

Exploring the Reception of Global Health Campaigns at a Local Level: A Study of the WHO #SafeHands Handwashing Social Media Campaign for the Coronavirus (COVID-19) Pandemic on Twitter.

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Abstract

This study explores the efficacy of the universal WHO #Safehands Handwashing campaign at a localised level, specifically for students at the University of KwaZulu-Natal (UKZN) in South Africa. It is essential to develop a greater understanding of the reception and effectiveness of global health campaigns in the context where they are received to improve future campaigns' success. This study also explores participatory platforms for health communication, such as social media platforms, to determine if they have a more significant impact on behaviour change. This study is helpful in assessing whether these platforms should be used more often in the future to achieve a greater impact on health communication campaigns. A further objective of this study is to better understand the affordances and limitations of health communication campaigns on Twitter (now X), as Twitter was the main platform utilised to distribute the WHO #SafeHands Handwashing campaign. This study is beneficial in guiding future campaigns that plan to utilise Twitter as an example of social media to disseminate health communication campaigns, particularly pandemic campaigns, as more effective campaigns can save lives.

Within the study, a qualitative research approach was performed in the form of online focus groups conducted via Zoom. The sample included registered UKZN students based in KwaZulu-Natal who were either in a rural or urban area during the initial COVID-19 lockdown period. The data analysis technique performed was the six-phase reflexive thematic analysis process to identify emerging themes and differentiate the three potential readings of the campaign from Stuart Hall's Reception Analysis. Reception Analysis and Participatory Culture were the theoretical guides for this study.

The reception of the campaign was positive overall, and participants felt better equipped to wash their hands effectively after seeing the campaign. The challenge of recreating videos within the campaign, which encouraged participants to actively participate in the campaign, however, was not received as positively. This is largely due to inadequate living conditions, whereby some participants did not have the same facilities or basic amenities, such as running water. The study discovered that vast contrasts in the living conditions of some of the local

participants had impacted the effectiveness of the WHO #Safehands Handwashing campaign for these participants.

The impact of this research highlights the need for global health authorities to work closely with local health authorities to ensure that unique regional circumstances and cultural differences are considered when designing campaigns. For global health campaigns to be more impactful and relatable, they may need to be adapted within different regions. By taking this into consideration, global campaigns may be more successful and ultimately save lives.

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Finally, and most importantly, my family for their support and motivation in completing this dissertation. I know that the sacrifices that had to be made to achieve this goal are part of life's plan and will aid in creating a better future for them. Thank you to my husband, Kyle, for supporting me in my decision to take this on amidst our already crazy life. Thanks to my mother-in-law, Debby, for selflessly helping me in any way she can and always being there for our family. For my three precious children, Hayden, Abigail and Aurora, I hope that I am able to encourage them to pursue their studies and that they, too, have the strength to do anything they set their minds on.

I dedicate this dissertation to the loving memory of my dad, Shane Allan Strauss. I thank you for your sacrifices that have made me into the person I am today, and I will continuously strive to make you proud. You are always in our thoughts and hearts.

Plagiarism Declaration

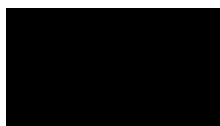
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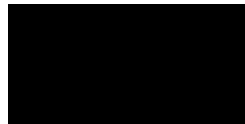


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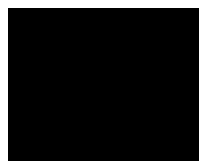


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Chapter 1: Introduction

This study explores the reception of global health campaigns on social media at a local level. As a reception study, this research reviews the World Health Organization's (WHO) #SafeHands Handwashing Challenge campaign, which aimed to educate the world on the correct handwashing practices and ultimately reduce the transmission of the coronavirus (COVID-19) (WHO, 2020c). The study focuses on the preventative interventions encouraged during the initial stages of COVID-19, where the only options were non-pharmaceutical interventions, such as handwashing. This study is conducted within a media and cultural studies context, and not a public health communication context. Media and cultural studies focus on evaluating the effectiveness of mass communication campaigns by critically analysing the content within campaigns (Lewis and Lewis, 2015: 13); and exploring the reception and effectiveness of the WHO #SafeHands Handwashing campaign. While some behaviour change was reflected on by participants within the study, behaviour change, however, was not the focus of the study, and behaviour change theory was therefore not included in the theoretical framework or analysis.

Global Public Health and the WHO

Public Health is defined as “the art and science of preventing disease, promoting population health, and extending life through organized local and global efforts” (McMichael and Beaglehole, 2009: 2). The goals of global public health include the improvement of the health of the worldwide population, the reduction of inequalities within populations and the development of health-sustaining environments (McMichael and Beaglehole, 2009).

Prior to the prioritisation of ‘Global Health’, there was a focus on ‘International Health’ during the late nineteenth and early twentieth centuries (Brown, Cueto and Fee, 2006; 2007). ‘International health’ refers more to the control of epidemics across national borders, whereas ‘global health’ focuses on the health concerns of the entire world population above the concerns of any particular nation (Brown, Cueto and Fee, 2007: 77). The agent that

facilitated the shift in terminology and highlighted 'global health' as the preferred authoritative term was the World Health Organization (WHO) in the 1990s (WHO, 2022a).

Originally, global public health referred to the effort to reduce the international transmission of a few infectious diseases. However, this has now expanded to include the action of managing major international health emergencies (Weir and Mykhalovskiy, 2010: 1). This definition of global public health also not only refers to infectious diseases but can also include chemical, industrial, environmental and radiological disasters that can cross international borders and have a direct impact on public health (Weir and Mykhalovskiy, 2010: 3).

The goals of agencies monitoring global public health risks have been identified as recognising dangers to public health, ensuring that the information regarding these dangers has been verified, alerting necessary health authorities of the threat, and intervening before the health threat becomes an international catastrophe (Weir and Mykhalovskiy, 2010: 3). Global public health agencies are now tasked with intervening and containing a threat prior to the international transmission of the threat.

Another essential goal of global health is to provide equitable access to quality health care for all. However, health care systems are inequitable; some are severely under-resourced and cannot cater to the community's needs (Friel and Marmot, 2011: 71; Waldman and Kruk, 2011: 230). Health systems often overlook disadvantaged communities, comprising of informal or illegal-status low-income settlements. This results in decision-makers having very limited information about the health conditions within these communities, and health information or advice that is shared is not always applicable to the health conditions experienced by these communities (Ramani, 2015: 59). This has negatively impacted these communities, as data policy development and planning public health programmes have not provisioned to cater to their health requirements (Ramani, 2015: 58).

The WHO is an authority in global health and works with governments and partners to improve local health systems and coordinate the global response to health threats. The WHO was incepted in 1948 by the World Health Assembly due to the need for a permanent

institution to address international health concerns (WHO, 2022a; Brown, Cueto and Fee, 2006; 2007). The WHO aims to be the organisation that “leads and champions global efforts to give everyone, everywhere an equal chance to live a healthy life” (WHO, 2022a).

From its inception, the WHO was tasked with aiding in preventing the spread of infectious diseases internationally (Weir and Mykhalovskiy, 2010). The WHO have expressed the urgent need to provide quality health care to all and encourage the Universal Health Coverage (UHC) concept. UHC refers to people accessing health services they require without financial constraints (WHO, n/d). To achieve this, the WHO has also invested in communication campaigns to educate the public on ways to mitigate the spread of infectious diseases.

The most significant global public health issue that has been faced this century is that of COVID-19, and the WHO played a crucial role in communicating about the pandemic at the global level and initiating steps to contain it.

The COVID-19 health threat and containment

COVID-19 is an infectious disease resulting from the coronavirus (SARS CoV-2) and, if contracted, causes respiratory illness. Most people experience mild to moderate and easily treatable symptoms after contracting the virus; however, older people or those with underlying health conditions can develop severe and life-threatening symptoms. Underlying health conditions include cardiovascular disease, diabetes, chronic respiratory disease, and cancer (WHO, 2020e). COVID-19 can also affect other organs and systems, and often, survivors experience side effects for months or even long-term after being infected (Lupton, 2021: 16).

The origin of COVID-19 is the city of Wuhan, in China, with the first noted outbreak in December 2019. The WHO Director-General, Dr Tedros Adhanom Ghebreyesus, announced COVID-19 as a public health emergency of international concern in a statement at an Emergency Committee on 30th January 2020 (WHO, 2020b). He officially declared COVID-19 a pandemic at a media briefing on 11th March 2020, as the statistics at the time had exceeded

118 000 cases in 114 countries and 4 291 deaths worldwide (WHO, 2020a). A pandemic can be defined as an epidemic that affects many people across international borders or worldwide (Last, 2001: 131), and as a result of human-to-human infection, a disease outbreak can become widespread (Qiu *et al.*, 2017: 3).

COVID-19 is easily spread from person to person, primarily via droplets of saliva or discharge from the nose when someone coughs or sneezes (WHO, 2020e). The WHO encouraged the public to take precautions to prevent the virus's contraction. These measures included regularly washing hands with soap and water or disinfecting hands with an alcohol-based sanitiser; ensuring a minimum distance of one metre from others; avoiding touching the face; ensuring the mouth and nose are covered when sneezing and coughing; staying home when feeling unwell; refraining from smoking and other activities that weaken the lungs; and practicing physical distancing by avoiding unnecessary travel and large groups of people (WHO, 2020e). These were the non-pharmaceutical measures encouraged by health authorities at the onset of COVID-19 and before a vaccine was developed.

Handwashing is the most common measure of combating the spread of COVID-19, and regular handwashing has been encouraged globally during the COVID-19 pandemic. The need for preventative measures at home, such as handwashing, in combating infectious diseases has become evident over the past 20 years (Bloomfield *et al.*, 2007: S28). Handwashing has been proven to reduce the transmission of respiratory viruses to as much as 45-55% (Brauer *et al.*, 2020; Jefferson *et al.*, 2009; 2011). Therefore, handwashing is a convenient method to encourage as it effectively reduces disease transmission and is a relatively cost-effective measure. The importance of handwashing first emerged in the 1840s when Hungarian gynaecologist Ignaz Philipp Semmelweis initiated discussions on Germ Theory through his experiences in practice (Snowden, 2019). In Semmelweis' observations, he noted that the maternal mortality rate of deliveries conducted by doctors who also conducted autopsies and did not wash their hands was considerably higher. This discovery led him to believe that these doctors had carried invisible particles containing diseases from the autopsy table to the women they examined (Snowden, 2019). The first forms of handwashing were then encouraged by Semmelweis in 1847 with the use of chlorine solution (Snowden, 2019: 208).

In South Africa, handwashing and wearing of facemasks were the encouraged preventive measures implemented to prevent the spread of COVID-19 in the first (May-June 2020) and second (July-August 2020) waves, respectively (Kollamparambil and Oyenubi, 2021: 5). In a global effort to encourage frequent handwashing and improved hygiene, the WHO released a handwashing campaign on their social media platforms, predominantly Twitter, known as the WHO #SafeHands Handwashing campaign (WHO, 2020a). The campaign featured a video of the WHO Director-General, Dr Tedros Adhanom Ghebreyesus, demonstrating and providing tips on the correct handwashing technique (WHO, 2020f). This campaign was designed as a challenge whereby others are also nominated to create their own videos to create awareness (WHO, 2020c).

Public figures such as influencers and celebrities took part in the challenge, sharing the technique with their followers and challenging their family, friends and fellow public figures to take part too, creating a chain reaction (Harris, 2020). These videos mainly originated from the global North, from first-world countries such as the United States of America (USA), the United Kingdom (UK) and Switzerland (WHO, 2020c). The campaign aimed to encourage awareness of the correct handwashing techniques best performed to limit the spread of the virus and promote behavioural change as, hopefully, the learnings would be put into action by viewers daily. The campaign is participatory in nature, as by participating in the challenge, the public created their own videos and shared these messages globally. This study focuses on the reception by South African audiences of the WHO #SafeHands Handwashing campaign instigated as part of global health communications by the WHO at the beginning of the pandemic.

The WHO #SafeHands Handwashing campaign was released on the 13th March 2020, just two days after COVID-19 was declared a pandemic by the WHO (11th March 2020) (WHO, 2020a; Arndt *et al.*, 2020: 2). The WHO #SafeHands Handwashing campaign was released on the WHO Social Media platforms, including Facebook, Instagram, Twitter, LinkedIn, TikTok and Snapchat, and received most of its engagement on Twitter (WHO, 2020a; WHO, 2020c). President Cyril Ramaphosa (the South African president) declared a National State of Disaster

on the 15th of March 2020, and this was followed by a lockdown order in South Africa on the 23rd of March 2020, which commenced on the 27th of March 2020 (Arndt *et al.*, 2020: 2).

South Africa was very proactive in its response to the COVID-19 pandemic. After the first COVID-19 case was reported in South Africa on the 5th March (National Institute for Communicable Diseases, 2020), the declaration of a national state of disaster (15th March 2020) and strict 21-day lockdown followed timeously within the same month on the 27th March (Govender, 2021: 104-105). The National Coronavirus Command Council was developed on the 17th March 2020 to strategise on the national plans that would need to be implemented to control the spread of COVID-19 in South Africa (Struckmann, 2023: 15). Other non-pharmaceutical measures within South Africa included a revised five-level lockdown strategy, rigorous screening measures and the continued promotion of preventative measures (Govender, 2021). South Africa remained on the strictest lockdown (alert level 5) measures, which permitted only the operation of essential services, from the start of the lockdown on the 27th March until the 31st April 2020 (Struckmann, 2023: 15-16). South Africa only began the rollout of its vaccination campaign (which initially targeted its 1.25 million frontline healthcare workers during the first phase) in January 2021 (Struckmann, 2023: 17-18). For more than nine months, non-pharmaceutical measures, including handwashing, were the only means South Africans had to prevent the transmission of COVID-19.

It is well established that health communication campaigns require shared meanings between senders and receivers to have a chance of being successful (Hall, 1980: 138; Balnaves, Donald and Shoesmith, 2009: 92). This becomes difficult with global campaigns, as meanings may not be shared worldwide and may be hindered by local contexts, cultural aspects, and accessibility of resources. There is a need for research to examine the social impact of COVID-19 campaigns within a local context, as research tends to be from a global perspective, as the pandemic is a worldwide phenomenon (Lupton and Willis, 2021: 5).

Globally, countries have unequal access to resources, and approximately two billion people do not have access to handwashing facilities (Schmidt, 2020). As the WHO #Safehands Handwashing campaign was a global campaign with the goal of educating the world on the

correct handwashing techniques and frequency, it is likely that not having access to water would affect the success of the campaign for some regions and countries. This inequality and lack of access to resources are not always considered within health communication campaigns.

Although it is beneficial to use social media to communicate health messages to achieve greater reach for their campaigns, authorities need to ensure that localised contexts are considered to ensure that messaging is appropriate and likely to have the desired impact. There are also a number of negative implications with the use of social media within health communication. This includes an array of miscommunication (Cinelli *et al.*, 2020), negative stigma resulting in reluctance to seek treatment (Li *et al.*, 2020) etc. This study aims to analyse the reception of a particular global social media health communication campaign within a localised context. It aims to understand the reception and efficiency of this global health communication campaign at a local level, with an understanding that global solutions may not always be applicable in local contexts.

The study focuses specifically on the WHO #SafeHands Handwashing Twitter campaign, in order to narrow the study, as it was the social media platform with the most engagement and used to launch the campaign (WHO, 2020a; WHO, 2020c). While Twitter was rebranded as 'X' in July 2023 (Ivanova, 2023), this thesis refers to Twitter as the name of the platform at the time of the campaign and the reception study. The target group for the study includes students at the University of KwaZulu-Natal (UKZN) in the context of KwaZulu-Natal, South Africa. Third-world or developing countries often require the most assistance when new infectious diseases emerge, and communication campaigns need to be effective at all levels of development. This study is undertaken in the context of South Africa as a developing country with development priorities in line with South Africa's inimitable leadership position at both a sub-regional and continental level (The World Bank, 2022). As such, the research provides an understanding of how a global campaign is understood at the local level within a developing context and may help to inform more relevant campaigns in future.

There is also minimal focus on the reception of the campaign at a local level within Africa, with previous studies in Indonesia and India (Djojaputro and Wempi, 2021; Sangra 2021), which provides a gap in the literature on the reception of the campaign in the African and South African context.

The aims and objectives of the study include:

- To examine the efficacy of universal health communication campaigns at a localised level;
- To examine the effectiveness of the WHO #SafeHands campaign in South Africa;
- To understand the impact of participatory methods, such as social media, on behaviour change in health communication campaigns; and
- To understand the affordances and limitations of health communication campaigns on Twitter as an example of social media.

The questions guiding this research include:

1. What is the reception of the #SafeHands campaign amongst UKZN students in KwaZulu-Natal, South Africa?
 - a) In what ways (if any) does water security/insecurity affect the participant's reception of the campaign?
2. How did the #SafeHands campaign raise awareness of hand hygiene amongst UKZN students in KwaZulu-Natal, South Africa?
 - a) How did the campaign influence the behaviour of participants?
3. What are the affordances and limitations of Twitter as an example of social media for spreading health communication campaigns?

This thesis includes a background to the study, as provided in this introduction (Chapter 1), a literature review (Chapter 2) covering global health communication, social media, COVID-19, and previous relevant studies, and a theoretical framework (Chapter 3), which focuses on the theories of active audience, encoding/decoding and participatory culture. The methodology

(Chapter 4) provides an overview of the data collection techniques used in the study. This includes the qualitative research approach, interpretivist research paradigm, the use of reception analysis in the research design for the study and the six-phase process of reflexive thematic analysis in the data analysis. The data analysis (Chapter 5) details the feedback received from online focus groups used to collect data for the study and explores how this relates to previous studies reviewed and theories. A conclusion chapter (Chapter 6) examines the findings from the research and details the results from the focus groups in relation to the objectives of the study and summarises the outcomes of the research to address the research questions.

Chapter 2: Literature Review

This chapter aims to understand how previous research has examined the various elements related to the current study. The literature reviewed highlights the relevance of my research of exploring the reception and effectiveness of global health communication campaigns at a local level, within the South African context. This includes discussion on global health communication and social media; Twitter as a 'glocal' social media platform (relating to the interconnection of global and local issues); Twitter and audiences; audience participation; health communication during a crisis; previous pandemic communication campaigns; COVID-19 communication, and the WHO #SafeHands campaign.

Global health communication and social media

Communication can be defined as the “process of sharing or exchanging of ideas, information, knowledge, attitude or feeling among two or more persons through certain sign and symbols” (Robinson, 2019: 2). It is therefore understood as the way in which people are able to share messages based on mutual understandings.

Communication has become integral in public health practice, and effective communication can add value to reducing the burden of disease (Haider and Rogers, 2005). Communication campaigns can impact the health behaviours of the masses (Snyder and Cistulli, 2005) by raising the demand to practice safer behaviours or compliance with the messages communicated. This can be achieved when the communication imparts the aimed expectations and educates on the correct health practices (Waisbord, 2005), thereby educating the intended audience on methods of reducing their risk of becoming sick or providing better immunity from potential illnesses. This is not as simple as it sounds, as many health campaigns have been critiqued for their lack of cultural sensitivity (Uwah, 2013: 141).

Global health communication is recognised as the means of promoting global health issues to address diseases and improve the overall health of the global population (Obregon and Waisbord, 2012: 3). Health communication has traditionally been informed by psychology,

social marketing and mass communication theories and approaches (Storey and Figueroa, 2012: 72). More recently, methods encouraging a participatory approach have allowed communities to enable, mediate, and advocate for health and social change themselves, through more active participation in the making of health messages (Lewis and Lewis, 2015: 5-7).

Health communication campaigns have made use of traditional uni-directional and top-down communication approaches in relaying health messages since the 1700s. During the 1721 smallpox epidemic in Boston, information pamphlets were distributed encouraging vaccinations against the virus (Ye and Aron, 2020: 177). During the influenza pandemic in 1918 in the United States, adverts encouraging the use of face masks were published in newspapers (Ye and Aron, 2020: 177). Traditional mass media methods, such as broadcast and printing channels (Vos *et al.*, 2018: 2580), were very powerful in promoting health awareness to the masses.

However, as technology advanced, new media methods have emerged, such as electronic and social media (Ye and Aron, 2020: 177). Social media refers to the “range of internet-based and mobile services that allow users to participate in online exchanges, contribute user-created content, or join online communities” (Dewing, 2010: 1). According to Lori McCay-Peet and Anabel Quan-Haase (2017) social media includes numerous forms of technology, and can be defined as:

Web-based services that allow individuals, communities, and organizations to collaborate, connect, interact, and build community by enabling them to create, co-create, modifies, share, and engage with user-generated content that is easily accessible (2017: 17).

Social media is linked to e-Health communication due to the fact that it is an enabler for health communication via the internet. E-health refers to “health services and information delivered or enhanced through the Internet and related technologies” (Eysenbach, 2001: 1).

With the potential for greater user participation, social media has resulted in new approaches to communication, including in relation to health communication. Consumers can now share and create their own news stories, which reveals a power shift from broadcast media to media users. New technologies and social media platforms have aided this shift, with consumers no longer passive receivers of media messages (Sinclair and Vogus, 2011: 293) but now more participatory and referred to as “active audiences” (Livingstone, 2013: 24).

The speed at which messages can be diffused through large networks on social media makes it an ideal way to communicate health communication (Jackson, Bailey and Welles, 2020; Petersen and Gerken, 2021). Communication campaigns can take advantage of technology and social media by disseminating information during a crisis due to its relatively low-cost factors, real-time advantage and removal of locational barriers (Veil, Buehner and Palenchar, 2011; Stellefson *et al.*, 2020; Lwin *et al.*, 2020). Due to this, social media platforms can potentially have a significant global impact for health communication.

In the context of health communication, social media is defined as “online platforms for interactions around various health topics relating to patient education, health promotion, public relations, and crisis communication” (Syed-Abdul *et al.*, 2016: 1). Social media platforms such as Twitter enable each of these functions and are becoming a popular source for breaking news (Murthy, 2018; Osborne and Dredze, 2014).

Social media users now have an array of resources to gather information, explore treatment options, connect with support groups and share their experiences on health-related topics (Syed-Abdul *et al.*, 2016). Social media platforms can be viewed as ‘participatory’, as users or receivers can share content and even contribute to existing messages (Jenkins, 2008). Patients often seek advice from the experiences of other patients and/or doctors when exploring and understanding health choices, and social media are considered inexpensive supplements that can reinforce existing health promotion methods (Eddabali and Yahia, 2020).

These changes in communication structures have aided in the shift in health communication from traditional mass communication approaches to more participatory approaches. There are however, concerns raised regarding the use of social media and unmediated forums in the context of health communication.

Twitter as a social media platform

The introduction of social media has resulted in new opportunities for disseminating information to a broader audience. Factors such as accessibility to billions of users worldwide, low-cost implications and instant content distribution have been favourable for health communication, particularly during a pandemic (Tsui *et al.*, 2020). There are now many new opportunities for users to gather information on health-related topics on social media platforms. There has been an influx of social media users following health authorities' social media pages, and this has presented a good opportunity for health communication campaigns (Kompani *et al.*, 2022). Numerous studies have highlighted the success and potential of social media platforms for health communication campaigns. A content analysis study on the use of TikTok by health authorities during COVID-19 highlighted the opportunities that existed to educate and foster community engagement with TikTok videos (Li *et al.*, 2021: 270). It has also been highlighted that health authorities are able to address the issue of misinformation through their own social media channels where they are able to post facts directly (Zdunek, 2022).

This study focuses specifically on Twitter as the platform used by the WHO to launch the #SafeHands handwashing campaign. Twitter is a social media platform that was introduced as a public short messaging service (SMS) for groups (History, 2019). Twitter is the social media platform where users publicly respond to the question "What's happening?". Responses on Twitter are referred to as "tweets" and unlike other platforms where content is only available to a user's friends, tweets are fully accessible to anyone in the public (Murthy, 2018: 2). Twitter was initially launched on the 15th July 2006 as Twtrr with a 140-character limit imposed on messages. About six months later, the name was amended to Twitter and

the character limit was increased to 280 (History, 2019). Twitter has become increasingly popular as a means of disseminating breaking news and information.

According to Anabel Quan-Haase and Luke Sloan (2017: 5), social media is characterised by having the capability to support user-generated content; providing a means for users to connect with one another; and supporting numerous ways for users to engage with one another. Twitter supports the capability for each of these characteristics. Twitter supports user-generated content by allowing users to post updates with the use of text, images, emoticons, emojis, embedded hyperlinks, animated gifs and/or video directly onto their Twitter accounts (Murthy, 2018: 2). It allows for users to connect to one another by allowing a Twitter user to “follow” another Twitter user or through their shared followings. Twitter also allows engagement with users in several ways, such as direct dialogue with another Twitter user with the at-sign (@) and the ability for users to instantly see a published tweet and respond or react to it (Murthy, 2018: 3).

The use of the hashtag (#) on Twitter is where the hashtag precedes a word or phrase and then links discussion themes together, allowing users the ability to search for specific topics with ease (Jackson, Bailey and Welles, 2020). Although the hashtag was originally introduced on Twitter in 2007, it is now widely used on all social media platforms, and themes can be linked with hashtag searches across multiple sites (Jackson, Bailey and Welles, 2020). With the emergence of hashtags, the trend for hashtag activism campaigns on social media platforms has also risen, where hashtags are utilised to raise awareness or increase support for a cause by creating engagement and allowing debate on the topic online (Tomblinson and Wolf, 2017: 15). Hashtags have aided social media its ability to disseminate information immediately and widespread, in a way that has never been possible before (Jackson, Bailey and Welles, 2020). Some of the other affordances include relatively low financial and technological barriers to access Twitter and social media platforms (Jackson, Bailey and Welles, 2020; Petersen and Gerken, 2021).

There are also some limitations to social media, such as the raw information that is disseminated is not always mediated or controlled as easily, as audiences are able to take

control, moving the debate from what was intended by the original communicators, sometimes in a negative light for the them (Jackson, Bailey and Welles, 2020; Petersen and Gerken, 2021; Tombleson and Wolf, 2017: 16).

There is little research focusing on the impact of health communication social media campaigns on young people (Goodyear and Armour, 2019). It is argued that adults still do not understand how social media influences the health-related knowledge and behaviours of young people and are therefore not equipped to optimise social media for health promotion (Goodyear and Armour, 2019: 2). There are some studies on social media from an African context relating to HIV communication campaigns (Kakooza, 2018; Mosweu and Ngoepe, 2020), but limited studies on pandemic communication. Pandemic communication refers to the communication campaigns targeting the response to international disease outbreaks resulting from the rapid spread of human-to-human infections (Qui *et al.*, 2017). This study explores the reception of pandemic communication by university students at UKZN and will be valuable in learning more about this age category.

Twitter as a global media platform

Twitter has been referred to as reflective of Marshall McLuhan and Quentin Fiore's (1968) notion of a "global village" due to its global reach in our interconnected world (Murthy, 2018: 22). This "global village" refers to electronic communities that would allow all parts of the world to be connected, creating a level of interdependence. This idea is true for most social media platforms, as information can easily be shared instantly worldwide through social media. However, there are constraints in that access to social media platforms may not be as prominent in disadvantaged countries, leading to unequal participation within the "global village" (Murthy, 2018: 23). Disadvantaged countries or communities may not be able to access internet connections as easily as advantaged countries or communities do and may not be active on social media platforms.

Twitter campaigns are beneficial in the global reach and study of health communication campaigns as, being public domains, all data in the form of tweets is by default considered

public messages (Salathe and Khandelwal, 2011). This allows for messages to be easily shared, resulting in a broader reach of campaign messages. Although accessibility may be an issue, social media campaigns still have the potential for global reach.

Twitter has become an effective way to gain reach for global campaigns, and to engage and connect audiences. With the use of the hashtag (#) before words, Twitter allows for users to categorise content into themes, thereby easily connecting tweets to people or groups worldwide (Murthy, 2018: 4).

Audience participation

With the introduction of social media, there has been a migration from passive to active audiences, with greater participation in communication events. Participation is not limited to any specific societal group but is available for all societal groups and at all levels (Carpentier, 2012: 171). The sharing, liking and commenting features within social media platforms can therefore be seen to accommodate an active audience. However, when it comes to social media campaigns, messages need to be specifically designed to encourage the distribution of the messages by audiences through their own social media network (Vos and Buckner, 2016: 306). This is so that audiences feel the need to share and interact with the messages to spread awareness of the campaigns.

With the use of the hashtag sign (#) before words, Twitter allows for users to categorise content into themes, thereby easily connecting tweets to people or groups worldwide (Murthy, 2018: 4). Hashtags are defined by Michele Zappavigna (2013) as “an emergent convention for labelling the topic of a micropost and a form of metadata incorporated into posts” (2013: 1). A micropost refers to a very short internet posted message and metadata refers to “data that describes other data”, serving as an informal label (WordSense Dictionary, 2022). Tweets can also be directed to specific individuals with the use of an at-sign (@) before the user’s name. As it is a public forum, users do not require permission from other users before including their name. This is rather powerful when including a celebrity or influencer in a tweet, as the user will then have exposure to their large social media following (Murthy,

2018: 5). Studies have discovered that the use of both the hashtag and at-sign affects the rate of which the message is shared (Sutton *et al.*, 2015: 14794; Vos *et al.*, 2018). A study on the use of social media influencers to promote COVID-19 communication in Finland revealed that audiences preferred personal posts where influencers' interpretations of campaigns were more relatable than influencers sharing official communication (Pöyry, Reinikainen and Luoma-Aho, 2022: 479).

Studies have discovered that the use of both the hashtag and at-sign affects the rate of which the message is shared (Sutton *et al.*, 2015: 14794; Vos *et al.*, 2018). A study on the Zika virus revealed that the inclusion of the hashtag (#Zika) resulted in a 52% increase in the rate of messages being shared (Vos *et al.*, 2018: 2591). In the case of the WHO #SafeHands Handwashing campaign, both the # hash sign and @at-sign have been used, with the likely result that the campaign messages were widely shared.

Sonja Livingstone (2013: 25) states that “audiences are becoming more participatory, and participation is ever more mediated. It is arguable that commerce primarily drives the former process while the state and civil society are driving the latter”. Livingstone refers to the fact that society, in the form of followers or friends, will judge the contributions of online contributors by the size of their audiences and may even provide support or funding if contributions are beneficial to the broader public (Livingstone, 2013: 25). For example, YouTube offers financial contributions to users who have high content views due to the advertising revenue generated from audience views (YouTube, n/d).

Participation in freedom of expression may be mediated, even if no harm is done, as they may offend society at large (Livingstone, 2013: 25). For example, a post on social media may visually reveal and educate users on the harsh realities of pollution on wildlife. Seeing this may be difficult for many social media users, and content may be blocked or removed due to its sensitive nature. Social media platforms, such as Facebook, may block or remove content if a social media user reports the content as an infringement or violation of their rights (Facebook, 2022). Similarly, Twitter also has the option whereby users can report any abusive or harmful posts within the offensive post (Twitter, 2023a) and even the option to have others

accounts muted or blocked if they have revealed any sort of harassment towards another user (Twitter, 2023b). Social media users therefore also participate in this process by reporting any issues to the relevant platform. The fact that our own participation within our own social media accounts is not only public, but can be commercialised or even mediated, leads us to seek to understand the changing conditions of communication (Livingstone, 2013: 28) that impact our participation in this networked “Global Village” (Murthy, 2018: 23). In a health communication context, this can be alarming as health concerns are usually treated in the strictest confidence (Saunders, 2016), but communication on social media platforms does not remain confidential.

Health communication during a crisis

During a crisis, standard communication is strengthened and adopts a more reactive role (Saliou, 1994: 516). Communication surrounding a crisis is more prevalent and spans across multiple mediums, from awareness campaigns to news broadcasting. It is also reactive in that communication can be triggered by an update on the crisis, such as a breakthrough, new discovery etc. In our interconnected and instantaneous world, dominated by the internet and social media, communication regarding a pandemic is expected continuously by users and as it unfolds, as communication is essential in mitigating fear and promoting confidence in health authorities (Ratzan and Meltzer, 2005).

Before social media, communication regarding infectious diseases was usually relayed to the public by journalists through traditional media, such as broadcast and print media (Vos *et al.*, 2018: 2580; Sutton *et al.*, 2015). These media platforms were considered relatively trustworthy sources of information (Brug *et al.*, 2004: 1486). Media networks would receive constant, real-time information via regular meetings and press conferences from an appointed spokesperson of the appointed crisis management team for the epidemic (Saliou, 1994: 516). This meant that appointed representatives gave updates regularly and in a controlled setting.

In 1957 during a flu pandemic in the United States, media such as newspapers utilised medical experts for information on pandemics. However, by 1968 this had shifted to the use of public agencies such as the country-based Centers for Disease Control (CDD) for reliable information (Yu *et al.*, 2013: 67). Increasingly in pandemic media coverage, the media has now shifted its focus and started including coverage of the consequences of the pandemic beyond the sphere of health.

Newspaper coverage of the 2003 SARS virus included information on economic consequences, governmental responsibility, and political leadership. Similarly, with the swine flu in 2009, media coverage included information on the shutdown of schools, the delay of movie openings, and the cancellation of international cruises (Yu *et al.*, 2013: 67). The introduction of social media has assisted in the ease of spreading coverage in both health information and non-health related areas of information such as much of the examples above. This study discovered that approximately 20% of articles within their research on the swine flu crisis include at least one aspect beyond public health (Yu *et al.*, 2013: 75). The inclusion of non-health-related content is a result of the more participatory audience's tendency to acquire information relating to their interests and worldviews (Cinelli *et al.*, 2020: 1).

The updates in technology and the introduction of new media, such as social media, have eased how information can be relayed, as social media platforms enable anyone to share information quickly and efficiently. For example, health experts can now communicate directly with the public; however, exposure is in the hands of the public, who have to share the messages instead of media networks (Vos *et al.*, 2018: 2580). In this instance, exposure is linked to the participatory element whereby audiences share the messages, resulting in more awareness. Exposure could be more likely or higher as audiences generally share posts on social media that appeal to them or if the content is relevant at the time. Crisis communication is relevant during a pandemic and the amount of information shared regarding the COVID-19 pandemic is proof of that (Cinelli *et al.*, 2020). However, there are risks that communication shared during a crisis could be damaging instead of beneficial to the health of individuals and communities. Even the WHO announced that we are just as much

fighting an *infodemic* as fighting a pandemic, referring to the vast amount of information and misinformation prevalent (WHO, 2020d).

Crisis communication during a health emergency, such as COVID-19, is particularly important and needs to be dealt with timeously and before the crisis intensifies (Snyder and Cistulli, 2005). This urgency is intensified in the current context of widespread access to social media as users expect real-time and regularly updated reliable crisis information which needs to be provided to prevent users from reverting to other sources of information that may not be as reliable (Chew and Eysenbach, 2010).

Studies into the reception of health crisis communication are not new. Previous health communication studies in South Africa that have utilised a reception analysis include studies focused on traditional media such as the local news coverage from eNCA of the Ebola outbreak (Moyo, 2015) and the coverage of HIV/AIDS campaigns in women's magazines (Van Den Berg, 2013). There is limited published research on the reception of social media health communication campaigns.

In utilising social media for the better, Wenyou Ye and Liviu Aron advocate for local health institutions to work with government and national media outlets during a crisis, to represent their local communities (Ye and Aron, 2020: 180). They argue that by filtering down to a local level, communication that is relevant for the specific community can take cultural differences into consideration and be relayed in a way that is meaningful to the community.

Previous pandemic communication campaigns

Communication approaches during previous pandemics have highlighted the phenomena of health communication campaigns and the reception of these campaigns on a global level.

A study on the Zika pandemic in Singapore in 2016 reveals that Twitter was the most dominant social media platform for news media outlets and was also utilised by government agencies to relay official statements regarding the outbreak (Lwin *et al.*, 2020). Lwin *et al*

argued that news media outlets and government agencies preferred to share information on Twitter due to the lower character/word limit. Therefore, updates and breaking news could be delivered via Twitter in smaller chunks throughout the day. Twitter is considered the best for breaking news reporting and is often the first social media platform on which significant events are reported (Osborne and Dredze, 2014). During the Zika pandemic, news agencies could also provide updates without being obligated to submit full news stories due to limited time and resources (Lwin *et al.*, 2020). The study recommended that news media outlets and government agencies work together to ensure a greater reach of important health communication to the public for future pandemics (Lwin *et al.*, 2020).

A study on the 2009 global outbreak of the H1N1 (swine flu) virus recognised this as the first global pandemic in the age of Web 2.0 (and that there is much to learn on best utilising social media platforms (Chew and Eysenbach, 2010). Web 2.0 refers to the second generation of the World Wide Web of the Internet, which was developed with more user-focused intentions including social, collaborative and user-generated platforms (Wilson *et al.*, 2011). This study determined that 90.2% of tweets circulated on Twitter regarding H1N1 contained references or links to the original sources of information and allowed users to verify the data being shared. When reflecting on the possibility of misinformation, the study revealed that retweeting of official sources gradually increased over time, revealing that users began to recognise the value of official sources in alleviating misinformation (Chew and Eysenbach, 2010).

Cynthia Chew and Gunther Eysenbach (2010) also highlighted that links to secondary news sites, such as news blogs, social sites and other websites, also began to gradually increase. It suggested that authorities in the future need to post more regular updates to ensure that supply keeps up with the demand of users, as this could avoid users reverting to secondary sources that may not be as reliable. Overall, this study revealed that Twitter was primarily utilised to disseminate credible information via credible sources to the public. Individuals who make up the public also utilised Twitter to share their personal opinions, experiences, and concerns. The study recommends that authorities take these real-time concerns into account

for future pandemics and use them to guide their responses as well as to generate ideas for the upcoming content shared (Chew and Eysenbach, 2010).

Similarly, other Twitter communication studies suggested that public health authorities need to know users' opinions, beliefs, and perceptions in real-time to address misconceptions or adapt and develop better effective communication strategies (Signorini, Segre and Polgreen, 2011; Scanfeld, Scanfeld and Larson, 2010). By understanding users, health authorities can pick up on issues within messages that may not be relevant or make sense to some users and adapt the messages to suit the niche target audience. This means that health authorities would need to understand users within different regions, living within different conditions and that they cannot simply apply the same message globally to users as one target audience.

It has been asserted that health messages relayed by global or national health authorities carry more weight than messages relayed by local health units (Vos *et al.*, 2018). Studies on the Ebola crisis and Zika virus determined that messages on Twitter by state or federal health agencies were shared and retweeted more than those communicated by local health departments within the USA (Vos *et al.*, 2018: 2582). This reveals that the prominence of the health organisation, in terms of size and credibility, is a factor in the probability that the message will be shared. According to a 2016 study on the Zika virus in the USA, messages from larger health authorities were passed on 106% more often than messages from local agencies (Vos *et al.*, 2018: 2592). Therefore, as a leading health authority, it may be considered that the WHO is in a position to launch successful global campaigns.

However, a critique of many global health communication campaigns, particularly HIV and AIDS campaigns, is the lack of cultural sensitivity (Uwah, 2013; Airhihenbuwa and Dutta, 2012). It is argued that many campaigns are unsuccessful as cultural influences are not considered (Uwah, 2013: 141), and health agendas are often misaligned with the identity of the receivers of these campaigns (Airhihenbuwa and Dutta, 2012: 34-35). Participatory methods of communication have been developed with the intention that health communication should originate from communities, such as the culture-centered approach (Airhihenbuwa and Dutta, 2012: 46). The culture-centered approach (CCA) involves the

affected community in understanding the health challenges experienced and also includes the community in co-creating solutions to these challenges (Dutta, Elers and Jayan, 2020). This is useful as communities often deal with unique circumstances that only they would understand. Such authors assert that involving communities in the development of communication campaigns could result in more impactful campaigns.

In a study of the use of the CCA during the COVID-19 pandemic to target Asian communities in Canada, it was discovered that a generic approach to health campaigns within a crisis like COVID-19 is not recommended (Pringle *et al.*, 2022: 515). The study suggests that to reach diverse and niche communities successfully, customised community engagement is a necessity, and health authorities should work in collaboration with community representatives to foster community connections (Pringle *et al.*, 2022: 521). Similarly, in a study on a CCA for COVID-19 in New Zealand and India, it was argued that communicative equality should form the basis for health communication, which can only be achieved through collaboration between community representatives and state response (Dutta, Elers and Jayan, 2020). Through these studies it is recommended that health authorities need to work in collaboration with state (country) leaders as well as community representatives to ensure that health communication can be relevant to all, include minority communities.

During the H1N1 pandemic in 2009 in Australia, national pandemic plans did not consider the needs of disadvantaged groups. As a result, these groups were further disadvantaged, as they did not have the basic resources required to take the precautions recommended when they required assistance the most (Miller *et al.*, 2015). In a study on the H1N1 response, a participatory action research (PAR) framework was used to explore the views and experiences of disadvantaged groups. The research findings were then used as an advocacy tool with the government, and the disadvantaged groups' specific needs were included in national planning (Miller *et al.*, 2015: 6). The study claims that by doing this, future health communication campaigns from national government can be planned, taking these needs into account, resulting in a wider reach and ultimately more successful campaign. This study suggests that by having a greater understanding of the reception of global health communication

campaigns, future campaigns can take these into account and potentially increase the effectiveness of future campaigns.

Similarly, in a study on the H1N1 outbreak in Canada, it was recommended that a community-based participatory approach should be utilised to include disadvantaged populations (Charania and Tsuji, 2012). These prior studies reveal the significance of participatory approaches in health communication and behaviour change campaigns, especially in developing impactful campaigns aimed at disadvantaged groups.

Further studies have highlighted that a rich understanding of cultural context is necessary to encourage an acceptance of health campaigns and behavioural change (Spengler *et al.*, 2016; Oren *et al.*, 2020; Pringle *et al.*, 2022; Dutta, Elers and Jayan, 2020).

A study on communication around the Ebola virus in West Africa from 2013 to 2016 highlighted that cultural context is necessary to encourage behavioural change. It also stated that “establishing in-country community partners should be integrated to health communication” due to their ability to overcome language and cultural barriers unique to the region (Spengler *et al.*, 2016: 961).

Global health campaigns need to be adapted to fit within different cultures if they aim to be effective at different local levels; however, there are minimal studies on how this can be achieved (Stellefson *et al.*, 2020). Gary Bennett and Russell Glasglow (2009) expressed this concern by highlighting that communication dissemination to smaller environments needs to be better understood to allow adoption considerations to be more effective. They note that a lack of infrastructure and access may impact on the effectiveness of technologically-driven communication campaigns, noting that smaller environments such as rural or small municipalities will not have the necessary infrastructure or will not be capable of making “the infrastructure investments necessary to support high-quality Internet interventions” (Bennett and Glasglow, 2009: 280).

Stellefson *et al.* (2020) also highlight that locational (rural) or scale (smaller) population factors are not the only factors to take into consideration when designing communication campaigns. Subgroups within a population may also be affected, such as the elderly, disabled or those with low technical or eHealth literacy and also need to be considered (Stellefson *et al.*, 2020).

In reviewing COVID-19 responses in South Africa, Eliza Govender (2021) highlights the importance of localised, community-led responses and asserts that they remain pivotal in the success of pandemic communication strategies.

COVID-19 communication

Before the advent of social media, broadcast media would distribute content dictated by authorities, such as the local government, sponsors, or even news based on profit generation. In South Africa, communication via broadcast media was still very popular with the regular “family meetings” in the form of the COVID-19 updates from President Cyril Ramaphosa (Gibson, 2021: 283). The key precautions encouraged by the presidential broadcasts included social distancing, basic hygiene and wearing facemasks. The social distancing or isolation was more prominent and encouraged at the onset of COVID-19, with the lockdown restrictions and the facemasks became more predominate as restrictions began to ease and people started to go out in public again (Gibson, 2021: 283). After these broadcasts, social media users would take their conversations to social media and this medium became popular for relaying information on COVID-19 (Gibson, 2021: 278). Social media platforms provide a sense of a community support system which is critical in allowing users a platform to continuously communicate, and to collectively seek support or advice during a time of extreme stress and uncertainty (Lewis, Holland and Govender, 2021).

During COVID-19, social media platforms communicated basic information about COVID-19 and any related circumstances surrounding it. The most common themes at the start of COVID-19 on social media included suspended flights; economic impact; protection advice; prayers; death tolls and infection rates; biological warfare theories; communist regime

theories; disease descriptions and symptoms; and the spread of the virus spreading (Cinelli *et al.*, 2020). As social media users ultimately determine the social media content, it is clear that the common topics at the start of COVID-19 were surrounding issues of concern (economic impact, suspended flights etc.) and areas of support (prayers etc.) of users.

Due to the global impact of COVID-19, health authorities, such as the WHO, utilised social media platforms to relay information that reached people around the world. Due to Twitter's ability to accurately and timeously spread information, it has been a popular source of information and news for the public (Swetland *et al.*, 2021: 505). Although studies have suggested that social media campaigns are beneficial in improving the health knowledge of users, the impact of social media campaigns on behavioural change shares contradicting results (Welch *et al.*, 2016). For example, a health campaign encouraging physical activity may create awareness on the need to be physically active and the health concerns of not being active, however, receivers of the campaign may still not improve their behaviour, despite agreeing with the messages.

Although social media has had a positive impact on the ability to easily share information on COVID-19 that could inevitably save lives, at the same time, it has had some negative repercussions. Various studies (Cinelli *et al.*, 2020; Brug *et al.*, 2004; Oyeyemi, Gabarron and Wynn, 2014; Ahinkorah *et al.*, 2020; Govender, 2021; Schmidt, 2020; Brauer *et al.* 2020) have identified issues negatively affecting COVID-19 communication campaigns, including misinformation, cultural context and message relevance. These are discussed in further detail below.

Misinformation

Misinformation, in a social media context, refers to the unintentional sharing of fake or inaccurate information (Wu *et al.*, 2019). COVID-19 is a global pandemic in the social media age, resulting in a vast reach of social media platforms when utilised for communicating health messages. However, this advancement also has a few challenges, such as misinformation, as anyone can share false information at the click of a button without

knowing it (Cinelli *et al.*, 2020). The WHO Director-General Tedros Adhanom Ghebreyesus's reference to an 'infodemic' refers to vast amounts of miscommunication that are just as much a threat as COVID-19 itself and has undermined the global response and measures in combating COVID-19 (Cinelli *et al.*, 2020; WHO, 2020d).

Although Twitter was used in the past to disseminate information regarding other infectious diseases, it has been proven that this platform was not trustworthy and has been responsible for misinformation (Cinelli *et al.*, 2020). During the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003, it was revealed that trustworthy sources of information at that time were considered to be primarily television and newspapers (Brug *et al.*, 2004: 1486). However, with the rise in the use of social media to share information, it was found that during the Ebola outbreak in 2014, 58.9% of tweets around Ebola contained medical misinformation (Oyeyemi, Gabarron and Wynn, 2014). The fact that social media communication can be a source of misinformation may have negative outcomes on the success of health communication campaigns on social media.

In the African context, many misconceptions were shared on social media during the COVID-19 period, due to misinformation such as the assumption that Africans were less susceptible to the COVID-19 virus due to their strong immune systems and that the warmer temperatures in Africa resulted in the virus being unable to survive (Ahinkorah *et al.*, 2020).

Various conspiracy theories were shared widely on social media during the COVID-19 pandemic, including those suggesting that the virus was man-made and a number of potential villains have been accused, including China, Russia, Bill Gates and the pharmaceutical industry (Enders *et al.*, 2020). Other popular fake news that circulated included that the coronavirus was a way to force a dangerous and unnecessary vaccine, that the vaccine was a way to install tracking devices, ultra-violet (UV) light can prevent or cure COVID-19, and the virus is a cover-up of the dangers of 5G cellphone technology (Enders *et al.*, 2020). Social media platforms have begun to recognise misinformation and have put in measures to prohibit it (Krishnan *et al.*, 2021: 2). These include labels or warnings on potential misinformation content, decreasing visibility and spread, content removal, advertising restrictions and even user

account suspension or banning (Krishnan *et al.*, 2021: 21-22). The most concerning factor with all the misinformation and fake news shared during the pandemic was that it made it very difficult for the voices of healthcare professionals and other valuable new sources to be heard (Ahinkorah *et al.*, 2020).

Message relevance

An important consideration of the COVID-19 communication is the relevance of global social media campaigns for local contexts. It is understandable that the WHO had to think quickly and had limited time to implement initiatives. The COVID-19 occurrence was a pandemic, and there was no time to research as would usually be required in participatory measures such as the culture-centred approach (Govender, 2021).

One of the key concerns for the relevance of health messaging is whether the proposed solutions are applicable in the context in which the message receivers live. Handwashing is the most common measure to combat the spread of COVID-19, and regular handwashing has been encouraged in health messages globally during the COVID-19 pandemic and in South Africa (Kollamparambil and Oyenubi, 2021: 5). Although handwashing has always been encouraged to reduce the spread of infectious diseases, it was brought into the spotlight again as the COVID-19 pandemic highlighted the importance of basic hygiene practices. However, the containment measures proposed during the pandemic highlighted the discrepancies between developed and developing countries regarding access to basic amenities such as running water (Schmidt, 2020; Zvobgo and Do, 2020; Brauer *et al.*, 2020; Stoler, Jepson and Wutich, 2020).

Water security refers to a country's availability of water resources that directly impacts its sustainability and economic development (Steyn *et al.*, 2019). Water security not only refers to the access to water, but also to the government's responsibility to provide protection from any water-related incidents, such as water-related diseases or water pollution (Steyn *et al.*, 2019). Water insecurity is plainly the absence of water or occurrence of a draught (Steyn *et al.*, 2019).

Unfortunately, accessibility to running water is not as prominent in rural, informal areas within developing countries (Schmidt, 2020). In a recent handwashing study, it was discovered that handwashing facilities, including water and soap, are easily accessible in higher-income countries; however, accessibility is not the same in lower-income countries (Brauer *et al.*, 2020: 1). Numerous studies have highlighted water insecurity challenges during the COVID-19 pandemic (Brauer *et al.*, 2020; Zvobgo and Do, 2020; Stoler, Jepson and Wutich, 2020; Sayeed *et al.*, 2020; Schmidt, 2020). Although the WHO developed the #SafeHands Handwashing challenge with good intentions of reducing the spread of COVID-19, it added extra pressure on water infrastructures. Some developing countries were unable to accommodate the increased demand in water due to the lack of water infrastructure development for decades prior to COVID-19 (Zvobgo and Do, 2020: 3).

In a study in Zimbabwe, Luckson Zvobgo and Pierre Do (2020) discovered an increased water demand to comply with the handwashing requirements recommended by the WHO and the United Nations International Children's Emergency Fund (UNICEF) during the COVID-19 pandemic. The study determined that by following the recommendations, water consumption would increase by an average of 4.5 litres per person per day and a 9% overall increase in domestic water consumption (Zvobgo and Do, 2020: 5). Other estimates in other countries are much higher, with some indicating an increase in water demand of the average person by 20 to 25% during the COVID-19 pandemic (Sayeed *et al.*, 2020), resulting in water shortages. The harsh reality experienced in developing countries with regard to water accessibility may have a negative impact on the success of handwashing campaigns in water-scarce regions.

The WHO #SafeHands campaign

The WHO runs an annual communication campaign to encourage improved hand hygiene practices (Saito, Kilpatrick and Pittet, 2018). This campaign promotes handwashing and takes place in celebration of World Hand Hygiene Day, acknowledged on 5th May (WHO, 2022b). The campaign is called *SAVE LIVES: Clean Your Hands*, and every year focuses on a theme and

encourages global advocacy. The WHO asks for support from various stakeholders, such as healthcare professionals, patients, politicians etc., to back the campaign and communicate the importance of handwashing (Martischang *et al.*, 2018: 3).

One of the communication campaigns aimed at combatting COVID-19 launched by the WHO to encourage correct hand hygiene practice was the #SafeHands Handwashing challenge. The aim of the handwashing challenge was to allow the public to post videos of themselves washing their hands to their social media accounts, following the guidelines provided by the WHO and is referred to as the WHO #SafeHands Handwashing challenge (WHO, 2020c).

Internet challenges, such as the WHO #SafeHands Handwashing challenge, are a cultural phenomenon whereby internet users record themselves performing a challenge. They then circulate the video footage on their social media pages and dare others to also take on the challenge (Quinn, 2018; Khasawneh *et al.*, 2021). These challenges often involve risk-taking, and vary in the levels of self-harm behaviour inflicted by the participants (Khasawneh *et al.*, 2021, Quinn, 2018). However, some challenges can have a positive impact on viewers and participants, such as the WHO #SafeHands Handwashing challenge, whereby the aim was to raise awareness on the correct handwashing techniques which can be learned and applied. Internet challenges have provided a means for social media to become participatory in nature and have been described as the latest form of participatory digital culture (Burgess, Miller and Moore, 2018: 1036). Internet challenges became increasingly popular during COVID-19 lockdown and the WHO #SafeHands Handwashing challenge was no exception. The original WHO #SafeHands Handwashing video was released by the WHO and initially shared on 13th March 2020 on the WHO Social Media platforms and has been shared on Facebook, Instagram, Twitter, LinkedIn, TikTok and Snapchat (WHO, 2020c). Although the challenge was released on many platforms, to narrow the study, the focus is on the Twitter social media platform.

Some research has previously been done into the WHO #SafeHands Handwashing campaign. A study in India discovered that the campaign provided a creative option to education through the delivery of a social media challenge (Sangra, 2021: 7). This study focused on the

population with access to social media platforms, which, in 2021, was only 54.58% of the population in India (Statista, 2022). The study reported that 31% of its respondents participated in the WHO #SafeHands campaign and although the majority did not participate, they were aware of it and were influenced to wash their hands more regularly (Sangra, 2021: 7). The inclusion of celebrities within the challenge encouraged participation and made users feel part of a more significant cause (Sangra, 2021: 8-9).

In a similar study on the WHO #SafeHands campaign in Indonesia, it was also received positively. The WHO was supported by the local government (Indonesian Ministry of Health) in that imitative campaigns, regulations, and policies were rolled out to encourage the adoption of the WHO regulations (Djojoputro and Wempi, 2021: 252). The data collection for this study comprised mainly of interviews with officials such as WHO Indonesian representatives, Indonesian Ministry of Health representatives, doctors, and volunteers, with only a group of six handwashing participants (Djojoputro and Wempi, 2021: 249). Officials and content creators may have been biased in their opinions regarding the success of the campaign, and anyone in a health field would have been more likely to be aware of such campaign within their workplace. In this study I will be determining the reception of the WHO #Safehands Handwashing campaign by UKZN students, who may or may not have even been aware of the campaign. This study will therefore focus on the actual reception of the campaign by unbiased participants and not the intended reception as anticipated by officials.

As previously outlined, the advantages of social media platforms are that they have a global reach and the ability to spread a message quickly and conveniently (Jackson, Bailey and Welles, 2020; Petersen and Gerken, 2021). They have also empowered users who now have the ability to be both receivers and senders of messages, by having the ability to contribute in developing and improving of online content (Bruns and Schmidt, 2011: 3). These developments have brought about new concepts such as 'prosumer' (users' ability to be a producer and consumer) and 'produsage' (users' ability to produce and utilise content) to describe these new phenomena (Bruns, 2009; Bruns and Schmidt, 2011). However, there are also limitations of social media platforms including the different meaning structures across different regions of the world (Andersen and Skouvig, 2017). Meaning structures refer to the

understanding of the meaning of things based on the individual experiences, cultural and societal beliefs of an individual (Andersen and Skouvig. 2017). This can result in messages that may not be relayed positively and as anticipated. There is also the notion of misinformation which affects the trustworthiness of social media platforms (Cinelli *et al.*, 2020).

The literature reviewed reveals that although global health threats do occur, a global communication response may not always be effective. Although citizens around the world are encountering the same health risk, due to cultural differences (affecting the understanding of messages) and different living circumstances (affecting resources available to mitigate risks) the interpretations of health communication campaigns are not equal. The literature reviewed also emphasises the power of audiences in creating and contributing to messages with the introduction of participatory media platforms, such as social media platforms.

This study aims to understand how young people in South Africa, particularly those living in areas without access to running water, received the global handwashing campaign and how they interpreted the messages relayed in the WHO #SafeHands Handwashing campaign and particularly with the #SafeHands Handwashing challenge.

Through this study, I will attempt to examine the notion that content needs to be repositioned when entering different communities. Media scholars Henry Jenkins, Sam Ford and Joshua Green state that when a message is produced to fit a universal model, it then “imperfectly fits the needs of any given audience” (2013: 27). They go on to mention that “audience members have to retrofit it to better serve their interests” (Jenkins, Ford and Green, 2013: 27). This implies that the global message would need to be adapted to fit the niche community or local context.

Research on the effects and reception of global health campaigns is limited, and scarce for countries within Africa. As South Africa, where my research is focused, often deals with issues of water insecurity and water accessibility; it is necessary to have a better understanding how South Africans received the #SafeHands Handwashing campaign and if the campaign was

effective despite these issues. Having a better understanding of the campaign's reception, can assist with the development of future campaigns, to ensure they are relevant.

Chapter 3: Theoretical Framework

This chapter explores the theoretical framework pertinent to making sense of my study and analysing the reception of the WHO #SafeHands Handwashing challenge. The principal theories that have informed my study include the active-audience theory, with a focus on Stuart Hall's encoding/decoding model (1980), and participatory culture (Jenkins, 2008), which reviews the interactive involvement of participants in the sharing of messages or creation of their own variations of messages. Henry Jenkins' participatory culture theory can be viewed as a development of Hall's encoding/decoding theory, and this chapter explores this progression from Hall (1973; 1980), through theorists David Morley (1992) and John Fiske (1987; 1989; 2010), to Jenkins (2008). This progression is imperative to the study as it reveals the progression and adaptations in thinking and theories as technology has changed over time.

Traditionally, health communication campaigns were developed via mass media or top-down approaches, where audiences were passive receivers of health communication messages (Govender, 2010: 206). Health authorities have since recognised the importance of cultural context and have begun to incorporate participatory approaches, with some HIV/AIDS campaigns taking participatory communication processes into account since 1996 (Winskell and Egner, 2009: 455; Govender, 2010: 206). As my study explores individuals' reception of the WHO #SafeHands Handwashing campaign, the active-audience theory is therefore relevant. This theory acknowledges that the intended meaning is not always how the meaning is received by audiences, and the encoding/decoding model posits that audiences read messages in different ways (Hall, 1980). As the WHO #SafeHands Handwashing campaign invites the audience to actively participate on social media platforms, the theory of participatory culture (Jenkins, 2008) is also relevant to the study.

Active-Audience theory

Communication has been studied by two leading schools that define communication in different ways. The first school refers to communication as the “transmission of messages”, which directly relates to how senders decode messages and receivers encode these messages (Fiske, 2010: 2). The second school refers to communication as the “production and exchange of meanings” and relates to how audiences interact with messages for meanings to be produced (Fiske, 2010: 2).

Audiences have been studied vastly over time. With the introduction of mass media, audiences were seen as passive and accepting of messages. Many theorists believed that audiences had a stimulus-response in that they would receive messages from the mass media and then act on these messages (Balnaves, Donald and Shoesmith, 2009: 58) and that they were easily manipulated by the mass media (Livingstone, 2000). These ideas informed theories such as the hypodermic needle theory (Lasswell, 1927) and cultivation theory developed by George Gerbner in the 1960s and 1970s (Mosharafa, 2015).

The hypodermic needle theory, developed by Harold Lasswell in 1927, suggests that the mass media injects thoughts into the audience, affecting their beliefs on a particular matter (Lasswell, 1927). It indicates that audiences are passive and accepting of the messages relayed to them (Robinson, 2019: 31). The cultivation theory is similar in that it suggests that audiences are passive; however, it indicates that the mass media (i.e. television) has the ability to shape the viewers’ values, beliefs, attitudes and perception over time (Shrum, 2017; Mosharafa, 2015). This theory suggests that audiences do not necessarily accept media messages instantly. Still, over time their beliefs are influenced by repeated media messages, leading to them accepting the intended messages (Shrum, 2017; Mosharafa, 2015).

New theories, such as the active audience theory, encoding/decoding (Hall, 1980) and participatory culture (Jenkins, 2008), emerged over time, suggesting that audiences were not actually passive receivers of messages but were active in analysing the messages and would then either accept or reject these messages. According to Sonja Livingstone (2000: 177),

active engagement with media comprises of audiences firstly interpreting the messages received as meaningful, audiences then diverging further within their interpretations, producing a number of meanings from the message, and thirdly the interpretation of the message is influenced by the concerns, experiences, and knowledge of the audience.

I have applied the active audience theory by determining how the research participants interpreted and were able to relate to the WHO #SafeHands Handwashing campaign. To do this, I utilised Stuart Hall's encoding/decoding model to determine which of the three potential positions/readings within this model was most applicable to the participants within the study.

Encoding / Decoding

The encoding/decoding model was established by Stuart Hall as a critique to mass communication research (Proctor, 2004: 48) and to relay his theory that audiences are not just passive receivers of messages that have been developed by the status quo of society (Kropp, 2015: 12). Hall argues that audiences are active users of media messages and interpret media messages in different ways (Kropp, 2015: 12).

Hall believed that the communication process was much more complex than linear models of communication outlined, and that audiences did not necessarily interpret messages as intended by producers (Hall, 1973: 3; Kropp, 2015: 12-13). He highlighted that there was just as much activity and thought in the decoding process as there is in the encoding process and that previous models and theories did not take the audience's interpretation of messages into account (Hall, 1973; Kropp, 2015).

In the encoding/decoding model (see Figure 1 below) encoding refers to the process where the producer (encoder) creates the message, and decoding refers to the process where the receiver (decoder) interprets the message within the communicative exchange (Hall, 1973: 4). The differences between these processes is that messages from producers are encoded based on assumptions of shared understandings, while the interpreted messages from

receivers are decoded based on their own norms (Kropp, 2015: 13). According to the model, the meaning structures of both producers and receivers are influenced by the three factors of: theoretical frameworks of knowledge; relations of production; and technical infrastructures. These all contribute to the unique meaning structures and affect the way in which the message is interpreted and understood. In a communication context, structures can be defined as comprising “beliefs and assumptions, established practices, skills and capabilities, networks of relationships, and awareness and sensibilities” (Senge, 2006: 286). Meaning structures are therefore developed from a receiver's beliefs based on their experiences that allow them to interpret a message in their own unique way.

In the encoding/decoding communication model, producers would encode messages, considering their own meaning structures and taking into consideration the intended target audiences’ meaning structures, thereby formulating a message. It is understood that producers would encode messages based on the assumption that the audience would share the understanding of the message (Kropp, 2015: 13). This message is represented as “*programme as ‘meaningful’ discourse*” within the model. Receivers then receive the programme/message, which is then decoded by them utilising their own meaning structures to interpret and understand the message (Hall, 1980: 130).

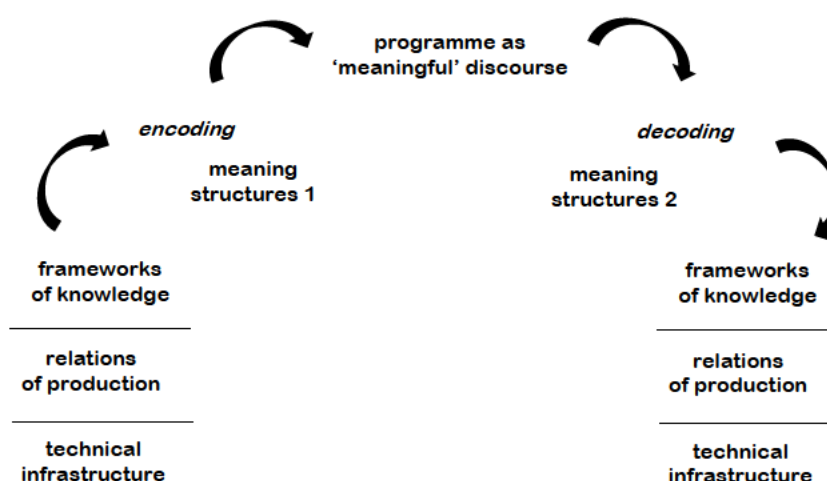


Figure 1: Encoding/decoding model (Hall, 1973; 1980)

It is important for encoders (producers) to be aware of their target market to ensure the messages are encoded according to the meaning structures of decoders (receivers). Hall also mentions that “if no ‘meaning’ is taken, there can be no ‘consumption’. If the meaning is not articulated in practice, it has no effect” (1980: 128). This highlights the importance of ensuring the messages are effectively encoded and that receivers are able to decode meaning from the messages, otherwise they will be ineffective and redundant.

The encoding/decoding model suggests that the communicative exchanges between the media (encoder) and audience (decoder) are dependent on the alignment and symmetry between both encoder and decoder (Hall, 1980: 131; Livingstone, 2000: 178). Hall theorises that meanings derived on a denotative level are a result of signs that are often fixed by limited codes, whereby meanings on a connotative level are signs that are more open and influenced by an individual viewer’s culture, values etc. (Hall, 1980: 134). When meaning is derived at the connotative level, this results in a number of different positions taken of the message by the individual audience members.

Hall also elaborated on the various reception positions that receivers may have. There are three positions detailed by Hall describing the possible readings of decoded messages. These include the dominant-hegemonic position, the negotiated-code or position and the oppositional-code or position (Hall, 1980: 136-138; Davis, 2004: 60).

The *dominant-hegemonic position* is whereby the receiver understands, accepts and shares the preferred reading. The preferred reading refers to the instance whereby the decoded message relays the same meaning as intended with the encoded message (Shaw, 2017: 593). The receiver can also go on to reproduce this preferred reading (Hall, 1980: 136; Balnaves, Donald and Shoesmith, 2009: 92). The audience therefore decodes the message as intended or as it was encoded (Shaw, 2017: 593).

The second possible position is the *negotiated position* and is taken by the audience whereby the receiver understands and partially accepts the encoded message. This is a combination of the preferred and oppositional positions (Shaw, 2017: 593). The receiver may resist or modify

the reception of the message in a way that takes their personal or cultural context into account, resulting in a reading that diverges somewhat from the encoder's intended or preferred reading (Hall, 1980: 137; Balnaves, Donald and Shoesmith, 2009: 92).

The final position defined by Hall is the *oppositional position* and refers to the position where the receiver understands the preferred reading but does not necessarily agree with or share the views. This position is where the receiver decodes the message opposite to the intended encoded message (Shaw, 2017: 593). In this instance, the receiver may acknowledge the preferred reading and deal with it in alternative ways (Hall, 1980: 138; Balnaves, Donald and Shoesmith, 2009: 92).

An important consideration in Hall's model is the meaning structures affecting the different interpretations of messages, and how these may differ between that of encoders versus that of decoders. If meaning structures are misaligned, then decoders will not take any meaning from the messages. With globalisation and the global reach of social media, it becomes extremely difficult for encoders to align meaning structures with decoders worldwide due to the variances of meaning structures in different cultural contexts. Andersen and Skouvig (2017) recognise this issue by stating that globalised meaning structures may have aided in shaping global discourses at the expense of local meaning.

Numerous scholars have critiqued and responded to Halls' encoding/decoding model and theories. At the time of developing the encoding/decoding model, it was merely hypothetical and did not have research to back up its validity (Kropp, 2015: 14). This was also highlighted by John Fiske (1987: 272) and David Morley (1992) who both argue that due to the model being simplified and lacking in audience research, this severely limited its potential. Since then, many scholars have tested this theory, and critiqued, developed and proven its legitimacy over time.

In a study by Hall's former student, David Morley, it was discovered that the model was incomplete, as it did not consider all variables in the decoding process. He stated that issues of recognition, comprehension, interpretation and response required further development

within the encoding/decoding model (Morley, 1992: 19). By this he is referring to the unique circumstances of the audience that affect the way they interpret messages. If these factors were considered and accounted for in the encoding/decoding model, this would have accounted for the additional depth that has been critiqued.

Factors such as the receiver's ability and/or motivation to participate in the decoding of a message also need to be considered (Kropp, 2015: 15). In Kropp's review of the model and various studies utilising the model, he noted a number of other critiques existed surrounding the "methodologies, conceptualizations of the encoders, the reliance on cultural stereotypes and the lack of inclusion of other social factors beyond class" (Kropp, 2015: 15) which have not been considered with the encoding/decoding model.

According to Fiske, within the encoding/decoding model, the reading of a message and the meanings from codes that audiences generate directly result from their social status (Pillia, 1992; Fiske, 1987). Fiske believed that audiences' social status directly influenced their reception of a message.

Another critique of the encoding/decoding model was the exclusion of the possibility of multiple readings of a message by a viewer (Kropp, 2015: 16). In a study of the model by Susan Thomas (2010), it was discovered that audiences were shifting between the three reception positions and were not set on one position during their consumption of the messages (Thomas, 2010). This was not taken into consideration in the encoding/decoding model and something that has been highlighted for further development.

In another critique of the encoding/decoding model, Justin Wren-Lewis (1983) discussed the mis-representation of the processes of encoding and decoding being symmetrical. He believed there were vast differences in these processes with encoding being coordinated and intentional, and decoding being conventional and natural (Wren-Lewis, 1983).

The issue of different cultures was discussed when utilising the encoding/decoding across countries in a study of the American television show *Dallas* (Kropp, 2015: 15). In the study by

Elihu Katz and Tamar Liebes (1990), it was revealed that the cultural differences between the different ethnic groups sampled in their study were vast. The reception of an international message by various countries resulted in a number of different meanings being derived (1990: 60).

Despite these criticisms, Morley (1992) argues that although Hall's model still required development and depth, it was the best alternative to the passive audience theory to understand media effects at the time, as Hall's theory accounted for meanings being open to various interpretations (1992: 19). Morley highlights that preferred meanings can be promoted by encoders, however, interpretations of meanings are dependent on the context and association with each receiver (Morley, 1992: 20).

Having been described as an extension of the encoding/decoding model, the circuit of culture model was developed in collaboration with Stuart Hall in 1997 (Du Gay *et al.*, 1997). The circuit of culture acknowledges five moments in which meaning is created, which includes representation, identify, production, consumption and regulation (Tomblason and Wolf, 2017: 15).

One critique with the circuit of culture is that it does not take into account the impact on international communication and meaning of both participatory culture and digital communication (Tomblason and Wolf, 2017: 15).

Further to the active audience theory, whereby the audience is no longer considered passive receivers of message, but are able to interpret messages based on their own meaning structures, media channels have progressed with the introduction of new technology and social media, audiences are able to participate in messages and even be creators of messages; and this necessitates new understandings of how audiences simultaneously participate in the making and receiving of messages, which is explored in the theory of participatory culture.

Participatory Culture

The term “participatory culture” was originally coined by Henry Jenkins (1992) in relation to the cultural production and social interactions within fan communities, whereby fans and other consumers have the ability to interact, comment, share and recreate messages (Jenkins, 2008; Jenkins, Ford and Green, 2013). Participatory culture is defined as a culture “in which fans and other consumers are invited to actively participate in the creation and circulation of new content” (Jenkins, 2008: 331). It is also defined as “the involvement of users, audiences, consumers and fans in the creation of culture and content.” (Fuchs 2014: 52). This is evident when analysing social media communication channels, as users are able to create content, share opinions and comment on content that is produced. Unlike mass communication approaches where there is one sender and many receivers (Fuchs, 2017: 65), participatory culture enables audiences to produce content themselves and does not restrict users to only receiving. Nowadays, with the presence of social media, audiences have the ability to easily contribute and interact with mediums.

Traditionally producers would produce a message that would be consumed by consumers. With the introduction of technology, the internet and social media, a new type of consumer has emerged – the prosumer. Prosumers not only have the ability to consume a message but now also have the ability to share, comment and interact with other prosumers (Jenkins *et al.*, 2009). The term ‘prosumer’ originally came about in 1980 and was coined by the American writer Alvin Toffler and although the early definition was before the emergence of social media and was based on mass media at the time, it refers to the critical and active consumer (Bruns, 2009).

The participatory model of culture has developed as a result of the shift from the distribution of messages by mass media to the circulation of messages through online and social media platforms and other communication forms, which promote engagement and participation in the creation of content (Jenkins, Ford and Green, 2013: 2). This shift has resulted in the audience having the ability to share, shape or reframe messages with larger communities and

networks well beyond the restrictions of their geographic locations (Jenkins, Ford and Green, 2013: 2).

In the context of participatory culture in the technological age, Morley highlights that the unique circumstances of an audience, such as access and acceptance of technology will affect the reception of the message (Christensen and Morley, 2014: 209). He states that “technology needs to be set in the right kind of context, in order to deliver any significant change of any kind” (Christensen and Morley, 2014: 209). This is an important factor to consider as audiences that do not have access or choose not to access technology cannot be targeted.

Mass media producers and audiences no longer have separate roles but now interact with each other as participants in the communication process, in the compilation and relay of messages (Jenkins, 2008: 3). Henry Jenkins, however, notes that there may not be equality among the participants. Mass media corporations and some individuals may have more power than other individuals in participating in the online and social media platforms (Jenkins, 2008: 3). By this he may be referring to the corporations that have dedicated resources to content creation and in terms of individuals, subject experts in a field and celebrities tend to have more power than the average consumer.

The shift to a participatory approach to communication has been argued as beneficial in being more inclusive and allowing grassroots communities to participate in the communication exchange and this has vast potentials that are worth fighting (Jenkins, 2008: 259). Jenkins also warns producers that do not accept the changes that come with participatory culture that they suffer both with their reputations and profitability: “Producers who fail to make their peace with this new participatory culture will face declining goodwill and diminished revenues” (Jenkins, 2008: 24). Similarly, in reference to Grant McCracken, Jenkins states that: “in the future, media producers must accommodate consumer demands to participate or they will run the risk of losing the most active and passionate consumers” (Jenkins, 2008: 137-138). With this it is clear that producers must adapt to remain relevant and successful. They cannot continue with the mass media approaches and ignore participatory measures.

A major shift with the introduction of the participatory model of communication is the shift from distributing to circulating a message (Jenkins, Ford and Green, 2013: 2), as circulating a message is a much more diverse and inclusive process. With the improved technology and use of social media platforms, there has become no limits in the adaptability, whereby the public are freely able to adapt and share the message, and the reach, whereby the circulation of the message is not restricted by geographic boundaries (Jenkins, Ford and Green, 2013: 2). As the WHO launched a social media campaign, allowing audiences to contribute by sharing and producing their own messages, the campaign can be seen as participatory as they aimed to create engagement.

One distinction that needs to be made, is that participation as it relates to communication via social media is not the same as access or interaction (Carpentier, 2012: 172). Access refers to the ability of users to have a presence with the organisation or message and therefore having an opportunity to provide feedback (2012: 173). Interaction with the message refers to an interaction on the basis of “shared interests, purposes and values, or common knowledge” (2012: 174). Participation is defined as the user having more power and being consciously involved in decision-making before interacting with the message (2012: 174). With these definitions in mind, participation can be better understood in a social media context in two different ways. The first is when social media users access a post or message when they see it, or scroll past the campaign when browsing on social media; and the second is when social media users interact with a post or message when they like or react to the post. Participation in the communication event, however, requires more engagement, and the audience should be engaged in the post, understand the message and consciously develop and express their opinion of the post or message.

The production/reproduction of content should not be the only consideration to determine if content is participatory. With the introduction of online media, users online have been divided into active and passive users (Jenkins, Ford and Green, 2013: 154). The online participation of audiences or users within the participatory culture context can therefore be described as either ‘active’, whereby the audience are involved in media production (blogging or uploading content, such as videos), or ‘inactive’, whereby they are not actively producing

content (merely click and receive content) (Jenkins, Ford and Green, 2013: 156-157). Henry Jenkins, Sam Ford and Joshua Green argue that participation should not be restricted to production, but evaluating, appraising, critiquing, and recirculation of material is also considered participatory (2013: 154). Although some audiences may prefer to be passive users of media, this does not exclude them from having the ability to be participatory, as the fact is that they have the potential to contribute more meaningfully, becoming active users (Jenkins, Ford and Green, 2013: 155). Audiences are also not necessarily permanently active or passive users, these are interchangeable, as they may be active in one instance and passive in another (Jenkins, Ford and Green, 2013: 155).

Another consideration that needs to be made with regard to participatory culture within different audiences is that “spreadability assumes a world where mass content is continually repositioned as it enters different niche communities” (Jenkins, Ford and Green, 2013: 27). With this assumption it is implied that within a participatory culture, as a message is spread, it is adapted to fit within niche communities. This is an interesting concept when critiquing the WHO #SafeHands Handwashing campaign as had the message been adapted to suit the market, would it have then been effective?

Participatory culture can be defined by five key characteristics, discussed in detail below regarding how they apply to social media. These five characteristics include relatively low barriers to artistic expression and civic engagement; strong support for creating and sharing what you create with others; some kind of informal mentorship whereby what is known by the most experienced gets passed along to newbies and novices; members feel that their contributions matter; and members feel some degree of social connection with each other (Jenkins *et al.*, 2007: 24; 2009). I will look at each of these characteristics in further detail and link them to the use of social media platforms to proof that they do allow for a participatory culture.

Relatively low barriers to artistic expression and civic engagement

Social media platforms have been characterised as spreadable media due to their ability to amplify the visibility of messages resulting in the ease at which messages can be shared (Jenkins, Ford and Green, 2013: 6). Social media users also feel less restricted in conversations on social media platforms versus face-to-face interactions, and online platforms allow users to be more expressive (Webb *et al.*, 2011: 4).

Social media platforms allow for individuals to express their opinions and share their likes and dislikes. “The participatory logic of spreadability leads to audiences using content in unanticipated ways as they retrofit material to the contours of their particular community” (Jenkins, Ford and Green, 2013: 6).

With the introduction of user-friendly web publishing systems between 1999 and 2004, almost all remaining barriers to entry for potential participants were eliminated resulting in an increase of participants (Delwiche and Jacobs Handerson, 2013: 5). Social media platforms are also generally freely accessible to anyone and therefore have low barriers of accessibility to participate.

Strong support for creating and sharing what you create with others

Social media platforms allow users to express their views and personalities in a public forum (Goodman, 2007). Social media users are able to post questions to engage with other users and make statements to attract comments and engagement between users (Ferguson, 2011: 50). Overall, social media platforms have been designed to encourage and facilitate sharing of content (Chau, 2010: 68). For example, on YouTube, instructional videos are available for users to become more aware of the various ways to be more engaged on the platform (Chau, 2010: 68). Users are encouraged to share and create content on social media platforms with the user-friendly, integrated and specific layout design. For example, users are able to post content and include an attachment such as an image or video with ease, as the platforms are

integrated with devices used to access them. It can therefore be argued that there is a strong support for creating and sharing with others on social media.

Some kind of informal mentorship whereby what is known by the most experienced gets passed along to newbies and novices

Within online platforms, newcomers become familiar with the tasks, principals, and vocabulary of the community through legitimate peripheral participation (LPP) (Bryant, Forte and Bruckman, 2005: 2). With LPP, newcomers begin by participating in simple, low risks tasks to become acquainted with the community. Gradually their participation increases, and their role becomes more essential to the functioning of the online community (Bryant, Forte and Bruckman, 2005: 2).

As mentioned previously, YouTube also provides access to instructional videos educating users on how to engage on the platform. There are also many informal self-help videos created by other users and unregulated by YouTube, which users can access to educate themselves (Chau, 2010: 70-71). It can therefore be acknowledged that there is support for new users who are learning how to utilise social media platforms.

Members feel that their contributions matter

It is mentioned by Evans, Frith and Saker (2022) that spreadable media empowers consumers and makes them feel part of the success of the brand. On social media platforms, any participation, from liking a post to creating a post, adds value to the online community. With reference to YouTube, users liking and commenting on a video will encourage the creator to continue to create further videos (Chau, 2010: 71).

Studies have revealed that over half of online users are “inactive” in that they watch or listen to media produced by others but do not actually create their own content (Jenkins, Ford and Green, 2013: 154). However, these users may only spectate but the process of doing so is different when they have the ability to contribute and participate and are not restricted to

only receiving and interpreting messages as they are with mass media platforms (Jenkins, Ford and Green, 2013: 155). Social Media users will feel their contributions matter when they are receiving feedback in the forms of post likes, comments and shares.

Members feel some degree of social connection with each other

Participatory culture allows participants to interact and collaborate with each other by combining their skills and intellect as a new source of media power (Jenkins, 2008: 4). Social media platforms, such as Twitter, have aided in the expansion of the global, instantaneous, and the interconnected world (Murthy, 2018: 194). Members of social media platforms have increased the social connectedness of users, whereas mass media platforms, such as television, result in a decline in connectedness (Murthy, 2018: 32).

Social media has advanced the notion of participatory culture through its ability to allow users to actively contribute by sharing, commenting, liking, and recreating messages communicated. This has caused a shift in the role of receivers, particularly social media users, as they now have the ability to provide feedback on messages and create their own messages. They now take on the roles of both sender and receiver.

Conclusion

The active audience theory is beneficial to my study as it argues that participants may have received the WHO #SafeHands Handwashing campaign differently, depending on their personal context and understanding. Hall's three possible readings highlight the fact that audiences are able to interpret messages in different ways. Within my study, I utilised this to determine the readings that UKZN students within KwaZulu-Natal, South Africa, have regarding the messages in the WHO #SafeHands Handwashing campaign. I have also explored if factors such as cultural proximity; having a preference to media within one's own cultural (Ksiazek and Webster, 2008: 485), and geographic location; rural versus urban experiences or first world versus third world experiences, affected the decoding of these messages.

The theory of participatory culture is relevant and evident in this study as social media has been utilised as the medium to relay the messages in the WHO #SafeHands Handwashing campaign. It has been beneficial in understanding the reception of and participation in the WHO #SafeHands Handwashing campaign as it has highlighted that participation does not necessarily have to equate to recreating the video as per the WHO campaign goals, but that participation in the forms of sharing, liking, and commenting are also effective and should also be considered as ways of participating within the campaign.

Chapter 4: Research Methodology

This chapter provides an account of the methodology applied in this research, to gain a better understanding of the reception of the WHO #Safehands Handwashing campaign for participants within the study.

The study takes the qualitative research approach, with an interpretivist research paradigm and the use of a reception analysis in the research design. This chapter reviews the elements involved in data collection, including sampling strategies and the method of focus groups for data collection. It describes the methods of analysis used to interpret the data, including the six-phase reflexive thematic analysis process. It also outlines the ethical considerations taken into account and explains limitations to the research.

Research approach

The research approach used within this study is a qualitative approach. Using a qualitative approach allows researchers to “study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them” (Denzin and Lincoln, 2018: 45). This study has utilised a qualitative research approach as it aimed to understand individual experiences, opinions and reasonings. This type of personal and individual feedback cannot be obtained through a quantitative research approach.

A qualitative approach allows the researcher to understand how people experience or react to specific aspects of their lives (Teherani *et al.*, 2015: 669). In my study, I aimed to understand how participants experienced and made sense of the specific WHO #SafeHands Handwashing campaign and in order to understand this on a personal level, a qualitative approach is preferable. With this approach, I, as the researcher, am the primary data collection instrument that can direct participants, to determine the meaning of specific events to the participants (Teherani *et al.*, 2015: 669). As the researcher, I directed the group of participants to explore and engage in discussions around specific areas pertinent to the study. These discussions were guided through the development and use of the focus group schedule

(Appendix A) which included guiding questions developed prior to the focus group discussions.

Qualitative research is usually best in circumstances when exploration of a topic is required as the target group or population cannot easily be measured (Cresswell and Poth, 2018: 45). A qualitative approach has therefore been used to understand how social media users interpret the WHO #SafeHands Handwashing campaign on an individual level. The population for my study included university students from the University of KwaZulu-Natal who may have experienced COVID-19 related lockdowns in both urban and rural areas.

Research paradigm

The research applies an interpretive paradigm which aims to study the “internal reality of subjective experience” (Terre Blanche, Durrheim and Painter, 2004: 6) and seeks not only to explore the experiences of the subjects but also “their perspectives of these experiences” (Gray, 2014: 37). This paradigm is also subjective in that it takes individuals’ worldviews, concepts and backgrounds into account, and that people can attribute meaning to different social phenomena in how they interact with other people and society (Rehman and Alharthi, 2016: 55). The goal of interpretive research is to try to understand the subjective interpretations of people and not the universal interpretations of social phenomena (Rehman and Alharthi, 2016: 55).

The WHO #SafeHands Handwashing campaign had a global goal of raising awareness of proper hand hygiene (WHO, 2020c). However, as my research aims to explore the subjective experiences and behaviour changes of social media users within South Africa, a developing country, of the #SafeHands challenge, the interpretive paradigm is most appropriate.

Research design

I used a reception analysis to determine the effectiveness of the global WHO #SafeHands campaign at a local level. I targeted groups of local South African UKZN students to assess

how they received the messages relayed within the WHO #SafeHands campaign. Using the three possible readings of decoded messages, I determined which of the three readings was adopted by the target group. These three readings included the dominant-hegemonic, negotiated or oppositional positions (Hall, 1980: 136-138). In addition to determining how the target group received the intended messages, I aimed to understand the impact of the messages on behavioural change and how they felt the messages related to them. Audience members who were previously aware of the WHO #SafeHands campaign were able to reflect on their behavioural patterns, and those who were not aware of the campaign were able to reflect on the potential impact the campaign could have on their behavioural patterns.

Through semi-structured questions, I aimed to determine the social media communication attributes that the target groups associate as both positive and negative. Understanding these attributes can therefore assist with future health-related social media campaigns.

Data collection

Data for this research was conducted through three focus group discussions conducted with UKZN students. Focus groups are “group discussions organised to explore a specific set of ideas” (Kitzinger, 1994: 103). Focus groups are suitable in research when the aim is “to elicit people’s understandings, opinions and views, or to explore how these are advanced, elaborated, and negotiated in a social context” (Wilkinson, 1998: 187). As this research aimed to explore the global WHO #SafeHands Handwashing campaign and to understand its interpretation at local levels, in a particular social context, focus groups would provide valuable feedback.

Balnaves, Donald and Shoesmith also argue that “group responses can produce different kinds of accounts compared with individual accounts” (2009: 285). A group setting is beneficial as it encourages discussion and debate amongst participants and lets them control the conversation. This is useful for the researcher, as the focus group aims to explore the participants’ understandings and opinions and not necessarily to guide the opinions as to where the researcher is thinking (Wilkinson, 1998: 190). Focus groups allow this to develop

naturally as the conversation between participants progresses and are a preferred technique for investigating attitudes and behaviour (Balnaves, Donald and Shoesmith, 2009: 285).

Data collection took the form of online focus group discussions, as they are a preferred technique for investigating attitudes and behaviour (Balnaves, Donald and Shoesmith, 2009: 285). All three focus groups conducted took place online conducted via the Zoom meeting platform in 2022. Studies on the utilisation of Zoom for qualitative research data collection are positive and reveal that Zoom is a preferred method for discussions due to its ability to maintain rapport, convenience, simplicity, user-friendliness, time- and travel-saving, reduced costs and wider recruitment reach (Archibald *et al.*, 2019: 4; Falter *et al.*, 2022, Gray *et al.*, 2020; Oliffe *et al.*, 2021). Some of the disadvantages of Zoom include difficulty joining the Zoom session, poor call quality or connectivity issues, environmental distractions and limitations within Zoom (Archibald *et al.*, 2019: 5; Falter *et al.*, 2022). Despite the difficulties experienced, the advantages still outweigh these.

The study aimed to explore the attitudes towards the #SafeHands Handwashing campaign and determine the behaviour change from this campaign. Therefore, the structure of the discussion was first to explore the participants' understanding of basic hygiene and familiarity with any COVID-19 campaigns. The WHO #SafeHands Handwashing challenge videos were then screened, and discussion around the campaigns was encouraged to determine how the participants received the campaign and the influence it may have had on their preventative behaviour.

Study sample and recruitment

The target population for the focus groups were registered students at UKZN. A gatekeeper's letter (Appendix C) was requested and awarded by the UKZN Registrar. Notices were then placed on the University's online notice system inviting students to volunteer for the study. The sample procedure entailed that volunteers complete an online pre-selection questionnaire (Appendix D) before being allocated to a focus group.

The pre-selection questionnaire aimed to determine if students qualified to be part of the study, their preferences for taking part in the study and which focus group would be most suitable for them to join. Inclusion criteria included South African citizens who are UKZN students that reside in KwaZulu-Natal and are between the ages of 18 and 34. The exclusion criteria include non-South African volunteers, volunteers who are not students, volunteers that reside outside of KwaZulu-Natal, and volunteers younger than 18 or older than 34.

Questions were included to understand where students spent their COVID-19 lockdown; if they had access to the internet and running water during lockdown; and their preferences (online or face-to-face) and availability to attend a focus group.

To better understand the importance of local context, the data specifically compares the campaign's reception by participants from rural and urban areas. The urban and rural areas are determined by the classification of regions by eThekweni Municipality, which defines a rural area by several factors, including locations outside of city limits and with sparse population densities (eThekweni Municipality, 2019: 93).

A total of three focus group discussions were conducted with between four and five participants within each group. Ideally, focus groups should consider having six to eight participants (Wilkinson, 1998: 182), however with the transition to online sessions, the slightly lower number of participants within each session was preferable and easier to manage. All focus groups comprised of participants that spent lockdown in both rural and urban areas, with the first focus group comprising of 75% rural and 25% urban; the second 50% rural and 50% urban; and the third group 60% urban and 40% rural. All participants had access to water during lockdown, however access to internet was not available to all participants. Most participants only had access to the internet for some of the time in lockdown and one participant did not have access at all.

Facilitating the Focus Group Discussions

As focus groups bring a group of strangers together to discuss the topic at hand, it is beneficial to include an activity or icebreaker to get the group to open up with one another. "The group is 'focused' in the sense that it involves some kind of collective activity" (Kitzinger, 1994:103).

I included a small group exercise as an icebreaker at the start of each focus group discussion, to encourage volunteers to open up with little input from myself as the facilitator (Kitzinger, 1994: 106-107). Students were encouraged to introduce themselves one by one and include some facts about themselves, such as what they are studying, their level, and their focus of study. This was done merely to bring the group together, make them feel more comfortable, and encourage participation.

After the icebreaker, I released a poll (Appendix B) to gain a better understanding of participants' behaviour and basic hygiene levels both prior and during COVID-19 lockdowns. The poll aimed to develop an understanding of personal hygiene levels prior to COVID-19 and if the participants had already taken COVID-19 precautions (such as regular handwashing and covering their mouth when coughing and sneezing) prior to COVID-19. I also aimed to see if their hygiene levels remained the same, increased or decreased during COVID-19 and what extra precautions may have been taken.

The focus group discussions were guided by a schedule of questions (Appendix A) to ensure all areas were addressed. The discussions commenced by exploring the different COVID-19 campaigns participants could recall that were prominent during the lockdown. Discussions on the COVID-19 campaigns surrounded the messages that were relayed within these campaigns and the platforms that were utilised by these campaigns, such as radio, print, TV, social media etc. The discussion then began to focus specifically on handwashing campaigns, what platforms were utilised to encourage handwashing and which organisations were producing these handwashing campaigns. Participants were asked about the WHO #SafeHands Handwashing campaign and if anyone was aware of this campaign before a screening of some of the social media videos.

During the five-minute screening, two videos were shared with participants. The first video (1.59 minutes) was the original WHO #SafeHands video featuring the WHO Director-General, Dr Tedros Adhanom Ghebreyesus (WHO, 2020f). The second video (3.17 minutes) was a compilation of videos featuring a range of celebrities who had accepted and taken part in the #SafeHands challenge (On Demand Entertainment, 2020). Celebrities featured in this video

included Gordon Ramsay (British chef), Arnold Schwarzenegger (Austrian and American actor, and Former Governor of California), Brandon Flowers (The Killers lead singer), Nicole Scherzinger (The Pussycat Dolls lead singer), Deepika Padukone (Indian actress), Billy Porter (American actor), Peter Schmeichel (Danish former football player) and G Herbo (American rapper).

The focus group then proceeded to discuss how participants felt after seeing the videos; what they liked or disliked about the campaign; if they would take part in the campaign; which videos or types of celebrities would be most appealing and which most trustworthy; and which videos or celebrities would they more likely share on their own social media platforms. Participants were then asked to discuss the representations of living situations in the videos and whether it was similar to their own living situations. The groups also discussed the option of recreating their own videos and if their videos would be similar to the videos screened or if they would need to make any adaptations and what would these be.

The focus group then went into discussions around the theme of behavioural change and if participants felt the campaigns motivated them to wash their hands more regularly and also what specific factors would motivate them to wash their hands more regularly. Lastly, questions centred around social media and Twitter and what the perceived benefits and disadvantages of utilising these platforms for health communication campaigns were.

All focus groups were conducted in English. Each of the discussions were between sixty and eighty minutes long and were recorded on Zoom for transcription purposes. All participants were reminded that they were attending voluntarily, and that anonymity will be kept even though the focus group was being recorded. Informed consent forms were distributed and signed prior to the discussion, and the first poll question was also an informed consent where participants could agree or disagree to give their consent to participate.

Jenny Kitzinger notes that group compositions need to be considered when using groups. She states that “minority voices are muted within majority population groups” (Kitzinger, 1994).

Within the focus groups, I ensured everyone had the opportunity to provide feedback on the topic and did not move on to the next topic until everyone had the opportunity to participate.

Data analysis

After collecting data from the focus groups, I transcribed the audio collected from these sessions utilising Microsoft Dictate. I reviewed the dictation while listening to the audio to ensure all script dictation was accurate and all participants were identified accurately. I also cleaned up the text so that it would make sense by deleting repeated words or any instances where there were unnecessary pauses or thought processing (such as 'um').

I organised my data through a thematic analysis which is defined as “a method for identifying, analysing and reporting patterns (themes) within data” (Braun and Clarke, 2006: 79). My approach to identifying themes was to draw them from the data directly in relation to the research questions and aims. Braun and Clarke define a theme as a category that “captures something important about the data in relation to the research question” (2006: 82). Whilst reviewing the transcripts, I identified recurring themes and summarised these into sections within the data analysis. My research questions and aims served as a guide to recognise emerging themes from the data as the aim of the research is to answer these questions.

I then followed the six-phase process of reflexive thematic analysis as developed by Braun and Clarke (2021: 331). The first phase identified is ‘*data familiarisation and writing familiarisation notes*’, and within this phase, I reviewed, transcribed and acquainted myself with responses received within all three focus groups.

During the second phase, ‘*systematic data coding*’, I sorted the data into codes to enable themes and patterns to be easily identified. I used a colour-coding key to highlight similar responses across all data sources to assist in identifying emerging themes. I placed particular emphasis on the key focus questions and highlighted the responses applicable to these as well. I then compiled a table, reviewed the various transcripts and colour-coding, and then

placed the key pieces of information within a table to easily review responses from all participants across all focus groups.

I prioritised the data collected in relation to the reception analysis of the campaign as it is the main aim of the research. This entailed reviewing and organising the data into the three potential reception positions identified by Hall (1980). These include the dominant-hegemonic, negotiated or oppositional positions, as detailed in the encoding/decoding model (Hall, 1980: 136-138). The questions used in order to determine which of the positions would be applicable to the participants included the following:

- 1) What are your initial thoughts or feelings after seeing these videos?
- 2) What did you like about this campaign?
- 3) What did you dislike about this campaign?
- 4) Would you take part in the campaign by sharing these videos?
- 5) Would you take part in the campaign by creating your own handwashing video?
- 6) Why would you/wouldn't you take part in the campaign?

Based on the responses to the above questions, I was able to determine how each participant received the campaign and message and put them into one of these three possible positions. This was done with the goal of understanding how each of the focus group participants received the campaign.

The third phase in reflexive thematic analysis is '*generating initial themes from coded and collated data*', whereby the preliminary themes that stand out from the coded data and table were plotted. Basic areas to be covered under each theme were finalised and supporting points from the literature review and theoretical framework were added where necessary to substantiate points and statements from participants.

The fourth phase of '*developing and reviewing themes*' then commenced, whereby all preliminary themes were reviewed, amended and in some instances, merged in order to develop the main themes that were examined. Within this phase I reviewed all potential themes in line with the research questions and then finalised the key themes to be discussed.

During this phase I realised the importance of dividing the reception of the campaign into two parts, the reception of the handwashing message and the reception of participation within the campaign. This is due to the fact that these two areas were received very differently by participants due to the fact that there were a number of barriers affecting the ability of rural participants to participate.

The fifth phase of '*refining, defining and naming themes*' and took place once all data had been allocated to the developed themes and finalised. Each theme area was then reviewed based on the content within the section and renamed where applicable, in line with what areas were covered within each theme. The final themes included: reception of the handwashing message; reception of participation within the campaign; adaptations to the handwashing campaign; reach of the campaign; campaigns taking into account local context; most influential videos (most appealing videos and most trustworthy videos); and the affordances and limitations of social media platforms.

The final phase of '*writing the report*' then commenced whereby themes were analysed concerning my research questions and aims and objectives, and brought together into this thesis, to address the questions raised.

Ethical Considerations

In planning the study, all ethical issues have been considered and necessary steps have been taken to address potential issues, including ensuring anonymity for all participants. I decided to target UKZN students who were over the age of 18, to ensure that no minors were included in the study. I applied and was awarded ethical clearance, and my Ethical Clearance Certificate is included as Appendix E. All participants consented to taking part within the study and the informed consent form used is included as Appendix F. An informed consent is a requirement for research to be conducted whereby the participant agrees to take part in the study and acknowledges the use of data collected for the study (Corti, 2018: 177).

To prevent any discrimination or stigmatisation of participants, the focus group discussions did not request or encourage participants to share personal health information, for example whether they had contracted COVID-19 before. This was to protect participants and was one of the ethical considerations of the study.

Study limitations

With regard to recruitment, the limitations included the lack of control of the number of participants who volunteered to be part of the study. My source of recruitment was advertisements on the UKZN Notice system, and although I increased the frequency of notices, I was unable to reach the anticipated number of volunteers I had hoped for. I experienced a very poor response from volunteers who were willing to take part in the focus groups. Furthermore, not all confirmed participants attended the focus group discussions despite direct confirmation and reminders. Although I was initially worried about the lower numbers, there were sufficient participants to facilitate lively discussion and the smaller group allowed for more in-depth discussions within each of the focus areas and, therefore, did not compromise the quality of the data collected. I also had to reduce the number of focus groups from four to three, due to the limited volunteers.

Initially, it was difficult to get the conversation flowing between participants and I sometimes had to prompt participants to encourage their feedback. After the screening of the videos, I did notice an improved flow within all focus groups as participants were happy to share their opinions and often more than one participant would try to add their feedback at the same time. An opportunity was however, given to each of the participants to provide their input on each of the discussion areas.

During the focus group discussions, internet connectivity was also a limitation as often participants would either lose connectivity or some of what they were saying did not come across clearly. This resulted in time being wasted due to a lot of repetition, and in some instances, having to move forward without proper feedback from a participant. Adaptions were made in that in extreme cases participants were then asked to type their feedback in

the chat and these responses were read aloud by the facilitator to include them in the discussions. Overall, the limitations did account for some issues, however suitable solutions were quickly implemented to mitigate these issues that had minimal impact on the integrity and quality of the research conducted.

The methodology process has allowed me to grasp the key themes from the focus groups discussions and link them back to the key findings within the literature review and theoretical framework. I have highlighted the need for a qualitative research approach, within an interpretivist research paradigm and use of a reception analysis in the research design for the study.

Chapter 5: Data Analysis

The study's main aim is to examine the efficacy of the global WHO #SafeHands Handwashing campaign and its reception by UKZN students at a local level in KwaZulu-Natal, South Africa. During this analysis, I initially aimed to determine which of the three positions (dominant, negotiated or oppositional) outlined by Hall (1980: 136-138) participants associated with regarding the campaign. If the dominant position is assumed, this can contribute to the campaign's success. If the negotiated or oppositional positions are preferred, then the research data provides an understanding of why this occurs. Through the study, I consider the campaign's impact on behavioural change, as this determines if the campaign was successful in a local context (KwaZulu-Natal, South Africa), as the campaign was a global campaign. Although behaviour change was reflected on by participants within the study, it was however, not the focus of the study, and behaviour change theory was therefore not included in the theoretical framework or analysis. Behaviour change was self-reflective by participants within the study. In addition to concluding whether the campaign can be considered a success in a local context, I also analysed the participants' perceptions about Twitter health communication campaigns and reviewed the strengths and weaknesses of this and other social media platforms.

Overview of participants

Both before and during the focus group discussions, participants were asked questions that provided insight into the circumstances that might impact on their reception of and engagement with the WHO #SafeHands Handwashing campaign. A total of twelve participants participated in the study, and of these participants, 50% were based in rural areas during the initial lockdown period (27th March – 31st April 2020), and the other 50% in urban areas. Of the participants based in rural areas, only one indicated having stable and reliable access to the internet, whereas the others had limited or no internet connectivity at all.

The lack of internet connectivity is problematic for social media campaigns such as the WHO #SafeHands Handwashing campaign, as it does limit their reach to these areas, and is

indicative of the inequalities of the digital divide between first and third world countries. This inequality is referred to as the participation gap (Jenkins *et al.*, 2007: 28; 2009) and exists when underdeveloped areas may not have access to technology, such as internet connectivity. In the case of digital health campaigns, the participation gap results in some people not being aware of or impacted by the campaign.

During the pre-selection questionnaire, prior to focus groups, 91.6% of all participants indicated they had access to running water; however, this was further elaborated during the focus group sessions. The participants who spent lockdown in rural areas did not always have access to running water from a tap. Some participants had to utilise stored water or had to fetch water from a central point within their communities. In both urban and rural areas, there was also mention of situations where there was water shedding (planned water outages, resulting in no access to piped water for periods of time). This would directly impact the manner and frequency of handwashing during these instances.

Before the focus group discussions, an online poll was conducted with participants within the focus groups to review their basic hygiene levels and practices before and during COVID-19. An understanding of basic hygiene was provided to participants in that it is how they care for their body, and that the practice includes bathing, washing hands, brushing teeth, and more. Overall, participants felt their hygiene levels were relatively good prior to COVID-19. Approximately 67% of participants agreed that their hygiene levels were good, with 25% indicating they had average hygiene levels and 8% with excellent hygiene levels. None of the participants indicated that they had poor hygiene levels. Most participants, totalling 75%, reported that prior to COVID-19 they only washed their hands after using the toilet and before eating. Other participants washed their hands every few hours (16,6%) or only sometimes when they remembered (8,3%). Before COVID-19, 75% of participants admitted to always covering their mouth and/or nose when coughing or sneezing, whereas 25% advised that they only sometimes covered their mouth and/or nose when coughing or sneezing prior to COVID-19.

When reflecting on their hygiene levels during the height of COVID-19, approximately 83% of participants believed their hygiene levels increased as a result of COVID-19, whereas approximately 17% admitted that their hygiene levels remained the same as their hygiene levels prior to COVID-19. Participants were also asked to indicate what they did differently with their personal hygiene routines as a result of COVID-19. Figure 2 below details the additional measures that participants took as a precaution to prevent them from contracting COVID-19.

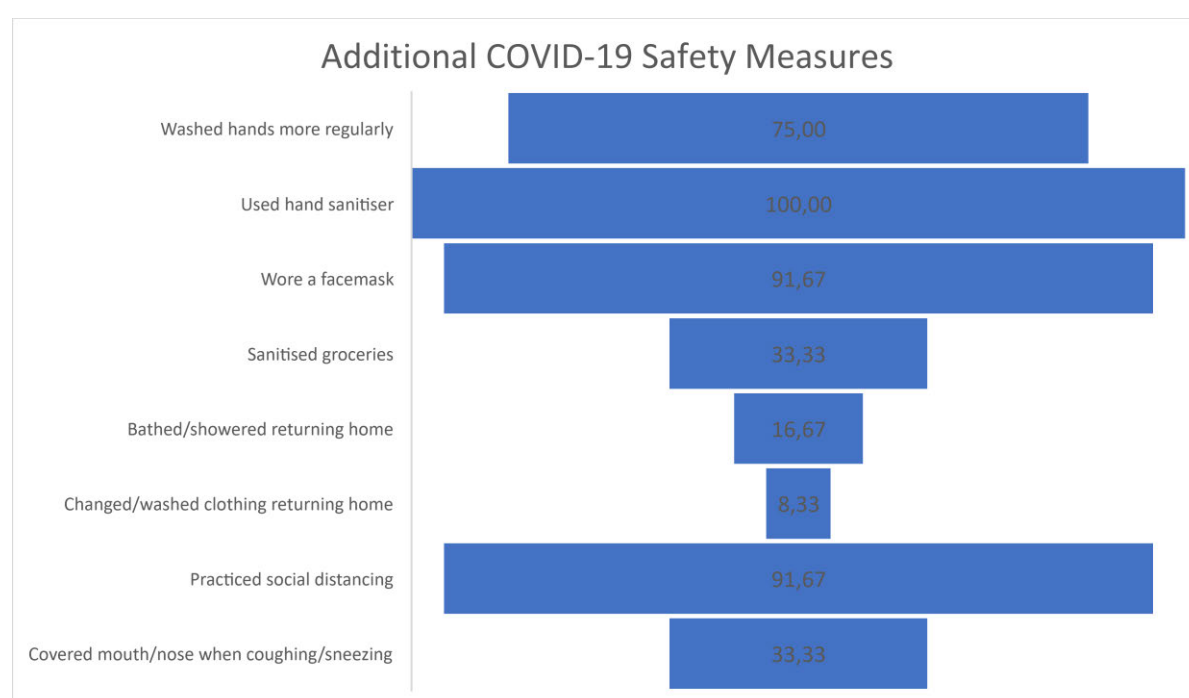


Figure 2: Additional COVID-19 Safety Measures taken by participants

From reviewing the additional safety measures taken by participants due to the COVID-19 pandemic, the most popular measures included using hand sanitiser (100% of participants); wearing a facemask (91.67%); practising social distancing (91.67%) and washing of hands more regularly (75%). These top four precautions tie in with the encouraged measures that the South African government expressed during the presidential COVID-19 updates (Gibson, 2021: 283).

Reception of the Handwashing Message

The handwashing message promoted in the WHO #SafeHands Handwashing campaign, and awareness of how to effectively wash your hands had an overall positive reception by the majority of participants. Although only one participant was familiar with the campaign, most of the participants were impressed and responded favourably to the awareness created by the campaign, from the length of time to wash, to the method of rubbing thoroughly with soap. Participants noted that they had previously just “dipped” their hands in water to wash them, did not use soap or rub their hands thoroughly and would usually wash for a few seconds only. One participant commented:

But for me how I used to wash hands, I just used to just dip my hands in water, and then I’m done, so the videos sort of gives more awareness (Urban participant, FGD 1).

Another participant added:

Previously I also used to just dip my hands in water and then just wipe ‘nje’. Using soap and rubbing thoroughly, it wasn't any of my things. I think they [#SafeHands Campaign] did emphasise the importance and also if you cautious, maybe you were safer in a way (Rural participant, FGD 1).

Overall participants felt better prepared to wash their hands after being exposed to the campaign. One participant stated:

The videos sort of gives more awareness, they like tell you more on how to properly wash your hands, so you we are more equipped and have better knowledge that even washing hands with water is not effective in protecting yourself. So washing hands with water and soap and for twenty seconds is more appropriate and is more effective (Urban participant, FGD 1).

Similarly, in another focus group discussion, one participant commented:

I think the initiative by WHO is actually a good one and that looking at the reasoning behind it, actually teaching people how to actually wash hands (Urban participant, FGD 3).

Another participant appreciated the objectives of the campaign:

I was just saying that the initiative was a good one, actually teaching people how to wash their hands (Urban participant, FGD 3).

Fear of contracting COVID-19 seemed to be an encouraging factor for participants to improve their personal hygiene, handwashing technique and frequency. One participant even mentioned:

I think if I had seen the video at the peak or the beginning of COVID, I would have been scared and actually follow each and every step, sing as many times that I need to sing, to prevent myself just out of being scared of COVID and just out of caution (Urban participant, FGD 3).

This is interesting as although the campaign did not use fear to encourage participants to comply with precautionary messages, the stigma and other publicity surrounding the spread of the virus may have contributed to this feeling. One participant commented:

I think it was the fear of getting COVID because there was quite a lot of hysteria around getting COVID, like I remember in the first few months of COVID, everyone knew that if you were to get COVID you were that sort of outcast because people were scared of you. So I think that's what motivated me the most is that I did not want to be an outcast in the community because '*haibo*' if you had COVID, everyone would run away from you (Rural participant, FGD 1).

A participant in a different focus group discussion also mentioned:

It would be the fear of actually getting COVID that would have motivated me to wash my hands more regularly (Urban participant, FGD 2).

Another participant in that group commented:

Because I have fear of COVID. I really had no reason not to be motivated to wash my hands regularly because that was what was going to keep me safe (Rural participant, FGD 2).

The above comments reveal that the fear of contracting COVID-19 was a contributing factor to regular handwashing, although fear was not used in the campaign.

The inclusion of celebrities in the challenge was also received positively, as the various celebrities from different spheres of influence were recognised by participants as being able to target various groups and could encourage their respective followers to also practice safe hand hygiene routines. One participant mentioned when referring to a celebrity they follow:

I think he is funny and he's just hilarious. I like watching his videos and I would have clicked on the video regardless of what he was doing (Rural participant, FGD 1).

Another participant stated:

A lot of celebrities got into these campaigns as well, so a lot of people will do what they feel that their favourite person is doing (Rural participant, FGD 1).

The use of celebrities also brought the pandemic to a realistic level, whereby followers may take precautions more seriously as COVID-19 can affect anyone, including celebrities. One participant highlighted that:

I feel like the fact that even celebrities were doing this challenge, I think it sort of highlights to everyone that COVID can affect anyone, regardless of race, regardless of wealth, regardless of ethnicity, so that it's just really just up to you to actually protect yourself or else you will be in trouble (Rural participant, FGD 1).

This highlighted the fact that everyone is vulnerable, and it is only up to the individual to protect themselves by taking necessary precautions, including adequately and frequently washing their hands.

Overall, the majority of participants (83%) agreed with and took the dominant-hegemonic position of the encoding/decoding model, with regards to the message relayed by the WHO #SafeHands Handwashing campaign. This is that they agreed with the message in the campaign that they should wash their hands more regularly, using the correct techniques to prevent contracting COVID-19. They were also impacted by the celebrities taking part as if celebrities were taking necessary precautions, they felt they should too. One participant commented:

I thought it was good because the people they used are public figures, many people follow them. I remember the first clip G HERBO, because I follow him, and, I think it was good because these people have an influence on others. I think more people washed their hands after seeing their clips (Rural participant, FGD 3).

Approximately 17% went against the dominant-hegemonic position with either a negotiated or oppositional position. One participant (8.5%) had a negotiated position whereby they did not completely agree with the message and may have adapted it. In this instance, the participant was not impacted or inspired by the campaign but did recognise the intentions and meaning behind it.

I understand that their purpose is to encourage people to wash their hands, and I understand that it does. It could possibly be more effective than just telling people to do this, but I wasn't particularly inspired (Urban participant, FGD 3).

One participant (8.5%) had an oppositional reading of the campaign, whereby they disagreed with it completely. In this instance, the participant expressed their opinion that there was just too much emphasis on washing hands for such a long period, and they disagreed.

For me they put too much of emphasis on washing your hands for a very long time like, for example, that guy says sing Happy Birthday like twice. Personally, I feel like there's no need to wash your hands for so long, especially if you're sanitising and washing your hands (Urban participant, FGD 2).

An alternative was suggested by this participant whereby hand sanitiser should be used to wash your hands instead as it is even more effective, hands can be cleaned within seconds, and it is easier to access. This participant argued that sanitising is acceptable when going out in public and should therefore be an acceptable measure instead of handwashing. The participant stated:

I feel like if you can just like sanitise your hands going into the shop, there is not really a need for you to wash your hands for so long (Urban participant, FGD 2).

Overall, the reception of the message relayed within the campaign was positively received with the dominant-hegemonic position being most favourable among participants. It can be concluded that overall, the participants understood, accepted and shared the intended reading of the campaign, which is awareness of the correct handwashing techniques (Hall, 1980: 136; Balnaves, Donald and Shoesmith, 2009: 92).

Reception of Participation within the Campaign

Regarding the reception of the campaign on a participatory level, that is, if the participants would necessarily participate in the #SafeHands campaign as intended by producing their own videos, the response of participants was less favourable. Although most participants received the campaign message favourably, they were not as positive about the participatory element within the campaign. One participant commented:

I would probably just share the video for the sake of sharing it, but I wouldn't really take part (Urban participant, FGD 2).

Some participants noted that they were uncomfortable to be on camera and based on their personality, would not recreate videos to be shared on social media. Most participants felt that they preferred not to have a social media presence. One participant commented:

I don't like having a social media presence. I don't like the idea of there being videos of me out on the internet (Urban participant, FGD 3).

One participant even felt indifferent to the campaign and felt that people should already have basic hygiene. She stated:

I don't have much feelings towards the campaign. I didn't dislike it, nor did I like it, because I feel like everybody should have basic general hygiene (Urban participant, FGD 2).

Out of all the participants in my study, 25% stated they would recreate their own videos as they believed that videos really do get through to people and they were motivated to take part in the challenge. They stated that the videos are informative and create awareness on an important topic. One participant felt that they would have created a video to share based on the potential to share important information:

I think yes, I would have, they are very informative and they share things that we don't usually pay attention to, so they'll be like more useful in giving more information (Urban participant, FGD 1).

Another participant commented:

I personally wouldn't mind because I feel like it's one way to get across to people because most people nowadays are always on their phone, always on social media. So I feel like videos really do get through to people (Rural participant, FGD 1).

In another discussion, a participant stated they would participate:

Because I like to talk, I can make videos educating people to wash their hands (Rural participant, FGD 2).

In another focus group, one participant also expressed an interest in taking part in the challenge:

I would actually create a video because it's a challenge. I would do it because it's a challenge that is informative and it actually aims to create awareness. So I wouldn't mind to do it as a means of creating awareness (Urban participant, FGD 3).

Similarly, a participant commented:

I would share the video just to create awareness of the washing of hands, and ya I might possibly also do it myself like if it's like a TikTok or with some background music or whatever, I wouldn't mind doing that (Urban participant, FGD 3).

With only 25% taking the dominant-hegemonic position regarding the participatory element (recreating and sharing the video) of the WHO #SafeHands Handwashing challenge. This is a considerable drop compared to the reception of the message where 83% of participants took the dominant-hegemonic position.

For the other participants, 50% had a negotiated position whereby they may not have agreed with the message, but understood the aim of the campaign. Participants expressed neutral feelings about the participatory elements of the campaign but could see that the WHO had

attempted to put together a successful campaign, but they would not recreate the video themselves. One participant stated:

I wouldn't necessarily say I disliked or liked the campaign. But it was a good campaign, honestly speaking. They tried, that's all I can say (Urban participant, FGD 2).

Many participants did not want to share their own videos for personal reasons. One participant commented:

Because of my character, I'm not that open on social media, so I cannot even do like a video of me smiling. I know that this is a campaign, but I feel like for me I wouldn't do it. But I don't criticise them for doing it, I applaud them (Urban participant, FGD 2).

Another participant in another discussion noted being 'camera-shy' but would have participated in other ways if these were available:

If there were other ways of pushing the campaign which didn't require someone to be in front of the camera, then I would have (Rural participant, FGD 1).

Similarly, another participant said:

I wouldn't do it unless, of course, there were other ways to promote the washing of hands. But being in front of the camera and posting on social media, I definitely won't (Rural participant, FGD 1).

The remaining 25% of the participants had an oppositional reading of the participatory element of the campaign, whereby they disagreed with it completely. They expressed that they would not want to watch people washing their hands, noting that this is something people should already be familiar with.

One participant commented:

It was a bit long, they could have just been some sort of fun or something just to draw all the attention (Rural participant, FGD 1).

A participant from another discussion noted:

I found the campaign very boring and, if I had seen any of these videos pop up, I probably would have skipped past them because I don't really want to spend 15 minutes watching a video about washing my hands (Urban participant, FGD 3).

In another discussion, one participant found that sharing in the campaign would be embarrassing:

So I personally wouldn't make my own video. I feel like it's kind of embarrassing. I mean, like, shouldn't you be washing your hands properly already? (Urban participant, FGD 2).

One participant also indicated that social media is a form of entertainment and they did not feel it should be used to share such informative information, noting that she usually “skips past” informative messages:

I'm on social media mostly for entertainment, and if something informative comes by, I usually skip past it (Urban participant, FGD 3).

Participants expressed that the campaign videos were boring to watch and this would have impacted their reasoning regarding sharing. One participant stated:

Well, I personally wasn't, I guess for lack of a better word, inspired (Urban participant, FGD 3)

This participant also added in the discussions that:

I think I would share them, but it would have to be a very interesting video for me to share it. But I definitely wouldn't take part by making a video of myself (Urban participant, FGD 3).

Overall, the reception of the 'participatory element' of the campaign was negative. This reception did not align with the goals of the campaign of sharing or recreating the video to participate in the challenge. The most common audience reception towards the 'participatory element' of the campaign identified from the various responses is the negotiated position whereby the participants understood and partially accepted the message, however, there was resistance or modification that took into account their personal or cultural context (Hall, 1980: 137; Balnaves, Donald and Shoesmith, 2009: 92). More details about the personal and cultural context will be discussed in the next section.

Although participants were not as keen to recreate the videos themselves, participation can also be defined as sharing or interacting (liking or commenting) with the posts (Jenkins, Ford and Green, 2013: 155). The concept of spreadability highlights the participatory element in social media, where it is not necessary that audiences have to actively contribute to participate (e.g. comment, recreate), but even accessing, sharing and having the option to participate can mean that the participant can be considered participatory (Jenkins, Ford and Green, 2013). With that being said, most participants would not recreate the videos themselves, however, 91,6% of participants admitted that they would have shared the campaign videos on their social media platforms at the height of COVID-19, when the campaign was initiated in order to create awareness.

In order to better understand this discrepancy between the reception of the message and the reception of the 'participation element' in the challenge, the focus group discussions also reflected on possible changes or adaptations that may need to be made to videos that would have considered their personal or cultural context.

Adaptations to the Handwashing Campaign

Throughout the literature review and focus group discussions, it was highlighted that global health communication campaigns often neglect the local cultural context. One of the major concerns raised in both the literature and focus groups was the issue of water insecurity, which may have had a direct impact on the ability to regularly handwash and therefore, directly affect the efficacy of the WHO #SafeHands Handwashing campaign (Schmidt, 2020; Zvobgo and Do, 2020; Brauer *et al.*, 2020; Stoler, Jepson and Wutich, 2020). Through the focus group discussions, ways to adapt the campaign were explored to determine if the campaign could be delivered in different ways to be made more relevant to different target groups, such as those in rural areas where accessibility to water is not always consistent.

Only 17% of participants noted that they were able to relate to the videos and did not need to adapt too much if they had to hypothetically recreate the videos to participate in the challenge. The majority of changes that were suggested by these participants were merely preference changes, such as the preference to record the video from a bathroom sink as opposed to a kitchen sink for hygiene reasons. One participant highlighted:

I'd prefer to wash my hands in my bathroom sink, because that's where your primary hand washing takes place in my opinion. With the kitchen sink, that's where you have your dishes so you might splash your residual water on your dishes, which is unsanitary (Urban participant, FGD 3).

This consideration reflects how different people live and may be related to whether they have more than a single tap in a household. Another preference change mentioned was a different song to be used instead of the Happy Birthday song. One participant expressed:

There was mention of how they said you wash your hands for as long as it takes to sing the Happy Birthday song. I would use another song that I like that's more or less two minutes long (Urban participant, FGD 3).

This may be a result of the cultural context, where this song is not commonly sung in non-English speaking communities, or to add more fun to the challenge and target a younger generation by using a more trending song.

The remaining 83% of participants felt that they would be forced to adapt their videos due to circumstances beyond their control. Some participants admitted to not having luxurious homes and bathroom facilities as some of the videos did. One participant mentioned not having a bathroom altogether:

I would change everything because where I'm from, we don't have taps and bathrooms. I think I would just use a bucket (Rural participant, FGD 3).

Another participant within the discussion commented that the videos did not represent living conditions very well:

It is not represented well, in a sense that these videos are shot in lavish homes and back home, water is even an issue there (Urban participant, FGD 3).

A participant from another discussion raised a similar concern:

Some people don't have running taps, so seeing someone with a running tap in their house will be like, oh okay, I can't do that because I don't have that (Rural participant, FGD 1).

Similarly, another participant commented:

I would want to wash my hands but my surroundings wouldn't allow me. As much as it looks easier on the videos, I would have to get a lot of work done so that I can actually get my hands washed (Rural participant, FGD 1).

Many rural participants highlighted that they could have easily recreated the videos if they were based at the University residences, as basic bathroom facilities were easily available there. It was much more challenging to recreate these videos in their hometowns, in rural areas. Interestingly, this is a contradictory safety measure from the South African government policies (Arndt *et al.*, 2020) as although movement restrictions were imposed to reduce the spread of COVID-19 and keep all citizens safer, members from rural areas were further disadvantaged as they were forced to live in less equipped areas where they were unable to follow the safety precautions as easily had they remained in urban areas. This relates to previous studies discussed in the literature review which highlights this issue with previous pandemics (Miller *et al.*, 2015).

Another participant commented on the inequality of resources:

At homes we don't have the things that they use, the sink and those soap, but if I was to do the videos here at res, they were going to be similar to their videos (Rural participant, FGD 2).

Similarly, another participant also agreed with this:

If I was doing the video at res, for me it will be similar, but at home I can't do such videos due to the lack of resources (Urban participant, FGD 2).

Some of the adaptations mentioned by these participants who lived without these facilities included using a bowl or bucket to wash their hands in. One participant explained:

Because I'm living in a rural area where we don't have running water. I would maybe use a bowl, and also we don't have those soap sanitisers, we just have those blue soap. So I would use them because I relate more to them (Rural participant, FGD 2).

Similarly, another participant shared this sentiment:

I would have to use a bucket and wouldn't use like a soap dispenser, I would use a bar of soap (Rural participant, FGD 2).

In the case where running water is not available, one participant mentioned they would have to use stored water:

I'd use stored water and then use it in a bucket to just be inclusive and everybody can relate and see it can be done without a tap (Rural participant, FGD 1).

One participant also mentioned that they would use a tippy-tap if they had to recreate their own videos. A tippy-tap is a locally made device comprising of a container, string, wooden frame and foot pedal that allows access to running water for hygiene and handwashing (Hartford, 2020; Mbakaya, Kalembo and Zgambo, 2020). This participant stated:

There is this thing called a tippy tap where you just take a two-litre bottle of water and you put water and you put a straw and you open and close that thing. So I would have used that demonstration to show that you don't really need to have running tap water and all that to actually wash hands, because the idea is to not use water that you have already washed hands in, and the water must be running so I would have used the idea of a tippy tap (Urban participant, FGD 1).

Washing hands frequently also meant water would be wasted for participants in rural areas, where it was often scarce (Brauer *et al.*, 2020; Zvobgo and Do, 2020; Stoler, Jepson and Wutich, 2020; Sayeed *et al.*, 2020; Schmidt, 2020). One participant commented from observing the videos:

I am motivated, but because of the living situation, it's hard to adapt in those things, it's like wasting water for us (Urban participant, FGD 2).

In every focus group, the issue of water insecurity was also highlighted through the frustration of participants witnessing water running and being wasted whilst some of the participants

within the example videos were washing their hands. Participants were disgusted to see water being wasted when for them water accessibility is an issue at times.

One participant stated:

The celebrities here as they are washing their hands, I was just noticing how the tap was mostly running and that was making me cringe, looking at that waste of water (Urban participant, FGD 3).

In another discussion, one participant highlighted:

Most of the celebrities left their taps open while they were still rubbing soap on their hands. I know it has nothing to do with COVID, but it was like 'ew'. We don't have water (Rural participant, FGD 1).

Another participant commented:

It gives you the 'eek'. Why do you have your tap open when you still rubbing your hands together? (Rural participant, FGD 2).

These responses show how a campaign developed in different circumstances (in this instance, more developed countries, where water is freely available) can have unintended effects such as creating a negative reaction about excess and wastage in a different, under-resourced context. A number of participants across multiple focus groups also recommended using hand sanitiser rather than washing their hands, due to the ease of this method and the fact that it is sometimes easier to access than running water within rural areas, and it had been distributed in some areas by government agencies and through schools.

One participant noted:

I would probably use a hand sanitiser because you just squeeze it into your hands and then you rub around your hands and then that's it. No need for the up and downs of the soap and the water, just use the hand sanitiser (Rural participant, FGD 1).

Another participant commented on the accessibility of hand sanitiser:

I feel the hand sanitiser is more accessible to nearly everyone because, even for kids at school (Rural participant, FGD 1).

Another participant mentioned hand sanitiser being distributed at schools:

The last time I checked they used to get sanitiser at school...I think sanitiser is more accessible to nearly everyone, than water (Rural participant, FGD 1).

Overall, the participants felt that the videos were not very accommodating or relatable for every economic class and that more relatable content should have been considered. As the majority of participants were not able to relate due to their circumstances, there may have been a disconnection with them participating. With social media and participatory culture, it is not compulsory for participation to take place. Although the trend in social media campaigns shows that more than 50% of online users are “inactive” and simply spectate (Jenkins, Ford and Green, 2013: 154), this is different in that participants felt that they were not able to relate to videos in the campaign. Participants also felt that the reach of the campaign was limited.

Reach of the Campaign

Participants also highlighted that the campaign had not reached them during the pandemic. One participant mentioned:

I feel that the message was strong. It's just that it didn't get to reach me. I'm not quite sure if it reached other people here in South Africa or around me, but for me, it didn't reach me, this campaign, with this challenge (Urban participant, FGD 3).

Another participant expressed that targeted messaging to various groups would have improved the impact and reach:

It's just that I didn't get the message, but I feel like the message would have easily been passed across to the queer community as well because if it's being said by an activist (Rural participant, FGD 1).

Although the campaign may have been educational and created an awareness of effective handwashing from handwashing techniques to the length of time to wash for, the campaign was unfortunately not widely known by participants. Only one participant (8.5%) was familiar with the campaign and had seen it prior to the focus group screening. Participants had not seen any celebrity videos, not even those presented in the second video with the collage of clips. This reveals that the reach was very limited and the campaign was not very popular within the target market for this study of students in KwaZulu-Natal.

Although other social media campaigns during the COVID-19 pandemic period had created awareness amongst some of the target group, this was mainly for participants based in urban areas. The accessibility to television and online campaigns was seen by participants to be very limited in rural areas, possibly due to the lack of stable and affordable internet connections, with most campaigns taking place in the form of face-to-face interventions in communities.

Campaigns taking into account local context

Not only was the medium for the campaign criticised, but participants also felt that its content was not relevant to their context. The WHO #SafeHands Handwashing campaign featured people in luxurious homes with running tap water. This was not very relatable to rural

participants who do not have this luxury and deal with water scarcity. As mentioned prior, many participants commented on this, with one stating:

The fact that we also don't have tap running water, how do you go about that? Because how am I gonna go about it if I don't have running water? Nje, that relatable content (Rural participant, FGD 1).

Participants were asked about which campaigns they had seen or were familiar with before finding out that the research was on the WHO #SafeHands Handwashing campaign. They recalled hearing messaging from recognised local brands.

I'm also seeing from Dettol and also I think it's Unilever as well that always encouraging handwashing (Rural participant, FGD 1).

One participant highlighted:

The one handwashing campaign I used to see, was an advert on TV. I think they used the Lifebuoy soap or the Protex soap, but they used to combine it, so they were like promoting the soap but also promoting to wash hands during the COVID time (Urban participant, FGD 2).

Dettol and Unilever had a localised campaign and contribution, including donations in partnership with the South African government (Tylowana, 2020; Unilever, 2021; Unilever South Africa, 2020). As Dettol and Unilever were working closely with the government, they understood the needs of the communities, and the donations included wash stations, soap, sanitiser etc. Participants highlighted that face-to-face interventions were a popular medium for COVID-19 communication, especially in rural communities where there were limitations with other mediums (e.g. limited internet connectivity for social media). It would, therefore, make sense that these were the handwashing campaigns that participants were familiar with.

Participants were familiar with these other handwashing campaigns, and felt that that these were addressing issues within a local context. Participants from rural areas in particular

recalled more face-to-face interventions. One group specifically mentioned the Department of Health (DOH), recalling them as a trustworthy source of information during the pandemic:

I was working with the Department of Health, I'm a postgrad, and so they coordinated these awareness campaigns throughout the whole of eThekweni, Durban (Urban participant, FGD 1).

One participant recalled facemasks being distributed:

I do remember in my community there were stalls where they gave out facemasks (Rural participant, FGD 1).

Another participant recalled some Department of Health face-to-face interventions:

The Department of Health was out there a lot during this time because people trust them more about this (Rural participant, FGD 1).

It is evident that the COVID-19 communication interventions that are most memorable for the participants included face-to-face interventions and those that took into consideration local conditions. The global WHO #SafeHands Handwashing campaign was not as prominent as the local campaigns. Participants did express that they would have preferred a handwashing video that took their actual living conditions into account. One participant expressed:

It would be better if maybe I could have related to one of the videos, maybe relating to my living situation (Rural participant, FGD 2).

Urban participants also understood rural participants' difficulties as water was being rationed in urban areas. One Urban participant related to the previous participant and stated:

I can kind of relate to her because at one point we were having water shortages for, like weeks. So what I would do, is that I would put like water in two bowls and so one would be where I wash like the soap off my hands and the other bowl would be like clean water where I obviously would rinse the excess soap off my hands (Urban participant, FGD 2).

One participant highlighted that videos should have been produced that accommodate different social and economic circumstances in order for them to be more relatable. She mentioned:

The videos were not very accommodative for each and every social economic class, if I may put it that way. Maybe if we even had someone using like a jug, another one pouring and showing how to wash hands, maybe using a bar of soap. So I think that would have been relatable with more people, because not everyone has a tap and running water in their houses (Urban participant, FGD 1).

From these discussions, it is evident that the lack of cultural considerations has negatively influenced the reception of the WHO campaign.

Most influential videos

One of the expectations from the research was to determine which type of videos and who would be featured in them, would be most influential for the participants, both in which they would interact with (view and share) and which they would most likely trust.

Most Appealing Videos

Most participants highlighted that the celebrity videos were more appealing to them, and they would be more likely to share those. One participant stated:

Where they actually included public figures, so that made it more engaging for the people that follow those public figures. By including the public figures, I think it made it interesting and made people actually want to watch it (Urban participant, FGD 3).

Another participant agreed and commented:

I agree because many people do things just because they saw celebrities doing them. So I think it was good that celebrities were part of the campaign (Rural participant, FGD 3).

In another discussion, one participant expressed:

Their technique of having celebrities or well-known people to advertise or show people to wash hands was productive because people, which I can say the fans look up to them, so seeing them wash hands, will make them motivated to always wash their hands (Rural participant, FGD 2).

Another participant added:

What I liked is it was just encouraging. It was nice to see someone you take as a role model, doing something that can influence people to just live a better lifestyle because washing your hands is actually good practice (Rural participant, FGD 1).

Overall, participants felt they would mostly be impacted by someone they admire or follow, who would be more likely to influence them directly, and they would share those which appealed to them. One participant stated:

If it's somebody of influence or somebody that I look up to is in that video or somebody of authority as well, I would definitely share the video. But if it's somebody who's lifestyle I do not align with, I wouldn't share that video (Urban participant, FGD 3).

Participants had made a number of suggestions to improve the videos, including that they should be more comical or fun to encourage people to watch the whole video. Content with humour would have appealed to them as COVID-19 was a serious matter at the time, so creating something fun and comical would have lightened the mood. When reflecting on some of the celebrity videos shared, one participant mentioned:

They engaged with not just washing hands but you know they're talking in between, and you know making side jokes (Urban participant, FGD 3).

One of the videos mentioned that was appealing in this regard was the one of Arnold Schwarzenegger washing his hands with his dog and explaining the steps to his dog.

I think that one having a dog, it was for me. Oh, this is cute. Oh, wow. You know, that dog just caught my attention (Urban participant, FGD 2).

Many of the participants also expressed their preference for musicians where celebrity singers were singing while washing their hands. One participant commented:

I think musicians are the most influential people as they are able to accommodate people of other languages as well (Urban participant, FGD 1).

Many also highlighted that they would have preferred hip-hop artists, especially local hip-hop artists as they would have appealed to the local market. Participants felt that the different target markets should have been considered.

To accommodate people of other languages as well, they could even use the local artists like 'maskandi' which are influential in rural areas, and use radio and other platforms to make sure that you reach people of all kinds (Urban participant, FGD 1).

There were also a number of suggestions that related to personal preferences which could help attract niche markets to participate. For example, a queer rights activist had expressed a preference for more queer celebrities and if featured in a video, they would have received the message more effectively:

I feel like it should pass the message across, and you should get people who easily relates to that community that you want to pass the message to, like for example I'm a queer rights activist, so if they included more queer people, I definitely would have gotten the message (Rural participant, FGD 1).

During COVID-19, some unique suggestions came to light during this unique time period. One participant expressed an interest in seeing content from Youtubers publishing lifestyle content, due to the fact that everyone was on lockdown at home. Participants expressed that they would have also been more likely to share content of this nature as it was relevant and applicable globally and everyone was on lockdown and could easily relate.

During COVID we were at home and we weren't doing anything. So I wanted to see other people living in their houses to see what people are up to (Rural participant, FGD 1).

Another participant had expressed her interest in animation, and she would have preferred good-quality animated videos revealing effective hand-washing techniques:

If the videos were animated, I think I would pay more attention and watch the whole thing. But that mostly comes from my preference for animation and how I like good quality animation because I think it's like art...So if it was an animated video of

someone washing their hands, or maybe an animation of a few of my favourite cartoon characters, then maybe I'd watch it (Urban participant, FGD 3).

One participant did mention seeing cartoon handwashing videos which appealed more to children but were not part of the WHO #SafeHands Handwashing challenge.

In another discussion, one participant did make mention to her preference of seeing children creating videos and this would be something you would share. She stated:

I think like seeing children washing their hands and stuff, because then other children would want to do what they see their peers doing. When I said children, I mean from creche and from primary school (Rural participant, FGD 1).

Most Trustworthy Videos

In terms of trustworthiness, the majority of participants (83%) expressed that they would only really trust official government or health organisations with messaging on effective handwashing techniques. They specifically mentioned the WHO, Department of Health, and the South African Minister of Health as being trustworthy sources as they feel they are part of official organisations dealing with the COVID-19 crisis. A participant stated:

On trustworthiness, I think I would believe more, a person that is in the department, or somebody of knowledge, for instance, I used to follow our Minister of Health talks a lot, because he's a Minister of Health and he's a doctor (Urban participant, FGD 3).

Another participant with the same discussion mentioned when comparing the two videos screened (WHO video and celebrity montage):

I would definitely only trust the WHO video, not the celebrity video (Urban participant, FGD 3).

One participant expressed a particular distrust for paid partnerships, whereby for example a video promoting handwashing was being promoted by a soap brand, as they felt it was produced with the intentions of making profits rather than educating the public and was therefore not seen as trustworthy.

I think most people did paid partnerships, so those people who are not doing paid partnerships would have been more effective, because the moment I see you selling Dettol, it's like, oh, OK, you doing that for money (Rural participant, FGD 1).

In summary, the types of videos participants would most likely share varied and is largely dependent on personal preferences, however a recurring theme was that local artists should have been utilised to appeal to local markets. This links to the issue of the importance of local context being considered when developing health communication campaigns. The majority of participants agreed that they would most likely trust official government or health organisations over celebrities, due to the fact that they would seem to be more knowledgeable with the facts and correct precautionary measures.

Affordances and limitations of social media platforms

A number of factors were discussed when reviewing the affordances and limitations of utilising social media platforms. The main factor that was highlighted is the reach of social media platforms and that it is able to relay messages to a wide audience fairly quickly. The reach is a lot wider than other mediums, whereby one participant mentioned:

A large amount of people are on social media, so the amount of people that are seeing these things increase, which can have an overall effect on world health (Urban participant, FGD 3).

Another participant added on the benefits of social media:

It reaches more people, the news travels faster, and then people get informed quickly (Rural participant, FGD 3).

However, participants felt that this would mean that the target market would be limited to younger generations who are more tech-savvy and use social media platforms. One participant commented:

If it's an urban population with young and old it can reach them, but in the rural areas it will be mostly the younger generation that is actually receiving this message rather than the older generation (Urban participant, FGD 3).

One participant mentioned that the older generations in her area do not have smartphones and the only social media platform they use is WhatsApp. She stated:

Many people are not on social media platforms, the most one they use is WhatsApp and even that too, it's not most of the time. I'm just looking at senior citizens, they don't even have smartphones, so this message couldn't have reached them (Urban participant, FGD 3).

Another participant mentioned that although social media was popular, it was more for entertainment and that people would not be looking for informative information. She stated:

I think a disadvantage to using social media is that a lot of people, I think, aren't really paying attention (Urban participant, FGD 3).

Another limitation mentioned by participants with utilising social media platforms is misinformation whereby one participant noted:

It's such an open platform and anybody can just share whatever they feel like (Rural participant, FGD 3).

Another participant mentioned the conspiracy theories that would have added to the misinformation:

There were a lot of conspiracy theories which ended up confusing some of us and some believed them (Rural participant, FGD 3).

It was discussed that there are no measures to control misinformation which, and thus affects the credibility of social media platforms:

There is no measure to really say no this is wrong or guidelines. I know during COVID especially, on Facebook there was like a warning that used to be there, but you know people can just be posting anything (Rural participant, FGD 3).

The misinformation could even discredit health authorities when using social media. One participant mentioned:

A well-known organisation like WHO, can post something but under the comment section, and somebody may come and try influence and change or discredit what WHO was even trying to send across (Rural participant, FGD 3).

This is a concern as although the original video was created and shared by the WHO, which participants have confirmed they view as a trustworthy source, the nature of the challenge is that anyone can recreate and share their own videos. Therefore, there is the potential for misinformation whereby incorrect facts could be given or relayed by others. This is therefore a limitation associated with using a challenge campaign to share health information.

Participants also commented on the influx of communication on COVID-19 at the time, noting that people stopped paying attention to it. One participant expressed that:

People got really tired of seeing information about COVID and it was like really draining. I'm not sure, in response, people decided to just disregard it, but I know that it kind of was annoying to see them every day (Urban participant, FGD 3).

The fact that there was too much information on COVID-19 from many different sources due to the nature of social media being easily accessible and available to all, may have resulted in communication campaigns being less effective.

Another issue highlighted by participants is that social media is limited by the availability of mobile phone network data, especially in rural areas where internet connectivity is not as easily available.

Internet accessibility has been identified as a barrier to entry for allowing equal access to the campaign. This is not only due to the lack of infrastructure, but also exorbitant costs of data. With COVID-19, the economy was also affected and many people were left without work or income. People did not have the money to purchase data within these circumstances.

The collected data reflects that the WHO #Safehands Handwashing campaign may have been successful in education and motivating the audience to practice better hand hygiene, however, all but one of the participants were not familiar with the campaign prior to the study. Although it would have been understandable that there may have been a participation gap (Jenkins *et al.*, 2007: 28; 2009) for participants living in areas without access to internet facilities to access the campaign, this gap appears to extend beyond that. Further to the limited connectivity, disadvantaged communities were also struggling with regular water supplies, and were not able to accommodate the additional hygiene requirements with continuous handwashing as indicated in the campaign.

Additionally, participants felt that videos from the campaign were largely uninspiring, and did not take into account the local context, and this affected their response to it. Participants had many ideas on ways to adapt the videos to make them more relatable to their living conditions, and more appealing to local audiences. However, the bigger issue is that of reach, as they were not exposed to the campaign, and felt that the medium of social media was exclusionary for many audiences, and there were more effective ways to reach people, particularly those in the rural areas, with COVID-19 related messages.

Chapter 6: Conclusion

The aim of the study is not only to understand the reception amongst UKZN students based in KwaZulu-Natal, South Africa, but to also assess whether water security/insecurity affected the reception of the campaign and how the campaign raised awareness of hand hygiene, including a change in behaviour. The study also aimed to explore the affordances and limitations of utilising Twitter as an example of social media for spreading health communication campaigns.

Reception of the WHO #SafeHands Handwashing campaign

The study was significant in providing greater insight into understanding the reception of a universal health communication campaign at a localised level. It has revealed that a lot of work needs to be done when trying to relay global communication campaigns internationally for them to be effective within all regions. Organisations need to understand that different regions and countries have varying circumstances, and one approach may not necessarily apply to all. Communities may receive communication messages differently depending on their meaning structures, including their living conditions, cultural beliefs, history of the matter, etc.

With regard to the success of the WHO #SafeHands Handwashing campaign in South Africa, it had a very poor impact on this study. Participants had not even heard or seen the campaign, except for one, prior to the focus group discussions, let alone participated in the campaign. The campaign's reach was not prominent or as anticipated for the participants within the study. This is not only for participants from rural areas with limited internet accessibility but also for participants within urban areas who would have been utilising social media platforms when the campaign was active.

The overall reception of the message (Handwashing techniques and tips) was received positively (83%) by the participants, who expressed that they felt encouraged and better equipped to wash their hands more effectively after being exposed to the campaign.

Despite the issues relating to the local context and accessibility, participants did express their willingness to participate in the #SafeHands challenge, with 91,6% of participants indicating that they would have shared #SafeHands Handwashing videos at the height of COVID-19 to create awareness to reduce COVID-19 infections. Therefore, had the participants been exposed to the #SafeHands campaign at the peak of COVID-19, they would have agreed with the message and shared the video to increase awareness of the campaign and the correct handwashing techniques.

The participants did not receive the reception of the participatory element (recreating videos) of the campaign as positively. Due to many reasons, including personal and environmental factors, participants did not want to recreate their own handwashing videos. The most popular position from Hall's (1980) reception analysis for participation in the campaign was the negotiated position. This is whereby the participants understood the meaning and intention behind the campaign but would have to adapt the message for it to be more relatable to them.

Overall, participants agreed with the campaign's message, encouraging regular handwashing and educating them on the correct handwashing techniques. However, they could not relate to the videos as the living conditions were unfamiliar to them. Perhaps with the use of local artists and local organisations, as well as considering realistic living conditions, may have resulted in more relatable content. The videos were not accommodating or relatable for every economic class, and health authorities should have considered more relatable content, or even partnered with local authorities on creating impactful campaigns that the local population can relate to.

The Participation Gap

From this study, it is evident that most participants found it difficult to relate to the messages relayed due to their living conditions. Most participants living in rural areas did not have piped water available within bathrooms or running taps, as was depicted in the WHO #SafeHands Handwashing campaign videos. These videos originated from the global North, from first-world countries such as the USA, UK and Switzerland, and they experience different living conditions. Despite the concerns about the content of the campaign videos, most participants understood their meaning. They agreed it would have influenced their hand washing behaviours if they had seen this during the peak of the pandemic, during lockdown.

As per previous studies, health systems did not take the conditions of disadvantaged communities into account, resulting in a health campaign that has not catered to the unique health requirements of disadvantaged communities (Ramani, 2015: 58). This seems to be a recurring problem, where rural or disadvantaged communities can be overlooked as there is limited health information regarding their health conditions (Ramani, 2015: 59; Miller *et al.*, 2015).

Some of the participants had suggested utilising local artists to target the local market; and perhaps with this approach, it may have resulted in greater awareness of the campaign amongst UKZN students living in KwaZulu-Natal.

Furthermore, rural areas had very limited internet connectivity and communities living in rural areas may not even have had access to social media and therefore were not exposed to the campaign.

Water insecurity

Participants within the focus groups had also highlighted that rural areas did not have access to running water, and if they had to recreate the videos, they would have to access water in alternative ways, such as utilising stored water, using either a bowl or bucket to demonstrate

the challenge, using a tippy-tap, or demonstrating with sanitiser instead as it is more accessible (Hartford, 2020).

Water insecurity most definitely played a role in the reception of the campaign as rural participants found it difficult to relate to the videos and recreate the videos in a similar way. Most participants felt they would have to adapt based on their living conditions if they wanted to take part in the challenge.

The WHO #SafeHands Handwashing campaign was developed as a global campaign but is not practical in third world countries where water security is an issue (Schmidt, 2020; Zvobgo and Do, 2020; Brauer *et al.*, 2020; Stoler, Jepson and Wutich, 2020). The campaign has not been adapted to take into consideration cultural sensitivities and as a result, the health agenda is misaligned to that of the participants within the study. Running water and soap is generally easily accessible, however accessibility is not the same in lower income countries (Brauer *et al.*, 2020: 1). It would therefore not be possible for audiences living in these lower income countries to participate in the campaign in the same way as higher income areas.

With regards to participatory culture, the spreadability factor is impacted by the ability of the message to be adapted to fit different niche communities (Jenkins, Ford and Green, 2013: 27). With the WHO #SafeHands Handwashing campaign, it does not seem that this was fully utilised. Perhaps if the global message had been adapted to fit the various niche communities or for a local context, it may have been more effective. From the suggestions in the focus group, to target areas with water insecurity, perhaps local authorities could have put together a version utilising tippy-taps or with a bucket to demonstrate effective handwashing techniques from a local context.

Affordances and limitations of social media

In terms of utilising social media platforms such as Twitter, the affordances and limitations identified are from a local context. The affordances of the broad reach, cost-effective approach and quick turnaround time make it seem like the best approach to communicate

quickly in a pandemic to assist in reducing the spread of the coronavirus. These affordances may have been ideal for targeting citizens in first-world countries with reliable internet connectivity but does not apply to all target markets, such as rural communities in third-world countries without reliable access to the internet.

Regarding the limitations of social media only applicable to younger generations and costs of data for lower-income users, these are applicable more to the local context. Whereas the issues of misinformation and information overload are applicable to all, and in all regions.

Technology accessibility is a limitation brought up Christensen and Morley (2014: 209) in the Theoretical Framework when discussing the audience reception of the messages. The Literature Review also touched on the fact that the infrastructure needs to support the intervention (Bennett and Glasglow, 2009: 280). The research data has proven the importance of technology, as a large portion of the South African target market has been disadvantaged as they have not had access to the campaign due to their lack of access to technology resources.

This research is useful for any future global campaigns as it is evident that considerations need to be made for various interpretations and relatability at a local level. Global agencies need to partner with local agents to ensure that an effective and relatable message is delivered to all if an impact needs to be made globally. A blanket message cannot be acceptable going forward. Considerations need to be made for underdevelopment areas as they are most likely require health-related communication. Future pandemic communication as well as health communication campaigns need to be planned, taking these needs into account, resulting in a wider reach and ultimately more successful campaign.

Perhaps more planning and coordination should have been done with different regions of the WHO to ensure content is created to suit different target markets. For example, the Lifebuoy handwashing campaign by Unilever facilitated tailored-made initiatives with the use of their regional offices working directly with government and stakeholders within their various

regions (Unilever, 2021). Perhaps a similar approach with the WHO #SafeHands Handwashing Campaign may have resulted in a wider reach with more relevance and impact.

This study revealed that UKZN students received the campaign with a negotiated position and that water insecurity did have an impact on the reception. Although the campaign was not received as favourably or reach participants, it did raise awareness of hand hygiene and correct handwashing techniques and has the potential to positively impact on behaviour change.

Recommendations for further research

It would be recommended that to further the research, and to define what would work better in the local context, either participants could be asked to recreate their own videos for review within their own living conditions, or new videos could be created with adaptations allowing for rural participants to relate, such as using a bucket or a tippy-tap, and another reception analysis done with the new videos.

It is also recommended that other studies may investigate other international health communication campaigns to review the local reach, in South Africa or other third-world countries, in order to assess its reception and impact. Alternatively, studies on the reception of the WHO #Safehands Handwashing campaign within other third world countries or regions may be beneficial.

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Appendices

Appendix A: Focus Group Guiding Questions

Appendix B: Poll in Focus Groups

Appendix C: Gatekeeper's Letter

Appendix D: Focus Group Pre-Selection Questionnaire

Appendix E: Ethical Clearance Approval Letter

Appendix F: Informed Consent Form

Appendix A: Focus Group Guiding Questions

Part 1: Introductions:

- 1) Introduce yourselves one at a time. Tell us your name and what you are studying, level of study?
- 2) Icebreaker Exercise: 'Where in the World'

Instructions:

- Ask participants to pick a place in the world where they would like to go or that suits their personality.
- Ask them to post three clues for that place.
- Explain that the other participants have to guess which place the other participants have chosen.

Part 2: Poll

Part 3: Discussions:

COVID campaigns:

Health campaigns aims to engage and empower people to choose make changes that reduce the risk of developing diseases. For example a COVID campaign may have been organised with the goal of reducing the number of COVID infections.

- 1) Does anyone remember any COVID-19 campaigns that they may have seen during lockdown?
- 2) What messages were relayed during these campaigns?
- 3) What platforms (radio, TV, Social Media etc.) do you remember these campaigns using?
- 3) Do you recall any campaigns encouraging handwashing?
- 4) Do you recall any social media platforms encouraging handwashing?
- 5) Do you recall the organisations that were producing these campaigns?
- 6) Have you seen the WHO Handwashing challenge?

>>>

Screening of WHO Hand washing challenge videos

2-3 videos (6mins)

>>>

WHO Handwashing challenge:

- 1) What are your initial thoughts or feelings after seeing these videos?

- 2) What did you like about this campaign?
- 3) What did you dislike about this campaign?
- 4) Would you take part in the campaign by sharing these videos?
- 5) Would you take part in the campaign by creating your own handwashing video?
- 6) Why would you/wouldn't you take part in the campaign?
- 7) Which videos are most appealing to you? (WHO/celebrity sports/ celebrity singer/influencer)
- 8) Which videos are seen as more trustworthy? (WHO/celebrity sports/ celebrity singer/influencer)
- 9) Which videos will you have most likely shared on your social media platforms?
(WHO/celebrity sports/ celebrity singer/influencer)

Active Audience:

- 1) Does anyone feel that the representations in the videos are similar to their own living situations?
- 2) If you had to recreate your own video at home, would it be similar to the examples?
- 3) Does anyone feel that the representations in the videos are ideal but not similar to their living situations?
- 4) Would you be able to recreate your own video at home with a few adaptations? What adaptations would have to be made?

Behavioural change:

Anyone who has previously seen the HandWashing challenge:

- 1) Did you feel motivated to wash your hands more regularly?
- 2) Did you actually wash your hands more regularly?

Anyone who has seen the HandWashing challenge for the first time today:

- 1) Do you feel motivated to wash your hands more regularly? Why?

Everyone:

- 1) What do you feel motivated you to wash your hands more regularly? (Fear of COVID/ WHO endorsing/ celebrity endorsing/ trending)

Twitter/Social Media:

- 1) What do you feel are the advantages/benefits of using social media platforms, such as Twitter, for health communication campaigns such as this?
- 2) What do you feel are the disadvantages of using social media platforms, such as Twitter, for health communication campaigns such as this?

Appendix B: Poll in Focus Groups

Basic Hygiene: (Poll on Zoom)

1) I have read the informed consent forms and Consent to Participate in this Research

- I Agree
- I Disagree

Personal hygiene is how you care for your body. This practice includes bathing, washing your hands, brushing your teeth, and more.

2) Before COVID, how do you feel your personal hygiene levels were?

- Excellent
- Good
- Average
- Poor

3) Before COVID, did you regularly wash your hands? How often?

- Yes, every few hours
- Yes, before eating and after using the toilet
- Sometimes, when I remember
- Very Rarely
- Never

4) Before COVID, did you cover your mouth when coughing or sneezing?

- Always
- Sometimes
- Never

5) During COVID do you feel your hygiene levels increased, decreased or remained the same?

- Increased Hygiene levels
- Decreased Hygiene levels
- Hygiene levels remained the same

6) What did you do differently with your personal hygiene routines as a result of COVID?

(multiple options can be selected)

- I washed my hands more regularly

- I used hand sanitiser
- I used a facemask
- I sanitised my grocery items
- I bathed/showered after leaving my house
- I changed and washed my clothing after leaving my house
- I practiced social distancing
- I covered my mouth/nose when coughing or sneezing

Appendix C: Gatekeeper's Letter



11 November 2021

Ms Sarah Haffenden (SN 206516325)
School of Applied Human Sciences
College of Humanities
Howard College Campus
UKZN
Email: s.haffenden@ukzn.ac.za

Dear Ms Haffenden

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN) towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

"Exploring the reception of Global Health Campaigns at a local level: A study of the WHO #SafeHands Handwashing social media campaign for COVID-19 on Twitter."


It is noted that you will be constituting your sample by conducting interviews and/or focus group discussions with students from UKZN (Taking in account the regulations imposed during the lockdown ie restrictions on gatherings, travel, social distancing etc. ZOOM, Skype or telephone interviews recommended).

Please ensure that the following appears on your notice/questionnaire:

- Ethical clearance approval letter;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using the 'Microsoft Outlook' address book. Identity numbers and email addresses of individuals are not a matter of public record and are protected according to Section 14 of the South African Constitution, as well as the PAIA and POPI Act. For the release of such information over to yourself for research purposes, the University of KwaZulu-Natal will need express consent from the relevant data subjects. Data collected must be treated with due confidentiality and anonymity.

Yours sincerely


Dr K Cleland
Registrar

Office of the Registrar

Postal Address: Private Bag X54001, Durban, 4006, South Africa
Telephone: +27 (0)31 260 7971 Email: registrar@ukzn.ac.za Website: www.ukzn.ac.za

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

INSPIRING GREATNESS

Appendix D: Focus Group Pre-Selection Questionnaire

Please note this questionnaire is purely to determine which focus group will be best suited for you to join. Please note that your personal information will not be shared and you will remain anonymous throughout the study.

Basic Information

Name:

Surname:

Student Number:

Contact Number:

Email Address:

Study Information

In 2020, where did you spend lockdown?

- Home, Rural Area, KwaZulu-Natal
- Home, Urban Area, KwaZulu-Natal
- Other: _____

During lockdown, did you have access to internet?

- Yes
- Sometimes
- No
- Other: _____

During lockdown, did you have access to running water?

- Yes
- Sometimes
- No
- Other: _____

During lockdown, where you living in an urban or rural area?

Do you have the following social media accounts:

- Facebook (Y/N)
- Twitter (Y/N)
- Instagram (Y/N)
- LinkedIn (Y/N)

- Other: _____

Availability

Would you prefer to attend a focus group on campus (Howard College) or virtually (online)?

- On Campus
- Virtually
- I can meet either on campus or virtually

If attending on campus, what days of the week are you available?

- Weekdays (Monday - Friday)
- Weekends (Saturday-Sunday)
- Any day of the week
- I can only attend virtually/online

If attending on campus, what times during the day are you available?

- Mornings
- Lunchtime
- Afternoons
- Anytime throughout the day
- I can only attend virtually/online

If attending virtually/online, what days of the week are you available?

- Weekdays (Monday - Friday)
- Weekends (Saturday-Sunday)
- Any day of the week

If attending virtually/online, what times during the day are you available?

- Mornings
- Lunchtime
- Afternoons
- Anytime throughout the day

If attending virtually/online, which platforms have you used before?

- Zoom
- Microsoft Teams
- Other: _____

Appendix E: Ethical Clearance Approval Letter



16 February 2022

S Haffenden (206516325)
School Of Applied Human Sc
Howard College

Dear S Haffenden,

Protocol reference number: HSSREC/00003752/2022

Project title: Exploring the reception of Global Health Campaigns at a local level: A study of the World Health Organization #SafeHands Handwashing social media campaign for the coronavirus disease on Twitter.

Degree: Masters

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 06 January 2022 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid until 16 February 2023.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,



Professor Dipane Hlalele (Chair)

/dd

Humanities and Social Sciences Research Ethics Committee

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 8350/4557/3587 Email: hssrec@ukzn.ac.za Website: <http://research.ukzn.ac.za/Research-Ethics>

Founding Colleges:  Edgewood  Howard College  Medical School  Pietermaritzburg  Washville

INSPIRING GREATNESS

Appendix F: Informed Consent Form

UKZN HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE (HSSREC)

APPLICATION FOR ETHICS APPROVAL For research with human participants

INFORMED CONSENT RESOURCE

Note to researchers: Notwithstanding the need for scientific and legal accuracy, every effort should be made to produce a consent document that is as linguistically clear and simple as possible, without omitting important details as outlined below. Certified translated versions will be required once the original version is approved.

There are specific circumstances where witnessed verbal consent might be acceptable, and circumstances where individual informed consent may be waived by HSSREC.

Information Sheet and Consent to Participate in Research

Date:

Dear Sir/Madam

My name is Sarah Haffenden and I am a Masters student from the department of Culture, Communication and Media Studies, and also referred to as the Centre for Communication, Media and Society (CCMS). CCMS falls under the Applied Human Sciences Faculty at the University of KwaZulu-Natal.

My research is: Exploring the reception of Global Health Campaigns at a local level: A study of the WHO #SafeHands Handwashing social media campaign for the coronavirus (COVID-19) on Twitter. Below are the details of the researcher and the institution of research:

Researcher	Sarah Haffenden	+2760 526 9464	strauss@ukzn.ac.za 206516325@stu.ukzn.ac.za
Department	Centre for Communication, Media and Society (CCMS)	+27-31-2602505	http://ccms.ukzn.ac.za
Institution	University of KwaZulu-Natal (UKZN)	Howard College Campus, Masizi Kunene Ave, Glenwood, Durban, South Africa	http://www.ukzn.ac.za
Supervisor	Prof. Sarah Gibson	+27-31-2602367	Gibsons@ukzn.ac.za
HSSREC Research Office		+27-31 260 3587/4557/8350	hssrec@ukzn.ac.za

You are being invited to consider participating in a study that involves research on the reception of the World Health Organisation's (WHO), #SafeHands Handwashing social media campaign. The aim and purpose of this research is to determine how this global campaign was received by South Africans at a local level. The research also aims to understand if the campaign raised awareness of handwashing as a coronavirus preventative measure and if the campaign influenced the behaviour of South Africans. The study is expected to enroll approximately 24 participants in total, with a total of four focus groups with at least 6 participants' in each group. All participants will be based in KwaZulu-Natal and will be students at UKZN. A selection process will involve a qualifying questionnaire with questions which will determine the most suitable focus group for each participant to form apart of. The focus group time and date will be determined based on the availability of all participants and should take place within 3 hours over one day. The duration of your participation if you choose to enroll and remain in the study is expected to be not more than half a day. The study is not funded by any third parties.

The study will involve focus groups that will be recorded for the purpose of analysis and transcription only. We hope that the study will be beneficial in the improvement of meaningful campaigns for developing countries for future pandemics.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number_____).

In the event of any problems or concerns/questions you may contact the researcher on the contact details above or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001

Durban, 4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557- Fax: 27 31 2604609 - Email: HSSREC@ukzn.ac.za

Please note that participation in this research is voluntary and participants may withdraw participation at any point of the study. In the event of refusal/withdrawal of participation, participants will not incur penalty or loss of treatment or other benefit to which they are normally entitled to. Any participant that chooses to withdrawal from the study can submit this response to the researcher in writing, via email.

The focus group discussion will not be paid for in monetary funds, however an incentive may be given (in the form of refreshments if contact sessions or data if online sessions). All responses will be treated in a confidential manner and pseudonyms will be used to protect participant's real identities. As a participant, you will be treated with respect and dignity. Please be advised that although confidentiality will be requested within the focus groups, it cannot be guaranteed by other participants' outside of the focus group session. Participants are encouraged to only share personal information that they feel comfortable sharing, as confidentiality outside of the research setting cannot be guaranteed.

The data will be kept securely for five years for purposes of verification by the University of KwaZulu-Natal, after that it will be destroyed. At your request, an electronic copy of the final projects will be sent to you on completion.

Your willingness to participate in this study will greatly be appreciated.

CONSENT

I, _____ have been informed about the study entitled Exploring the reception of Global Health Campaigns at a local level: A study of the WHO #SafeHands Handwashing social media campaign for the coronavirus (COVID-19) on Twitter, by Sarah Haffenden (researcher).

I understand the purpose and procedures of the study is to determine how this global campaign was received by South Africans at a local level. The research also aims to understand if the campaign raised awareness of handwashing as a coronavirus preventative measure and if the campaign influenced the behaviour of South Africans.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

I have been informed about any available compensation or medical treatment if injury occurs to me as a result of study-related procedures.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at +27 60526 9464 or strauss@ukzn.ac.za .

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

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Tel: 27 31 2604557 - Fax: 27 31 2604609 - Email: HSSREC@ukzn.ac.za

Additional consent, where applicable

I hereby provide consent to:

Audio-record my interview / focus group discussion YES / NO

Video-record my interview / focus group discussion* YES / NO

**Video-record is only for online focus groups*

Signature of Participant

Date

Signature of Witness
(Where applicable)

Date

Signature of Translator
(Where applicable)

Date