and Practice*, *1*(2), 1-21. https://doi.org/10.1145/3372021

Iqani, M., & Schroeder, J. E. (2016). # selfie: Digital self-portraits as commodity form and consumption practice. *Consumption Markets & Culture*, *19*(5), 405-415. https://doi.org/10.1080/10253866.2015.1116784

Kareklas, I., Muehling, D. D., & King, S. (2019). The effect of color and self-view priming in persuasive communications. *Journal of Business Research*, *98*, 33-49. https://doi.org/10.1016/j.jbusres.2019.01.022

Kariryaa, A., Rundé, S., Heuer, H., Jungherr, A., & Schöning, J. (2022). The role of flag emoji in online political communication. *Social Science Computer Review*, *40*(2), 367-387. https://doi.org/10.1177/0894439320909085

Krippendorff, K. (2004). *Content Analysis: An Introduction to its Methodology* 2nd ed. Thousand Oaks: Sage.

Kriyantono, R. (2019). The Implementation of Permenpan-RB No 29/2011 in Crisis Management of Government Public Relations. *Komunikator*, *11*(2), 93-106. https://doi.org/10.18196/jkm.112023

Leech, N. L., Dellinger, A. B., Brannagan, K. B., & Tanaka, H. (2010). Evaluating mixed research studies: A mixed methods approach. *Journal of mixed methods research*, *4*(1), 17-31. https://doi.org/10.1177/1558689809345262

Lin, X., Spence, P. R., Sellnow, T. L., & Lachlan, K. A. (2016). Crisis communication, learning and responding: Best practices in social media. *Computers in human behaviour*, *65*, 601-605. https://doi.org/10.1016/j.chb.2016.05.080

Liu, B. F., & Levenshus, A. B. (2017). Crisis public relations for government communicators. In Lee, M., Neeley, G., and Stewart, K. (Eds.), *The Practice of Government Public Relations* 1st ed. (pp. 101-124). Boca Raton: CRC Press.

Naudé, W., & Vinuesa, R. (2021). Data deprivations, data gaps and digital divides: Lessons from the COVID-19 pandemic. *Big Data & Society*, *8*(2), 1-12. http://dx.doi.org/10.1177/20539517211025545

Ndemo, B., & Weiss, T. (2017). Making sense of Africa's emerging digital transformation and its many futures. *Africa Journal of Management*, *3*(3-4), 328-347. https://doi.org/10.1080/23322373.2017.1400260

Nguyen, M. H., Gruber, J., Fuchs, J., Marler, W., Hunsaker, A., & Hargittai, E. (2020). <? covid19?> Changes in Digital Communication During the COVID-19 Global Pandemic: Implications for Digital Inequality and Future Research. *Social Media+ Society*, *6*(3), 1-6. https://doi.org/10.1177/2056305120948255

Obonyo, L. (2011). Towards a theory of communication for Africa: The challenges for emerging democracies. *Communicatio: South African Journal for Communication Theory and Research*, *37*(1), 1-20. https://doi.org/10.1080/02500167.2011.563822

Omotoso, S. A. (2013). Deploying African philosophy of political communication for functional leadership in Africa. *Journal on African Philosophy*, (8), 52-67.

Poncian, J. (2015). The persistence of western negative perceptions about Africa: Factoring in the role of Africans. *Journal of African Studies and Development*, *7*(3), 72-80. https://doi.org/*10.5897/JASD2014.0317*

Reddy, B. V., & Gupta, A. (2020). Importance of effective communication during COVID-19 infodemic. *Journal of family medicine and primary care*, *9*(8), 3793-3796. https://doi.org/10.4103/jfmpc.jfmpc_719_20

Rodríguez-Hidalgo, A. J., Pantaleón, Y., Dios, I., & Falla, D. (2020). Fear of COVID-19, stress, and anxiety in university undergraduate students: a predictive model for depression. *Frontiers in psychology*, *11*, 1-9. https://doi.org/10.3389/fpsyg.2020.591797

Romano, M., Ruggiero, A., Squeglia, F., Maga, G., & Berisio, R. (2020). A structural view of SARS-CoV-2 RNA replication machinery: RNA synthesis, proofreading and final capping. *Cells*, *9*(5), 1-22. https://doi.org/10.3390/cells9051267

Saidi, U. (2024). Pursuing the 'disaster' of managing communication during a natural disaster 'crisis': Zimbabwe's unending 'woes'. In Jakaza, E., Mangeya, H., and Mhute, I. (eds), *The Palgrave Handbook of Language and Crisis Communication in Sub-Saharan Africa* (pp. 205-222). Cham: Springer International Publishing.

Scacco, J. M., Coe, K., & Hearit, L. (2018). Presidential communication in tumultuous times: insights into key shifts, normative implications, and research opportunities. *Annals of the International Communication Association*, *42*(1), 21-37. https://doi.org/10.1080/23808985.2018.1433962

Schill, D. (2012). The visual image and the political image: A review of visual communication research in the field of political communication. *Review of Communication*, *12*(2), 118-142. https://doi.org/10.1080/15358593.2011.653504

Shiundu, T. W. A. (2024). Critical examination of dominant worldviews and value systems: Exploring how culture and identity shape perspectives. Publishing Journal of Human Resource & Leadership 8(1), 78-86. https://doi.org/10.53819/81018102t301

Shirzadfar, H. (2020). A Review on Novel Coronavirus (COVID-19): Symptoms, Transmission and Diagnosis Tests, Research in Infectious Diseases and Tropical Medicine, *2*(1) 1-8. https://doi.org/10.33702/ridtm.2020.2.1.1

Smith, R. D. (2017). *Strategic Planning for Public Relations* 5th ed. New York: Routledge Taylor & Francis Group.

Stanton, R., To, Q. G., Khalesi, S., Williams, S. L., Alley, S. J., Thwaite, T. L., ... & Vandelanotte, C. (2020). Depression, anxiety and stress during COVID-19: associations with changes in physical activity, sleep, tobacco and alcohol use in Australian adults. *International journal of environmental research and public health*, *17*(11), 1-13. https://doi.org/10.3390/ijerph17114065

Taras, D. & Davis, R. (Eds.) (2019). *Power Shift? Political Leadership and Social Media: Case Studies in Political Communication* 1st ed. London: Routledge.

Tashakkori, A. & Teddlie, C. (Eds.) (2010). *Sage Handbook of Mixed Methods in Social & behavioural Research* 2nd ed. Los Angeles: Sage.

Uehara, M., Fujii, M., & Kobayashi, K. (2021). A model of stress change under the first COVID-19 pandemic among the general public in Japanese major cities and rural areas. *Sustainability*, *13*(3), 1-17. https://doi.org/10.3390/su13031207

Van Rompay, T. J., De Vries, P. W., & Van Venrooij, X. G. (2010). More than words: on the importance of picture–text congruence in the online environment. *Journal of Interactive Marketing*, *24*(1), 22-30. https://doi.org/10.1016/j.intmar.2009.10.003

Wang, C., Horby, P. W., Hayden, F. G., & Gao, G. F. (2020). A novel coronavirus outbreak of global health concern. *The lancet*, *395*(10223), 470-473. https://doi.org/10.1016/S0140-6736(20)30185-9

World Health Organization. (2021). WHO Coronavirus Disease (COVID-19) Dashboard. WHO. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public?adgroupsurvey={adgroupsurvey}&gad_source=1&gclid=Cj0KCQjwyL24BhCtARIsALo0fSC8-Srcmyv30Ns_p00U6c04Ve8GWXUdEtfE3YftTpeN2xsU0Ll1Lv8aAk9sEALw_wcB

Zhao, X., Zhan, M. M., & Liu, B. F. (2019). Understanding motivated publics during disasters: Examining message functions, frames, and styles of social media influentials and followers. *Journal of Contingencies and Crisis Management*, *27*(4), 387-399. https://doi.org/10.1111/1468-5973.12279

Zheng, Y. Y., Ma, Y. T., Zhang, J. Y., & Xie, X. (2020). COVID-19 and the cardiovascular system. *Nature Reviews Cardiology*, *17*(5), 259-260. https://doi.org/10.1038/s41569-020-0360-5