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PUBLIC RESPONSES TO MULTI-PHASED FEAR AND PRO-SOCIAL EMOTIONAL APPEALS FROM THE SOUTH AFRICAN GOVERNMENT'S COVID-19 HEALTH COMMUNICATION STRATEGIES

ABSTRACT

Globally, using emotional appeals as communication strategies to influence public behavioural change has been popular for containment of the COVID-19 pandemic. Research shows that the uptake of health messaging is often partly influenced by audience responses to emotional appeal strategies employed. This study assessed responses by South African audiences to COVID-19 emotional appeal messages. The Extended Parallel Process Model (EPPM) was applied. A quantitative survey analysed responses of over 1000 participants. Results indicate that government officials used a tailored and mixed multi-phased communication strategy mirroring fear and pro-social appeal messages to the intensity of recurring multiple COVID-19 waves. The most recurring emotional responses by participants were concern, worry and sadness, conversely gloom and surprise. This study provides insight into effective, audience-responsive messaging for longstanding health crises by health promotion organisations including governments.

Keywords: pro-social COVID-19 appeals, COVID-19 fear appeals, South African government COVID-19 message strategies, health crises, emotional appeals, audience emotional responses, COVID-19 message clarity, tailored COVID-19 communication, phased COVID-19 communication strategies, mixed multi-phased COVID-19 communication

INTRODUCTION AND BACKGROUND

The onset of the global COVID-19 pandemic caused by SARS-CoV-2 in 2019 created communicative challenges for governments, especially in developing countries such as South Africa. The rapid spread of the disease necessitated instant communication as well as a need for governments to ensure a wide reach of communicated messages about crucial behavioural measures for virus containment. The apparent grave consequences of COVID-19 shifted norms in government health communication, triggering a greater reliance on digital and social media to attain swift and timeous dissemination of information to audiences and changing communicative norms.

Furthermore, during the COVID-19 pandemic, emotional appeals became strong mechanisms for use in public health communication to influence behavioural change and combat the spread of the Coronavirus. Decades of research on the effectiveness of using emotional appeals for health communication indicate that emotional engagement by targeted audiences is a critical component of behaviour change (Myrick 2015; Bagozzi & Pieters 1998; Cooper & Nisbet 2016; Hartley & Phelps 2010; Perugini & Bagozzi 2001). The South African government relied on the use of emotional appeals, including fear and pro-social appeals, to ensure the effectiveness of messages. Audience uptake of health messaging may be influenced by their reactions to emotional appeal messages. This emotional engagement is the main reason such appeals are often employed in public health campaigns (Myrick 2015; Dillard & Nabi 2006; Lang & Yegiyen 2008).

On 11 March 2020, the World Health Organisation (WHO) declared COVID-19 a global pandemic, a week after South Africa had declared its first confirmed case on 5 March. The declaration of a pandemic by the WHO triggers disaster preparedness plans by all governments globally to contain diseases, in the case of COVID-19, guided by a disease-specific Strategic Preparedness and Response plan (WHO 2021). Disaster preparedness and the implementation of emergency plans to contain a pandemic require and involve swift and effective communication of such plans by governments. Yet, by the time the WHO's declaration of COVID-19 as a pandemic happened (WHO 2021), ten positive cases had been reported in South Africa following the first reported case of the individual who had been part of a ten-person group who had travelled to Europe for a skiing holiday (Broadbent *et al.* 2020).

South African President Cyril Ramaphosa declared a national state of disaster and enacted the Disaster Management Act on 15 March 2020. The enactment of the Disaster Management Act placed power into the hands of the government, limiting the rights of citizens, in a bid to contain the pandemic. In addition, the declaration invoked the implementation of intense messaging as part of the containment communication strategy. Citizens were informed through various media of containment strategic tactics including the deployment of 70 000 troops of the South African National Defence Force (BBC 2020), and the enforcement of random police roadblocks within provinces and between inter-provincial borders leading to 230 000 police cases against citizens (BusinessTech 2020). Other containment tactics included the enforcement of a curfew from 21:00 to 04:00, the movement of essential workers only, restrictions concerning alcohol and tobacco sales, as well as the prohibition of most economic activities. Acts

of violence and brutality by armed and police forces during the Covid-19 lockdown in South Africa are well documented (Mahamba 2020; Makinana 2020; Maseko 2020). Such containment tactics mirrored a parallel South African health communication strategy that was initially epitomised by instilling fear through social representations of the “invisible enemy” (Sitto & Lubinga 2020) among audiences.

Targeted, multi-phased COVID-19 government communication strategy

From March 2020 and throughout the progression of the pandemic, the South African government’s communicative focus was primarily based on communicating targeted messages that were relevant for each stage of the disease. Targeted health messages can be effective as part of a communication strategy. Mayfield *et al.* (2021) argued that targeted COVID-19 messaging campaigns could be successfully applied as part of a broad, rapid-response healthcare system strategy. However, the success of targeted messages as part of a health communication strategy should be considered alongside potential barriers. In the case of the COVID-19 pandemic, given that communication strategies took a population-focused approach, targeting entire country populations, strategy effectiveness could have been negatively influenced by structural and individual-level barriers (Mayfield *et al.* 2021; Van Dorn *et al.* 2020).

While the COVID-19 pandemic was primarily a health crisis, it triggered other social crises. The impact of the virus and governments’ lockdown and communication measures in response to it manifested at the socio-economic level by citizens, especially in South Africa, one of the most unequal societies in the world (BusinessTech 2019). South Africa is a country of deep structural social inequalities (Finn & Kobayashi 2020). Reddy and Gupta (2020) referred to the significance of how life conditions, cultural values, and risk experience affect actions during a pandemic, specifically in relation to societal inequalities amplified during COVID-19. They argued for effective communication, which if ignored, had the potential to generate gaps for vulnerable populations and possibly result in added difficulties in combating the COVID-19 pandemic. Smillie (2020) noted that during the hard lockdown in March 2020, although townships such as Alexandra in Johannesburg experienced the harshest policing, residents said that it did not work, crowding the narrow streets and many still refusing to wear masks by July 2020. Yet Rogerson and Rogerson (2020) observed that at the onset, the more vulnerable groups, mostly black South Africans living in rural areas and low-income areas, appeared to have been hardest hit by infections and rates of death from COVID-19 related complications.

Additionally, in South Africa, the COVID-19 waves greatly determined government communicative purposes. During the first wave of the COVID-19 pandemic from early March 2020, culminating in mid-July and ebbing at the end of August 2020, as well as the second wave, from the end of November 2020 to mid-February 2021, the communicative purpose of messages seemed to be awareness creation about the “novel” disease and promoting containment measures. From mid-2021 to 2022, the purpose of communication by the South African government changed to the promotion of vaccination among the public, interspersed with reminders of maintaining behavioural measures.

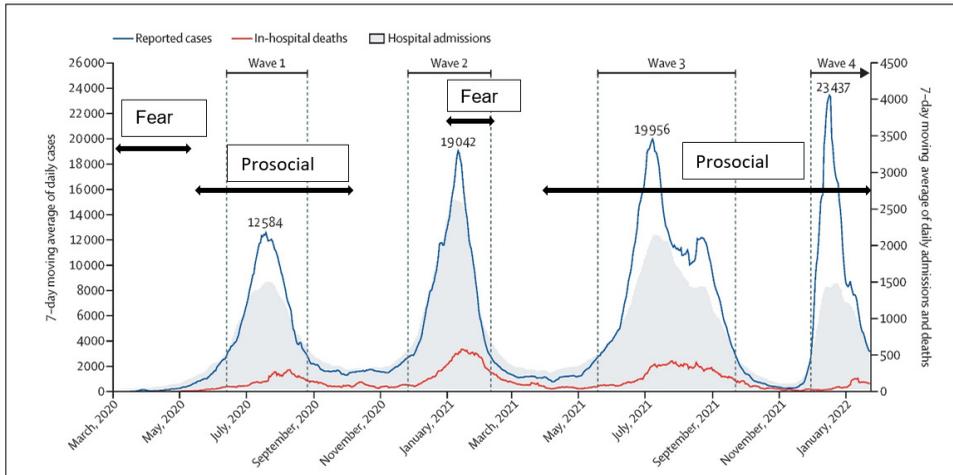


FIGURE 1: 7-DAY MOVING AVERAGE OF SARS-COV-2 CASES, HOSPITAL ADMISSIONS, AND IN-HOSPITAL DEATHS IN SOUTH AFRICA WITH APPEALS STRATEGIES EMPLOYED BY SOUTH AFRICAN GOVERNMENT

(Adapted from Jassat *et al.* 2022: e963)

Evaluating the messages sent by the government and distributed through mixed media channels during the period of lockdown in South Africa presents a mixed use of emotional appeals in response to the COVID-19 pandemic statistics (see Figure 1). The first confirmed COVID-19 positive case was reported on 5 March 2020 (Labuschagne 2020). When the first COVID-19 related death was reported on 27 March 2020, South Africa declared a state of disaster, effectively locking down the country (Broadbent *et al.* 2020). To attract the attention of citizens and emphasise the danger of the novel COVID-19 virus, the South African government followed similar fear appeals strategies as other governments globally. Fear appeals were used at the start of the COVID-19 pandemic for South Africa, with the intention to influence required behaviour change among citizens to wear masks, sanitise hands regularly, and maintain social distance from others by adhering to lockdown regulations.

From March to May 2020 the key messages from the South African government were for citizens to *Stay Home* and *Coronavirus Kills*. Daily SMS text messages were sent to all citizens with cellphones, and media statements carried the message to build fear for risks about contracting the coronavirus and adherence to behavioural measures. This messaging was repurposed and amplified by journalists amid a context of panic and uncertainties caused by the fact that the novel coronavirus leading to a global pandemic was uncharted territory for the entire world. This implies that beyond the message framing of fear, there were already contextual fear triggers that determine how

people react to information. As South Africa reached the first wave, the government's key messages from June to October 2020 switched to pro-social appeals, with the key messages communicated being *It's in your hands*; *Together we can beat this*; and *Let's play our part*. The first wave ended officially in September 2020, but the pro-social messaging continued.

The South African summer period, starting in November 2020, saw a gradual resurgence of COVID-19 infections, with the beginning of a second wave in December 2020. The government swiftly moved back to fear appeal messaging in their communication strategy to attempt to persuade citizens to change their behaviour immediately, with slogans such as *Immediate behavioural change*; *Compulsory*; *Arrested for non-compliance with mask regulations*. The fear appeal messages were employed from January to February 2021. The official end of the second wave brought about a change back to pro-social government messages for the remainder of the pandemic through the third and fourth wave, until the state of disaster was ended on 4 April 2022 (SA News 2022). The pro-social messages used from April 2021 to March 2022 included:

- ◆ *Stand together as a nation*
- ◆ *Continue being responsible*
- ◆ *Protect yourself and others*
- ◆ *Get vaccinated to protect you, your family and loved ones*
- ◆ *Keep SA safe*

The lockdown period in South Africa demonstrated the responsive and dynamic use of emotional appeals by the government as the pandemic developed. The communication strategy included mixed use of fear appeal and pro-social appeals to engage citizens in behaviour change in response to the infection statistics. The public health communication strategy by the South African government during the lockdown period made use of mixed emotional appeals in an effort to reduce infections through behavioural changes among citizens. The communication purpose determined the multi-modal and converged media approach by the South African government.

Multi-modal media, converged government COVID-19 messaging

Mass media campaigns, as used at the onset of the pandemic, can create positive changes or prevent negative changes in health-related behaviours across large populations. Specifically, these were instrumental in acting as major sources of information creating awareness about the virus, but simultaneously noted for instigating fear and psychological stress during enduring lockdowns, extended quarantines, financial and social hardships (Anwar *et al.* 2020). While mass media campaigns during COVID-19 may have been most efficient and effective at creating public awareness and promoting behaviour change, they cannot be credited for influencing attitudes and beliefs or subsequent actual behaviour change (Al-Dmour *et al.* 2022). Mass media were used in tandem with social and digital media by the South African

government. Using social media platforms has been found to positively influence the awareness of the public regarding health behavioural changes and public protection against COVID-19 (Al-Dmour 2020).

In South Africa, the government committed resources to ensure that the multi-modal media communication strategy, entailing the use of various media, was extensive. The then Health Minister, Zweli Mkhize, in June 2020 reported to Parliament that three organisations had received R43 million to run COVID-19 related communication campaigns. Fourth Door Holdings received R1.4 million to drive a public awareness and engagement campaign on the coronavirus on multiple communication platforms. Equal Edge Trading received R3.6 million to drive a public awareness and engagement campaign on the coronavirus using multiple communication platforms, while Digital Vibes received R35.9 million for a COVID-19 communication strategy. In addition, Digital Vibes received R2.1 million to conduct media interviews. While the South African government spent millions of rands mounting a converged communication strategy involving various traditional, digital and social media, other cheaper sources did not require funding. Some communicative loopholes were covered by legal imperatives, which for instance required workplaces to ensure that employees were informed about COVID-19.

Regarding messaging, in March 2020, the South African government immediately, through its converged communication campaign, led with the message that the *coronavirus must be contained*, the *coronavirus kills*, *citizens need to stay home*, and thanking citizens for *obeying the rules of lockdown* (Figure 2). These messages were communicated to audiences from March to April 2020 daily via SMS, on social media, in digital media advertising, for example, YouTube advertisements, as well as through mass media advertising on television and radio. Upon declaring a disaster, the government gained access to all cellular telephone service providers' databases, sending more than 100 million SMS messages through existing mobile connections. The number of mobile connections in South Africa in January 2021 was equivalent to 168.5% of the total population of 59.67 million. It should be noted that the actual number of mobile connections may exceed the estimate as many people have more than one device (Kemp 2021).

Multiple channels reported daily statistics of the number of COVID-19 tests conducted, the number of positive cases, as well as statistics on deaths, updated daily across all converged media channels being used. In live broadcast presidential addresses, Cyril Ramaphosa chastised citizens for non-compliant behaviour, such as breaking curfew prohibitions; not adhering to public gathering number limits, as well as reckless behaviour; threats of arrests for mask regulations' non-compliance; and invoking fear appeals that the government was monitoring citizen behaviour through various media and public policing enforcement.

Multi-phased mixed emotional appeal communication strategy

Virus-driven pandemics are dynamic by nature and for COVID-19, towards the end of 2021, there were various mutations globally, necessitating communication and messaging variations in response to the information available, as well as the continually

changing circumstances of the pandemic. The COVID-19 pandemic was one of the most complex recent pandemics, considered to be highly contagious, with continually increasing chances of infected persons dying with each new, more virulent strain of the virus. The prolonged period of the pandemic also challenged global governments concerning keeping citizens compliant with the social behaviours considered to be most effective in reducing the spread of the coronavirus, necessitating a multi-phased, mixed emotional appeal strategy as one of the potential communication tools.

Public health messages often use emotional communicative strategies with fear and pro-social appeals to change attitudes and behaviour; such messages have the power to evoke a range of negative and positive emotional responses. One health communication strategy involves using fear appeals, also referred to as threat appeals, considered to be persuasive (O'Keefe 1990; 2008) to provoke fear either through the content of messages (message content) or by the reactions that they evoke from audiences (audience reactions). In contrast, another communication strategy uses pro-social appeals that deviate from using threatening or fear-provoking language. Instead, pro-social appeals focus on messages that emphasise engaging in health behaviour that leads to societal and communal benefits, rather than focusing on behaviours that only benefit the self. Pro-social appeals are effective for public health (Kelly & Hornik 2016; Li *et al.* 2016), specifically for communicating public health recommendations related to COVID-19 (Jordan *et al.* 2020).

THEORETICAL PERSPECTIVES ON EMOTIONAL APPEALS

Providing insight into understanding the use of emotional appeals, both fear and pro-social appeals, has been the subject of research for decades. Although the concept of fear appeals is credited to O'Keefe (1990), other researchers such as Witte (1998) have studied how fear appeals may evoke behaviour change among audiences. Witte proposed a model, the Extended Parallel Process Model (EPPM), conjoining three older models: the Fear As-Acquired Drive Model (Hovland *et al.* 1953), the Parallel Process Model (Leventhal 1970), and the protection motivation theory (Rogers 1975; 1983). The EPPM Model predicts pathways that fear appeals follow to influence behaviour change. These pathways are based on threat perception, specifically perceived susceptibility and perceived severity of the threat, as well as perceived efficacy: self-efficacy and response efficacy. Perceived severity involves beliefs about the magnitude of the threat and the gravity of its consequences.

Perceived susceptibility concerns beliefs about the probability of personally experiencing the threat (Witte 1998; Witte *et al.* 1996). Perceptions towards susceptibility refer to how the audiences think about the seriousness of the threat and their chances of experiencing the threat. The EPPM also makes assumptions about audience perceptions regarding the effectiveness of the recommended response as suggested by the messages (response efficacy) and audience beliefs in whether they can perform the recommended response (self-efficacy). Popova (2012) questions some aspects of the EPPM, for example, failure by researchers to assess beliefs about threats and efficacy versus those about recommended messages that were named as one of the potential danger control responses. Ooms *et al.* (2015) found efficacy

plays a more important role than threat in the persuasive effects of fear appeals, as both components of efficacy (perceived response efficacy and perceived self-efficacy) appeared to correlate positively with the intention to engage in the required health behaviour. Within the context of COVID-19 awareness initial messaging, for instance, which the government used following the easing of lockdown measures in the country, messages urged audiences to stay at home, only leaving home to engage in certain essential activities because *the coronavirus kills*. The study explored how audiences perceived the threat of COVID-19 based on the predominant fear appeal strategy employed by the government and amplified by the media and the subsequent mixed emotional appeals communication strategy throughout the lockdown period. Witte's EPPM model predicts individuals' responses when confronted with fear-inducing stimuli, such as the fear appeal messages used by the South African government during the COVID-19 pandemic.

Researchers Dillard and Nabi (2006) created a typology that sought to provide insight into emotional responses. The researchers sought to bridge a gap following the previous distinction of emotions simply based on whether audiences had a positive or negative reaction to messages. They wanted to specify the emotional responses of audience members. The researchers (2006) further qualified each emotion by attempting to identify the cause; for example, that fear is in response to danger. In their typology, they identified six emotions: surprise, fear, anger, sadness, happiness, and contentment. Dillard and Nabi (2006) identified surprise as an emotion that is provoked by novelty; anger is caused by offense; sadness arises from loss; happiness triggered by progress; and contentment growing from satisfaction. Their typology provides a granular evaluation of the circumstances under which each response emerges from a provoking factor.

The aim of the study was to explore the effectiveness of using responsive emotional appeals in COVID-19 messages by the South African government during the pandemic.

The study attempted to:

- ◆ examine the South African government's responsiveness of the multimodal and multimedia COVID-19 communication strategy;
- ◆ determine prominent public perceptions to COVID-19 messages by the South African government; and
- ◆ assess public emotional responses to government's mixed emotional appeal messaging during the COVID-19 pandemic.

METHODOLOGY

A quantitative study was conducted, which included over 1000 participants in two South African provinces. The total number of respondents were 1006, from Gauteng (500) and the Western Cape (506). The respondents hailed from rural (15.5%), suburban (48.9%) and urban (35.6%) areas in these provinces. Of these, 52.7% were female, 47.1% were male, and the balance were marked as other. The selection of participants

from Gauteng and the Western Cape was made based on the fact that these were the two most affected provinces, as shown by infection numbers in South Africa at the time the questionnaire was administered in July 2021 (NICD 2021).

The study was part of a COVID-19 study on innovative message framing for the comprehension and uptake of health crisis communication by the University of Johannesburg, the South African Human Sciences Research Council (HSRC) and Namibia University of Science and Technology (NUST), funded by the National Research Foundation (NRF) (University of Johannesburg 2021). An online administered questionnaire was given to the participants as part of a study by the joint research group project. Ethical clearance was obtained for the research project.

The questions ranged from media access by the participants during the COVID-19 pandemic, their personal experiences and sources of COVID-19 information, the effectiveness of the government messages, as well as the emotions those messages invoked in them. The participants were also asked about their perceptions of the government's COVID-19 messages, their perceived threat with respect to severity and susceptibility, efficacy and behavioural intentions, as well as behavioural change.

For the purposes of this study, the authors evaluated the responses on sources of COVID-19 information, perceptions, emotional responses, as well as behavioural intentions and changes based on the government's emotional appeals messages during the coronavirus pandemic. The data was used to evaluate the effectiveness of responsive messaging by health communicators, such as governments, to influence emotional outcomes and behavioural intentions during the COVID-19 pandemic based on lessons from the South African context. The data was analysed and is presented descriptively.

RESULTS

The sources of information in Figure 2 demonstrate varied access by audiences to COVID-19 information spanning various contexts of communication, including interpersonal, mass and digital communication. Interpersonal communication involved health professionals, community members, friends, and family. Within the public communication context, mainstream media were accessed by the audiences including television, radio, billboards, and posters. Digital and social media were widely used, including messages on South Africans' mobile phones, in their interpersonal networks, and on social media networks.

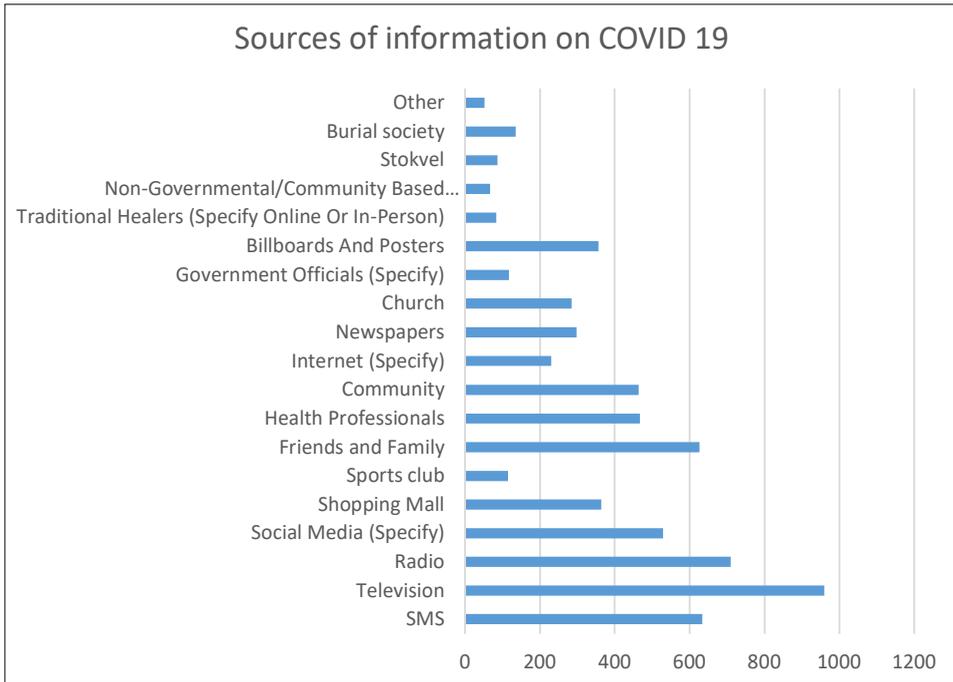


FIGURE 2: SOURCES OF COVID-19 INFORMATION

Perceptions towards South African government COVID-19 messages

From 2020 to 2021, there appears to have been mixed perceptions towards the government’s COVID-19 messages in the country, whose range is yet to be fully explored. From the current study, when the participants were asked about their perceptions about the South African government’s messages on COVID-19, per Figure 2, the responses provided a mixed picture in response to the government’s mixed appeals communication strategy. The three top perceptions towards the government messages that the participants strongly agreed to were: 1) clarity of government messaging enabling individuals to protect themselves and others, that is, pro-social. The participants were asked to rate on a scale of strongly disagree to strongly agree whether they perceived the government messages to be informative and whether they assisted them as individuals and others to protect themselves; 2) the second prominent perception was based on fear and was that daily provincial and national reports, especially those relating the number of people who had died (COVID-19 mortalities), created fear in individuals. This response accrued from perceived severity, which the EPPM identifies as audience perception towards the severity of the threat. The participants were asked to rate a statement about whether the daily death reports created fear in them because they did not want to contract COVID-19; and, 3) a third dominant perception was pro-social with the participants stating that the messages were informative and helped them and others to protect themselves.

Figure 2 demonstrates the full range of responses, and that most of the participants self-reported that they did not stop listening to the government’s COVID-19 messages after the initial hard lockdown and that people paid attention to the government’s COVID-19 messages.

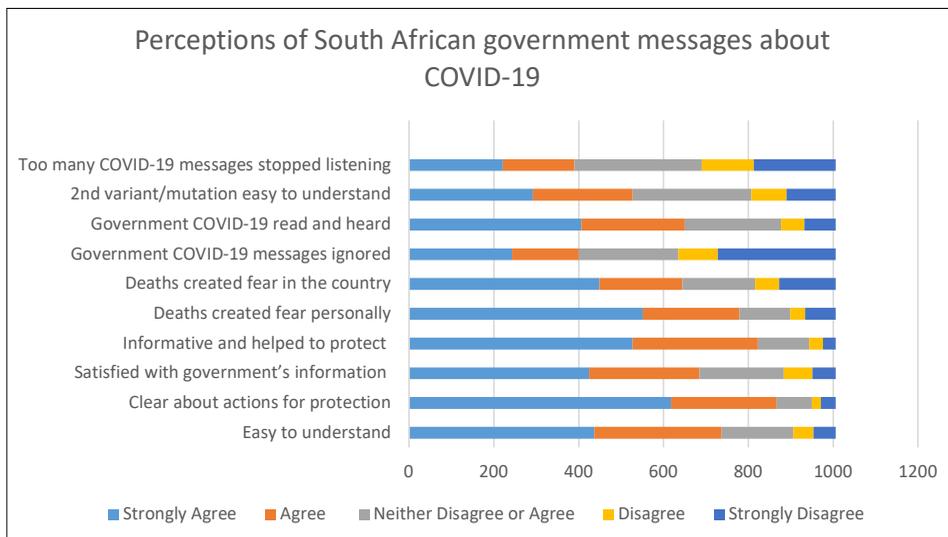


FIGURE 3: PERCEPTIONS OF SOUTH AFRICAN GOVERNMENT MESSAGES ABOUT COVID-19 RESPONSES

Whilst the updated government messaging on COVID-19, including the ongoing vaccination campaign in South Africa, had become more prosocial in its tone, the sharing of statistics, especially highlighting the COVID-19 wave peaks, continued to use fear appeals until the end of the second wave. Interest in the daily statistics had been waning, except at notable peaks of infections; that is, the first wave, the second wave, the third wave, as well as the presence of new, more deadly COVID-19 strains discovered in South Africa. Thus, through sustained reporting of daily deaths coupled with highlighting cases and deaths milestones, fear in citizens continued to be invoked through subtly reverting to the *coronavirus kills* message when fear appeals messages were employed.

Participants’ emotional responses to COVID-19 messages

The participants responded to how the South African government’s messages on COVID-19 made them feel in order to measure their emotional responses. Using a five-point Likert scale, the participants responded to 17 possible emotional responses, adapted from Witte’s fear appeal EPPM model (1992), as well as Dillard and Nabi’s (2006) typology of emotional responses. The participants’ responses to the question about their emotions (see Figure 3), led to the three predominant emotions, namely *concern*, *worry*, and *sadness*. The emotions that they hardly felt were *gloom* and *surprise*.

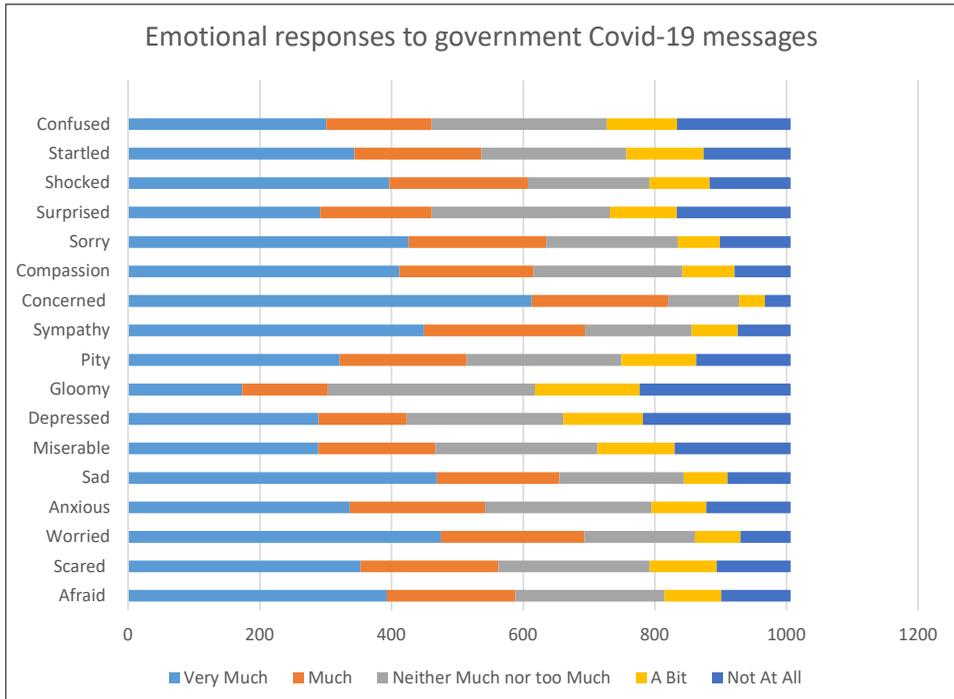


FIGURE 4: RESEARCH PARTICIPANTS' EMOTIONAL RESPONSES TO GOVERNMENT COVID-19 MESSAGES

The emotional responses to government messages in South Africa may indicate a possible relationship between the two. The information, as presented in Figure 4, does not allow for inferring any influences. Whilst individuals in terms of perceptions felt that government messages were clear about promoting behavioural preventative measures, they felt fear about COVID-19 infections, even though the participants in the study reported feeling informed enough to be able to protect themselves and loved ones.

Participants' behavioural intentions

Regarding their behavioural intentions, the questionnaire asked the participants whether they planned to continue washing their hands often and sanitising, always wearing a mask, continue with social distancing, always self-isolate after being in contact with a positive person, and continue staying away from places with many people/crowds to prevent spreading COVID-19. The majority of the participants, more than 70%, said that they would continue observing behavioural COVID-19 measures, which were communicated by the government (Table 1).

TABLE 1: PARTICIPANT BEHAVIOURAL INTENTIONS IN NUMBERS AND PERCENTAGES (TOTAL PARTICIPANT NUMBER = 1006)

Likert Scale = Strongly agree (5) to Strongly disagree (1)	Plan to continue to wash and sanitise hands (N=1006)	Plan to always wear a mask (N=1006)	Plan to continue social distancing (N=1006)	Plan to self-isolate post contact with COVID-19 positive person (N=1006)	Plan to stay away from crowded public places (N=1006)
Strongly Agree	768 (76.3%)	739 (73.5%)	738 (73.4%)	734 (73%)	724 (72%)
Agree	167 (16.6%)	172 (17.1%)	179 (17.8%)	187 (18.6%)	186 (18.5%)
Neither Disagree or Agree	41 (4.1%)	62 (6.2%)	55 (5.5%)	54 (5.4%)	65 (6.5%)
Disagree	7 (0.7%)	13 (1.3%)	13 (1.3%)	9 (0.9%)	12 (1.2%)
Strongly Disagree	23 (2.3%)	20 (2%)	21 (2.1%)	22 (2.2%)	19 (1.9%)
TOTAL	1006	1006	1006	1006	1006

Participant perceptions about messaging

Whereas these results do not claim a causal cause-effect relationship, a descriptive analysis of participant results provides responses about the messages that affected them most towards changing their behaviour. The participants indicated that they would consider adhering to COVID-19 behaviour because of health professional advice (59.6%), and not being allowed by shopping mall management to gain access to malls if they did not comply with measures such as wearing masks (56.9%). The study participants further indicated that they would be less willing to comply with behavioural measures if their family and friends were sick with COVID-19 (37.2%).

DISCUSSION

While South Africa is one of the most unequal societies in the world, the possibility of exclusion of some members of society from potentially lifesaving COVID-19 information is a challenge. The likely unintentional reliance on citizens to spread the word through various social settings and communication channels was a key possibility in the South African government's COVID-19 communication strategy,

by appealing to citizens' emotions considering the effectiveness of word-of-mouth interpersonal communication, as indicated by the participants. The results of this study indicated that the most effective form of COVID-19 messaging was that conducted by health professionals. Nonetheless, government messages played a crucial role. The high rating by the participants indicated that government COVID-19 messaging was considered effective. This study showed that the primary emotional responses to government messages were concern, worry, and sadness. This contrasts with what would have been expected that fear affected COVID-19 behaviour, as is expected in responses to fear appeal messages.

Globally, at the beginning of 2022, apart from African countries, the world was in the throes of the COVID-19 pandemic; the Omicron variant with rumours about an emergent IHU variant indicating that COVID-19 had not abated or slowed down significantly for any government to claim success at overcoming the virus. Questions about the long-term effectiveness and sustainability of the communication messaging strategies used by the South African government remain unanswered. Yet lessons can accrue from gaps that are apparent from the 2020 and 2021 communication strategies. For instance, the use of social media platforms is viable and effective if they are used for interaction with the public, rather than merely functioning as information conduits. Additionally, monitoring and influencing conversations on social media platforms could be instrumental in mitigating conspiracies and steering emotional responses about COVID-19 by the public. Digital media should be continuously updated to provide current information.

From lessons learnt through communicative efforts during the pandemic, and in comparison, with the twin HIV/AIDS and tuberculosis epidemics prevalent in South Africa, the future of government health crisis messaging could be riddled with public apathy and impassivity. Apathy and impassivity could lead to backsliding on positive behaviour change gains achieved. The EPPM predicts that an unintended consequence of using emotional appeals, such as fear appeals, is fear control. Fear control happens when audiences feel disempowered to address the danger they face, such as disease. They then engage in defence mechanisms to deal with their emotions. This has been the case in South Africa and other countries globally during interludes between COVID-19 waves when members of the public became complacent about behavioural measures, requiring the intensification of compliance messages. Sustained communication promoting behaviour throughout the COVID-19 pandemic became crucial, given the progression of the disease, such as through the continuing emergence of variants accompanied by requisite behavioural measures, such as addressing vaccine hesitancy.

Towards the end of 2021, the emotional responses in South Africa appeared to be high in response to the novelty of the COVID-19 virus and the rapidly rising rate of death. South Africa ranked among the top 15 countries globally in terms of total COVID deaths and the highest on the African continent. The introduction of vaccines presented a new outlook that the virus might not be as aggressive in vaccinated bodies, leading to low hospitalisation numbers and a lower death rate. Constant government communication of new COVID-19 information with the public was needed,

especially given that individuals were constantly communicating through electronic word-of-mouth (eWOM) using digital and social media, with the likelihood of instant communication of misinformation. Thus, the South African government could not rely on existing communication messaging but needed to continually develop dynamic messaging to avoid citizen complacency and apathy.

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