Exploring Medical Communication & Media Influence on Public Health Perceptions During the COVID-19 Pandemic

COVID-19 Medical Communication & Contemporary Media Complexity

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Abstract

Background

The COVID-19 pandemic marked the first global health crisis to unfold in a highly connected digital media environment. Understanding how social and mainstream media shaped public health communication during this period is crucial for improving future pandemic responses. Early pandemic communication was complicated by rapid information spread through social media, which often outpaced official channels and created challenges for effective public health messaging.

Research Question

How did social and mainstream media shape public perceptions and responses during the COVID-19 pandemic, and what were the lived experiences and understandings among both healthcare professionals and members of the public regarding social and mainstream media broadcasting 15 months into the pandemic?

Literature

A narrative review explored three key areas: the evolution of media technologies and landscapes, communication strategies from past pandemics, and expert perspectives on initial COVID-19 coverage. The review highlighted the unprecedented nature of pandemic communication in an environment where social media enabled instant global information sharing while also facilitating the spread of misinformation.

Methods

The study employed Interpretative Phenomenological Analysis (IPA) methodology to examine the lived experiences of 40 participants (20 healthcare professionals and 20 members of the public) through in-depth, semi-structured interviews conducted 15 months into the pandemic. Analysis was enhanced through innovative use of AI-assisted tools while maintaining IPA's idiographic focus.

Results

Analysis revealed distinct Group Experiential Themes (GETs) for healthcare professionals and the public. Healthcare professionals demonstrated more sophisticated information evaluation strategies but struggled with bridging professional knowledge and public understanding. The public showed greater vulnerability to misinformation but developed increasingly critical approaches to media consumption over time. Both groups experienced evolution in their trust of different information sources throughout the pandemic.

Discussion

The findings highlighted how modern media environments complicate traditional public health communication approaches. The research identified crucial differences in how healthcare professionals and the public processed pandemic information, while also revealing shared challenges in navigating the complex media landscape. The study extends understanding of how social media platforms can both enhance and hinder effective health communication during crises.

Conclusions

The research demonstrates a fundamental shift from a 'deferrer society' to a 'referrer society' in public health communication, necessitating new approaches to crisis communication that can harness social media's speed and reach while maintaining message integrity. Findings suggest future pandemic responses must balance traditional authority with new forms of collaborative knowledge creation, while supporting both healthcare professionals and the public in navigating complex information landscapes.

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Author Declaration

I confirm that this work is original and that if any passage(s) or diagram(s) have been copied from academic papers, books, the internet, or any other sources these are clearly identified by the use of quotation marks and the reference(s) is fully cited. I certify that, other than where indicated, this is my own work and does not breach the regulations of HYMS, the University of Hull or the University of York regarding plagiarism or academic conduct in examinations. I have read the HYMS Code of Practice on Academic Misconduct, and state that this piece of work is my own and does not contain any unacknowledged work from any other sources I confirm that any participant information obtained to produce this piece of work has been appropriately anonymised.

1.0 Introduction

This chapter provides important background context around communication challenges during the early stages of the COVID-19 pandemic. It highlights the critical case of Dr Li Wenliang, whose attempts to raise early warnings were initially suppressed by local authorities in Wuhan, China. This case underscores the rapid dissemination of information through social media, which far surpasses speed of information from institutional sources, in the earliest pandemic stages. It emphasises the complexity of communication during health crises amid the prevalence of issues like confusion, fear, and mistrust among the public. As millions of undiscovered viruses continue to pose threats to human health, this chapter argues that understanding communication during COVID-19 is crucial to informing strategies for future pandemics. The aim is to draw lessons from participants' lived experiences during this pandemic and apply those insights to enhancing communication for future outbreaks. Overall, this chapter situates the research within the wider context of health communication challenges and the ongoing need to derive learnings for mitigating future risks.

1.1 Background

1.1.1 The Wuhan Whistle-blower: A Case Study in Early Pandemic Communication

On December 30, 2019, Dr Li Wenliang, an ophthalmologist in Wuhan, China, experienced a critical juncture in the early stages of the COVID-19 pandemic. After attempting to raise awareness about an unusual illness resembling Severe Acute Respiratory Syndrome (SARS) and Middle Eastern Respiratory Syndrome (MERS), Dr Wenliang was reprimanded by the public security bureau for "spreading rumours that disturbed the public order". His well-intentioned message, shared privately with medical school colleagues via WeChat, warned of the emerging pathogen SARS-CoV-2 and the subsequent Coronavirus Disease–2019 (COVID-19).

Tragically, Dr Wenliang died from COVID-19 on February 7, 2020, at the age of 33, leaving behind his pregnant wife. Although the Chinese government later apologised for their accusations, Dr

Wenliang's story remains emblematic of the early mismanagement of the crisis (Farrar 2021). The suppression of information raises questions about the potential impact of timely communication on the global pandemic response.

With COVID-19 being the first pandemic to play out in a 24/7 media environment, it is fitting for a medical professional to pursue using social media as a tool to spread awareness in the earliest days of this outbreak, before it was declared a pandemic.

This case study highlights two critical aspects of modern health communication. First, the rapid dissemination of emerging information via new media channels outpaces official announcements from central governments and organisations such as The World Health Organisation (WHO). This speed differential has persisted throughout the pandemic, prompting questions about its influence on individuals' reactions and subsequent health behaviours. Second, Dr Wenliang's case demonstrates the importance of professional networks allowing for rapid oversight of local outbreaks and subsequent global awareness, both of which are facilitated by modern communication technologies. Given the public nature and ability to, via social media, rapidly share both validated expert opinion and unvalidated speculation on an unprecedented scale; this is an area worthy of academic exploration in context of future pandemic communications.

1.1.2 Early Pandemic Behavioural Indicators

As early as April 2020, the literature suggests 'Functional fear' was a good predictor of public health compliance in the COVID-19 pandemic (Harper et al. 2020). Ahorsu et al. highlight that a feature unique to pandemic viral infections is the degree of fear which can be engendered across large swathes of the population (Ahorsu et al. 2020). Fear, a negative emotion, is characterised by extreme levels of emotional avoidance concerning specific stimuli (Perin et al. 2015).

Taylor and Asmundson's research from Canada suggests that during the COVID-19 pandemic, some people have developed 'COVID Stress Syndrome'. Characterised by fear of infection, fear of touching

surfaces or objects that might be contaminated with the novel coronavirus, xenophobia (i.e., fear that foreigners might be infected with the virus), COVID–related checking and reassurance seeking and COVID–related traumatic stress symptoms (e.g. COVID–related intrusive thoughts and nightmares) (Taylor and Asmundson 2020).

These are all important considerations, especially in a 24/7 media environment, as the true impact of how concerning COVID-19 information was communicated may potentially not be known for many years. As a result of the current pandemic, if research on natural disasters is used as a reference, we can estimate that 10% of people develop severe psychological problems, such as mood disorders, anxiety disorders or post-traumatic stress disorder (PTSD) (Galatzer-Levy, Huang, and Bonanno 2018).

However, considering the SARS outbreak of 2003, the percentage of those suffering could be even higher. A four–year follow up study of 70 survivors of SARS found that 44% developed PTSD (Hong et al. 2009). Even after recovering from the physical effects of SARS, the psychological effects continued in 82%. It is, therefore, unsurprising to see PTSD being predicted as the 'second tsunami of the SARS-CoV-2 pandemic' (Dutheil, Mondillon, and Navel 2020). The broader potential impact of pandemic communications therefore highlights the importance of clear communication and coherent leadership during a health crisis such as COVID-19.

1.1.3 What Is Effective Communication & To Whom?

The unprecedented complexity of communication during a health emergency like COVID-19 has resulted in confusion, fear, fatigue, issues with trust, and denial, all of which emerged as themes in this research. By examining the lived experiences of diverse participants, this study aims to deeply explore and understand the impact of COVID-19 communications on individuals' lives.

The estimated millions of currently undiscovered viruses (Carroll et al. 2018) and fungi (Kolby 2020) have the potential to negatively impact human health on a far greater scale than the already significant

disruption of COVID-19. Therefore, understanding communication during this pandemic is crucial. Factors such as increasing global travel, urbanisation, and deforestation contribute to the growing likelihood of pandemics (Madhav et al. 2018). With technological advancements like the 'metaverse' (Mystakidis 2022) and the advancing role of Artificial Intelligence (AI) in healthcare (Bohr and Memarzadeh 2020) creating increasingly immersive online worlds, the implications for communication in future pandemics is worthwhile considering.

To build on the insights gleaned from the case of Dr Wenliang and the complex communication landscape during health emergencies, the next section outlines the aims of this research, focusing on the specific objectives and questions that will guide the investigation of communication across various forms of media during the COVID-19 pandemic and its implications for future health crises. This research seeks to draw lessons from participants' lived experiences during the COVID-19 pandemic, in hopes of informing health communication strategies for future pandemics.

In the context of this thesis, 'effective communication' refers to the clear, accurate, and timely dissemination of information that enables recipients to make informed decisions and take appropriate actions. It encompasses not only the content of the message but also the channels through which it is delivered, the credibility of the source, and the ability to adapt messaging to diverse audiences.

This research considers two key populations: healthcare professionals and the general public. Healthcare professionals include doctors, nurses, and other medical staff who are both consumers and disseminators of pandemic-related information. The general public encompasses individuals from various backgrounds who rely on different media sources for information about the pandemic.

1.2 Research Questions

This study aims to examine:

1. "How social and mainstream media shaped public perceptions and responses during the COVID-19 pandemic?"
2. "What were the lived experiences and understandings, among both medically qualified and members of the public, of social and mainstream media broadcasting 15 months into the COVID-19 pandemic?"

1.2.1 Research Aims

1. Explore the impact of social and mainstream media on public understanding and behaviour during the COVID-19 pandemic.
2. Investigate the challenges of information dissemination and consumption in the contemporary media environment during a global health crisis.
3. Examine the role of trust in authorities and media sources in shaping public response to pandemic-related information.
4. Identify key factors influencing the effectiveness of public health communication during the pandemic.
5. Generate insights to inform future pandemic communication strategies.

2.0 Literature Review

This chapter provides a narrative review of the literature examining the media's role during pandemics. The chapter begins with an introduction, an overview of the literature review, followed by a methodology of how the review was conducted. It is then organised into three sections, each exploring distinct facets of media. The first section considers evolution of media technologies and landscapes, establishing crucial context about social media's foundations and capabilities. The second delves into communication strategies utilised during past pandemics, analysing their relevance for COVID-19. The third considers expert perspectives on media coverage during the initial COVID-19 outbreak, investigating potential challenges and consequences. Sources range from scholarly publications to first-hand accounts from journalists reporting on the pandemic. Together, these sections aim to equip readers with essential background knowledge about media's complex relationship with pandemic communication. The literature provides a springboard for assessing media impacts on societies facing future outbreaks and anchors the current study within broader discourses on this critical issue. Overall, this review chapter maps the terrain of media's involvement in pandemic response through an expansive, multi-disciplinary lens.

2.1 Introduction

2.1.1 What is Health Communication?

Health communication is constantly evolving in scope and scale with it becoming an increasingly prominent field in public health, healthcare, non-profit and private sectors. As a result, many authors and organisations have been attempting to define and/or redefine the term over time. There are discrepancies in some of these definitions given the various multi-disciplinary lenses that are being applied (Schiavo 2013). The commonalities from the twenty-one definitions by multiple organisations examined in Schiavo's core textbook were distilled into the following:

"Health communication is a multifaceted and multidisciplinary field of research, theory and practice. It is concerned with reaching different populations and groups to exchange health-related information, ideas, and methods in order to influence, engage, empower and support individuals, communities, healthcare professionals, patients, policy makers, organisations... and the public, so that they will champion, introduce, adopt, or sustain a health or social behaviour, practice, or policy, that will ultimately improve individual, community and public health outcomes".

Successful health communication operates within a complex environment, which involves encouraging and supporting a wide range of stakeholders to make and or absorb information and implement behavioural changes as a result, be they members of the public to adopt and sustain healthy lifestyles, health care professionals to provide evidence based care or policy makers implementing new processes or procedures.

Schiavo also detailed some key characteristics of effective health communication including: people centred, evidence based, multidisciplinary, strategic, process-oriented, cost-effective, creative in support of strategy, audience- and media- specific, relationship building, aimed at behavioural and social results, inclusive of vulnerable and underserved groups.

Clearly the wide range of disciplines involved in the successful deployment of health communications make this a complex task. This complexity existed even before the emergence of the COVID-19 pandemic which only served to complicate things further. Having considered what health communication is and what effective health communication looks like, the rest of this section considers some of the seminal and underpinning theoretical literature around media and communication theory.

Firstly, "mass communication" refers to messages transmitted to a large audience through one or more forms of media (Deuze 2020). Media is the means of transmitting such messages. Subsequently, communication theory considers how messages mean different things to different people according to the different channels used to communicate them (Deuze 2020). Various communication theories

provide crucial frameworks for understanding the dynamics of information dissemination during a pandemic. Key concepts include source credibility (Hovland and Weiss 1951), message framing (Tversky and Kahneman 1981) and channel effects (McLuhan 1964).

Source credibility theory suggests that the perceived expertise and trustworthiness of information sources significantly influence message reception and acceptance (Hovland and Weiss 1951). In the context of pandemic communication, this may explain varying public responses to information from health authorities versus celebrities or social media influencers.

Message framing theory posits that the way information is presented can significantly affect how it is received and acted upon (Tversky and Kahneman 1981). During a health crisis, framing effects may impact public compliance with safety measures or vaccine acceptance. Further expanding on message framing theory, a comprehensive meta-analysis by Gallagher and Updegraff examined the effects of gain- versus loss-framed messages on health behaviours. Their findings revealed that gain-framed messages were significantly more effective than loss-framed messages in promoting prevention behaviours, particularly for skin cancer prevention, smoking cessation, and physical activity. Interestingly, this effect was most pronounced when examining actual behavioural outcomes rather than attitudes or intentions. This distinction underscores the importance of assessing behavioural measures in health communication research, as attitudes and intentions may not always translate directly into action. The authors also found that for detection behaviours, such as screening, there was no significant overall advantage for either frame. These insights suggest that careful consideration of message framing, tailored to the specific health behaviour being promoted, can enhance the effectiveness of health communication strategies. In the context of a pandemic, such nuanced understanding of framing effects could be crucial in crafting messages that effectively promote preventive behaviours like mask-wearing or vaccination (Gallagher and Updegraff 2012).

Marshall McLuhan was a Canadian philosopher whose work is among the cornerstones of the study of media theory. His core text “The Medium is the Message” is particularly relevant of consideration in

this section on the theoretical underpinnings of media and communication. His channel effects theory proposes that the medium through which a message is transmitted can be as impactful as the message itself. In the modern media landscape, this concept takes on new dimensions with the interplay between traditional and social media channels – where multiple new mediums can be used to convey messages. This was a concept firmly grounded in the theoretical literature by McLuhan highlighting the importance of the medium used in shaping the perception of the message itself (McLuhan 1964). McLuhan's seminal work on the state of the then emerging phenomenon of mass media as it was in 1964 has enjoyed a notable resurgence of interest, in today's modern media environment with phrases such as "the global village" and "the medium is the message" becoming particularly relevant once more.

A decade later, further research into the interplay between and importance of medium and message, developed new knowledge pertinent to the theoretical considerations of this MD research. Worchel et al's study with 242 introductory psychology students found while the type of media does have an effect, it is dependent on both the message (whether it agrees with the audience or disagrees with them) and on the communicator (whether they are deemed trustworthy or non-trustworthy). When the message agrees with the position held by the audience, the media over which it is presented makes little difference. An effect which holds true across the source of said message, whether they be newscaster or political candidate (Worchel, Andreoli, and Eason 1975).

Whereas, when the position taken by the message disagrees with that held by the audience, then depending on the communicator, the type of media does have an effect on the persuasiveness of the message. There was also an interesting dimension related to trust in this regard. With the trusted communicator, television was by far the most effective media in producing attitude change and radio seems to be more effective than the written message. The opposite was found when the communicator is initially viewed as untrustworthy; here television is the least effective attitude change media, and the written communication is the most effective.

When Worchel et al's study was conducted only speculation could be offered as to why the pattern outlined above emerged. One theory suggested that the more "live" the speech the more involvement on the part of the audience. With television more "live" than radio; and radio being more involving than the written word (Weiss 1969). Given the aforementioned theoretical underpinning, it is proposed this research poses a relevant examination of the impact of increasingly immersive content distributed across social media, concerning the COVID-19 pandemic.

2.1.2 The Evolution of Health Communication: Social Media's Growing Role & Impact

Building upon the theoretical foundations of health communication, it is crucial to consider the rapidly evolving role of social media in this domain. As Moorhead et al comprehensively examined in their systematic review, social media platforms have become increasingly integral to health communication strategies among the public, patients, and healthcare professionals alike (Moorhead et al. 2013). The rise of social media in health communication can be seen as a natural progression of McLuhan's "global village" concept, where information now spreads rapidly across digital networks, transcending traditional geographical and temporal boundaries (McLuhan 1994). This shift aligns with the Centers for Disease Control (CDC) Crisis & Emergency Risk Communication (CERC) Manual. This framework's emphasis on ongoing two-way communication, as social media platforms inherently facilitate real-time interactions and feedback loops between information sources and recipients.

The benefits of social media in health communication are multifaceted. Firstly, it dramatically increases the potential for interaction, allowing for more dynamic and responsive communication strategies. This interactivity dovetails with Worchel et al.'s findings on audience involvement and message effectiveness (Worchel, Andreoli, and Eason 1975). Secondly, social media enables the dissemination of more tailored and personalised health information, potentially enhancing message relevance and impact as per the CERC manual's guidance on audience-specific messaging. Furthermore, social media platforms have significantly expanded accessibility to health information, reaching demographics that may have been underserved by traditional communication channels. This

increased reach is particularly pertinent when considering Schiavo's emphasis on inclusive health communication strategies (Schiavo 2013).

Social media also facilitates peer support networks, providing a digital space for individuals to share experiences and information – a factor that may influence perceived self-efficacy, a key component in health behaviour change. From a public health perspective, social media has emerged as a powerful tool for health surveillance, allowing for real-time monitoring of health trends and public sentiment. This capability is especially valuable in crisis situations, enabling rapid response and targeted interventions.

However, the use of social media in health communication is not without limitations. Chief among these are concerns about information quality and reliability – issues that intersect with Hovland and Weiss's work on source credibility (Hovland and Weiss 1951). The democratisation of information dissemination, while beneficial in many ways, also poses challenges in maintaining message accuracy and credibility. Additionally, the use of social media raises important questions about confidentiality and privacy, particularly when dealing with sensitive health information.

As we continue to navigate the complex landscape of health communication in the digital age, it is clear that social media will play an increasingly significant role. However, its effective use will require a nuanced understanding of both its potential benefits and limitations, grounded in established communication theories and adapted to the unique challenges of the modern information ecosystem.

2.1.3 Medical Practice: Dealing With Uncertainty & Ambiguity

The practise of medicine has always been characterised by uncertainty (Geller, Faden, and Levine 1990). As Sir William Osler alluded to over 100 years ago "medicine is a science of uncertainty, and an art of probability" (Bean 1954). Some early work in this area suggests as training advances residents may become more tolerant of ambiguity thus the training process produces physicians who can deal with the ambiguity and uncertainty of clinical practice (DeForge and Sobal 1991).

The concept of uncertainty has been explored recently in medical education, with a particular focus on how clinical medical students navigate ambiguous situations (Stephens, Sarkar, and Lazarus 2022). The authors emphasise that uncertainty is inherent to medical practice, a reality that has been magnified during the COVID-19 pandemic, when dealing with a pandemic caused by a novel pathogen. Their research underscores that uncertainty tolerance is not merely an emotional response but involves cognitive and behavioural strategies that can be developed over time.

While members of the medical profession may have been trained to deal with uncertainty and ambiguity, members of the public when placed in a situation where they are exposed to pandemic related media via social and mainstream channels will not have the benefit of that knowledge and training. It is hoped this research may provide insights into what constitutes effective public health communication in such a situation and what causes confusion and or disengagement with COVID-19 related content.

2.1.4 Health Crisis Communications

Well before the COVID-19 pandemic health communicators at the CDC, given their experience and exposure dealing with prior pandemics developed an integrated model titled Crisis & Emergency Risk Communication (CERC). CERC was pioneered as a general theoretical framework for explaining how health communication functions within the contexts of risk and crisis (Veil et al. 2008). As a framework CERC provides guidance emphasising the importance of ongoing two-way communication to build trust and credibility. It also provides advice around channel and message characteristics. CERC alludes to the fact risks and crises affect a wide variety of the public, all with variable needs, interests and resources which in turn affects their communication channel preferences. Something they advise paying particular attention to is the evolution of communication as a risk evolves into a crisis, introducing new risks and as a crisis evolves to post crisis and recovery. From a message characteristic and persuasiveness perspective, the CERC framework emphasises tailoring messages to

audience needs and promoting self-efficacy. The premise behind this is if individuals believe they can act effectively to alleviate risk, they are more likely to do so.

2.2 Literature Review Methodology

A narrative literature review was conducted to explore the role of media during pandemics. Narrative reviews are considered an important educational tool in continuing medical education and public health (Bernardo, Nobre, and Jatene 2004). A narrative review approach was ultimately chosen for the following reasons. Firstly, given the interdisciplinary nature of health communication and the broad scope of our research questions, a narrative review allowed for the integration of diverse theoretical perspectives and empirical findings. Secondly, this approach provided the flexibility to trace the historical development of key concepts while also incorporating contemporary applications, particularly in the rapidly evolving domain of social media and crisis communication. Lastly, a narrative review facilitated the synthesis of complex theoretical frameworks in a manner that could inform our specific research focus on pandemic communication.

While a traditional systematic search was not conducted, a comprehensive and structured approach was employed to identify relevant theoretical and empirical work. Using suggested historical references as a starting point, Research Rabbit - an AI-powered literature mapping tool, was utilised to explore the broader landscape of communication theory and health communication research. This tool allowed for the visualisation of citation networks and the identification of similar works across time. For instance, McLuhan's seminal work "Understanding Media: The Extensions of Man" (McLuhan 1994) was used as a seed publication, leading to the exploration of 1,077 similar works and 6,762 citations. Additionally, academic texts such as "Introduction to Digital Media" (Delfanti and Arvidsson 2019) and "The Power of Platforms : Shaping Media and Society" (Nielsen and Ganter 2022) were used as comprehensive jumping-off points into the literature, providing valuable insights into the past, present, and future of digital media. This multi-faceted approach enabled a thorough examination of the theoretical evolution and empirical applications of communication theories in health contexts, while

also ensuring coverage of contemporary digital media landscapes. The novel literature mapping tool, Research Rabbit, identified all linked publications from databases including PubMed and Google Scholar.

2.3 Overview of Literature Review

This literature review is organised into three main sections, each addressing distinct aspects of the media's role in the context of pandemics. Section I establishes the foundational role of media in modern life, considering the literature pertaining to the use of social media in a pandemic. Section II introduces the importance of effective communication during an evolving pandemic and media landscape. This section explores the communication strategies employed during past pandemics over the last two decades, even though these strategies unfolded within a significantly different media environment – what elements remain relevant for the COVID-19 pandemic? One such example this section examines is the work of Professor Barbara Reynolds, the CDC's first communications professional to respond on the ground to the emerging bird flu outbreak in Hong Kong in 1997 (Quick 2018).

Having introduced the media landscape and learnings from past pandemics, Section III considers expert opinion on initial COVID-19 coverage. This section investigates the potential challenges and consequences of the initial stages of the COVID-19 pandemic as it unfolded in the complex media landscape. Key sources discussed here include an opinion piece by Saad Omer, Director of the Yale Institute for Global Health, published in The New York Times on January 23, 2020, in which he posed the question, *"Is America Ready for Another Outbreak?"* (Omer 2020).

This section also considers the reflections of journalists on the front lines of reporting COVID-19, as discussed in the book *"Reporting Coronavirus",* which contains a collection of essays that provide valuable 'behind the screens' insights into the evolving coverage of the pandemic's first six months. Michael Jeremy, Director of News and Current Affairs at ITV, highlights the unprecedented nature of the pandemic and its impact on television journalism in his opening quote: "As people increasingly

turned to mainstream media for information, the importance of reliable news sources became more apparent". Mary Nightingale, one of the journalists involved in *"Reporting Coronavirus"* (ITV News 2020) emphasised the essential role of highly regulated mainstream broadcasters in keeping people informed and safe. However, she went on to say this is in contrast to the highly unregulated "social media fanfare", where misinformation could cost lives. The interplay between these two forms of media, particularly during the initial stages of communication during a pandemic involving a novel pathogen, is a critical area of exploration.

Furthermore, this section presents the main themes from the Royal Society of Medicine (RSM) webinar titled "Media in a Health Crisis?" broadcast on May 28, 2021, as part of their COVID-19 lecture series. A write up of this webinar has been included, as it formed part of my preparation in the run up to competing the interviews. Considering the views of this expert panel as I completed interviewing and then writing up the research participants lived experiences was helpful when drafting topics that are presented in *'6.0 Discussion'*.

This literature review section aims to provide a solid foundation for readers who may not possess extensive background knowledge on the subject matter. In addition to conventionally referenced academic literature, news articles and websites will be hyperlinked to facilitate immediate access to relevant resources.

2.4 The Evolution of Media: From Traditional to Social

The media landscape has undergone significant transformation over the past few decades, profoundly impacting how information is disseminated during global health crises. This section will briefly outline the transition from traditional media to the current digital media environment, with a focus on the rise of social media and its implications for pandemic communication.

2.4.1 Traditional Media

Traditional media, including newspapers, radio, and television, have long been the primary sources of information for the general public. These forms of media were characterised by one-way mass communication, with limited opportunities for audience interaction or immediate feedback. During previous pandemics, such as the 1918 influenza pandemic, these traditional media channels played a crucial role in disseminating public health information.

2.4.2 The Deferrer Society: Constraints of Traditional Media

In the era spanning from the printing press to the advent of the World Wide Web, the media environment was characterised by the broadcasting of information and knowledge, with limited opportunities for interaction and discussion among recipients. In the realm of traditional media, news was disseminated at fixed times through one-way mass communication channels. Consequently, a 'deferrer society' emerged, marked by minimal interconnectivity.

Individuals were entirely reliant on traditional broadcast media, such as news programs, newspapers, and magazines, for insights into the world beyond their immediate environment. The time lag between an event occurring and its coverage in print materials was a crucial factor contributing to delays in knowledge dissemination. This distinctive aspect of the traditional media age restricted readers' ability to swiftly comment, engage in discussions, and share content with a broader audience.

As this thesis will later explore, the 'deferrer society' contrasts starkly with the 'referrer society' facilitated by the silicon chip and social media, which have uniquely shaped communication and interaction during the COVID-19 pandemic.

2.4.3 The Digital Revolution & The Rise of Social Media

The advent of the internet and subsequent technological advancements, particularly the development of smartphones, has dramatically altered the media landscape. This digital revolution has given rise to new forms of media, most notably social media platforms, which have significantly changed how individuals access, consume, and share information.

Key features of social media that have impacted pandemic communication include:

1. Instant information sharing: Social media allows for real-time dissemination of information, enabling rapid updates during fast-evolving situations like pandemics.
2. User-generated content: Platforms enable individuals to create and share their own content, leading to a democratisation of information but also potential spread of mis-information.
3. Interactive nature: Unlike traditional media, social media facilitates two-way communication, allowing for immediate feedback and discussion.
4. Global reach: Social media platforms can connect individuals across geographical boundaries, facilitating the spread of information (and mis-information) on a global scale.
5. Algorithmic content curation: Social media platforms use algorithms to personalise content, potentially creating echo chambers and filter bubbles that can influence how individuals perceive pandemic-related information.

2.5 Implications for Pandemic Communication

The shift from traditional to social media has significant implications for how public health information is communicated during pandemics:

1. Speed of information spread: While beneficial for rapid updates, this can also lead to the quick proliferation of misinformation.
2. Information overload: The sheer volume of information available can lead to confusion and difficulty in distinguishing credible sources.
3. Fragmented information landscape: The multitude of information sources can lead to inconsistent messaging and public confusion.
4. Challenges to authority: Traditional gatekeepers of information (e.g., health authorities, mainstream media) face challenges from alternative voices on social media.

2.6 The Revolution of Media: Social Media & It's Impacts

2.6.1 Social Media: Connectivity, Communication & Coverage

As inherently social beings, humans possess a fundamental need for contact and connection. Social media platforms, through their influence on dopamine pathways, capitalise on these primal desires and offer an enticing space for engaging in conversations (Macït, Macit, and Güngör 2018).

Rapid advancements in globalisation and technology have provided innovative tools for interaction and engagement with others. Social media has revolutionised the way we communicate, maintain connections with family and friends, access information, and engage with news.

Consequently, social networks serve to:

- Rapidly disseminate information.
- Connect individuals globally.
- Enable users to join groups with shared passions and interests.
- Share and aggregate common ideas using hashtags.

The factors outlined above, in combination with the emergence of the internet, have brought about fundamental changes to the way information is produced, communicated, and distributed. From the information consumption perspective, a process which was once private has become public, further fuelling interaction and likes from other social media users.

These features have contributed to the immense popularity of social media, as evidenced by the *"Digital 2021 Global Overview Report"* published by 'We Are Social' and 'Hootsuite' (Kemp 2021) which provides essential insights into mobile, internet, and social media usage. As of January 2021, out of a global population of 7.83 billion, 66.6% or 5.22 billion were mobile phone users, while 4.20 billion, or 53.6% of the global population, were active social media users. Collectively, the world's social media users were projected to spend a total of 3.7 trillion hours on social media in 2021, equivalent to more than 420 million years of combined human existence. Notably, during 2020, the first year of the pandemic, over 1.3 million new users joined social media daily, translating to approximately 15.5 users every second. Given the popularity and scale of social media usage, it is crucial to investigate its impact on pandemic public health communication.

2.6.2 Social Media: Challenging Mainstream Media's Business Model

In his article, *"You can't sell news for what it costs to make"* (Filloux 2017), published by the Walkley Foundation, an Australian non-profit organisation dedicated to promoting and supporting journalism and the role of media in society, Filloux raised a crucial point regarding the relationship between social

and mainstream media two years before the emergence of the pandemic. He discussed the first large-scale deployment of fake news on an industrial scale, marked by a wave of false reports propagated by Donald Trump, which then reverberated within the social media echo chamber. Filloux refers to this as "Ground Zero" in the phenomenon, which proved to be extremely effective. Considering that social media platforms and internet technologies have significantly democratised news distribution, the business model around news has made it increasingly challenging to profit from it.

Filloux contends that in the digital news business, neither the production costs nor the quality of the content matter in terms of advertising prices. Advertisers are charged the same amount, regardless of the quality of the editorial content hosting the advertising module. The cost of producing a news story can vary widely. For example, a one-month investigation conducted by a team of reporters, reviewed by editors and fact-checkers, may cost up to $50,000 USD. This cost could increase substantially if the story originates from a news bureau in Kabul, which might have annual fixed costs of one million dollars. Conversely, a 500-word news article that takes a junior staff member and a subeditor half a day to report, write, and edit may only cost a few hundred dollars to produce. However, both pieces of journalism are sold to advertisers for the same amount, typically a few dollars for every thousand views, also known as Cost per Mille (CPM).

Filloux's observation of the 2017 situation, where the distribution of misinformation parallels Moore's Law with exponential growth in technology and rapid cost reduction, is highly relevant to the subject of this thesis. As the research question seeks to examine the impact of and interplay between social and mainstream media on global public health communication during a pandemic, it is crucial to consider the implications of misinformation in the context of public health. The democratisation of news distribution, combined with the proliferation of misinformation, has created an environment where misleading or false information can spread rapidly and widely, potentially undermining public trust in health authorities and affecting public health response efforts. The relationship between social and mainstream media, as well as the consequences of their business models, may further exacerbate the

dissemination of inaccurate information during a pandemic. By exploring these dynamics, this thesis aims to shed light on the role of media in shaping public health communication and the potential consequences for global health during a pandemic.

2.6.3 The Impact of Social Media Addiction on Public Health Communication

In the book 'Digital Minimalism' (Newport 2019), addiction is described as a condition wherein an individual engages in the use of a substance or exhibits a behaviour for which the rewarding effects serve as a compelling incentive to repeatedly pursue the behaviour, despite detrimental consequences. It is essential to consider these factors when examining the perception and influence of public health communication messages disseminated within the complex contempory media environment.

Newport's research made quite clear even prior to the pandemic, society's unhealthy relationship with social media was already a concern, as individuals often spent excessive time on these platforms, seeking validation and instant gratification. This issue was further exacerbated during the first year of the pandemic, as a significant increase in social media users was observed. People were constantly searching for news and information about the pandemic, heightening their reliance on these platforms.

In this context, it becomes crucial to consider how social media addiction may affect the reception and interpretation of public health messages. Do public health officials need to adapt their communication strategies to account for the addictive nature of social media? Thus ensuring, that accurate, timely, and effective messages reach their intended audience, amidst the noise and distractions present in the digital environment.

2.7 The Rise of the Referrer Society: Trust & Information Dissemination

Trust has long been considered a critical factor in shaping people's relationships with media and news sources (Fletcher and Park 2017). In recent years, the digital landscape has witnessed an exponential increase in the variety of information sources available online, accompanied by the emergence of innovative tools, services, and social media applications that serve as intermediaries and enable

unprecedented levels of interactivity around the news. The flow of information, and more importantly, disinformation, can now disseminate instantaneously across the globe via individuals sharing content within their networks and beyond, a phenomenon referred to as 'virality' (Denisova 2020).

The pervasive use of social media during a pandemic may present both opportunities and challenges in terms of public health communication and response. This research seeks to further qualify those challenges and opportunities. While social media platforms facilitate the rapid dissemination of accurate information, enabling health organisations and governments to communicate important information, updates, and strategies for managing the crisis. They can also facilitate the spread of mal-, mis- and dis- information terms that have been defined below, as per a Council of Europe Report titled *'Information Disorder: Toward an interdisciplinary framework for research and policy making'* (Wardle 2017).

2.7.1 Malinformation

Malinformation refers to genuine information that is shared with the intent to cause harm, often by taking it out of context or manipulating it to serve harmful purposes. This can include sharing private information to harm someone's reputation or leaking sensitive data to damage an organisation.

2.7.2 Misinformation

Misinformation refers to false or inaccurate information that is shared unintentionally, often by individuals who genuinely believe the information to be true. This can result from misunderstandings, cognitive biases, or a lack of knowledge about a particular subject.

2.7.3 Disinformation

Disinformation refers to deliberately created and disseminated false information or propaganda, often with the intention of misleading or manipulating public opinion, causing confusion, or discrediting specific individuals or organisations. It is typically created and spread by individuals or groups with a specific agenda or goal in mind.

2.8 Social Media as a Catalyst for Societal Change via Information Dissemination

Social media platforms have played a significant role in driving societal change and revolution, as evidenced by events such as the 'Arab Spring' (Khondker 2011), which was largely fuelled by the then-emerging platform, Facebook. Additionally, the 2020 uprising in Belarus demonstrated the power of secure private messaging apps, such as Telegram, in coordinating efforts of over 100,000 protesters against Alexander Lukashenko's digital blackout, as reported by WIRED Magazine (Williams 2020). In both instances, social media was a key factor in driving these social revolutions, showcasing the potential impact of rapid information dissemination through digital channels.

2.9 New Media's Influence on Psychological Health, Medical Practices, & Public Opinion

2.9.1 Historical Impact of Media on Public Opinion & Psychological Health

Long before the emergence of new media, traditional mass media was already identified as a source of great frustration for social scientists (Zaller 1996). Zaller described the difficulties faced by researchers in demonstrating mass media's effects on public opinion, despite citizens in modern democracies frequently developing opinions about political events beyond their direct experience. He argued that contrary to the prevailing hypothesis of minimal effects, the persuasive impact of mass communication in the domain of political communication should be considered closer to "massive" (Zaller 1996).

The influence of media on the psychological well-being of populations has long been recognised, as seen in studies investigating the causal relationship between media consumption and eating disorders as early as 1997 (Harrison and Cantor 1997). This relationship has become more complex with the advent of social media, leading to an increase in research and meta-analyses on the topic, such as Barlett et al's study on the impact of media images on men's body image concerns (Barlett et al. 2008).

2.9.2 Establishing New Media's Causal Connection in Political & Health Arenas

Since Zaller's writing in 1996, causal connections between media's influence on public opinion formation have been established in various contexts, particularly through the use of Facebook in

influencing elections worldwide (Williams and Gulati 2013; Vepsäläinen, Li, and Suomi 2017; Bronstein, Aharony, and Bar-Ilan 2018; Del Vicario et al. 2017). Although these examples are political in nature, the lessons are equally relevant for matters concerning health, especially in the context of a global pandemic – where politics and health intertwine given the nature of decisions to be made around responses such as lockdowns and decisions on vaccinations.

2.9.3 New Media in Medical Contexts: A Double Edged Sword

New media can have both positive and negative consequences in the medical field. On one hand, it can quickly help expose fraudulent practices and claims of specialist knowledge, commonly referred to as 'quackery', thus protecting patients from potentially dangerous treatments through the dissemination of accurate information (Shukman 2020). Conversely, the widespread availability of mal-, mis-, and dis-information on social media platforms can also lead to the proliferation of confusion via unverified medical advice, which can have detrimental effects on public health.

2.9.4 The Complex Influence of Media: The Werther Effect & The Papageno Effect

The media has influenced people in varying ways for many years, as demonstrated by the 'Werther Effect' (Niederkrotenthaler, Herberth, and Sonneck 2007) and the 'Papageno Effect' (Niederkrotenthaler et al. 2010). One of the earliest pieces of documentation concerning 'Suicide Contagion' appeared in 1774, with the publication of Johann Wolfgang von Goethe's *'The Sorrows of Young Werther'* (Ortiz and Khin Khin 2018). It propelled Goethe to an international literary celebrity, even having his work considered by Napoleon Bonaparte as *'one of the great works of European literature'.* However, there was a more macabre side to this fictional but loosely autobiographical work; the book reputedly led to some of the earliest examples of 'copycat suicide'. The cultural phenomenon was such that it also caught the eyes of authorities who were so concerned that the sale of both Goethe's book *'The Sorrows of Young Werther'* and Werther style clothes were banned in several countries, as eloquently articulated in Furedi's paper 'The Media's First Moral Panic' (Furedi 2015). Suicidal contagion is a complex subject, and not everyone is affected in the same

way. While the Werther Effect refers to the phenomenon of copycat suicides following the exposure to a publicised suicide, the Papageno Effect describes the positive role mass media can have by presenting non-suicide alternatives to crises (O'Carroll et al. 1994; Ortiz, Khin Khin, and law 2018; Steede and Range 1989). This complex dynamic may be important to consider in the context of communicating a pandemic on the scale of COVID-19, or any other health emergency, where fatality following infection is a possibility and likely to be heavily focussed on in media coverage of a pandemic caused by a novel pathogen.

2.10 Pandemic Communication in the Social Media Era

2.10.1 Challenges & Opportunities

The pervasive influence of social media and communication technology has resulted in unprecedented global connectivity. This interconnectedness has been described by journalists and health commentators as a "double-edged sword" (Quick 2018) given its potential to disseminate both beneficial and detrimental messages.

The widespread use of social media platforms has contributed significantly to the proliferation of conspiracy theories, such as those related to anti-vaccination movements or COVID-19 denialism. These platforms provide a forum for like-minded individuals to connect with others who share their beliefs and find information that validates their views (Senthilingham 2020).

These evolving dynamics underscore the importance of trust in pandemic communication from official sources, particularly in the multifaceted multimedia environment of the 2020s, characterised by constant connectivity and access to diverse, and often conflicting, perspectives. This environment differs markedly from the more centralised media landscapes of the past, which relied on a deferral system of news dissemination.

The current referral system of receiving, responding to, and reacting to news is facilitated by the abundance of multimedia devices that connect social networks of friends, family, and colleagues

globally. As Dr Jonathan Quick alludes in his book *'The End of Epidemics – The Looming Threat to Humanity'*, these informal communication networks play a crucial role in shaping pandemic communications and must be carefully considered when devising effective public health strategies (Quick 2018).

2.10.2 Considerations for Navigating Infodemics

Infodemics, characterised by the rapid spread of excessive amounts of often unreliable information concerning a problem, are not new phenomena. However, they have been exacerbated in the highly connected, globalised social media environments which have been recognised as 'interconnected global risks' in the 2017 W*orld Economic Forum Global Risk Report'* (Quattrociocchi 2017).

Addressing infodemics is essential, as they tend to complicate the process of finding solutions, and the psychology of fear can have detrimental effects on people's behaviour. A critical factor for this research is the role of information diffusion in a disintermediated news cycle – one where the functions of marketing and distribution are separated, enabling digital content to be delivered, or allowing customers to find information through their means. The term 'disintermediated news cycle' effectively captures the transition from old to new media and the differences between deferrer and referrer approaches to engaging with the media (Cinelli et al. 2020).

A Lancet paper presents intriguing interviews with experts, discussing various factors concerning the COVID-19 infodemic (Zarocostas 2020). One particularly insightful interview features Sylvie Briand, a WHO Director tasked with developing their strategy for countering the anticipated infodemic associated with COVID-19. Briand acknowledges that every outbreak is inevitably accompanied by a deluge of information, misinformation, and rumours, a phenomenon observed even in the Middle Ages. However, she notes that the amplification and acceleration of this phenomenon are now facilitated by social media, posing a new challenge. Briand emphasises the need to be faster in providing accurate information to fill the void and ensure that people are not only informed but also act appropriately.

Another notable comment comes from David Heymann, Professor of Infectious Disease Epidemiology at the London School of Hygiene and Tropical Medicine. He tells The Lancet that traditional media has a vital role in providing evidence-based information to the general public, which will 'hopefully' be circulated on social media. The relationship between credible information being shared on traditional media and then disseminated on social media is a complicated one, which is further explored in context of the academic literature related to COVID-19 in *'6.0 Discussion'*.

2.10.3 The Start of the COVID-19 Infodemic

Cinelli et al. from various Italian institutions published a significant review article titled *'The COVID-19 Social Media Infodemic'* (Cinelli et al. 2020). This paper, where they essentially conducted a 'massive meta-analysis' across five social media platforms, is significant for several reasons. Firstly, it was published in March 2020, early in the pandemic. Secondly, originating from Italy, it is particularly relevant as the European epicentre of the COVID-19 pandemic was initially centred on the outbreak in Italy. Thirdly, the authors address the topic of information diffusion across multiple social media platforms using extensive data analysis. Fourthly, they not only fit information spreading to epidemic models, calculating basic reproduction numbers (R0) for each social media platform, but also characterised information spreading from questionable sources, identifying varying amounts of misinformation on each platform. Lastly, they present an analysis and a differential assessment of the global discourse's evolution across the various platforms they studied, including Twitter, Instagram, YouTube, Reddit, and others. This final point is especially relevant given the high degree of fragmentation of users across multiple social media channels and the substantial polarisation within these channels. Algorithms essentially filter people into tribes, and controversial content is prioritised to further segment people into camps. Cinelli et al.'s paper provides a compelling perspective on the content posted across five social media platforms in early 2020, and how that information spread. The authors believe the understanding of social dynamics between content consumption and social media platforms is an important research subject, since it may help to design more efficient pandemic models

accounting for social behaviour and to design more effective and tailored communication strategies in time of crisis.

2.10.4 Infodemics Impact on Pandemic Public Health Communication

In June 2020, Tedros Adhanom Ghebreyesus, WHO Director-General, stated that a parallel 'Infodemic' was taking place alongside the COVID-19 pandemic. An infodemic is defined as "an excessive amount of information about a problem, making it difficult to identify a solution" (Diseases 2020). During health emergencies, an infodemic can drown out reliable information, enable rumours to spread more effectively, and ultimately hinder any effective public health response. This confusion can affect both the general public and health professionals. Given the rapid growth of digital communications (Glover and Grant 2010) and social media platforms, information can spread faster than the virus itself, seamlessly moving from our digital devices to our offline world. One area with less mature literature is the examination of information diffusion within a disintermediated news environment, where the link between marketing and distribution of content is severed (Zarocostas 2020). Through examining the lived experience of participant's media consumption fifteen months into the pandemic, it is hoped this research may contribute to the literature in this area by providing valuable insights.

Whether it be conspiracies, dubious medical advice, or trivialisation of SARS-CoV-2, this content spreads quickly, ignoring national boundaries. This was despite the generally strong preferences for domestic national media and social media networks that ordinarily remain bounded geographically (Bridgman et al. 2021). It is therefore relevant to examine academic opinion around infodemics and the relationship of this dataset to the published literature.

In *'The impact of fake news on social media and its influence on health during the COVID-19 pandemic: a systematic review'* it was found the spread of fake news and misinformation during the COVID-19 pandemic has had a significant impact on people's health. The review included 14 studies from different countries and identified a total of 1467 false news items and 2508 reports. The findings

showed that people tend to trust information found on social media platforms, leading them to believe and be affected by unverified information. The review emphasised the importance of addressing the perception of risk found in social media and promoting trust in information provided by reliable sources (Rocha et al. 2021).

When considering 'infodemic pathways', it is worth noting that information spreads through a variety of social media channels, but also traditional media channels where journalists and politicians adopt inaccurate and misleading positions (Jamison et al. 2020). We have seen in the past peer to peer transmission via rumours and unfounded conspiracy theories which often accompany pandemics, as was the case for HIV and AIDS (Smith, Lucas, and Latkin 1999). Social media provides a medium for vastly increased visibility of peer to peer interactions and certainly acted as the catalyst for creating the conditions of a parallel infodemic during the COVID-19 pandemic (Bridgman et al. 2020) but also on a lesser scale during past pandemics including Ebola (Fung et al. 2016), Zika (Sharma et al. 2017) and also vaccines more broadly (Radzikowski et al. 2016). The impact of misinformation around vaccines is particularly relevant as Larson alludes to in her book *'Stuck: How Vaccine Rumours Start and Why They Don't Go Away'* (Larson 2020), making this a particularly fertile ground for future intervention to make maximal positive impact on public health communication.

There was a complicated interconnected dynamic occurring across social media driving the COVID-19 infodemic, comprising both willing and unwilling participants in the spreading of mal-, mis- and dis-information. A dynamic that is worth exploring in the context of interpreting the results of this research project. While deliberate COVID-19 disinformation campaigns, designed to disseminate confusion and fear, have been documented (Swan 2020) it is not correct to attribute the scale of the infodemic to them alone. The COVID-19 infodemic appears to have been sustained and spread beyond the usually naturally constrictive geographical boundaries by a wider group of online political participants who ended up propagating misinformation inadvertently. This has been labelled as a *'paradox of participation'* and is a well-documented phenomena most likely to occur through for example those

engaging enthusiastically in online political debate – generating peer-to-peer misinformation transmission (Valenzuela et al. 2019). This situation becomes further complicated by new users coming to either the disinformation or misinformation, adding their own misleading commentary and sharing to their networks (Anspach and Carlson 2020). This additional commentary fuels a further dynamic whereby social media users are more likely to share and spread content from those they trust (Buchanan and Benson 2019), more likely to believe its validity (Sterrett et al. 2019), more likely to attribute importance to the issue (Feezell 2018) *and* more likely to later trust the source (e.g. external website) upon which their connection added commentary (Turcotte et al. 2015). This sequence clearly has consequences for the successful communication of public health messaging. The situation however spirals further still as the more widely content is endorsed, via liking, tweeting, re-tweeting with comments or sharing, the more likely it is to be further trusted/shared (Luo, Hancock, and Markowitz 2022) via a *'bandwagon heuristic'* (Sundar 2008). The more people are subjected to content containing claims created, and compounded in this way by multiple social media users, the more they are at risk of falling victim to an *'illusory truth effect'* – wherein individuals have greater confidence in in the truthfulness of a claim given past exposure (Pennycook, McPhetres, et al. 2020).

2.10.5 Miscommunication in Mainstream Media & Social Media Volatility: A UK Example

The complex and sometimes contentious relationship between social and mainstream media and the degree of volatility it can generate should not be underestimated. A notable example that demonstrates the sensitive nature of this interplay occurred on July 19, 2021, widely referred to as 'Freedom Day' in the UK, when the last remaining restrictions regarding social distancing and mask-wearing were lifted. On this day, Sir Patrick Vallance, the UK Chief Scientific Advisor, misspoke during a press conference, stating*: "60% of hospitalisations from COVID-19 are from double vaccinated people"*. Meaning to say those hospitalised were actually unvaccinated. Two hours later Sir Patrick corrected himself via a tweet. The responses to this tweet are also worth examining, with one user replying: *"Can you tell @SkyNews because they're still trying to scare people with the error two hours later"*. This case

study highlights the critical role that accurate communication plays in both mainstream and social media, as well as the potential consequences of miscommunication in fuelling social media volatility.

2.10.6 Virtual Volatility & Real-World Protests: Online Communication & Physical Violence

Although Sir Patrick Vallance's corrected tweet was acknowledged by mainstream media outlets, many of which published their own corrections, the social media frenzy surrounding the subject persisted. This online volatility spilled over into real-world protests outside Downing Street, where banners displayed the false claim that had been rectified. This event was reported by GB News. The offensive language directed at the reporter is indicative of the highly charged atmosphere that COVID-19 communications evoked at the height of the pandemic. This example emphasises the importance of accurate communication in a highly connected world, where misinformation can rapidly escalate tensions and contribute to real-world incidents, even when efforts are made to rectify errors. It underscores the need for responsible and fact-based communication, particularly during times of crisis, such as a pandemic.

2.11 Recent Empirical Applications in COVID-19 Communication

The COVID-19 pandemic has provided a unique opportunity to examine the application of established communication theories in a real-world, global health crisis. Recent empirical studies have shed light on how these theories manifest in the digital age, particularly in the context of social media and misinformation.

(Vraga and Bode 2021) conducted a study that applies theories of source credibility to combat COVID-19 misinformation on social media. Their research provides insights into strategies for addressing false information in the digital age, particularly during a global health crisis.

(Zhao et al. 2020) examined how trust in different media sources influences health behaviours during the pandemic. Their study sheds light on the relationship between media trust and the adoption of

infection-mitigating behaviours, which is crucial for understanding public response to health communications during crises.

(Cinelli et al. 2020) conducted an extensive analysis of information spreading on different social media platforms during the pandemic, with relevance to channel effects theory. This research offers valuable insights into how various social media channels influence the dissemination of health-related information during a global crisis.

(Lwin et al. 2020) applied sentiment analysis to examine public reactions on social media during the pandemic. Their study provides a deeper understanding of global sentiments surrounding COVID-19 as expressed on Twitter, offering a unique perspective on public response to the pandemic through social media trends.

The aforementioned studies collectively demonstrate the enduring relevance of established communication theories while also highlighting the need for their adaptation to the unique challenges of the digital age. They underscore the complex interplay between information sources, message framing, channel characteristics, and public trust in the context of a global health crisis. Moreover, they illustrate the potential of social media as both a challenge (in terms of misinformation spread) and an opportunity (for rapid, wide-reaching communication) in public health messaging. In the aftermath of the COVID-19 pandemic and as we prepare for future health crises, these empirical insights offer valuable guidance for crafting effective health communication strategies that leverage the power of digital platforms while mitigating their potential pitfalls.

Having considered some of the theoretical underpinnings of the literature around communication theory, and some of the contemporary COVID-19 health communication literature the next section of the literature review considers the importance of effective communication in the context of an evolving pandemic.

SECTION II

2.12 The Imperative of Effective Communication in the Context of an Evolving Pandemic & Media Landscape

2.12.1 The Contemporary Media Environment & Current Challenges

The contemporary media environment is characterised by a constant influx of information through 24/7 rolling news cycles and an abundance of social media channels. In such a context, individuals can easily garner an audience, regardless of their qualifications or expertise. This situation poses significant challenges for governments and public health officials when communicating about an evolving pandemic, particularly if systems for managing pandemics are sub-optimally prepared.

2.12.2 The Importance of Clear Communication Amidst Pandemic Complexity

Given the complexities inherent in the management and communication of an evolving pandemic caused by a novel pathogen, it is crucial for public health officials to adopt effective communication strategies to disseminate accurate and timely information to the general public. In light of the paucity of literature on best practices for communicating about an evolving pandemic in the current media landscape, examining historical examples of pandemic communication may offer valuable insights. Some such examples are explored in *'2.13 Learning from Past Pandemics: The Relevance of Historical Best Practices'*.

2.13 Learning from Past Pandemics: The Relevance of Historical Best Practices

In order to develop effective communication strategies for present and future pandemics, it is worth considering best practices employed during past pandemics as a starting point. Although the media landscape has evolved significantly over time, lessons gleaned from previous experiences can provide valuable guidance for contemporary public health officials. By analysing past successes and failures in pandemic communication, policymakers and public health professionals can identify key principles and strategies that may be adapted to the unique challenges posed by the contemporary media

environment. This will ultimately contribute to improved public understanding of the situation, increased trust in authorities, and more effective management of public health crises.

2.14 The Significance of Effective Communication Strategies in Pandemic Management: Lessons from the Past

2.14.1 A Playbook for Pandemic Communication: Dr Barbara Reynolds' Experience

Effective communication during a pandemic is a complex and challenging endeavour. However, valuable guidance can be found in the playbook authored by Dr Barbara Reynolds, which chronicles her experiences in dealing with the 1997 Hong Kong bird flu outbreak. As the first communications professional from The CDC to be deployed outside the United States for a health emergency, Dr Reynolds has dedicated her career to assisting public health officials in navigating crisis communication. Six key points from her comprehensive guide, *"Crisis, Emergency, and Risk Communication"* (Quick 2018) are presented in Table 1. While these tried and tested measures for how pandemic public health messaging is shared with communities provide a good starting point. It is important to note they haven't been tested to the degree; they have in this pandemic given the extent of social media interconnectivity amplifying missteps in communications that in the past, may have gone completely unnoticed.

Table 1: Six Salient Points From 'Crisis, Emergency And Risk Communication' (Quick 2018)

Be first	If the information is yours to provide by organisational authority, do so as soon as possible. If you cannot provide the information, then explain how you are working to get it.
Be right	Give facts in increments. Tell people what you know when you know it, tell them what you do not know, and tell them you will share relevant information as it becomes available.
Be credible	Tell the truth. Do not withhold information to avoid embarrassment or the possible 'panic' – that seldom happens. Uncertainty is worse than not knowing. Remember, rumours are more damaging than hard truths.
Express empathy	Acknowledge in words what people are feeling – it builds trust.
Promote action	Give people things to do. It calms anxiety and helps restore order.
Show respect	Treat people the way you want to be treated, even if you must communicate hard decisions.

(Reproduced from 'The End of Pandemics - The Looming Threat To Humanity...')

2.14.2 Positive, Proactive Applications: Social Mobilisation Efforts

During the 2014 Ebola outbreak in Sierra Leone, the country experienced over 14,000 cases, the highest number worldwide (Prevention 2016). Ebola typically has a Case Fatality Rate (CFR) of 50% with a range of 25-90% in previous outbreaks. Remarkably, Sierra Leone reported a CFR of 28%. This success can be attributed to several factors, including the establishment of National Ebola Response Centres (NERC) by President Koroma at the time. Among the NERC's mandates was the dissemination of scientifically sound yet culturally appropriate messages.

A notable example involved the engagement of approximately 40,000 traditional healers, who were initially excluded from the Ebola response. Through the *'Sierra Leone Indigenous Traditional Healers Union'*, these practitioners were incorporated into the response and tasked with running an Ebola campaign using approved messaging. Consequently, patients were referred for appropriate treatment, and unsafe secret burial practices were halted, contributing to the country's relatively lower CFR (Coltart et al. 2017).

Effective communication strategies, such as social mobilisation efforts employed during the 2014 Ebola outbreak (Laverack and Manoncourt 2016; Gillespie et al. 2016) are crucial for successfully managing public health crises. These proactive approaches can yield significant positive impacts, fostering trust in authorities and facilitating the dissemination of accurate information.

2.14.3 Consequences of Neglected Communication: The Emergence of an "Infodemic"

However, when communication efforts are neglected in the early stages of a pandemic, an information vacuum arises, leading to the proliferation of rumours and misinformation. In the absence of reliable and trustworthy information, individuals may resort to creating narratives to fill the gaps and make sense of the unfolding crisis. In today's globally connected world, social media platforms facilitate the rapid spread of such stories, often outpacing the dissemination of accurate information. Consequently, medical professionals are tasked with combating both the disease and the resulting 'infodemic' of misinformation (O'Connor and Murphy 2020). Thus, it is essential for public health officials to prioritise effective communication strategies in managing pandemics to mitigate the negative consequences of misinformation.

2.14.4 The Influence of Broadcast Drama on Behaviour Change: Integrating Public Health Messaging & Psychological Perspectives

The effectiveness of incorporating public health messaging into broadcast dramas has been demonstrated through initiatives such as the Population Media Centre's (PMC) work in Sierra Leone since January 2009. PMCs mission is empowering communities by telling transformative stories (Center 2023). Their drama, titled *'Saliwansai' (Puppet on a String)*, included storylines related to Acquired Immunodeficiency Disease (AIDS). As a result, listeners were 3.1 times more likely than non-listeners to acknowledge that the risk of contracting AIDS can be reduced through consistent condom use during sexual encounters.

Understanding the underlying psychological mechanisms that drive behaviour change is crucial for developing impactful health communication strategies. The extensive literature on behaviour change in

psychology provides valuable insights into the factors that influence individuals' attitudes, beliefs, and actions. By integrating these psychological perspectives into the development of public health messaging, for example in the context of broadcast dramas, it is possible to create more effective interventions that resonate with the audience and contribute to positive health outcomes.

Incorporating behaviour change theories and frameworks, such as the Health Belief Model (HBM) (Rosenstock 1974), the Theory of Planned Behaviour (TPB) (Ajzen 1991), and the Transtheoretical Model (TTM) (Prochaska and DiClemente 1983) can help public health professionals design persuasive messages that address the cognitive, emotional, and social determinants of health behaviours. By leveraging the power of storytelling and emotion in broadcast dramas, these interventions can foster empathy, raise awareness, and challenge misconceptions, ultimately contributing to a shift in societal norms and individual behaviours.

2.14.5 Navigating the Media Landscape During a Pandemic: The Politicisation of Public Health

COVID-19 is the first pandemic to unfold in the context of an intense 24/7 news landscape, further exacerbated by an increasingly politically polarised social media environment. The politicisation of the pandemic has significantly impacted people's behaviours and compliance with regulations, as noted by a couple of editorials published in the British Medical Journal by Prof Gavin Yamey Professor of Global Health and Public policy (Gonsalves and Yamey 2020; Yamey and Gonsalves 2020). For instance, former President Donald Trump's prolific Twitter use for both pandemic and political topics led to his banning from the social media platform, only to be re-instated once Elon Musk completed the acquisition and renamed it 'X'. However, before his removal, he actively contradicted health officials at a press conference, by suggesting non-medical options such as injecting bleach as a COVID-19 cure. Even after his ban, this fallacy further propagated on social media.

2.14.6 Trust & Credibility in COVID-19 Health Communication

The concepts of trust and credibility have long been central to effective health communication, but their importance has been further amplified in the digital age, particularly during the COVID-19

pandemic. As information sources multiply and misinformation proliferates, establishing and maintaining public trust has become increasingly challenging yet crucial for public health interventions. The rapid spread of information - and misinformation - through social media platforms has added new dimensions to the traditional understanding of source credibility. Recent research has explored how trust in various information sources influences public behaviour, vaccine acceptance, and overall adherence to public health guidelines. This section examines contemporary studies that shed light on the complex dynamics of trust and credibility in health communication, particularly in the context of the COVID-19 pandemic and the evolving digital media landscape.

(Lovari 2020) examines the role of government communication in building public trust during the pandemic. This study provides insights into how governmental interventions and messaging strategies can influence public trust in the context of COVID-19 misinformation in Italy.

(Limaye et al. 2020) discuss strategies for building trust in health communication on social media platforms. Their work explores methods to effectively influence online COVID-19 content while maintaining and enhancing public trust in health information shared through social media channels.

(Nguyen and Catalan 2020) explore how digital misinformation affects public trust in health information. Their research offers fresh perspectives on public engagement with health and science controversies in the context of the COVID-19 pandemic, highlighting the challenges posed by digital mis/disinformation.

(Ratzan, Sommarivac, and Rauh 2020) discuss the importance of trust and credibility in global health communication during crises. Their work draws lessons from the COVID-19 pandemic to enhance the effectiveness of health communication strategies in crisis situations.

(Gesualdo et al. 2022) examine how trust in different information sources influences vaccine intention among healthcare workers. This cross-sectional survey provides insights into the relationship between

trust in various information sources and COVID-19 vaccine acceptance among Italian health professionals.

2.14.6.1 Challenges in Communicating COVID-19 Information: The Importance of Transparency & Accuracy

Successfully communicating COVID-19 information to the broader public presented numerous challenges. Initial delays in reporting and information dissemination from China, coupled with continued underreporting, hindered accurate communication. As He et al. suggest, discrepancies in reporting were identified when comparing cremation data with official COVID-19 figures in Wuhan. In such an interconnected world, initial delays in data release from China could represent a missed opportunity in positively impacting the global pandemic response (He et al. 2020).

2.14.7 Challenges in Information Dissemination

The challenges faced in disseminating and consuming information during a global health crisis are closely linked to how ambiguity is handled. Stephens et al. note that medical students' ability to tolerate uncertainty improves with experience and education. Similarly, public health communication strategies during the pandemic must account for the varying levels of tolerance for ambiguity within the general population (Stephens, Sarkar, and Lazarus 2024). Tailoring messages to enhance understanding without overwhelming audiences is critical. This aligns with the finding that effective communication under conditions of uncertainty requires not just the dissemination of information but also guidance on how to interpret and act on that information amidst ambiguity.

2.14.8 Balancing Trust & Realism: The Delicate Art of Pandemic Leadership Communications

The communication tightrope officials must traverse during an evolving pandemic is a precarious one. With significant levels of fear in a population, it is essential to gain trust while maintaining calm. Simultaneously, the public must be provided with available facts and a realistic understanding of risk. These factors are amplified when dealing with a novel pathogen, as new information continually

emerges. Global leaders' actions are under intense scrutiny, with the advent of social media it is the first time an environment which actively facilitates comparisons of what other world leaders and countries are doing, further increasing the complexity of COVID-19 communications.

SECTION III

2.15 Expert Opinion on Initial COVID-19 Coverage

In this section, we will explore expert opinions on the initial coverage of the COVID-19 pandemic. By examining insights from various sources, including Saad Omer's early assessment, reflections from frontline journalists, a Royal Society of Medicine webinar, discussions on the politicisation of science, and challenges in the digital information realm as noted by President Obama, we aim to provide a comprehensive understanding of the complexities surrounding COVID-19 reporting and communication. This analysis will shed light on the challenges faced by experts, journalists, and policymakers during the early stages of the pandemic and the ongoing issues in disseminating accurate and reliable information.

2.15.1 Saad Omer – January 2020: Communicating Complexity & The Impact of Communication Styles on Real-World Behaviours

Effectively conveying the development of a pandemic during its nascent stages within a highly interconnected media environment, where news disseminates instantaneously, poses significant challenges. The rapidly evolving nature of pandemics necessitates ongoing learning and contributions from researchers, scientists, and medical professionals as government policies dynamically adapt.

On January 23, 2020, Saad Omer, Director of the Yale Institute for Global Health, penned an opinion piece in The New York Times, questioning, "Is America Ready for Another Outbreak?" (Omer 2020). Although framed within the context of the United States, Omer emphasised that these lessons were applicable to multiple governments. His conclusion was that the country was not ready, but he outlined clear steps governments needed to take. Omer further elaborated on his New York Times

opinion piece during a pre-conference event for the first WHO Global Infodemiology Conference held on June 29, 2020 (Omer 2021). His insights, detailed below, warrant further exploration, as they are relevant to this research.

1. **Let Scientists Deal with Emerging Information:** Omer emphasises the need to close the gap between those who can assimilate rapidly evolving technical information and those who make or communicate decisions. He underscores the importance of allowing scientists to lead, ensuring optimal decision-making, and minimising confusion.

2. **Avoid False Reassurance:** Political leaders often seek to project control, leading to false reassurance for populations during the early stages of pandemics. Although this might work in the short term, incoherent government messaging and reversals in recommendations can be misconstrued as incompetence, ultimately undermining trust in political and technical leadership.

3. **Scientific and Public Misinformation:** Omer cautions against the early sharing of pre-print materials, particularly through press releases, before they undergo a rigorous peer review process. In the current media landscape, such practices can inadvertently contribute to the rapid spread of misinformation.

Omer's timely warning underscored potential issues regarding governments' preparedness for a pandemic, as well as the challenges in communicating the nuances of an emerging novel pathogen in the age of 24/7 news and social media.

In the early stages of the pandemic, communication challenges were not exclusive to the United States. As the pandemic progressed and lockdowns were implemented worldwide, journalists played a crucial role in disseminating vital information to the public. The following section, *'2.15.2 Reflections from Frontline Journalists: Reporting Coronavirus in the First Six Months',* will explore the experiences and perspectives of ITV journalists during the initial six months of the pandemic. This analysis will provide

insights into the challenges faced by the media in the United Kingdom, as well as the strategies employed to ensure accurate and timely reporting of critical information to the public.

2.15.2 Reflections from Frontline Journalists: 'Reporting Coronavirus' March – August 2020

2.15.2.1 The Confluence of Social and Mainstream Media during COVID-19

The 2020 coronavirus pandemic marked an unprecedented event in the history of television journalism, affecting every populated continent and directly impacting the lives of individuals around the world including the UK. As Michael Jeremy, Director of News and Current Affairs at ITV, states in the opening quote of *'Reporting Coronavirus'*, the pandemic profoundly altered the way news organisations created their programs due to lockdowns, international travel restrictions, and social distancing measures. The book offers a behind-the-scenes look into the experiences of journalists reporting on COVID-19 during the first six months of the pandemic (ITV News 2020).

As people turned to mainstream media for information, they also increasingly relied on social media platforms. The relationship between these two distinct forms of media was particularly intriguing throughout the pandemic. Mary Nightingale, a journalist featured in *'Reporting Coronavirus'*, highlights the valuable role that highly regulated mainstream broadcasters play in public service, disseminating accurate information to keep people informed and safe. However, this stands in contrast to the unregulated nature of social media, where misinformation can be just as influential and potentially life-threatening.

2.15.2.2 Pandemic Reporting and the Impact of Previous Pandemics on Media

Over the past two decades, numerous organisms with pandemic potential have been reported but have not resulted in widespread crises. This led to a sense of complacency among media professionals and the public in the early stages of the COVID-19 pandemic. Tom Clarke, Science Editor at ITV News, provides an insightful perspective in his chapter 'We Are Dealing With a Completely New Virus' (ITV News 2020). He admits that when he first heard about the unknown respiratory disease in Wuhan, he did not immediately alert his news desk. Clarke's career had been "overshadowed" by the

constant threat of pandemics, and none of the previous outbreaks had turned out to be the global public health crisis everyone feared—until COVID-19.

The politicised nature of the early pandemic, coupled with the UK's withdrawal from the EU, contributed to a lack of extensive media coverage on the emerging crisis. Moreover, the manner in which previous pandemics were communicated also played a role in shaping the response to the COVID-19 outbreak. Despite the prediction of the pandemic in David Quammen's book *'Spillover'* (Quammen 2012) which accurately anticipated the coronavirus's origin and characteristics, but remained niched in the specialist literature on this topic, a wider awareness of the threat was not achieved among the general population or within the media. Consequently, as reflected in Tom Clarke's account, many media professionals were caught off guard in the early stages of the pandemic.

Additional factors contributed to the lack of immediate attention to the COVID-19 pandemic within mainstream media and the wider UK population during the first three months of 2020. These factors included a highly competitive media landscape (Praprotnik 2016), where numerous outlets competed for people's attention. Furthermore, people's attention spans for specific content have become increasingly shorter, even though individuals spend more hours on social media platforms (Newport 2019). These combined factors contributed to the delayed recognition and coverage of the COVID-19 pandemic during its initial stages.

2.16 Royal Society of Medicine (RSM) Webinar 'COVID-19 – Media in A Health Crisis?' – May 2021

2.16.1 Overview

In a webinar titled 'Media in a Health Crisis?' (Medicine 2021) broadcast on May 28, 2021, as part of the Royal Society of Medicine's (RSM) COVID-19 Lecture Series, four experts discussed the role of media during the pandemic. The panel was chaired by Victoria MacDonald, Health and Social Care Editor at Channel 4 News, and featured Professor Ivan Browne, Director of Public Health in

Leicester, Robin McKee, Science and Environment Editor for the Observer, and Dr David Oliver, Consultant in Geriatrics at The Royal Berkshire NHS Foundation Trust. The discussion covered seven themes related to the communication of facts and safety measures during the COVID-19 pandemic. Given their relevance to this research, they have been summarised below.

2.16.2 Fear-Driven Compliance: The Role of Emotion in Public Health Messaging

One theme highlighted was the role of fear in driving initial compliance with public health measures. The panel suggested that this reliance on fear, particularly during the early stages of the pandemic, may have contributed to widespread anxiety and missed opportunities to engage, educate, and empower the public to make informed decisions. For instance, the panel pointed out that instead of emphasising fear, public health messaging could have focused on building collective resilience, fostering community spirit, and promoting a better understanding of the virus and its transmission.

2.16.3 The Need for a Timely Public Inquiry: Learning Lessons Amid Ongoing Threats

The timing of a public inquiry into the pandemic response was another topic of discussion. Oliver argued that through the work of the National Audit Office and investigative journalists, much of what transpired during the pandemic is already known. However, there was a desire among clinicians to learn lessons in real-time, especially as emerging variants, such as Delta and Omicron, continued to pose a threat. The panel emphasised that a timely public inquiry could have identified areas for improvement and facilitated better preparedness for future pandemics.

2.16.4 Local vs. National Messaging: Overcoming Barriers & Ensuring Effective Communication

The panel also debated the effectiveness of local versus national messaging, with Browne sharing his experience from Leicester, where local restrictions remained in place even after the national lockdown was eased. He pointed out the challenges in breaking through the powerful national narratives, such as "Stay at Home, Protect the NHS, Save Lives", and ensuring local messages were heard and understood. To overcome these challenges, Browne suggested that local authorities needed to be more innovative in their messaging strategies, such as using targeted social media campaigns or

working with community leaders to disseminate crucial information. This is particularly relevant as of the participants in this research Tariq was from Leicester, so it was interesting to explore his lived experience through the lens that he had been living under lockdown restrictions for far longer than other participants in this research.

2.16.5 The Impact of Centralised Control on Public Health Communication & Trust

The centralisation of communication control was another concern raised by the panel, particularly its effect on local engagement and the suppression of individual doctors who wanted to contribute to public communication. McKee noted that centralisation has been a recurring issue in past health crises, such as foot and mouth disease, Measles Mumps and Rubella vaccines, and genetically modified crops. The panel mentioned that during the COVID-19 pandemic, this central control often led to doctors being explicitly told not to speak to the media, resulting in a lack of diverse voices and perspectives in public discussions. This suppression not only limited valuable input from medical professionals but also inadvertently created an impression that public health officials had something to hide, eroding public trust in the healthcare response.

2.16.6 Diverse Media Landscapes & Human Error: The Challenge of Maintaining Public Engagement

MacDonald emphasised the diversity within the media landscape, arguing that it is unfair to generalise their pandemic response. For example, while some outlets focused on investigative journalism and presenting evidence-based information, others resorted to sensationalism or politicising the pandemic. The panellists agreed that human error played a role in shaping public perception of the pandemic, with incidents such as the test and trace data loss in Bolton leading to unfair blame being placed on the local population for the spread of a COVID-19 variant. They acknowledged that maintaining public engagement with complex issues became increasingly difficult as the crisis persisted, with people feeling overwhelmed or fatigued by constant reporting.

2.16.7 Slogans & Media Medics: Balancing Simplification & Integrity in Public Health Messaging

The panel also explored the use of slogans, such as "Follow the Science" and "Protect the NHS", which were met with mixed reactions. While these slogans were designed to simplify public health messages, they sometimes led to scepticism or confusion. For example, the slogan "Follow the Science" was criticised for implying that science is a monolithic entity, whereas it is a constantly evolving field with multiple perspectives. The panel discussed the potential benefits of utilising media medics, especially GPs, who are adept at simplifying complex information while maintaining message integrity. These medical professionals could have played a more significant role in public communication if it weren't for the centralised control of messaging during the pandemic, and NHS Communication Directors actively shutting down local voices.

2.16.8 Building Trust & Transparency: Key Elements for a Successful Public Health Response

In discussing the key elements of a successful public health response, the panel emphasised the importance of trust, transparency, and effective communication. Browne asserted that "no public health response can succeed without public trust" and that sharing information openly and promptly is crucial to building and maintaining that trust. For example, New Zealand's response to the pandemic was lauded for its clear communication and data transparency, which helped foster public trust in government actions. The panellists also noted that public trust in frontline healthcare workers is generally high, so leveraging their experiences and insights could have improved communication efforts. Additionally, they acknowledged the importance of engaging with communities that may have low trust in government and institutions due to long-term neglect, as neglect can exacerbate discontent and distrust during a crisis.

2.16.9 Summary

In conclusion, The RSM webinar brought to light several critical themes, such as the role of emotion in public health messaging, the necessity for a timely public inquiry, the struggle to balance local and national communication, the impact of centralised control, the challenges of navigating a diverse media landscape, the use of slogans and media medics in simplifying complex information, and the importance of trust and transparency in public health response. The expertise of this panel and the themes they chose to discuss underscore the intricate relationship between public health communication and the factors that influence its effectiveness. Where relevant, these themes will be considered in conjunction with the findings of this research project within the context of the contempory literature in *'6.0 Discussion'*.

2.17 Role of Media & Communications in Pandemic Prevention

2.17.1 The Power of Seven Framework

In *'The End of Pandemics – The Looming Threat To Humanity And How To Stop It',* a framework titled 'The Power of Seven' (Quick 2018) is laid out consisting of the actions required for preventing pandemics. These include: –

(1) Ensuring bold leadership at all levels.

(2) Building resilient health systems.

(3) Fortifying three lines of defence against disease (prevention, detection & response).

(4) Ensuring timely and accurate communication.

(5) Investing in smart, new innovation.

(6) Spending wisely to prevent disease before an epidemic strikes.

(7) Mobilising citizen action.

The research that went into Quick's work establishing this framework involved interviews, lectures, publications and mining the expertise of scores of policymakers, political leaders, public–health experts, research scientists, field epidemiologists and frontline workers. Given the vast expertise of subject matter experts interviewed, and this work was published before the COVID-19 pandemic, 'The Power of Seven' framework provides a valuable lens within the pre-pandemic literature through which we can examine elements of the UK response – especially as there is so much in this framework that is related media and communication.

2.17.2 Pandemic Communication Considerations

Multimedia has made the world more connected than ever before. This degree of connectivity has been described by journalists and health commentators alike as a *"double-edged sword"* (Quick 2018) as it can be used to spread both useful public health information as well as mis- or dis-information. The advent of technology and, more specifically, the ubiquitous use of social media has played a crucial role in the growth of conspiracy theorists. Whether those with anti-vax sentiment or COVID-19 deniers, social media provides a forum for like-minded individuals to seek out fellow believers and find information that validates their views (Senthilingham 2020).

2.17.3 Complexity in Communicating Novel Nature

While the symptoms of COVID-19 share commonality with those caused by other coronaviruses, i.e. fever, fatigue and cough (Wang et al. 2020), many individuals can appear asymptomatic, thus spreading the virus without knowing to those in their vicinity (Holshue et al. 2020). Another complicating factor is the lack of awareness of how different individuals respond to SARS-CoV-2 infection and develop COVID-19. In the earliest stages of the pandemic, as the UK pursed a strategy of 'herd immunity' people were told most would suffer a mild infection from which they would recover from.

2.17.4 Constant Communication

Given the 24/7 nature of the modern-day news environment, the extensive degree of coverage a pandemic caused by a novel pathogen generated, and our natural propensity to gravitate towards negative headlines. It is certainly worth further consideration as to the impact media coverage of such an event can have on the psychological health of populations.

This new dynamic brings an added level of significance to the role of trust in pandemic communications from official sources. Especially given the rich multimedia environment of the 2020s, where everyone is constantly connected and has access to competing and or contrary voices. There is a marked difference from media environments of the past that were more centred on a deferral system of news dissemination. This move towards a referral system of receiving, responding, and reacting to news is fuelled by the multitude of multimedia devices connecting social networks of friends, family, and colleagues around the world. As Dr Jonathan Quick eludes in his book *'The End of Epidemics – The Looming Threat to Humanity'* these informal communication networks are of vital importance to consider in pandemic communications (Quick 2018).

Positive, proactive applications such as the social mobilisation efforts (Laverack and Manoncourt 2016; Gillespie et al. 2016) deployed during the Ebola outbreak of 2014 are vital and have had immensely positive impacts. However, should these approaches be neglected in the early phase of a pandemic, the resulting information vacuum and lack of facts from highly reputable and trusted sources means people concoct stories to fill in the blanks and make sense of what is happening. In a world globally connected by social media these stories and rumours can and often spread further and quicker than the disease itself, leaving doctors having to both combat disease and counter fake news (O'Connor and Murphy 2020) as a result of the consequent 'Infodemic'.

2.18 The Politicisation of Science & Implications for Public Health Response

It is important to consider the politicisation of science throughout the COVID-19 pandemic, this is particularly relevant to this thesis given one of the main slogans communicated in this pandemic was

"Follow the Science". The potential for science to become politicised during a pandemic is a significant concern, as it can compromise the integrity of public health responses. A notable instance of this during the COVID-19 pandemic involved the pharmaceutical company Pfizer and its vaccine development. The timing of the vaccine data release and subsequent deployment, which closely coincided with the US presidential election, led to the politicisation of the vaccine by then-President Donald Trump (Bourla 2022). This situation prompted several pharmaceutical industry CEOs, including Pfizer's Albert Bourla, to sign a letter asserting their political independence and commitment to following the science. This incident received considerable attention on social media, highlighting the potential impact of such politicisation on public trust and response.

2.18.1 The Role of Social Media in Shaping The 'Global Political Village' & Influencing Public Perception

The pervasive influence of social media in modern communication has enabled local populations to observe and compare global responses to the pandemic. The contrasting approaches of different international governments and organisations to public health management during the pandemic have become readily apparent due to the constant media coverage of global events. This unprecedented level of oversight has facilitated comparisons between political leaders and their handling of COVID-19. For instance, New Zealand's Jacinda Ardern and Germany's Chancellor Angela Merkel were praised for their leadership, characterised by clear communication, empathy, and the alignment of science and politics. In contrast, the actions of the United States' Donald Trump and Brazil's Jair Bolsonaro were criticised as "shambolic, self-serving, and sometimes deliberately misleading" (Diseases 2020).

The Lancet Journal of Infectious Diseases article further argued that the mass media's preference for quick, often sensationalist reporting over carefully worded scientific messages with balanced interpretation exacerbates miscommunication (Diseases 2020). When officials underreact to threats that subsequently worsen, such as the case with SARS, public trust is eroded, and outrage and anger

are instilled. This highlights the importance of considering the role of social media and the politicisation of science in shaping public perception and response during a global health crisis. In the next and final section, we will consider the impact of digital information on democracy and its implications for public health communication.

2.19 Former U.S. President Barack Obama's Insights on the Challenges to Democracy in a Digital Information Realm

In a keynote address at the Cyber Policy Centre on April 21, 2022, former U.S. President Barack Obama discussed the challenges to democracy posed by the digital information realm. Although his speech was not directly related to COVID-19, it sheds light on the complexities of communicating intricate information through new media platforms (De Witte 2022), which is highly relevant to this thesis. Obama emphasised the transformation in how we communicate and consume information, with search and social media platforms becoming our primary sources of news and information. He warned that these platforms often *"blur the lines between fact, opinion, and fiction, as useful and factual information is mixed with lies, conspiracy theories, junk science, and other harmful content"*.

This constant exposure can erode our ability to discern the credibility of the information we encounter. In the context of this thesis, Obama's insights on the impact of big tech and social media platforms on society can be applied to the challenges faced in public health communication during the COVID-19 pandemic. The following excerpt from his speech highlights the need for tech platforms, citizens, and healthcare professionals to take responsibility for the information they disseminate and consume:

"Tech platforms need to accept that they play a unique role in how we, as a people, are consuming information, and that their decisions have an impact on every aspect of society. With that power comes accountability and, in democracies like ours, at least, the need for some democratic oversight. As citizens, we have to take it upon ourselves to become better consumers of news. Looking at

sources, thinking before we share, and teaching our kids to become critical thinkers who know how to evaluate sources and separate opinion from fact".

President Obama's warnings underscore the importance of fostering critical thinking and media literacy among the public to navigate the vast and complex digital information landscape, especially during a pandemic. The role of tech platforms in shaping public perception and response to a global health crisis like COVID-19 cannot be understated, and it is essential to consider their influence and responsibility in public health communication.

3.0 Methodology

In alignment with the objectives of this research, this chapter delves into the theoretical and philosophical foundations of potential methodologies applicable to the study. The chapter commences with a broad consideration of the appropriateness of quantitative versus qualitative approaches, ultimately selecting the latter with a justification as to rationale for its adoption.

There is then a detailed examination of the ontological and epistemological foundations of Interpretative Phenomenological Analysis (IPA), considering the applications and relevance to media experience research as well as a consideration of the challenges encountered when scaling IPA via the use of Artificial Intelligence enabled tools to assist analysis for a broader group of participants.

The chapter introduces the semi-structured interview schedule, interview timing, data collection and analysis methods, and measures employed to enhance the trustworthiness of the data and overall study quality. Finally, this chapter concludes with *'3.15 Reflexive Section'* an introspective account of my background, formative experiences, and perspectives that have shaped my interest in studying medical communication during the COVID-19 pandemic.

3.1 The Landscape of Medical Education Research

This section examines the research landscape within medical education, discussing potential research design options and providing justification for the selected methodology. Both qualitative and quantitative research methods contribute to our understanding of the world (Davides 2002). However, they have not always been equally valued (Bunniss and Kelly 2010). While some authors recognise the significance of qualitative research (Lingard and Kennedy 2010; Shaw, Larkin, and Flowers 2014) in medical research, this has not always been the case and consequently Health Professions Education (HPE) research, have historically leaned toward quantitative approaches rooted in positivist or post-positivist paradigms (Brown and Dueñas 2020). These paradigms uphold the existence of a universal truth, which manifests as a set of consistently replicable facts in medical practice (Alderson 1998). Given the medical field in which this research is taking place, an awareness of this perspective is useful when considering the design of research and dissemination of research findings.

Qualitative research, conducted from constructivist and critical theory paradigms, aims to understand and describe human nature and challenge myths to empower societal change (Blaikie and Priest 2019). Considering the traditionally paternalistic approach to medical practice (Buchanan 1978) and the influence of Flexner's 1910 report on medical education over the past century (Duffy 2011) it is perhaps not surprising to see a historical preference within the medical sciences research landscape for positivist and post-positivist paradigms associated with quantitative research.

Over the last decade, there has been ongoing debate about how to ensure qualitative medical education research is not perceived as inferior to quantitative research (Todres, Stephenson, and Jones 2007). The contentious relationship between the two approaches may have been exacerbated by the introduction of the Research Excellence Framework in the UK in 2008, which positioned medical education closer to science rather than social science (Bligh and Brice 2008). Concurrently, some advocated for classifying medical education as a social science (Monrouxe and Rees 2009).

Qualitative research is gaining acceptance in medical journals (Shuval et al. 2011). Over the past fifteen years, HPE research conducted by qualitative scholars has seen increased legitimacy and publication success, though these accomplishments were hard-earned (Varpio et al. 2017). As qualitative research gains recognition and value, it is essential that it is conducted rigorously and methodically to produce meaningful and beneficial results (Nowell et al. 2017). These are factors that have been considered when designing this research project.

3.2 Qualitative, Quantitative, or Mixed Methods?

Several potential research methodologies were considered when designing this study. At the paradigm level, there was a consideration as to whether qualitative, quantitative, or mixed methods would be appropriate. With the development and perceived legitimacy of both qualitative and quantitative research, mixed methods employing the combination of both approaches has gained increasing popularity within the social and human sciences (Creswell and Creswell 2017). That being said, there were three reasons as to why quantitative investigational methods were discounted, and mixed methods were not pursued.

Firstly, given the subject matter under investigation, COVID-19 and medical communication through multimedia platforms, there was the potential this topic may have been distressing for some. As such, sending a quantitative-based research tool or form would not allow for the contemporaneous assessment of the emotional or psychological wellbeing of participants, as they were taking part in the study. Therefore, it was felt a quantitative approach would be sub-optimal in this regard.

Secondly, with this being a part-time Doctor of Medicine degree, there was a need for speed in terms of gathering responses at a specific time point in the pandemic. A time after which the initial shock and distress COVID-19 no doubt had on the country had subsided. However, also not so far after the initial stages of the pandemic, memories of participants falter or fail. During the planning stages of this research project, it was felt a time period of between twelve to fifteen months into the pandemic would allow for sufficient background reading and study design to be undertaken while also securing all

appropriate ethical approvals. Thus, a balance was struck between maintaining psychological safety of participants, while also conducting a qualitative research study sufficiently soon after the pandemic such that it was a contemporaneous record of what was a unique time in human history.

Lastly, a mixed-methods approach was considered but ultimately not chosen due to the limited scope and timeframe of the study. While mixed methods can provide a more comprehensive understanding of the research question by combining the strengths of both quantitative and qualitative methods, the implementation of such an approach would demand additional resources and time, which were deemed not feasible within the constraints of a part-time Doctor of Medicine program. Consequently, a qualitative methodology was deemed most suitable for this study.

3.3 Axiology

Traditionally, the core concepts of constructing social science research and defining one's research paradigm have consisted of ontology, epistemology, methodology, methods, and sources, as alluded to in Guba and Lincoln's work, which has since been cited over 30,000 times (Guba and Lincoln 1994). (Grix 2002) argued that a *"directional and logical relationship needs to be understood if academics are to engage in constructive dialogue and criticism of each other's work".* There has been a move towards the inclusion of axiology as a fourth defining component of a research paradigm (Deane 2018).

3.3.1 Axiological Approach

The axiological approach I bring to this research project is grounded in my professional experiences in communication, social media, and public health messaging. As a clinician skilled in conveying complex medical information clearly to the public, I have witnessed firsthand how impactful effective communication can be. Social media has enabled me to disseminate important public health insights widely. However, I have also observed the potential for media to be used divisively when contentious narratives spread unchecked.

Even before COVID-19 was formally declared a pandemic, I felt this would be the first global public health crisis to unfold in the social media era. My early pandemic experiences cemented this realisation - I received messages from distressed individuals seeking explanations amidst the uncertainty. While brief, these interactions offered perspective on how rapidly misinformation and fear could propagate and the need for credible voices promoting scientifically accurate facts.

As I embarked on this research, I was mindful of my duty as both a clinician and researcher to provide a platform for participants to share their stories. My aim was to approach each interview with openness to emotions and vulnerabilities, while maintaining methodological rigor. My communication background shapes the axiological perspective I bring. Valuing the potential to broadly communicate complex information, yet also acutely aware of media's potential to divide. This study provided an opportunity to explore the interplay between public commentary and personal pandemic experiences, with the goal of improving future health crisis communication.

3.4 Ontology, Epistemology & Research Underpinnings

3.4.1 Ontological Stance

One of the main categorisations relevant to qualitative research is related with ontology, which is defined as the 'nature of reality' (Ritchie 2020) and the 'study of being' (Scotland 2012). The two overarching ontological positions include realism and relativism. Realism relates to a distinction between the way the world is and of people's beliefs or understanding of that external reality (Ritchie 2020). Relativism relates to the philosophy that reality is constructed within the human mind and that reality is 'relative' depending on the experiences of individuals (Moon and Blackman 2014).

3.4.2 Epistemology & Research Paradigms

Epistemology is based on the creation, acquisition and communication of knowledge (Cohen, Manion, and Morrison 2002). (Guba and Lincoln 1994) formed the epistemological question: *"What is the nature of the relationship between the would-be knower*?"

A paradigm is "*a basic set of beliefs that guide action*". Paradigms differ according to the set of beliefs they bring with them to the research setting. Research paradigms are the philosophical positions that underpin how research is designed, conducted, and interpreted (Rossman and Rallis 2011). The first aspect to consider in the construction of this research project's paradigm involves the study of value and ethics (Biedenbach and Jacobsson 2016). Two factors I hope have clearly been conveyed in this thesis thus far. While relevant across all clinical educational research, paradigms hold particular prominence when discussing qualitative research. To ensure research rigor, appropriate reflection, and consideration of the paradigm within which it is conducted are critical. Brown and Dueñas argue that within the medical sciences educational community, there is a "paucity of understanding" regarding what a research paradigm consists of and how best to construct one (Brown and Dueñas 2020). This section will detail the considerations around the research paradigm within which this work has been conducted.

The perspective one has on the world, biases they bring and the need for reflexivity are all of vital importance to consider, especially in the qualitative research process, impacting everything from study design and data collection to the delivery of results. Ultimately, as Rolfe alludes, they are critical for validity, trustworthiness and rigor of qualitative research (Rolfe 2006). Researchers can use various paradigms together based on compatibility within their research (Creswell and Creswell 2017). The four main paradigms used to inform research include: post positivism, constructivism, advocacy/participatory and pragmatism.

Post positivism allows engaging with research through a scientific approach based on logic, cause-and-effect and empirical data collection through a *priori* theory (Creswell and Poth 2016). Researchers using a postpositive paradigm will adopt rigorous methods of data collection and analysis and seek multiple perspectives from participants rather than a single reality (Denzin and Lincoln 2011).

The constructivist worldview enables individuals to develop subjective meanings around their experiences. As researchers using constructivism seek complexity of views rather than narrow

meanings, they orient their research around the participants' view of the situation. These subjective views are formed through interactions with others; hence the researcher inductively generates a theory or pattern of meaning rather than beginning with a theory as seen in post positivism. Constructivist researchers ask broad questions to participants and stimulate these participants to construct meaning through open-ended discussion and dialogue. The researchers' own background shapes their interpretation of the constructed meaning formed by participants, and ultimately, the researcher looks to make sense of the meaning others have about the world. It is seen that constructivist worldviews usually manifest in phenomenological studies (Creswell and Poth 2016).

Advocacy/Participatory stipulates that research must bring an action agenda which will lead to meaningful change to the lives of the participants and institutions involved in the research. The researcher looks to act as a voice for these participants and institutions and help free them from the constraints of unjust structures hindering their self-development and self-determination. Subsequently, advocacy/participatory researchers design their questions and conduct their research through collaboration with their participants, with the final report consisting of an agenda for reform. This paradigm is usually seen in ethnographic studies (Creswell and Poth 2016).

Pragmatism allows researchers to focus on the overall outcome of the research, including the actions and consequences of the inquiry. Pragmatist researchers retain complete freedom over the methods, techniques and procedures of research they best see fit for the purpose, as pragmatism is not committed to any specific philosophy or reality (Cherryholmes 1992; Murphy 1990). Researchers using this worldview will use multiple methods of data collection to comprehensively answer the research question and they will focus on the practical implications of the research (Creswell and Poth 2016).

One's worldview influences the underlying research design deemed appropriate and selected. Moreover, the manners in which these manifests in the research process is intimately connected to the underlying perspective of the researcher. With that in mind, it is worth noting that knowledge is not

asocial. 'Data' is not just out there to be obtained by automated, emotionally neutral processes. Rather, data are constructed according to the framing of the research topic and theoretical assumptions researchers have of the world. Braun and Clarke discuss the importance of the active role researchers play in identifying patterns and themes based on their theoretical and epistemological commitments (Braun and Clarke 2006).

Given the deeply personal nature of a pandemic, especially one involving a novel virus affecting people in seemingly indiscriminate ways, I was keen to learn what people felt was important about how the evolving phenomenon was communicated to them, what processes led to their engagement or disengagement with the media regarding COVID-19 and then their resulting behaviours.

3.5 Ontological & Epistemological Foundations of Interpretative Phenomenological Analysis (IPA) in COVID-19 Media Experience Research

3.5.1 Introduction to Interpretative Phenomenological Analysis (IPA)

Interpretive Phenomenological Analysis (IPA) is a qualitative research approach committed to the examination of how people make sense of their major life experiences (Larkin, Flowers, and Smith 2021).

The genesis of IPA is complex and multifaceted. With its origins in health psychology (Smith 1995; Smith, Flowers, and Osborn 2013; Smith, Jarman, and Osborn 1999), theoretically its roots lie in what some scholars refer to as a "Critical realist" position (Bhaskar 2013; Fade 2004).

While IPA is a relatively recently developed and still evolving approach to qualitative research (Willig 2013) it has emerged as a potent research methodology, particularly suited to exploring lived experiences and focuses on how individuals make sense of their personal and social world.

3.5.2 Theoretical Underpinnings of IPA

The main theoretical underpinnings of IPA are drawn from phenomenology, hermeneutics and idiography which when combined can facilitate a deep understanding of the subjective experiences of individuals.

3.5.3 Application of IPA to Media Experience Research

In the context of investigating the lived experience of mainstream and social media consumption among medically and non-medically qualified participants during a pandemic, IPA offers a robust framework for deep, nuanced understanding. This section elucidates the ontological and epistemological underpinnings of IPA as applied to this thesis.

3.5.4 Rationale for Using IPA

The rationale for employing IPA in this study is rooted in its unique philosophical underpinnings, which align closely with the research question's focus on lived experiences. IPA's methodological approach is particularly relevant for examining media experiences during a global pandemic, as it acknowledges the complex interplay between individual meaning-making and collective crisis experiences. The methodology enables researchers to explore how participants navigate and interpret their media engagement while recognising that these experiences are deeply embedded in their personal, professional, and social contexts. The IPA framework provides a robust foundation for understanding the nuanced ways individuals processed media information during COVID-19.

3.5.5 Ontological & Epistemological Considerations

IPA's ontological position assumes that reality is subjective and constructed through individual experiences and interpretations. Epistemologically, IPA acknowledges that access to these experiences is always interpretative, recognising the double hermeneutic where the researcher interprets the participants' interpretations of their experiences.

In the context of media experience research, this ontological position acknowledges that each participant's interaction with mainstream and social media is unique, influenced by their background,

profession (medical or non-medical), and personal history. The reality of media experience is not a fixed external entity, but a fluid, internally constructed phenomenon.

IPA's foundation in phenomenology, hermeneutics, and idiography makes it particularly suitable for this study. The phenomenological aspect allows for a deep exploration of participants' lived experiences with media during the pandemic. The hermeneutic element acknowledges the interpretative nature of understanding these experiences, both from the participant's and the researcher's perspectives. The idiographic focus enables a detailed examination of individual cases before moving to more general claims.

3.5.6 Methodological Considerations

3.5.6.1 Sample Size in IPA

However, it's crucial to address the limitations of IPA, particularly concerning sample size. While (Tindall 2009) suggest that IPA is most effective with smaller sample sizes to maintain its idiographic commitment, this study's larger sample size (n=40) pushes the boundaries of typical IPA practice. This decision was made to capture a broader range of experiences across both medical professionals and the general public, providing a more comprehensive understanding of the phenomenon under study.

The choice of a larger sample size within an IPA framework necessitates careful consideration of how to maintain the idiographic focus while also identifying patterns across cases. This approach allows for a nuanced understanding of individual experiences while also revealing shared themes that may have broader implications for pandemic communication strategies.

3.5.6.2 Comparison with Reflexive Thematic Analysis (RTA)

In contrast to Reflexive Thematic Analysis (RTA), which might have allowed for a larger sample size but potentially at the cost of depth in individual accounts, IPA enables a more detailed exploration of personal meanings and the lived experience of engaging with media during the pandemic. While it's true that RTA could also elaborate on emotive claims, IPA's specific theoretical background in

phenomenology, hermeneutics and idiography and its interpretative element provides a unique lens through which to view these experiences.

The decision to persist with IPA despite the larger sample size reflects a commitment to honouring individual voices while also seeking to understand broader patterns in the lived experience of pandemic media consumption. This approach allows for a rich, nuanced analysis that may help inform future public health communication strategies while remaining true to the idiographic principle of IPA.

3.5.7 Use of Artificial Intelligence (AI) in IPA Research

3.5.7.1 Role of AI Tools

While this study employed IPA with a larger sample size than is typically recommended, it's important to clarify the role of AI tools in the research process. Rather than considering the use of AI as a novel methodology, it's more accurate to describe these tools as supportive elements in managing and organising the extensive data set generated from 40 interviews. One could consider the coherence of such an approach with abiding by and applying the philosophy behind IPA. The use of AI, namely ChatGPT 4 and Descript, as tools to organise and re-visit and interrogate the transcripts aided the application of IPA principles in order to getting a deep understanding of individual lived experience.

Specifically, the Descript tool was utilised for its transcription capabilities, helping to efficiently convert audio recordings into text. ChatGPT 4, an advanced large language model, was employed as an organisational aid to help sort and categorise the vast corpus of interview transcripts. It is important to state, each interview transcript was divided into smaller sections, with a myself a human researcher, 'in the loop' at every stage of the process checking outputs, matched transcript inputs, and ensuring against hallucination – essentially ChatGPT generated content. Information about how ChatGPT and Descript were deployed as tools to assist in this research can be found in Appendices VI & VII.

3.5.7.2 Maintaining IPA Integrity with AI Support

However, it's crucial to emphasise that these AI tools did not play a part in the hermeneutic circle central to IPA. The interpretative work, which is at the heart of IPA's methodology, remained firmly in the hands of the researcher.

The use of AI in this context was limited to tasks that supported the analysis process without replacing the researcher's interpretative role. This approach allowed for the maintenance of IPA's idiographic focus while managing a larger sample size than is typically used in IPA studies. It's important to note that the decision to use AI tools was made to enhance efficiency in data management, not to alter the fundamental interpretative nature of IPA.

3.5.7.3 Privacy Concerns & Data Security

However, the use of AI tools in research, particularly those involving sensitive health data, raises important privacy concerns. While steps were taken to ensure data security, including seeking guidance from HYMS, anonymising data fed into these tools, paying for the professional versions and opting out of allowing research transcript data to train the large language model. It is worth acknowledging the potential risks associated with using current AI tools for research purposes. These concerns include the storage and potential reuse of data by AI companies, the possibility of data breaches, and the evolving nature of AI privacy policies. By clarifying the limited role of AI tools in this study and addressing the associated privacy concerns, we can maintain the integrity of the IPA approach while acknowledging the practical support that technology provided in managing a larger-than-typical sample size for an IPA study.

3.5.8 Summary of Ontological & Epistemological Foundations

The ontological and epistemological foundations of IPA provide a robust framework for exploring the lived experiences of mainstream and social media among diverse participants. By acknowledging the subjective, interpreted nature of reality and emphasising deep, contextual understanding, IPA offers unique insights into how individuals navigate and make meaning from their media experiences. This

approach aligns well with the complex, personal nature of media interaction in contemporary society, offering potential for rich, nuanced findings that can inform future practice in effective public health communication.

3.6 Expanding IPA: Considerations on Sample Size & AI-Assisted Analysis

The application of Interpretative Phenomenological Analysis (IPA) to larger datasets, particularly when facilitated by AI tools such as ChatGPT 4, raises important questions about maintaining the methodological and philosophical underpinnings of IPA. This section addresses these considerations, with particular attention to the core elements of IPA: hermeneutics, idiography, and phenomenology.

3.6.1 The Challenge of Scale in IPA

Traditionally, IPA has been associated with small sample sizes, typically ranging from 1 to 10 participants (Larkin, Flowers, and Smith 2021). This approach aligns with IPA's commitment to idiography and deep, contextual analysis. However, the use of AI to analyse larger quantities of data presents both opportunities and challenges to this established paradigm.

3.6.2 Potential Benefits of Larger Samples

1. Increased Diversity: Larger samples can capture a wider range of experiences, potentially leading to more comprehensive insights for consideration in future pandemics.

2. Pattern Recognition: AI-assisted analysis may identify patterns or themes that might be less apparent in smaller samples.

3. Generalisability: While not a primary goal of IPA, larger samples might offer more transferable findings.

3.6.3 Potential Challenges to IPA Philosophy

1. Idiographic Focus: The cornerstone of IPA is its commitment to detailed examination of individual cases (Tindall 2009). Larger samples may compromise this depth.

2. Hermeneutic Circle: The interpretative process in IPA involves moving between the part and the whole, which becomes more complex with larger datasets.

3. Phenomenological Essence: Capturing the essence of lived experience may be diluted in the analysis of larger datasets.

3.6.4 Revisiting the Core Elements of IPA

To address these challenges, it's crucial to revisit the three key philosophical elements of IPA as outlined by Larkin et al (Larkin, Flowers, and Smith 2021).

1. Hermeneutics: The theory of interpretation is central to IPA. With larger datasets, researchers must ensure that the interpretative process remains true to the individual's experience while also considering the broader context.
2. Idiography: This commitment to the particular is perhaps the most challenged by larger sample sizes. Researchers must find ways to maintain the idiographic focus even when dealing with more extensive data.
3. Phenomenology: The focus on lived experience and how individuals make sense of it remains crucial, regardless of sample size.

3.6.5 AI as a Tool in IPA: Opportunities & Limitations

The use of AI as a tool in IPA research requires careful consideration with regards to opportunities and limitations:

1. Enhanced Data Processing: AI can help process larger volumes of data, potentially identifying patterns that might be missed in manual analysis.
2. Consistency in Coding: AI tools can provide consistency in initial coding stages, potentially reducing researcher bias.
3. Risk of Decontextualisation: There's a risk that AI-driven analysis might miss nuanced, context-dependent meanings that are crucial to IPA.

4. Maintaining the Interpretative Element: Researchers must ensure that AI tools support rather than replace the crucial interpretative work central to IPA.

3.6.6 Contrasting with Reflexive Thematic Analysis (RTA)

To illustrate the decision-making process in choosing IPA for larger datasets, it's helpful to contrast it with Reflexive Thematic Analysis (RTA) as proposed by Braun and Clarke (Braun and Clarke 2006, 2019):

1. Theoretical Flexibility: RTA offers greater theoretical flexibility and is more amenable to larger datasets.
2. Level of Interpretation: While both involve interpretation, IPA typically involves a deeper level of interpretative work, focusing on the lived experience.
3. Idiographic vs. Pattern-Based: IPA maintains an idiographic focus, whereas RTA is more pattern-based across the dataset.
4. Researcher Positioning: In IPA, the researcher's interpretative role is more explicitly acknowledged and utilised.

3.6.7 Conclusion: Navigating the Tensions

The use of AI to analyse larger datasets within an IPA framework presents both opportunities and challenges. While it may allow for broader insights, researchers must be vigilant in maintaining the core philosophical commitments of IPA:

1. Ensure that the idiographic focus is not lost by protecting and preserving the continued and deep engagement with individual cases.
2. Use AI as a supportive tool in the initial stages of sorting transcripts, but rely on human interpretation for deeper, contextual understanding.
3. Maintain a reflexive stance, acknowledging how the use of AI and larger samples impacts the interpretative process.

By carefully navigating these tensions, it is hoped this research may potentially expand the scope of IPA while remaining true to its philosophical foundations. This approach requires a clear articulation of methodological decisions and their implications, ensuring transparency in how AI tools and larger samples are integrated into the IPA framework.

3.7 Formulating a Research Question

I wanted to base my programme of study around a research question aiming to compare medical education in my two roles, in the pharmaceutical industry and as an honorary lecturer at Hull York Medical School. However, with the emergence of the COVID-19 pandemic in March 2020, it became apparent that this event could have significant impact upon society. Following discussions with my supervisor Professor Martin Veysey, we decided to reshape the scope of this MD to examine the influence of media during a pandemic. Over the first 12 months, until March 2021, I extensively consumed various mainstream and social media content related to COVID-19. However, there was also an element of criticality in the timing of the interviews, as they had to be conducted in a relatively contemporaneous manner during a condensed period of the pandemic.

3.8 Ethics Application

The ethics application process for this research project exploring the impact and interplay between social and mainstream media on global public health communication during a pandemic, commenced in February 2021. Following acceptance of the proposed ethical considerations and safeguards ethical approval was granted by the end of May 2021 – as per the approval letter in *'Appendix I – Approval Letter from Ethics Committee'*.

3.9 Rationale for Individual Interviews

Considering the highly personal and potentially emotive nature of experiences related to the pandemic, individual interviews were deemed the most appropriate method to elicit in-depth and candid responses from participants. This approach allowed for open discussions and facilitated the exploration of each participant's unique perspective on the impact of social and mainstream media during the pandemic. In contrast, focus groups might not have provided the same level of comfort or encouraged the same level of openness, given the group setting and potential for social dynamics to influence participants' responses.

3.9.1 Timing of Interviews

Interviews for this study were conducted between June and July 2021, which marked a period of fifteen months after the declaration of the pandemic in March 2020. This timing was chosen to strike a balance between allowing sufficient time to elapse, so as not to evoke trauma or distress for participants while discussing their experiences and ensuring that their thoughts and recollections of the early stages of the pandemic remained relatively fresh. This approach aimed to facilitate a comprehensive exploration of the participants' experiences while minimising potential emotional distress associated with discussing what may have been a challenging period in their lives.

3.9.2 Participant Selection & Sampling

Participant recruitment for this study was carried out according to the documentation approved by the ethics committee. These documents consisted of *'Appendix II – Invitation to Participant Text & Artwork'*, *'Appendix III – Research Study Information Sheet'*, and *'Appendix IV Participant Consent Form'*. Advertisements were posted on social media platforms to attract a diverse pool of participants. During the study period, interviews were conducted with a range of individuals to ensure a balanced representation of age, sex, educational qualifications, and professional backgrounds. This approach aimed to include a heterogeneous mix of participants, comprising both medically and non-medically qualified individuals, in order to capture a wide range of perspectives on the impact of media during the pandemic.

3.9.3 Reception of Participation

Only one participant responded to an invite via WhatsApp declining to participate in the research, who felt the line of questioning maybe something they were not willing to participate in. In fact, the majority of participants responded positively and commented in the interview, or just after, how much of a cathartic exercise they found the process of talking for the first time about what had clearly been a traumatic series of events in the 15 months preceding the initial lockdown of March 2020. Given these

facts I feel the timing of interviews was just right in regard to the balance between participant wellbeing and richness of research findings.

3.9.4 Conducting Interviews

Semi-structured interviews were utilised in this study, allowing participants the freedom to guide the conversation in directions they found relevant or significant. While adhering to the predetermined questions in *'Appendix V – Questions Prepared for Semi-Structured Interviews'*, participants were encouraged to explore their thoughts and elaborate their experiences in-depth. Handwritten field notes were taken during the interviews and reviewed immediately afterward. These notes were consulted before conducting subsequent interviews to ensure continuity and reflection on the process.

3.9.5 Interviewer

The majority of interviews were conducted solely by me. However, in five instances, medical students from the research team joined the process. This approach aimed to provide them with valuable research experience and allowed me to observe their interviewing techniques and mannerisms. I found this observation beneficial, as it enabled me to incorporate useful elements from their approach into my own interview process. Consistency was maintained as they used the same semi-structured interview schedule.

3.9.6 Data Collection

A series of questions were written, and submitted for ethical approval, for the semi structured interviews. These can be found in *'Appendix V – Questions Prepared for Semi-Structured Interviews'*. The intention behind writing this document was to provide a framework around which participants could elaborate on areas most pertinent to their lived experience of the pandemic.

All interviews started the same way with the participant being thanked for their time, making it clear there were no right or wrong answers and if there were any questions, they didn't want to answer that

wasn't a problem. Assuming they were ok to proceed, which they all were, the following opening statement was read out:

"2020 has been a year like no other, the purpose of this interview is to explore your views on the role various forms of media has had on how you personally have processed and reacted to evolving news of the pandemic".

Participants were then asked an open question for their reflections on that statement. It proved this was a particularly rich period of the interview, with many people giving detailed answers, pertinent to their own lived experience, that set the scene of the rest of the interview.

The following sections of the interview centred around:

1) Initial recollections when they first heard about COVID-19.

2) Origins of COVID-19.

3) Subsequent pandemic behaviours.

4) Faces and phrases of the pandemic.

3.10 Phenomenological Research Principles

There are four phenomenological research principles, namely bracketing, intuiting, analysing, and describing (Moustakas 1994). Each step plays a pivotal role in helping to understand the lived experiences of research participants. In this section, I will provide a brief overview of each of these terms and share my personal reflections on the challenges and successes I encountered while deploying these techniques in my research project.

3.10.1 Bracketing

Bracketing is an essential methodological aspect of phenomenological inquiry (Chan, Fung, and Chien 2013), requiring researchers to consciously set aside their own beliefs and pre-existing knowledge about the phenomenon under investigation. The purpose of this suspension of judgment is to enable

researchers to focus on the analysis of experiences rather than allowing preconceived notions or biases to influence their understanding.

Initially, I found this aspect of the IPA process challenging, particularly during the early stages of analysis. However, as I became more deeply immersed in the data, I noticed a significant improvement in my ability to bracket my own preconceptions. Continually revisiting the transcripts of participants with differing views from my own and repeatedly watching and listening to their accounts helped me to genuinely hear and understand what they were saying, rather than interpreting their words purely through the lens of my own beliefs. This iterative process of engagement with the data ultimately enabled me to gain a more authentic understanding of the participants' experiences and perspectives.

3.10.2 Intuiting

Following the bracketing process, intuiting takes centre stage, which entails the researcher focusing on the meanings attributed to the phenomenon by the participants. Intuiting facilitates the development of a shared understanding of the phenomenon between the researcher and the participant, fostering a deeper insight into their experiences.

As a researcher, I found that I was naturally more adept at intuiting, thanks to my empathetic and inquisitive disposition. At the beginning of each interview, I emphasised my eagerness to understand the participants' perspectives on the impact and interplay of media during the pandemic. This approach encouraged participants to share extensive and detailed information. It was this eagerness conducting interviews and learning first-hand how COVID-19 communication in the media had affected people which led to me conduct a larger quantity of interviews than would ordinarily be required for an IPA study. The same reasoning as to seeking a heterogeneous rather than homogeneous group.

3.10.3 Analysing

The analysis stage necessitates a meticulous and comprehensive examination of the collected data to discern patterns, themes, and insights into the participants' lived experiences. This process commences with the researcher repeatedly reading and re-reading the gathered data, fostering a deeper and more holistic understanding of the participants' perspectives.

As previously mentioned, the considerable volume of data collected posed challenges in terms of relying purely on manual processing and analysis. To maintain academic rigor and ensure a thorough engagement with the data, I devoted ample time and effort to the manual IPA approach. I also spent time exploring how innovative AI tools could augment the interrogation of the vast corpus of data. This approach facilitated the identification and interpretation of the nuances and complexities of the participants' experiences. By embracing both traditional analytical techniques and innovative technologies, I was able to achieve a balance between in-depth understanding and efficient data processing, ensuring the validity and reliability of the study's findings.

3.10.4 Describing

The final principle in phenomenological research is describing, which emphasises the articulation of how individuals experience a specific phenomenon. It is crucial to set aside biases and present a detailed and accurate account of the participants' experiences, ensuring the validity of the research findings.

As detailed in chapters *'4.0 Results for HCPs' and '5.0 Results for General Public'*, individual write-ups for each participant are provided, highlighting themes and substantiating quotes that emerged from their experiences. In *'6.0 Discussion'*, a comprehensive analysis of the common GETs that surfaced throughout the research process is presented, in relation to the contemporary COVID-19 literature on the subject. This in-depth exploration was made possible by employing IPA methodology through a combination of traditional techniques and innovative technological approaches. By integrating these

methods, a more accurate and thorough understanding of the participants' lived experiences was achieved, ultimately contributing to the rigor and credibility of the study.

3.11 Traditional IPA Methodology

From August 2021 to October 2022, a period of 14 months, the IPA methodology for analysis was applied manually. The interviews were conducted on Zoom, which offered an auto-transcription feature. While this feature saved time, there were limitations due to occasional transcription errors. Nevertheless, by carefully listening back to the interviews, I was able to work around these inaccuracies and ensure the reliability of the transcriptions.

From November 2022 to August 2023, I engaged in a period of in-depth analysis, immersing myself in the dataset. This process entailed creating handwritten exploratory, descriptive, linguistic, and conceptual notes based on the recorded interviews. The sheer volume of data, combined with my part-time MD status, meant that this phase of the project required the most significant individual investment of time. This immersion proved invaluable for gaining a profound understanding of the data.

3.12 An IPA Study with Use of AI Tools

Utilising AI enabled tools, I revisited every transcript in a consistent and replicable manner and validated the outputs from the manual methodology applied. My deep familiarity with the data allowed me to clearly recognise which interview each specific theme originated from, as well as where occasional errors or misrepresentations were made, as a result of the AI hallucinating and essentially making up output.

These cutting edge tools streamlined the data analysis process, allowing analysis which took 15 months to be completed manually, to be replicated and completed over a period of a few concentrated weeks of work, but also enhance the depth and rigor of the study, allowing for more comprehensive review of all the participants' lived experiences. These outputs still required manual review to ensure they were all correct and fair representations and of relevance to the research question. By leveraging the capabilities of AI systems like ChatGPT and Descript, I was able to efficiently process, re-visit and re-analyse the wealth of information gathered in its entirety, effectively integrating technology throughout the entire research process.

The simple example of ChatGPT 3 being asked to provide bullet point summaries allowed for rapid navigation around transcripts. The consistency of which these tools can analyse vast corpuses of data to identify connections that may be missed by human analysis alone, in my opinion, enhance the rigor of the human analytical process. For example, the ability of ChatGPT 4 to pull out all themes and quotes for human review. As a dyslexic researcher, I particularly found it useful, allowing me to better understand each of the participants lived experience in a deeper way. The following section details exactly how each AI tool was used, and how it augmented the human IPA research process.

3.12.1 Using ChatGPT 3 for Experimentation & Exploration

I began experimenting with ChatGPT 3 upon its release in November 2022 for work purposes unrelated to my research project. Over the Christmas holidays, time dedicated to my MD, this experimentation progressed to exploring whether there may be relevant use cases for my research.

Initially, there was again a period of experimentation, as this new technology had not previously been deployed for the purpose of assisting the analysis of an IPA study. I explored the use of ChatGPT 3 as an instrument for conducting superficial analysis and condensing the transcripts into bullet points. The capabilities of this tool were such that it could provide a useful bullet point list to easily identify broadly what issues appeared in which interviews. However, it was not capable of any more nuanced or detailed analysis.

I explored the potential of ChatGPT 3 assisting for identifying themes, but I found that the output was not of sufficient quality for this purpose, with the tool making errors and at times even fabricating answers. It was only as a result of my deep immersion within the data I was able to spot these answers produced as a result of AI hallucination, so would caution against other researchers attempting to use ChatGPT 3 for this purpose. Consequently, I decided to continue using ChatGPT 3 solely for providing bullet point summaries of the transcripts. This was helpful to approach the project again in a fresh manner after 18 months had elapsed since the interviews were conducted. When these bullet points were considered in context with my handwritten notes this approach proved to be highly beneficial, as it facilitated efficient quick, and accurate access to the relevant sections of interviews when revisiting and refining first and second pass IPA notes.

3.12.2 Using ChatGPT 4 to Identify All Themes & Substantiating Quotes from Transcripts

In March 2023, the latest generation of ChatGPT was released. Given the significant amount of data collected across the 40 interviews, consisting of over 35 hours of interviews and a corpus of transcripts of 375,000 words, running to over 1,000 pages. I wanted to explore whether ChatGPT 4, could be used as a tool to extend the IPA process over a wider sample size of participants than usually

considered for a study using IPA methodology. Could ChatGPT 4 potentially identify themes, that may be missed by human analysis alone? And present themes with substantiating quotes in a replicable, auditable manner?

The advanced capabilities of ChatGPT 4 made it a valuable tool for augmenting the IPA research process, as it can efficiently analyse large volumes of data and extract themes that might be overlooked by human researchers. The AI's ability to process and categorise information quickly and accurately enhances the quality of the research and provides a comprehensive list of all themes covered. It was then up to me as a researcher to manually review these themes so I can develop a more comprehensive understanding of each of the participants' lived experience.

In this study, ChatGPT 4 was deployed to revisit each transcript individually for the analysis of themes and substantiating quotes. The AI's power enabled the extraction of *all* themes present in the transcripts. Something not possible with ChatGPT 3, nor human analysis alone. This information was then manually copied into an Excel spreadsheet, where each theme and substantiating quote was reviewed manually for its relevance to the research question. Irrelevant themes, unrelated to the research question were removed, resulting in 835 themes related to the research question. These themes and substantiating quotes were presented in one tab per interview, allowing for easy access when revisiting the cases. Although there was duplication of themes across interview, this approach allowed for the attribution of each theme to its respective interview and the determination of theme frequency. This was of great benefit to the study, as it facilitated a more comprehensive and nuanced understanding of the participants' experiences and perspectives with regards to the research question.

I then used the excel document collating the collection of themes and substantiating quotes, in combination with my first and second pass IPA notes to compile manually written individual summaries for each participant. I felt this combined approach helped me do justice to accurately detailing their lived experiences with media during the COVID-19 pandemic, and each participants summary is presented in the chapters *'4.0 Results for HCPs' and '5.0 Results for General Public'*.

3.11.3 Transcription & Revisiting Interviews: The Role of Descript

Descript is an AI-powered transcription software that offers industry leading accuracy and speed, along with powerful tools for re-visiting specific sentences quickly and efficiently, as demonstrated in 'Appendix VII – Miscellaneous Material'. In the context of an IPA study, Descript can significantly streamline the transcription process and facilitate the revisiting of interviews for analysis. The software automatically transcribes interviews within minutes, assigns speaker labels using its AI-powered 'Speaker Detective' feature, and allows users to export well-formatted transcripts. Descript was deployed in this research project, shortly after its release, from March 2023 onwards.

In addition to its transcription capabilities, Descript enables researchers to remove filler words, search for specific phrases or quotes, and quickly listen back to the relevant sections of the interview. The interface to allow this is shown in Appendix VII. This level of efficiency and accessibility makes it easier for researchers to delve deeper into the data and extract meaningful insights. As a relatively new technology, Descript may not be widely used in IPA research yet. However, its potential to enhance the transcription and analysis process warrants further exploration and adoption by qualitative researchers. By integrating tools like Descript into the research process, researchers may be able to further optimise their workflow and potentially improve the quality of their IPA studies.

3.12 Embracing AI Enabled Technologies in Future IPA Research: A Concluding Reflection

AI technology and Large Language Models (LLM), such as ChatGPT 3 and ChatGPT 4, represent a potential new frontier in IPA research methodology, as demonstrated by this research project. While these technologies have shown promise in enhancing the depth and efficiency of analysis, it is important to recognise that they currently serve as adjuncts to the human research process. As these technologies continue to advance and become more widely adopted, standardised approaches for their use in IPA studies may emerge. I believe it is crucial for researchers to openly share their experiences using these tools, and for academic institutions to embrace and support their integration into the

research process, as ultimately an augmented approach to research combining the best of both human and AI capabilities will improve the quality, reliability, and robustness of such projects.

Fundamental training in conducting research remains invaluable, coupled with deeply immersing oneself in the data through practical application of said research methodology. The collaboration between human researchers and AI systems has the potential to increase the quality and scope of IPA studies, leading to a deeper understanding of the complexities of human experience. By adopting a forward looking perspective and continuing to explore the potential of AI and LLMs, researchers can pave the way for new insights and advancements in the field of IPA research.

With this being a new use of a novel technology, I also strongly feel it is important to share such insights as it may be of use to other researchers wishing to use LLMs, such as ChatGPT 4, to augment their own research projects. This field is advancing so rapidly that during the write up stages of this project there has already been three distinct AI tools used with very different capabilities all of increasing ability. As documented ChatGPT 3, ChatGPT 4 and Descript have all been used. For context these are just three of hundreds of AI tools being released. With the pace of change showing no sign of abating, university institutions and organisations that ban the use of these emerging technologies in research stand to lose out on learning regarding the pros and cons of safely integrating these tools into research processes.

3.13 Rigour in Research

Rigour is defined as the state of being very exact or strictly precise (Dictionary 2002). In research, rigour relates to the strength of the research design and appropriateness of the methods to answer relevant questions (Morse et al. 2002). The concept of Rigour is heightened in importance for qualitative research due to the potential of subjectivity inherent in this research approach. Thus, for qualitative research to be accepted as conducted in a rigorous manner, the inclusion of a reflexive section is of paramount importance (Rolfe 2006). While quantitative research has been the traditional mainstay of research methodologies deployed in medical research it tends to analyse phenomena in

terms of trends and frequencies, whereas qualitative research provides the opportunity to uncover depth of understanding phenomena through exploration with emphasis on the meaning, experiences and views of the participants (Al-Busaidi 2008). As such, in the reflexive statement of this research project I have introduced the biases, background, and experiences I bring to this project, to allow readers an insight into the factors that contributed to that interplay between the data and the researcher. Thus, I will now detail my reflexive practice and present my reflexivity statement.

3.14 Reflexivity Section

Having discussed the rationale and justification for the choice of research methods, it is also important for qualitative research to consider ones positionality, biases, and pre-suppositions. Throughout this research project frequent reflexive conversations with my supervisors enabled critical self-appraisal concerning my role within the evolving research process.

As a clinician with a longstanding interest in communication across various domains - clinical, educational, managerial, and media settings - I approached this research with a unique perspective. My professional background has made me acutely aware of the critical role that effective communication plays in healthcare, particularly during times of crisis. This awareness significantly influenced my choice of research topic and my approach to exploring the impact of social and mainstream media on global public health communication during the COVID-19 pandemic.

My clinical experience has taught me the importance of clear, accurate, and empathetic communication in healthcare settings. I've observed firsthand how miscommunication or misunderstanding can lead to adverse outcomes for patients. This background made me particularly sensitive to the challenges of communicating complex health information to the public during a rapidly evolving pandemic. It also fuelled my curiosity about how different media channels might influence public understanding and behaviour.

As a researcher with dyslexia, I faced unique challenges in approaching the traditionally text-heavy process of Interpretative Phenomenological Analysis (IPA). IPA typically involves extensive reading and re-reading of interview transcripts, which can be particularly demanding for individuals with dyslexia. Recognising this potential barrier, I sought innovative solutions that would allow me to engage deeply with the data without being hindered by my severe dyslexia.

This led me to adapt my research methods by incorporating technological tools such as ChatGPT and Descript. These tools proved invaluable in helping me navigate the large corpus of data generated from the interviews. Descript, an audio transcription and editing tool, allowed me to engage with the interview content through both text and audio formats. This multimodal approach made it easier for me to process and analyse the information, playing to my strengths as a dyslexic researcher.

ChatGPT, an AI large language model, served as a supportive tool in several ways. It helped me organise and summarise key points from the interviews, which was particularly useful given the volume of data. However, I was always mindful of the need to maintain the integrity of the IPA approach. I used ChatGPT as an aid to my thinking process, not as a replacement for my own analysis. The AI's summaries and suggestions served as a starting point, prompting me to delve deeper into the data and encouraging me to consider perspectives I might have otherwise overlooked.

My use of these tools reflects a broader consideration in my research: the role of technology in shaping how we communicate and process information. Just as I adapted my research methods using technology, I was studying how society at large adapted to new forms of media during the pandemic. This parallel wasn't lost on me and indeed informed my analysis of how people engaged with various media platforms during the crisis.

Throughout the research process, I was acutely aware of my own experiences and perceptions of media coverage during the pandemic. As both a healthcare professional and a consumer of media, I had my own reactions to the evolving situation. I made a conscious effort to bracket these personal

experiences while conducting interviews and analysing data, striving to approach each participant's narrative with openness and curiosity.

My portfolio background proved to be a significant asset in conducting this research, substantially enriching both the data collection and analysis phases. My broad clinical experience enabled me to ask probing, contextually relevant questions when participants discussed their health-related anxieties and alluded to information-seeking behaviours. I could quickly identify areas that warranted deeper exploration and guide participants to elaborate on crucial aspects of their experiences that might otherwise have been overlooked. My expertise across multiple communication domains - clinical, educational, broadcast and social media, provided me with a sophisticated understanding of how information flows through different channels. This allowed me to recognise subtle but important patterns in how participants navigated various media platforms during the pandemic, and to draw meaningful connections between their described experiences and broader public health communication challenges. Rather than simply observing their narratives, I could engage with participants' accounts at a deeper level, drawing on my practical understanding of both healthcare delivery and crisis communication to uncover richer insights into their lived experiences.

Reflecting on the research process, I realise that my adaptation of IPA methods to accommodate my dyslexia mirrors a key theme that emerged from the study: the importance of adapting communication strategies to meet diverse needs. Just as I found ways to engage with the research data that worked for me, participants in the study described their own processes of finding and filtering information in ways that suited their individual circumstances and capabilities.

This research journey has deepened my appreciation for the complexity of public health communication, especially in crisis situations. It has also reinforced my belief in the importance of considering diverse perspectives and needs when developing communication strategies. As a clinician, researcher, and individual with dyslexia, I feel this project has not only contributed to the field of health communication research but has also enhanced my own practice and understanding.

In conclusion, my personal and professional experiences significantly shaped my approach to this research, from the choice of topic to the methods used. By reflecting on these influences, I hope to provide transparency about the lens through which this research was conducted, allowing readers to better contextualise the findings and interpretations presented in this thesis.

3.14.1 Communication & Media in Medical Practice

Communication has been a core component of my clinical practice and career. I am also against the paternalistic practise of medicine and have spoken positively about the benefits of 'Dr Google'. I have experience in communicating complex clinical scenarios in the consulting room, through social media and via mainstream media, including three appearances on Sky News covering COVID-19 related issues. First before COVID-19 was even declared a pandemic, discussing the emerging story in the studio on Mark Austin's News Hour (Rees 2020b). Second, when the then UK Prime Minister Boris Johnson was admitted to hospital with COVID-19 (Rees 2020a). The third and final COVID-19 related appearance was in January 2021 when The Mayor of London Sadiq Khan put London hospitals on high alert over COVID-19 admissions (Rees 2021). Combining my interests and career experiences meant even before COVID-19 was officially declared a pandemic, I recognised the importance of designing a research project around this unique event playing out in the all-consuming, connected, and complicated contemporary media environment.

3.14.2 Research Interests & Approach

There were several reasons behind approaching this research with a preference towards a qualitative approach. Given the novel nature of COVID-19, and the highly connected contemporary media environment through which it was reported I felt the potential for miscommunication and misunderstanding was high. I was interested to explore any subsequent potential impacts of media reporting on people's lives. I believed a qualitative approach may provide rich insights into how individuals were affected by the reporting of news related to COVID-19.

Throughout my research, I have relied on a wide range of resources, many with competing perspectives, to gain a comprehensive understanding of the pandemic and how it was communicated. This includes examining scientific literature, media reports, social media posts, and personal accounts from individuals who have experienced the disease first-hand.

During the pandemic, the catchphrase "Following the Science" was widely accepted by the public, at least superficially. However, some in the scientific community were sounding alarm bells either at the time or shortly thereafter. In the years following the pandemics declaration, several books were published by those who raised early concerns. These publications critically examined the decisions made and their subsequent communication. Examples include *'Reporting Coronavirus - Personal Reflections on a Global Crisis from ITV News Journalists'* (ITV News 2020), *'What Really Happened in Wuhan: A Virus Like No Other, Countless Infections, Millions of Deaths'* (Markson 2021), and Mark Woolhouse's *'The Year the World Went Mad - A Scientific Memoir'* (Woolhouse 2022). Additional resources, such as Sir Jeremy Farrar's *'Spike: The Virus Vs. the People the Inside Story'* (Farrar 2021), contributed to my background reading for this Doctor of Medicine.

When conducting research, it is crucial to consider a wide range of resources with diverse viewpoints. This includes perspectives like Farrar's following his resignation from the Government's Scientific Advisory Group for Emergencies (SAGE) or Markson's investigative reporting. It is particularly important in a world where social media often drives polarisation and hostility towards opposing views (Wylie 2019).

My research interests primarily revolve around the intersection of medical communication, during a pandemic caused by a novel pathogen, in a complicated media environment in which both mainstream and social media compete for capturing peoples' attention. What is the impact on understanding, subsequent behaviours, and overall public health response? By focusing on the following key areas, I aim to explore the nuances of communication during an unprecedented global crisis:

1. The role of mainstream and social media in disseminating information about COVID-19, both accurate and inaccurate.
2. The impact of governmental and public health messaging on public perceptions and adherence to guidelines.
3. The role of medical professionals as communicators, both in clinical settings and on public platforms.
4. The influence of individual experiences and perspectives on understanding and interpreting information related to COVID-19.
5. The challenges and opportunities presented by the pandemic for improving future medical communication, public health messaging, and media literacy.

My approach to the research is grounded in empathy and a genuine interest in listening to the experiences of those who have lived through the pandemic, as well as considering the perspectives of members of the public, healthcare professionals, policymakers, and media representatives. By examining a diverse range of sources and engaging in open dialogue with various stakeholders, I strive to present a holistic view of the complex landscape of medical communication during the COVID-19 pandemic. Ultimately, I hope to contribute to a better understanding of how communication can be improved in times of crisis, with the aim of fostering greater trust, transparency, and collaboration between medical professionals, media, and the public.

4.0 Results – Healthcare Professionals

This chapter presents the outcomes of 20 in-depth, semi-structured interviews conducted to explore healthcare professionals' lived experiences with media during the COVID-19 pandemic. Aligning with the phenomenological principles underpinning this study, the results are structured around individual case summaries for each participant. Manually applying an IPA methodology enabled deep immersion in the idiographic details of each account. The analysis seeks to balance capturing the nuances of individual pandemic journeys with extracting meaningful insights applicable to collective comprehension and future crisis communication.

4.1 Overview

In the results section, I have made every effort to faithfully represent the summary of each participant's lived experience. I have carefully selected quotes that best represent the corpus of data for that specific participant. I made the deliberate decision to write up each participants experience individually, as I felt this was the best way to accurately represent their invaluable contributions to this research while also aligning to the phenomenological approach of this research (Alase 2017).

This is achieved by using the analytical framework of Personal Experiential Themes (PETs) and Group Experiential Themes (GETs) as outlined in Smith, Flowers and Larkin's (2022) Interpretative Phenomenological Analysis textbook (Smith 2022). PETs represent patterns identified within individual participant accounts, capturing how each person made sense of their lived experience. These PETs form the building blocks for developing GETs - higher-order patterns that emerge when examining commonalities and divergences across multiple participants' accounts. Throughout the following two chapters, individual participant summaries are presented to maintain a deep idiographic commitment, with PETs and GETs used as analytical tools to systematically explore both the unique and common features between healthcare professionals' and members of the publics' experiences with media during the COVID-19 pandemic.

By presenting each case individually, I was able to maintain an idiographic focus, staying consistent to the essence of the IPA methodology and developing a deep understanding of each participant's lived experience, while also gaining multiple perspectives from the participants in order to explore this phenomena in a broad manner (McInally and Gray-Brunton 2021). This approach also facilitated cross-case analysis, enabling me to compare and contrast participants' experiences and identify commonalities and differences across cases, which was crucial for generating insights relevant to the broader complex phenomenon under study.

Writing up individual summaries greatly assisted my engagement in a reflexive process as I grappled with my own understanding and interpretation of the data. This is an essential aspect of qualitative research, as it helps raise awareness of how as a researcher, I may influence the data collected and findings. Thus, reflexivity helps ensure the credibility of the findings. Additionally, this approach aided data organisation, allowing me to easily revisit specific themes and interviews as needed. Most importantly, presenting the results with individual summaries, in conjunction with the detailed appendices that have been provided, increases the transparency of the research process, enabling readers to better understand the data and the steps taken to arrive at the final conclusions. This approach supports the auditability of the study, another critical aspect of ensuring its trustworthiness. Table 2 provides a summary of the baseline characteristics of the participant group, offering a clear overview of the diverse backgrounds and experiences represented within the study. Note names have been replaced with pseudonyms.

Table 2: Summary of Healthcare Professionals' Baseline Characteristics

#	Pseudonym	Nationality	Age & Sex	Occupation	Highest qualification
1	Christina	Philippine	45-49 F	1st year GP	Post Graduate Certificate
2	Anjali	Indian	30-34 F	Psychiatrist	Masters
3	Agnieszka	Polish	18-19 F	1st year medical student	A-levels
4	Radha	Indian	25-29 F	FY1 Doctor	Bachelors
5	Owen	English	40-44 M	General Practitioner	Post Graduate Certificate
6	Becky	English	35-39 F	Ex-Surgeon now Pharmaceutical Professional	Post Graduate Certificate
7	Louise	German	30-35 F	Cardiology Registrar	Post Graduate Certificate
8	Claire	British	40-44 F	General Practitioner	Post Graduate Certificate
9	Pravin	Indian	65-69 M	Medical Director	Masters
10	Laura	British	18 or 19 F	1st year medical student	A-levels
11	Evelyn	British	55-59 F	Psychotherapist	Masters
12	Hannah	British	25-29 F	Trainee Clinical Psychologist	PhD
13	Simon	British	20-24 M	Foundation Doctor	Bachelors
14	Sebastian	British	40-44 M	Consultant Physician	Doctorate
15	Claudia	Swiss	25-29 F	FY1 Doctor	Bachelors
16	Ivana	Bulgarian	25-29 F	Clinical Project Associate	Masters
17	Martin	British	50-54 M	Emergency Medicine Consultant	Doctorate
18	Phoebe	British	20-24 F	Student and HCA	A-levels
19	Peter	British	50-54 M	Patient Organisation CEO	A-levels
20	Aiste	Lithuanian	25-29 F	Doctor - Surgical Trainee	Masters

4.2 Healthcare Professional Participant Summaries

In this section, I summarise healthcare professional participant's story, presenting an accurate representation of what I as the researcher considered the most significant and relevant aspects of their lived experience interacting with COVID-19 content and communication across various media. Throughout each summary representative quotes have been incorporated. At the end of each summary Personal Experiential Themes (PETs) are listed.

4.2.1 Christina's Story | A 45-49F Healthcare Professional of Philippine Origin

Christina is a 45-49 year old female healthcare professional. She expressed frustration with the media's portrayal of the pandemic, claiming that there seemed to be a lot of blame placed on people getting sick, and a perceived bias in media coverage: *"The media are demonising healthcare workers and hospitals and blaming them for not doing enough, even though we are doing our best"*. She mentioned her distrust in mainstream media, stating: *"I don't watch the BBC News... I find it very biased [towards the government] it seems to be... and I also take newspapers with a pinch of salt"*.

During the early stages of the pandemic Christina felt the public were largely ignorant of the risks, continuing to engage in risky behaviours and not adhering to distancing guidelines, which caused her to become increasingly frustrated. She relied on government information and guidelines but expressed mistrust in the government's handling of the pandemic, particularly with regard to contracts and the: *"PPE disaster"*. Christina expressed a deep concern about the influence of both social and mainstream media on public perceptions of the pandemic, stating people tend to pick up on certain phrases and misconstrue them altogether.

Christina also mentioned the challenges in interpreting scientific papers and the increased access to information and resources through medical groups. She noted the public's misunderstanding of pandemic risks and guidelines, especially with regard to asymptomatic individuals and vaccines. This seemed a real source of frustration for her, especially when reflecting on her day to day interactions with patients in clinic. Christina went on to highlight the role of experts and media doctors in

communication, while expressing caution about potential collusion with the government: *"I didn't find them [press conferences] useful. It seemed to be a lot of rhetoric and very little action and very little decisions, and it wasn't always based on what the scientists have recommended. In the end I just stopped watching them"*.

She lamented the general public's lack of consideration for others and the tension between healthcare professionals and the public, feeling unsupported by the media and government. Christina was keen to stress the importance of clear messaging and emphasised the need for focus on specific guidelines like mask-wearing. She was troubled by the misconceptions about vaccines and the impact of misinformation on vaccination rates, stating: *"Oh terrible, absolutely disgusting... because it meant that people didn't want the vaccine, we still have problems with that*".

Christina also noted the negative impact on healthcare workers, feeling disrespected and unsupported by the public and their colleagues. She perceived a bias in media coverage and criticised the government's inaction and consequences, stating: *"I think they knew a lot more... but they didn't want to risk losing money so with regards to the economy... and then in the end actually it made it worse, because so many people become unwell and lost their lives, sadly".* She also shared her frustration with the public's understanding and behaviour during the pandemic, particularly when it came to mask-wearing and adhering to guidelines. Although this was balanced with: *"There's other considerations to consider with regards to human behaviour and the effect of the news that's disseminated and the wording that's given... So, when they say they're lifting lockdown, that can be quite misleading because the risk is still there"*.

4.2.1.1 PETs Derived from Christina's Story

- Deep frustration with media bias and demonisation of healthcare workers.
- Sense of betrayal by government prioritising economy over health.
- Professional isolation and feeling unsupported by public and colleagues.
- Anxiety over public misunderstanding of health guidelines and science.

- Exhaustion from managing misinformation in patient interactions.
- Cynicism toward official communications perceived as empty rhetoric.
- Recognition of complex relationship between messaging and behaviour.

4.2.2 Anjali's Story | A 30-34F Healthcare Professional of Indian Origin

Anjali a 30-34 year old female healthcare professional revealed the significant impact lockdown had on her personal life, including disrupted maternity leave and financial strain as her partner struggled to find work. She also admitted to seeking information on social media, particularly Facebook, while acknowledging this could be a source of misinformation. Anjali shared she was initially unaware of the severity of the overall COVID-19 situation and politicians' calls for lockdown.

In reaction to the lockdown measures, Anjali questioned their effectiveness given the nature of the virus. She mentioned using: *"Google Scholar and hospital librarians to access reliable medical information, while also receiving updates from sources like the BMJ and NICE guidance".* Of significant personal concern for Anjali was the health of her husband given his asthma, placing him at higher risk were he to contract COVID, this significantly influenced her behaviour and meant she was strict in adhering to the lockdown rules.

Anjali noted conspiracy theories and misinformation were rampant during the pandemic, with some people suggesting the virus originated from a biological weapons factory in Wuhan, however tried to stay away from consuming such content. Anjali also expressed a personal preference with an increased interest in vaccine information stating: *"Well I'm interested in, understanding about immunisations because that's something that is within my realm of influence [to control]".*

The actions of government officials like Dominic Cummings, who broke lockdown rules with much social and mainstream media attention, were seen as contributing to a more carefree attitude among the public and a decrease in compliance with restrictions, therefore having a negative impact on the public health response. Anjali backed this position up with the following: *"I definitely saw a change in*

attitudes ... lots of people saying well if he can do it, it's not really that bad. After he did what he did people just had this very carefree attitude". She was however very balanced in her views in this regard and went on to say: *"maybe people were already breaking the rules anyway, but were too shy to say it, but it suddenly became 'okay' following Dominic Cummings doing so"*.

Given Anjali's role as a psychiatrist she felt the government's public health communication was: *"simple and effective but could have made better use of platforms like Facebook"*. She identified the main issue throughout, as the government not setting the right example themselves.

Splits within Anjali's household emerged regarding media consumption. Although *"the news is on in our house, my hubby watches it every day"*, she actively goes out of her way to avoid the news and any theories about the virus. She says: *"The more I watch it, the more stressed out I'm likely to be"* and: *"Knowing a lot more about [the figures] isn't going to help me personally because it's just going to upset me"*.

The fact this lady's husband had asthma which made him a particularly high risk patient, should he contract COVID-19, proved to be a powerful motivator for behaviour change: *"I was very, very worried about him getting anything so I didn't dare leave the house"*.

Anjali therefore took a very practical approach regarding her engagement with pandemic related media probably stemming from the stress and anxiety unmoderated access had on her: *"If I can change it, I'll get involved!"*. She went on to elaborate on this with an example, she would choose to have the vaccine because that's a bit she can influence, therefore it's a bit she chooses to be aware of and engage with media related to vaccines.

4.2.2.1 PETs Derived from Anjali's Story

- Personal impact of lockdown affecting maternity leave and family finances.
- Selective media engagement to manage stress and anxiety.
- Professional approach to information seeking through medical databases.

- Deep concern for vulnerable family member (husband with asthma) driving strict adherence.
- Pragmatic focus on controllable aspects like vaccination rather than broader pandemic news.
- Recognition of Cummings scandal as turning point in public compliance.
- Strategic avoidance of COVID news despite household differences in media consumption.
- Practical approach to engagement based on ability to influence outcomes.

4.2.3 Agnieszka's Story | A 18-19F Medical Student of Polish Origin

In the interview with Agnieszka, a 18-19 year old female medical student, several themes emerged regarding her experience and perceptions of the pandemic. As a young medical student with family all over the world – Croatia, Germany, America, etc, she has seen first-hand how the different media responses in each country and how the public reacted accordingly: *"I've read just pretty much a lot of scaremongering in the Bosnian [newspapers]"* she recalls. Whereas: *"my family in Germany, they took a more serious approach straight away"*.

Agnieszka was critical of the blanket media reporting on the pandemic at the expense of other important matters in the country: *"Things like child poverty, increase in child hunger, increase of homelessness in senior citizens... All these things got put on the backburner"* she says. *"It puts blinkers on the public so we're only seeing one massive thing in front of us, whereas if we look behind there's about three major other issues that are going on"*.

Initially, Agnieszka did not take the pandemic seriously, describing it as: *"just a virus outbreak in China"* and believing it would: *"come and go"*. However, as the situation escalated and began to affect her personal life, she became more aware and concerned, stating that she: *"didn't feel the gravity of the situation"* until her college closed.

As a medical student Agnieszka, like many of her peers, relied heavily on social media particularly Twitter, for information during the pandemic. She appreciated the platform because it allowed her to hear directly from world leaders like Boris Johnson, asserting that: *"there are a lot of figureheads on*

Twitter, and it can come directly from them". Despite this, she expressed concerns about the increase in technology use during the pandemic and acknowledged the presence of conspiracy theories and misinformation, mentioning: *"a lot of theories going on in Bosnia, that COVID-19 was to do with 5G towers".*

Agnieszka also discussed the impact of communication during the pandemic, criticising the government's contradictory statements and the ineffectiveness of slogans such as: *"stay alert, control the virus, save lives"* which she said: *"didn't even stick".* She emphasised the importance of clear, simple, and consistent messaging, stating: *"if you decrease the simplicity of the message, compliance will also decrease".* As such, she believes in creating simple, unified messages to communicate with members of the public from all backgrounds and political mindsets: *"People are just confused by certain things and to make things digestible just creates a more trusting environment".* Agnieszka was a big believer in the power of empathy in communication: *"I think a big part of this, and this applied to everything in life not just this pandemic but being well read up on different sides of a story and [aware] where these people are getting their information from. Empathy is a big thing".*

Trust in the government was a key factor, and Agnieszka felt it was severely lacking during the pandemic due to a lack of transparency, arguing: *"with trust comes transparency, which is something that the government lacked during the pandemic".*

Agnieszka highlighted the media's role in sensationalising the pandemic, stating: *"the media is making it out to be this massive thing, but they're making out aspects that shouldn't really be blown up".* She called for empathy and understanding, urging others to consider different perspectives and socio-economic backgrounds when discussing pandemic responses: *"if you put yourself in their shoes and you think from that perspective, you're already one step ahead of the game".*

Agnieszka was particularly concerned about the lockdowns having led to an increased use of tech among young people who it may be damaging for, as seen in her brother: *"It's not normal for a child to be on an iPad that much".*

Finally, she expressed the belief that future pandemics are likely, noting that: *"we have more effect on the environment than we ever have done before"* hence she stressed the importance of preparedness, suggesting early lockdowns and improved global communication as potential improvements in pandemic response. Agnieszka also emphasised the need for transparency and public communication, advocating for openness from the start in order to better manage future outbreaks: *"I think we should be completely open from the start"*.

4.2.3.1 PETs Derived from Agnieszka's Story

- Global perspective on pandemic response through international family connections.
- Critical of media's singular focus neglecting other societal issues.
- Evolution from initial dismissal to serious concern as pandemic affected personal life.
- Strategic use of Twitter for direct information from leaders despite misinformation risks.
- Strong advocacy for simple, clear messaging to maintain public compliance.
- Emphasis on empathy and understanding different perspectives in crisis communication.
- Concern about increased technology dependence, particularly among young people.
- Recognition of transparency's role in building public trust during health crises.

4.2.4 Radha's Story | A 25-29F Foundation Doctor of Indian Origin

Radha a 25-29 year old female Foundation Year 1 doctor, emphasised the role of health messaging on social media, particularly during the pandemic: *"I think people have relied heavily on both social and mainstream media to keep up their morale and to keep informed and entertained"*. She remarked on how even official sources, like NHS England and the government, have been using platforms like TikTok to communicate essential information: *"The importance of social media change this last year has really spoken volumes... we've had NHS England, and the government started doing TikTok... giving those messages of hands, face and space"*.

The doctor acknowledged both the positive and negative impacts of social media consumption during the pandemic. On one hand, she appreciated the businesses that leveraged social media to engage with audiences and entertain them during lockdowns: *"So many businesses have really gone to town with using social media creating content in order to reach out to their audiences and keep them entertained".* On the other hand, Radha recognised the negative effect social media could have on mental health when it led to constant comparison or information overload, stating: *"at one point, it became really toxic for me to watch that because it is constantly comparing yourself".* She admitted to having had to detox from social media herself: *"social media was consuming my life so much last year, I had to do some serious detox".*

Radha's personal experience as a doctor and public figure allowed her to spread important messages and inspire young people*: "With my small platform being able to spread messages, been able to be inspiring to young people".* She appreciated the value the public placed on healthcare professionals, as well as the media's celebration of their efforts: *"A lot of people in the healthcare industry actually who've said that they feel valued as a profession because they can see that someone like me a health care professional is getting celebrated in the media".*

However, Radha also recalled the initial disbelief and fear when the pandemic started: *"When I first heard about it, I never thought that it would actually become a global pandemic... I had absolutely no idea how big this pandemic was going to get".* Radha recounted the challenges faced during travel restrictions, describing it as: *"really scary and horrible".* She recalls a period in India: *"When I was self-isolating... I was just literally begging someone to please add more credit to my SIM card so I could just consume more social media or just do anything else... it was really helpful actually having any media and listening to the radio".*

Radha expressed concern about misinformation and misinterpretation of information surrounding the pandemic, highlighting the importance of clear messaging, trust in health communication, and transparency. She emphasised the role healthcare professionals play in educating the public, both in

and out of work: *"It needs to be taught to all medics and health professionals to... teach the public"*. She also emphasised the importance of honesty and trust in health communication, stating: *"Trust is important, but more important than that I think it's a sense of feeling that what you're doing is actually helping"*.

Radha was passionate in her belief that addressing, the significant amounts of misinformation out there and empowering the public through education are essential in managing the current pandemic and maintaining trust in healthcare communication. In her words: *"We need to empower the public by teaching them more and finding whatever opportunity we can to teach... we have a responsibility outside of our working hours as medical students, as doctors, as whatever health professional you are to reinforce those messages in the public"*.

Radha felt mask messaging was particularly effective: *"This is a visual thing therefore you can hold people accountable when they're not doing it... honestly I feel naked and guilty without a face covering now"*.

4.2.4.1 PETs Derived from Radha's Story

- Dual perspective as healthcare professional and social media user on pandemic communication.
- Recognition of social media's evolving role in official health messaging.
- Personal struggle with social media overconsumption requiring "detox".
- Professional pride in being celebrated and valued through media coverage.
- Journey from initial pandemic disbelief to frontline reality.
- Value of media connectivity during isolation periods.
- Strong belief in healthcare professionals' duty to educate public beyond work hours.
- Personal embodiment of successful public health messaging (mask wearing).

4.2.5 Owen's Story | A 40-44M General Practitioner of British Origin

Owen, a 40-44 year old male GP, gave a particularly frank account of his thoughts on many subjects related to COVID-19 and the media. He emphasised the importance of team building and trust in communication, especially in a volatile media environment during the pandemic. Owen elaborated on how he initiated the creation of a: *"team wall"* in his practice, where team members contribute images that represent their values and identity as a group. This fosters a sense of unity and cohesion within his team. It meant confidence was built such that they could discuss various pandemic related media stories immediately as they arose. As a group he felt they'd achieved coverage of the vast media output that was clearly affecting his staff.

Owen also touched on the importance of trust and communication, expressing his sense of betrayal when learning about the critical pandemic situation from an outside source, who came to him for advice, rather than from official NHS England channels: *"I felt personally betrayed that the first I heard of it [COVID-19] was from somebody in banking [coming to him for advice], who clearly knew more than we as clinicians in the UK knew"*.

Owen also discussed the role of charismatic leadership, mentioning how general practice has gained allegiance to a charismatic leader who has generated goodwill previously absent in the community. However, he also expressed concern about potential manipulation: *"I believe it is a persona and I believe general practice is being manipulated. I think probably what is happening is we're seeing an old fashioned military tactic of control of the media. If you control communication, you control the power"*.

Owen emphasised the significance of pattern recognition and global communication in the context of pandemics, highlighting the importance of immediate learning: *"We don't need to learn for the next pandemic, we need to learn, right now, because we're making the exact same mistake that caused the worldwide outbreak"*. In this context, he acknowledged the role of social media in rapidly disseminating information, despite concerns about the quality and trustworthiness of the sources: *"My*

personal feeling is that I've received information faster through social media". He went on to qualify this: *"the thing about listening to the social network is that you often get the bullet points of facts, or you might get a balanced view or opinions based on the left side and the right side of people's political streams, what it means is you can weigh it up and come to your own conclusions"*. Owen was a strong proponent of utilising one's social network advocating: *"one of the things we have in the world that we haven't had before is global communication that is immediate and massive, so we have a world of data that we have never had access to before"*. He explained the utility of live access to information as it happens: *"really boils down to trust, is it high quality, reputable and can you inform decisions based on it?"*.

Just as he enthused about social media he was equally scathing of NHS England: *"even if NHS England were timely with their communications, it would still be important to have social media to be able to give context to what would otherwise be a corporate sanitised communication that requires interpretation, it might even be termed propaganda"*.

Owen again further discussed the importance of developing trusted networks and the need for unbiased information to make informed decisions for patients. He recognised the value of balancing different opinions and engaging in team discussions for decision-making. The same pattern recognition skills that are crucial in diagnosing medical conditions can also be applied to interpreting meaning out of social media noise. His personal experience at the beginning of the pandemic letting his banking acquaintance down, being unable to provide information or insight, seemed to spur him on.

Owen felt high quality leadership and communication were both vital during crises, providing information, comfort, and a focus for negative energy. Owen expressed frustration with miscommunication and lack of trust between medical professionals and official sources, emphasising the potential influence of charismatic leaders in shaping opinions and the importance of controlling communication to maintain power.

In conclusion, Owen highlighted the need for trust, communication, and leadership in healthcare, underscoring the role of team building and global communication in addressing challenges. He also emphasised the need to balance speed, source, and trust in information, as well as the importance of interpreting and filtering information for better decision-making.

4.2.5.1 PETs Derived from Owen's Story

- Strong emphasis on team building and trust within practice to manage media impact.
- Deep sense of betrayal learning critical pandemic info from banking sector before NHS.
- Scepticism of charismatic leadership in general practice, viewing it as media control.
- Strategic use of social media for rapid information despite quality concerns.
- Critical view of NHS England's "sanitized" communications versus social media context.
- Recognition of global communication's unprecedented value in pandemic response.
- Emphasis on pattern recognition skills in interpreting media "noise".
- Personal experience of early pandemic unpreparedness driving information-seeking behaviour.

4.2.6 Becky's Story | A 35-39F Ex-Surgeon & Pharmaceutical Professional of British Origin

Becky a 35-39 year old female shares a unique perspective on her experience of COVID-19 and media, at the beginning of the pandemic she was an orthopaedic registrar. At the time of interview Becky had moved to a role in the Pharmaceutical industry. As you will see from Becky's lived experience it relates to both these domains of her professional life while also touching upon personal impact.

Becky started revealing her journey through the COVID-19 pandemic, starting with initial scepticism and denial, as she claimed: *"I was a naysayer at the beginning"*, and thought it was a: *"storm in a teacup"*. However, her perception shifted as the situation worsened, and she experienced fear and anxiety, especially after contracting COVID-19 herself. She described her illness as leaving her:

"delirious for about four days" and: *"petrified"* about the potential impact on her family. This quote from the transcript of our discussion clearly demonstrates the degree of fear: *"there's obviously enough fear by that point that we had gone to the trouble of getting our wills done"*.

Becky's early personal experience with COVID-19 led to challenges when implementing her own safety measures at work. She mentioned: *"getting in trouble at work for wearing a mask"*, especially when in fracture clinic (an area deemed low risk). A willingness to go against PPE recommendations circulated in the medical media at the time coupled with her recovery from the virus brought a newfound confidence, which led to her taking on high-risk procedures at the hospital. The messaging around who was at risk of COVID-19 in the early stages of the pandemic also contributed: *"everyone wanted me to do all the high risk procedures because... ...you're the lowest risk person in the department"*. However, this was not without personal difficulty; she noted that treating patients during the pandemic was: *"very hard"* and involved dealing with increased mortality rates.

When reflecting on the absurdity of the PPE situation, Becky also touched upon inter-departmental politics and tensions, expressing frustrations with power dynamics and departmental conflicts. These interdepartmental tensions manifested when this registrar was told by a matron, she was: *"scaring patients"* when going in seeing them in PPE.

Becky described herself as: *"quite an old fashioned and not particularly media savvy person"* while she logs on to the BBC News platforms she admits: *"it's a terrible source of news"*. Becky expressed her strong preference for using LinkedIn and The Economist as news sources, as well as WhatsApp for information during the pandemic. WhatsApp in fact emerged as a powerful aggregator of news sources for Becky with her membership of several different professional and personal groups providing different perspectives: *"people were just constantly sending each other data essentially"*.

Becky had particularly strong views on slogans such as: *"follow the science"* which was prevalent across various forms of both social and mainstream media especially in the initial stages of the pandemic. She felt there was a very real risk of letting politics overrule science. Her personal experience of being a

mother still breastfeeding a four month old baby strongly informing this viewpoint. Becky felt it was inappropriate for pharmaceutical companies such as AstraZeneca and Pfizer who released their vaccines stating they have not done the normal toxicology studies to recommend it in pregnancy breastfeeding or those trying to conceive. Yet, the Joint Committee for Vaccines and Immunisations (JCVI) telling women: *"the vaccine is fine if you are breastfeeding or if pregnant because we know thousands of pregnant women have had the vaccine"*. She was firm in her belief: *"that's not science, that's not how you tell if a drug or vaccine is safe in pregnancy you can't just bend science to make your point"*.

Becky who at time of interview was working in the Pharmaceutical industry was also critical of how side effects associated with the AstraZeneca vaccine were communicated: *"With the blood clots, they played a very fine game between denying there was any side effects because they didn't want people to stop taking the vaccine and then, when there was an established link people were very close to thinking they were trying to cover that up"*. She thought while: *"they just about got away with it, it was a close run thing and if people think they're trying to cover up side-effects no one will have any vaccines for the next 5 generations"*. She went on to make the point: *"people's concept of risk is not intelligent, so you have to be very, very careful what impact do you let the politics play on the science"*.

Another aspect of the COVID-19 media experience that was particularly pertinent to this participant was how COVID-19 took over from Brexit in dominating the news cycle: *"we had spent three years [constantly] going through Brexit and there was nothing in the news except for Brexit and then when this came along it was [initially] at least we don't have to talk about Brexit anymore"*. As COVID-19 media coverage ramped up she expressed scepticism towards media coverage and saturation, public health slogans, and political figures such as Matt Hancock.

Becky's closing comments shared her prediction for a: *"technology backlash in the middle classes and a disconnect"*. Potentially with culture in Britain going to become more divided between those who plug in and those who consciously try to plug out of all this media because: *"there's so much noise*

with a huge proportion of society [missing out on the real world] sitting in a huge [virtual] room listening to it all".

4.2.6.1 PETs Derived from Becky's Story

- Evolution from initial pandemic scepticism to deep fear after personal COVID experience.
- Professional conflict over PPE use despite being deemed a "low risk" staff member.
- Complex navigation of work responsibilities after recovery made her "lowest risk" person.
- Strategic use of WhatsApp groups as news aggregator across professional networks.
- Critical perspective on "follow the science" slogan, especially regarding pregnancy advice.
- Industry insider's view on vaccine side-effect communication challenges.
- Observation of media transition from Brexit to COVID coverage.
- Prediction of societal divide between those who "plug in" versus "plug out" of media.

4.2.7 Louise's Story | A 30-35F Cardiology Registrar of German Origin

Louise is a 30 to 35 year old female cardiology registrar was not dissimilar to many of the other participants in this research in that in the initial stages of the pandemic she did not take the situation seriously, there was always an element of thinking: *"the BBC were scaremongering"*. Interestingly in this case it wasn't scaremongering about the effects of COVID-19 per se. Louise a public sector worker was immediately drawn to the part of the story she could relate to most. The fact this pandemic could see a large percentage of public sector workers off sick she distinctly remembers chuckling with her husband that such a scenario seemed unlikely. The other factor in Louise's mind that made this an unlikely event to affect us was the sheer geographical distances between the UK and China. As a medically qualified person this quote on realisation was interesting: *"It took a couple of weeks for the news to repetitively come through and us realising that actually this was going to hit us"*.

As Louise shared where she got her news from, she was unusual in that she was very clear: *"objective news for me, the first is always BBC news, that sort of objective reporting, whereas twitter, which sort*

of came into play a bit later is opinion from experts and digesting what happens in the news". Louise was well aware of the inherent bias present in social media platforms specifically Twitter's: *"echo chamber effect"* - which she found can limit exposure to diverse perspectives as such she carefully created her own media diet to get a broad mix of both opinions and information. Louise's role as an influencer in her own right as a founder of *'women in cardiology'*, gave her an understanding of Twitter as an influencer rather than just a passive participant of social media. She reflects her time pre pandemic using social media to influence women about careers in cardiology and how it gave her an understanding of the algorithms that these social media platforms use to increase engagement. Given Louise's unique background, knowledge and use of both mainstream and social media as an active and passive participant she took it upon herself to spend her time looking through a range of media including reports, papers, and commentary on social media. She then created a WhatsApp group of all people around her to which she disseminated a condensed summary, as she wanted to educate her surroundings in a filtered way rather than just sending over facts which the general public might not understand. Louise, as a science driven person, felt she made all her decisions on informed knowledge. She also felt it's very difficult for the general population to translate all the scientific numbers into what it means in real life. Louise was well aware algorithms a vital component off pandemic communications presented a skewed view: *"The problem on Twitter and social media in general is that you are connected to those people you like and the algorithm both on Twitter and on Instagram, they focus on what you like and what you spend time on, so you obviously have a totally skewed opinion because Twitter offers you the opinion of people you are likely to agree with, so you end up in a sort of Twitter echo chamber and you don't hear those people who might have contrary views"*. She therefore strived to balance a mix of subjective and objective news sources.

Louise emphasised the need for expert opinions to translate complex infection control concepts into digestible, actionable advice for the public. This role is crucial for media doctors, who can bridge the gap between high-profile experts and the general population: *"Their role is really important because they can translate the sort of high profile, you know professor of immunology and so forth talk into*

what people understand". Therefore, Louise felt such media doctors can be really important in helping bridge that gap and increase public understanding.

In reflecting on the importance of public health slogans, such as: *"Stay at Home"*, which, while effective in promoting certain behaviours, may have unintentionally discouraged people from seeking necessary medical help. Louise recounted: *"there were hundreds of free beds in the hospital... not a single patient to end up with severe illness and a lot of out of hospital cardiac arrest, because people didn't come in with a heart attack because they were told to stay at home"*.

The role of mainstream media and social media algorithms in creating echo chambers was seen as problematic, leading to biased perspectives, and influencing public opinion and behaviour. Louise also criticised government messaging and rule-breaking by leaders, which may have led to the public justifying their own non-compliance with pandemic guidelines. Louise lamented: *"knowing that our leaders... didn't follow the rules [it] makes people justify why they can break the rules"*.

Louise felt trust was a vital component of pandemic communications stating: *"the role of the media is to report neutrally, in an ideal world, and the medical profession should then comment on what that means for people and gain their trust and translated into layman's terms"*. Louise also felt slogans were a good idea for the uneducated general public*: "I think it's incredibly important to translate something as complex as infection control to simple words to hammer it home and get people to reproduce it on a day-to-day level"*. On experts and their role in the media Louise explained her nuanced view: *"The problem with experts is that some of them are self-selected experts, if you look at the media doctors, they're not necessarily experts in medicine, they're just experts in presenting their medical profession in the media. But I guess if a professor of infection control tells me what the right thing to do is, then that would be the person I believe"*.

Louise shared how critical the combination of news and social media is when communicating to the public during health crises: *"For the general blast of getting everyone in the population on board, I think the news are very important. Vital in fact. That's just to get out neutral information to the general*

population. I think social media is really important, also, to get those who are not on board, to understand those people and then try and convince them to do the right thing".

Louise was broadly supportive of the use of simple catchy slogans in certain circumstances: *"I think the problem is that we are having information overload and if you don't pay attention to the news on a regular basis, then you will end up not getting the right thing. I think the simpler you can keep it for the population, the better and I think they certainly attempted it, and it was catchy phrases, so overall I think I would support the government in what they've done".*

4.2.7.1 PETs Derived from Louise's Story

- Evolution from initial dismissal as "BBC scaremongering" to pandemic realisation.
- Strategic approach to media consumption, balancing BBC news with expert Twitter opinions.
- Unique dual perspective as both medical professional and social media influencer.
- Active role in filtering and disseminating information to personal network via WhatsApp.
- Strong awareness of social media algorithms creating "echo chambers".
- Recognition of media doctors' importance in translating complex medical concepts.
- Concern about unintended consequences of "Stay at Home" messaging on healthcare seeking.
- Balanced view on simple slogans while acknowledging information overload challenges.

4.2.8 Claire's Story | A 40-44 F General Practitioner of British Origin

Claire, a 40 to 44 year old female General practitioner, working in a remote rural area found elderly patients in her village took to organising community support over social media (Facebook etc) during lockdown. Claire's deep worry around media reporting during COVID centred around health inequality and disparity in responses between cities and rural areas, she saw social media as a particularly effective way of helping in this regard. One of the most significant observations was the rapid communication and information dissemination enabled by social media, which Claire noted: *"never before... in human history has it been possible really to kind of communicate so easily and so*

quickly". This had posed some challenges also, with even professional colleagues getting sucked into conspiracy theories: *"I have a friend who is a doctor... She's very much in the school of thought that it's a conspiracy and... it's nowhere near as contagious and damaging as it has been proven to be. She's actually gone out of her way not to wear any sort of PPE, and I don't actually know how she's got away with it. But any time I get into any kind of conversation with her, she starts trying to spout research to me about 'do you have any understanding about how the PCR test works?' She's done a lot of research into it, [via social media] but her whole stance on the pandemic I one that I find quite unsettling"*.

Yet social media played a crucial role in keeping local communities connected during the pandemic, as Claire shared: *"Facebook groups were formed and lots of little Community things... [which] was a great way to allow people to say, 'are you Okay?', 'Do you need some more shopping?', 'Can I help walk the dog is there anything I can do to help?' I think it [social media] kept a lot of people going in a very, very difficult [time]"*.

The spread of information purely via social media environments also allowed one of Claire's GP colleagues to make very early recommendations in her practice, to safeguard staff. Social media was perhaps not seen as a credible source by all with the intervention not necessarily welcomed by all partners: *"A good friend of mine, who is also a GP, was way ahead of the game. She was saying, 'we need to protect out reception staff because they're on the frontline seeing patients... We need to provide masks.' This is way before masks were even talked about, it was only Japanese tourists that were walking around wearing masks at that point. But she was shunned by the other partners in the practice because she was speaking out and saying what she thought based on her own understanding of the situation, her own research into what was going in on China and the way it was spreading from China across Europe... She arranged weekly practice meetings. None of the other partners attended the only people that attended were reception staff"*. Claire felt this was an example of how

discrepancies in how information is reported via social versus mainstream media can lead to colleagues being shunned by their peer's despite in the end being proved right.

In terms of the relevance of COVID briefings to the wider population, Claire questioned how accessible the information was to those without a medical or science background, stating: *"I'm not sure how relevant those statistics and presentations were to the wider population average Joe"*. This highlights the importance of clear communication and consistency, with the Claire also suggesting that: *"if we keep things simple and keep things... and don't keep changing our minds generally about what to do and when to do it and how to do it [people will have a better understanding]"*.

Lastly, Claire highlighted the need for better regulation and public trust in media, asserting: *"a big key in joining everything up is... trust and... a great public trust because there's been an awful lot of... mistrust and distress about information that's being given about"*. During the pandemic, the focus of mainstream media shifted from issues like climate change to COVID-19, demonstrating potential biases in coverage. As Claire observed: *"it is interesting how social mainstream media can bias itself so strongly to new stories"*.

4.2.8.1 PETs Derived from Claire's Story

- Observation of rural elderly adapting to social media for community support.
- Deep concern about health inequality between urban and rural pandemic response.
- Complex reaction to professional colleagues falling for social media conspiracy theories.
- Recognition of social media's unprecedented speed in information sharing.
- Example of early social media-informed preventive measures being initially rejected.
- Questioning accessibility of technical COVID briefings for general public.
- Emphasis on need for simple, consistent messaging to maintain understanding.
- Recognition of media's role in building or eroding public trust.

4.2.9 Pravin's Story | A 65-69M Consultant Paediatrician of Indian Origin

Pravin, a 65-69-year old male Consultant Paediatrician, provides valuable insights into the impact of and interplay between social and mainstream media on global public health communication during the COVID-19 pandemic. He believes: *"mainstream media is, in my personal opinion, stage managed by politicians"* which may have contributed to confusion and misinformation surrounding the pandemic. On the other hand, he notes: *"social media is completely transforming"* communication by allowing professionals like himself to: *"use a lot of social media engage in Zoom meetings, and consult (directly) with experts"*, thereby creating new avenues for sharing information and knowledge acquisition. However, he felt sorry for members of the public: *"but the profession is confused, how bad must it be for the common people and common men and women?"*.

Pravin highlighted the confusion arising from mixed messaging in professional fields, which may have been exacerbated by the influence of different sources of information, such as *"official SAGE committee, Independent SAGE committee, then the [Royal] college's"*. This confusion, he says, highlights the need for: *"clear, unified messaging from credible sources, such as the WHO and senior leaders, who should take a leading role in guiding public health communication"*.

Public education and communication are emphasised as critical components in managing the pandemic, with the director urging the medical community to take responsibility for educating the public, stating that it is the: *"medical and nursing professions' [obligation] to take the responsibility of] educating the public"*. The inclusion of faith leaders and community engagement in public health communication strategies is recognised as an essential aspect of disseminating accurate information and fostering trust among diverse populations, with the director stating that: *"that is why I was really happy when they started using faith leaders"*.

Pravin was clear in his belief for involving front line health care professionals in creation and distribution of messaging: *"I think the whole community of medical professionals, nursing professionals, have to take the responsibility of educating the public. For example, look at the*

vaccination initial hesitation. Once the GPs got involved, everything changed. Until then there was a lot of vaccine hesitancy... I think we have to communicate with the people and tell them, this is not flu, this is a serious illness, this is how we are going to manage it, this is the evidence". Pravin felt the situation wasn't sensationalised by the media – it was serious and needed to be communicated as such: *"I don't think it's been sensationalised at all. I think it's a fact. It is a dangerous condition. They had no choice. I always said, 'be honest with the public,' and that is what they have done. I think daily statistics have been very helpful".*

4.2.9.1 PETs Derived from Pravin's Story

- Strong scepticism of politically "stage-managed" mainstream media messaging.
- Recognition of social media's transformative role in professional communication.
- Concern about public confusion when even medical professionals were uncertain.
- Frustration with multiple competing expert committees creating mixed messages.
- Strong advocacy for frontline healthcare professionals' role in public education.
- Recognition of faith leaders' importance in building community trust.
- Support for honest communication of pandemic severity through statistics.
- Emphasis on GPs role in reducing vaccine hesitancy through direct engagement.

4.2.10 Laura's Story | A 18-19F Medical Student of British Origin

Laura, an 18-19 year old female medical student, shared several topics that emerged regarding the experiences and perceptions of young people during the COVID-19 pandemic. One notable topic was the prevalence of inaccurate information and sensationalism in the media. Laura described how misleading and sensationalised articles were widespread, often creating confusion and mistrust: *"there has been so much misleading information, deliberately misleading information, a lot of the time from the media... I think sensationalised is probably the best way to put it".*

The impact of the pandemic on young people and students was a topic that Laura clearly felt strongly about and felt deeply affected by it. Laura expressed how she felt young people were unfairly demonised and blamed for the spread of the virus, which she believed shifted responsibility away from the government. Laura was also left conflicted by schemes such as "Eat out to Help out" as much as she enjoyed it while knowing it was perhaps not the best thing to do in a pandemic wasn't keen on students being blamed for going out and causing rises in cases: *"My first thought was 'I can eat at Wagamamas for six pounds'. I'm not going to pretend that I did the moral thing and didn't go at all. I definitely got my money's worth, but I did think it was a ridiculous way of getting everyone to go out and spend as much money as they can... but then they were shocked and blamed a lot of it on the University students when it spread".*

Laura also recounted her own experiences working in a pub during the early stages before a pandemic was formally declared, where she was exposed to misinformation and fear. Mistrust of information on social media emerged as a significant issue, with Laura noting that unreliable sources were often shared on platforms like Facebook, which then quickly spread. She stressed the importance of reliable news sources and mentioned using Twitter and Instagram to access news updates from mainstream media sources. However, she also acknowledged that exposure to misinformation and arguments online could be overwhelming. This young medical student highlighted the prevalence of sensationalised articles related to COVID-19, noting that she often encounters new articles about alleged severe symptoms or alarming death rates. She expressed her frustration with these articles, as they tend to be misleading and often based on small or insignificant details. Upon closer examination, she found that most of the information in these articles was not accurate and seemed to be exaggerated to attract attention and encourage clicks.

Laura observed public scepticism about vaccines, stating that when vaccines were mentioned, comments on social media were often filled with: *"little sheep emoji being like it's a poison"*. She also noticed a variety of opinions on the government's handling of COVID, with many comments

criticising their response. The influence of social media platforms on shaping opinions appeared to vary depending on the platform and the pages being viewed.

Early reactions and misconceptions about COVID were also discussed, with Laura admitting that she and her peers initially did not take the pandemic seriously. However, as the situation progressed, her perception of the seriousness of the virus evolved. Laura expressed scepticism about various theories and beliefs surrounding COVID, and she felt that the Prime Minister's actions hindered compliance with public health measures: *"Well, honestly think the Prime Minister was the biggest hinderance (for) people complying with any COVID rules"*.

Laura was well aware as to the media's power in being used for both good and bad and manipulating people's fears: *"It's quite complicated because, in many ways, the only reason we've been able to isolate so long successfully is because of the media being able to share the news for people to understand what's going on... but at the same time I also think it has been extremely damaging because there has been so much deliberately misleading information from the media and so much fear has been produced because of it. Because they want clicks, they've manipulated people's fears and you see a thousand articles that haven't got any science behind them"*.

Laura also went on to say she felt the media was responsible for shifting the blame from the government as to the handing of the pandemic to various other groups: *"I feel like a lot of groups were demonised throughout this whole pandemic, especially young people, and students, and I think there was a responsibility taken off the government because of that. I feel like every week there was someone new to blame but not an awful lot of blame put on the government... Every week there was a new article saying who's at fault, like 'it's people coming back from holidays', 'it's people who chose to go on holidays', in the middle of the pandemic when a lot of people had no choice"*.

4.2.10.1 PETs Derived from Laura's Story

- Frustration with media sensationalism and deliberately misleading information.

- Personal conflict over government initiatives like "Eat Out to Help Out".
- Resentment of media scapegoating young people and students for virus spread.
- Evolution of pandemic perception from initial dismissal to serious concern.
- Critical awareness of click-bait tactics in COVID-19 reporting.
- Recognition of media's dual role in enabling isolation while spreading fear.
- Observation of social media's role in vaccine scepticism.
- Criticism of media deflecting blame from government to different groups.

4.2.11 Evelyn's Story | A 55-59F Psychotherapist of British Origin

Evelyn, a female psychotherapist aged 55-59, highlights the misrepresentation of mental health in the media, which can contribute to confusion and misinformation.

The impact of media-induced fear and misunderstanding is evident in Evelyn's account of communication and social interaction during the pandemic. She suggests that the way media portrays health and illness can make people more fearful and less likely to engage with others: *"And you believe what you're watching on the news, and you bet you are frightened out of your life. I've seen people with double masks on and all sorts"*.

Generational differences in social media use further contribute to the complex interplay between media and public health communication. Evelyn explains that younger generations are more likely to rely on social media for information, which can exacerbate fear and contribute to misinformation. Moreover, Evelyn discusses the negative messaging from authorities and mainstream media, as well as inadequate support from healthcare providers during the pandemic. This combination has created a pervasive atmosphere of fear that affects mental health, relationships, and social interactions. As a psychotherapist Evelyn emphasises the significant role media and government messaging play in causing fear during a pandemic. She suggests that consuming news can lead to extreme fear, which

impacts people's behaviours and social interactions, such as being afraid to interact with delivery personnel.

Evelyn felt significant media coverage of COVID made it predictable the type of people who may be susceptible to latching onto long COVID as a diagnosis: *"There's someone here [in her apartment building] who has got Long COVID... If I'd put a bet on the person that would get Long COVID in this building, I'd have put a £1000 bet on it... because he suffered from depression for many, many years... it's almost like he needs something that no one has been able to give him, so therefore at least Long COVID gives him: a) something to talk about and b) some empathy and c) it's very current and more cool to say you've got Long COVID than you're depressed or you've got ME"*.

In summary, Evelyn shared insights around a significant impact on mental health caused by social and mainstream media and how health messages are communicated during a pandemic. In her opinion the media's portrayal of health issues lead to confusion, fear, and misinformation, while generational differences in social media use can exacerbate these problems. The negative messaging from authorities and mainstream media, coupled with inadequate healthcare support, further contributed to a general climate of fear and anxiety.

4.2.11.1 PETs Derived from Evelyn's Story

- Strong criticism of media's role in generating excessive fear around COVID.
- Professional concern about media's impact on mental health and social interactions.
- Observation of generational differences in social media consumption and effects.
- Critical perspective on Long COVID media coverage influencing illness identification.
- Recognition of media attention making certain diagnoses more socially acceptable.
- Insight into how media coverage affects patient presenting behaviour.
- Concern about inadequate healthcare support during heightened media anxiety.
- Connection between media consumption and extreme behavioural changes.

4.2.12 Hannah's Story | A 25-29F Trainee Clinical Psychologist of British Origin

Hannah, a 25-29 year old female trainee clinical psychologist, emphasised the importance of effectively communicating the risks and benefits associated with the pandemic and its management. Noting there has been insufficient emphasis on understanding why people have not adhered to guidelines, despite it being communicated enough stating: *"I do think, with my psychology head on about trying to understand why people haven't stuck to that"*.

Hannah also discussed the pressure individuals face in making decisions related to the pandemic, highlighting how society puts a significant emphasis on individualism rather than the collective good. She noted: *"It's an awful lot of individual pressure to put on people...I think that we put a lot of individual pressure on people to follow rules and to make their own decisions rather than thinking about the collective good of society"*.

Social media and misinformation were also identified as challenges, as the participant mentioned seeing claims about vaccines still being in phase three trials on social media. This ties into the broader issue of polarisation and the effects of social media on public opinion. Hannah observed: *"Everything gets polarised online, you have to have this strict view either one way or the other, you can't sit on the fence online like it's got to be one or the other"*.

Hannah further discussed the importance of critical thinking and questioning sources, as well as seeking factual information from experts, stating: *"And I think now I'm finding if I want to know something factual about, I'm fine and also because of the privilege, I have going into research journals of what actually was the research telling me all the time fact-checking website"*. She also mentioned following medical professionals and researchers to obtain accurate information, distancing herself from biased news sources.

Moreover, Hannah touched on issues of denial and disbelief, as well as the dismissal of concerns, reflecting on her experiences with supervisors and colleagues who downplayed the situation. However,

she also recognised the importance of diverse perspectives on social media, valuing disagreements as a healthy part of discourse. She emphasised the need to avoid news overload, acknowledging that too much information can be overwhelming.

Hannah expressed the importance of encouraging critical thinking in others, as well as practicing it herself. She also acknowledged the lack of critical thinking skills taught in the British education system, which she believes contributes to the spread of conspiracy theories.

The personal impact of COVID-19 on relationships and belief systems was also discussed, as well as the reliance on medical journals and professionals for accurate information. Hannah acknowledged the role of celebrities in public health communication but noted that their messages may not always be consistent or reliable stating: *"You can't rely on these people to give a consistent message"*.

Hannah criticised the government's response to the pandemic, highlighting inconsistent messaging and delays in action, such as the initial advice against wearing masks. She also discussed the impact of rule-breaking on behaviour, observing that it can lead to both increased compliance and rule defiance among the public.

Emphasising the importance of compassion and listening, Hannah mentioned her approach to understanding differing beliefs and concerns, rather than simply dismissing them. She also touched on the confusion caused by government slogans, suggesting that the intended messages were unclear.

The impact of social media was recognised, including the spread of memes and misinformation. Hannah also discussed the mistrust in government, sharing anecdotes of individuals who believed images of leaked text messages had been: *"doctored"*.

Hannah described the overwhelming nature of the rapidly changing news cycle during the pandemic, particularly for individuals experiencing anxiety. She acknowledged the difficulties posed by conflicting information and the possibility of details becoming outdated within just a couple of hours.

Consequently, she found herself advising others to avoid constant news consumption, while also questioning the impact of such exposure on her own mental well-being.

Hannah shared her deeper thoughts on the rapidly changing news cycle being overwhelming and causing anxiety. She also shared her experience working with anxious individuals, which caused a moment of self-reflection stating: *"I just think it's overwhelming, you can have too much information professionally I work with a lot of people who are very anxious. Over the last year [it] has been incredibly difficult for them"*. Hannah also mentioned her own struggles with the constant influx of contradictory information, which led her to advise others not to look at the news. She reflected on her own feelings, saying: *"I'm thinking why am I doing this? It's making me more anxious. This information overload of contradictory stuff. Who do I believe? What's true of the information? It will change tomorrow. So, what's the point in looking right now?"*.

When considering COVID and the media Hannah had several thoughts. First, she mentioned the lack of recognition for public figures involved in the pandemic response, suggesting that their roles and identities were not well known among the public. She also shared how difficult she found it when a colleague was dying of long COVID while the media said we needed to get back to normal: *"One of my colleagues passed away at the weekend. He had COVID last year and died due to complications of Long COVID and I'm seeing a lot of stuff on social media and generally in the media this week about 'we need our lives to get back to normal' and 'everyone just needs to get on with it, if people die, people die' and that's been really hard to hear this week"*. Hannah also shared she was conflicted about the vaccines following significant coverage and discussion in the media: *"I know logically that the vaccines has been through lots of tests and it's fine, but I think personally, ethically, I don't know if this is true or not but from what I've seen on social media, people are saying [the vaccines are] still technically in a phase 3 trial... so we're vaccinating all these people and I've seen this week that the government are on about everyone in a care home has to be vaccinated... But I also personally feel a strong sense of autonomy, like I should be able to make a choice. I don't feel confident yet that there*

will 100% not be any complications or side effects or anything. So me, personally right now, I'm feeling really apprehensive about that".

Another interesting comment Hannah made concerned how she saw people coming together at the beginning of the pandemic, but felt the online world was pulling people apart: "*I also know that the tech world is here to stay and does push people apart further and further. Everything gets polarized online. You have to have a strict view one way or the other. You can't sit on the fence online; it's got to be one or the other. We're seeing that more and more and I think that will continue. Not just with COVID, generally. You are either in this camp of, 'you're an anti-vaxxer and you're killing everyone and you're really selfish' or you're doing the greater good, and you can't be anywhere in the middle".*

Finally, Hannah shared a detailed personal story of a colleague being sucked into believing conspiracy theories: *"I think people believe in conspiracy theories for lots of different reasons and a... lack of education sometimes. I have a very good friend that has been completely sucked into all the COVID conspiracy theories. I had to distance myself from him. My psychological understanding of why he believes it is because he moved to a different part of the country just as COVID started and wanted to find a community, find a place he belonged. He didn't have that; he has not had it all his life. He is a gay man from a Muslim background, his family didn't accept him, he experienced lots of bullying, he has never really found a place to fit, so this has happened, he's moved to another part of the country, he's wanted to find a place to fit and online he's found this community of people who all believe that COVID is a hoax or a scam or whatever and so he's found a place to belong and he wants to stay in that community rather than questioning the reality of that. I challenged him on something he posted on social media, and he blocked and deleted me. I think I got to know a different side of him because of the COVID-19 pandemic. I already knew stuff about his life, already knew he'd had a challenging life. I'd already psychologically formulated him; I knew what was going on for him... But what I saw through social media was him being sucked into believing stuff, not challenging stuff... because of COVID he just became completely encompassed by conspiracies".*

4.2.12.1 PETs Derived from Hannah's Story

- Professional emphasis on understanding psychological reasons for guideline non-adherence.
- Critical of societal pressure on individual rather than collective responsibility.
- Observation of online polarisation preventing nuanced discussion.
- Recognition of privilege in accessing research journals for fact-checking.
- Personal conflict over media messaging while experiencing colleague's death from Long COVID.
- Insight into psychological drivers of conspiracy theory belief through friend's experience.
- Concern about overwhelming nature of rapidly changing news cycle.
- Analysis of how online communities can provide belonging through shared misinformation.

4.2.13 Simon's Story | A 20-24M Foundation Doctor of British Origin

Simon, a 20-24 year old male FY1 doctor, revealed a range of perspectives on the impact of social media. He expressed long held beliefs regarding concerns about social media's effect on happiness, suggesting in his experience those who engage with it were: *"not a lot happier"* and that it may not offer the promised benefits of staying in touch. He also noted the potential for social media to negatively impact self-image and self-worth, with users constantly comparing themselves to others.

Despite these concerns, Simon acknowledged the role social media played during the pandemic in facilitating public health communication. He explained that it allowed for the rapid spread of important messages, but at the same time: *"enabled the spread of misinformation a lot as well"*. This was particularly evident in the growth of movements such as anti-vaccine and anti-mask campaigns, which gained momentum following the COVID-19 outbreak.

Simon also shared his views on the significant differences between social media and traditional media in news delivery. He observed how social media fosters more dialogue, as: *"the news is there and then right underneath that news is all the comments, while traditional media like BBC News presents*

information in a lecture format, allowing for individual interpretation". This interactive conversation seeing how your friends' comments are reacted to have a significant role on credibility and level of interpretation: *"So underneath that news I can immediately see that one of my friends or a friend of a friend has put 'I think that's rubbish' and that's got 50,000 likes and I think oh, maybe it is rubbish, because he's got a lot of likes"*.

In terms of the initial perception and preparedness for the pandemic, Simon admitted that he did not initially recognise the global threat, and that the UK was not prepared for COVID-19. As the pandemic played out Simon felt the media coverage did sensationalise things with the daily death figures being posted out of context as to what it meant in relation to people dying on a normal day in a previous year for example.

Simon shared further insights into the pandemic, highlighting the growth of anti-vaccine and anti-mask movements, which he attributed to gaining: *"a lot more momentum, since the COVID vaccine came out"*. He also discussed his initial perception of COVID-19, not realising its potential to become a global crisis at first. Simon emphasised the lack of preparedness for the pandemic, particularly in the UK, comparing it to how other diseases like Ebola did not spread globally due to better containment measures.

Simon touched upon government messaging and public response during the pandemic. He recognised the impact of slogans as political tools, noting that they instilled a sense of guilt and responsibility, for example, to: *"protect the NHS"*. More specifically on slogans: *"[Boris Johnson] got slated at the time for it being quite vague, the 'stay alert' part of it particularly. I think that's quite reasonable. It was a bit vague, and it was like, 'we've already been staying alert for this whole time'. At the time I didn't see that the changing message was necessary, it all felt a bit semantic"*. He also mentioned: *"In terms of instilling fear in the public, especially around the time of the first slogans ['stay home, protect the NHS, save lives'], it got the job done. I think people, even if they can't remember the specific slogan, remember 'this is a scary situation, don't go out'. And that element of 'protect the NHS' instilling a*

feeling of if you were to go out, you're feeling guilt, you're contributing to the problems. So, I think slogans are a good political tool. I don't know how much I like them. But things like 'Get Brexit Done', people just started saying it and it doesn't have any meaning anymore... but it works as a political tool to get people onside to get a message across, definitely".

Simon mentioned that misunderstandings and confusion around various aspects of the disease persist not helped by the media's role in sensationalising information, which contributed to fear and confusion, and observed the politicisation of the pandemic, with examples such as the involvement of Dominic Cummings attendance at meetings of the UK's independent Scientific Advisory Group for Emergencies (SAGE) for COVID-19. He expressed a preference for trusting scientific papers rather than media outlets, which tend to focus on sensationalised soundbites rather than scientifically verified information.

The media's role in creating fear and confusion during the pandemic was significant, as it often sensationalised information, contributing to heightened anxiety. Simon noted: *"While the media was keeping very abreast of the governments daily deaths figure, I felt it could have been given potentially in a bit more context, maybe".* This sensationalism, along with the prevalence of unverified theories, undermined trust in media outlets as reliable sources of information. Despite this scepticism, Simon acknowledged: *"I wouldn't really trust media outlets, I don't think. Because it's all just these theories, these are more theories".* He still reads these sources to stay informed and critically assess the theories presented, explaining that he likes: *"keeping abreast of what the theories are at least because they're interesting to sort of think through and even in your own head".*

The long-term changes and impacts of the pandemic were also discussed, with Simon suggesting that we are now in a: *"less trusting world".* He shared his thoughts on the influence of friends, celebrities, and experts during the pandemic, explaining that he would consider implementing suggestions from these sources if they were: *"easy to implement, not harmful, and had potential benefits".*

Finally, Simon addressed the challenges of dealing with misinformation and unknowns in healthcare, emphasising the importance of being careful with words and not straying from verified information when communicating with patients.

4.2.13.1 PETs Derived from Simon's Story

- Recognition of social media's mixed impact on mental health and information spread.
- Insight into how social media's comment sections influence message credibility.
- Critical view of media's presentation of death figures without proper context.
- Analysis of slogan effectiveness while questioning their ethical implications.
- Evolution of trust in different information sources during pandemic.
- Recognition of social media's dialogue format versus traditional media's lecture style.
- Professional commitment to verified information in patient communication.
- Observation of pandemic creating "less trusting world" through media exposure.

4.2.14 Sebastian's Story | A 40-44M Senior Medical Director of British Origin

Sebastian, a 40-44 year old male Senior Medical Director, demonstrated his awareness and willingness to seek out diverse information sources, stating that he gathers information from a wide range of sources, including those that do not necessarily align with his views. He is wary of confirmation bias and echo chambers, striving to make well-rounded decisions by exploring various perspectives. He said: *"I'm very aware of confirmation bias and I'm very wary of the effect of ECHO chambers, and I think you make better decisions by having a well-rounded view"*.

Sebastian recounted his early perceptions of the pandemic, acknowledging that the trajectory exceeded his initial expectations. The influence of his professional network played a significant role in shaping his understanding of the situation. A practical example of making independent decisions and relying on his professional network was where he emphasised the importance of PPE and safety measures,

stating: *"I was one of the physicians who was insisting on slightly higher levels of PPE... I was saying to myself and the team that we are not going to see a patient unless we have high levels of PPE"*.

He critiqued the effectiveness of slogans and messaging during the pandemic. Sebastian felt that the messages were weak and reactionary, likely influenced by the Dominic Cummings affair, which led to people questioning and then breaking the rules. Sebastian acknowledged the impact of social media on public perception and felt there was a need for tighter social media regulation to prevent the spread of misinformation.

Sebastian also emphasised the importance of credibility and transparent messaging in communication, suggesting that messages should be tailored to different communities to effectively convey information. He stated: *"And then, recognising that they're going to be different communities you're trying to communicate to and when you're communicating, we're trying to understand where they come from and how the message is going to land"*.

In discussing public health messaging around the Dominic Cummings incident, he felt: *"It was an inflection point where people then started to question the rules, started to break them. It took us from a position where it felt like we were all in this together, so people were willing to accept more restrictions, to one where people thought there was a two tier system. I think it was a major point of weakening of the public health campaign"*. In discussing the use of slogans and messaging, Sebastian felt that government messaging following this incident, was weak and reactionary, again emphasising the need for consistent and simple communication.

Sebastian acknowledged the impact of social media on public perception and the need for tighter regulation, noting the challenge in helping the public recognise credible sources. Echo chambers and polarised views on vaccination were identified as problematic, as people tend to seek or be presented with materials that support their existing beliefs.

Adapting communication strategies as information evolves was seen as crucial, with the Sebastian suggesting that experts should be willing to revise their positions based on new evidence and communicate transparently. The importance of credibility and transparent messaging was emphasised, along with the need to tailor messages to different communities, considering their backgrounds and perspectives. On slogans Sebastian had the following views: *"There's the hands, face, space slogan which doesn't roll off the tongue for me but the message is clear. And then there's 'stay at home, protect the NHS, save lives' which got sort of weakened after the Dominic Cummings episode at Barnard Castle"*.

Given Sebastian's dual role spending time in industry as well as on the wards he was afforded the opportunity to see variations among how professional groups differed in their response: *"My family, at the time, were more conservative than I was, so they wanted to be extremely cautious. I would say otherwise my general professional network were fairly aligned, the professional network in industry. On the wards, if anything they were a bit more blasé, junior doctors on the wards"*.

Sebastian was very clear on his thoughts as to how best to communicate scientific information to the public: *"I think you need to keep your messages consistent and simple. You need to think about broad impact... it's about the impact of that message on various people because that's going to have an impact on how it's received"*.

"Language. We all know that black and minority ethnic people were more at risk and things like the vaccine uptake, so thinking about credibility of that message and how it's delivered across communities".

"Evidence-based, and communicating that, but at times like this you may not have a complete evidence base, [so] clarity about where there is uncertainty. Transparency about uncertainty but explanation".

Sebastian also felt the way rules were broadcast to all but differed led to annoyance among members of the public: *"I think anything that feels like one rule for one group and another rule for a separate*

group. And that can be in two ways, it can be like the tier system, particularly if one area of the country feels they've been disproportionately affected, whether real or perceived. There was certainly a suggestion when it affected London, everything was locked down, you were furloughed, you were given a hypothetical salary. But when it's in northern England, you get on with it yourself and accept far less".

Sebastian's final thoughts were surrounding the difficulties around recognising credible sources on social media: *"There's a real problem at the moment with social media which is, how do the public in general recognise a credible source? You get people who speak with great authority, who have titles, but you've got no idea who they are, what their biases are, where they come from".*

4.2.14.1 PETs Derived from Sebastian's Story

- Strong awareness of confirmation bias and conscious effort to seek diverse viewpoints.
- Early adoption of strict PPE measures based on professional network insights.
- Recognition of Cummings incident as critical turning point in public compliance.
- Emphasis on tailoring messages for different communities backgrounds.
- Observation of varying risk attitudes between industry and clinical professionals.
- Criticism of perceived geographic inequalities in pandemic response.
- Focus on transparency about scientific uncertainty in public communication.
- Concern about credibility assessment challenges in social media environment.

4.2.15 Claudia's Story | A 25-29 Foundation Doctor of Swiss Origin

Claudia, a 25-29 year old female Foundation Year 1 doctor, shared her experiences and perspectives on various aspects relating to media and communication of the COVID-19 pandemic. She expressed a preference for ignoring the news and relying on work communication to stay updated, stating: *"I kind of just stopped reading the news so much because we already had all the work emails that would update us on how it's going".* Claudia qualified this by saying: *"I got very quickly fed up with the same*

news for a year and a half. I listened in the first lockdown but then it was all over the place at work anyway – so I don't think I needed the news to tell me how bad everything was".

Claudia appreciated social media's role in promoting vaccination, mentioning: *"in terms of social media, I've got a bunch of pages, or people like follow that were saying how you should get vaccinated, yeah I thought was good"*. However, Claudia was frustrated by the presence of non-believers in her personal circles, saying: *"I've had colleagues that lived with people that still didn't believe in it and you're like well what the hell?!"*.

Claudia observed a difference in news portrayal between waves, with the first wave receiving more coverage, and felt that the severity of the pandemic was portrayed differently in various countries. She mentioned that the UK news portrayed their situation as: *"terrifying"*, while in Switzerland news coverage seemed less sensationalised. Claudia found herself comparing news sources and countries, relying on the BBC and Swiss news for information, but remained sceptical about the accuracy and potential biases in news reporting, expressing: *"any blog or YouTube or even the news honestly, I don't even... I don't know if that would be true"*.

Adjusting her personal behaviour in response to the pandemic, Claudia recalled: *"I went home for an interview in the New Year and went skiing for two days with my parents and I found it so weird being so close to people"*. She described her reaction to information overload as one of avoidance, stating: *"I got very quickly fed up with the same news... my reaction to that was ignore it"*. She shared her perception that there was often a disparity between news coverage and reality on the ground in hospitals, noting: *"I think it was worse in hospital before it made the news... there was a big delay"*.

Claudia was particularly concerned about the long-term effects of COVID-19 and its impact on personal life, particularly when she saw it affecting those outside of who the media warned were at increased risk e.g. those with conditions such as Type 2 Diabetes or obesity. Claudia went on to share stories of teammates who were Olympic athletes suffering from long COVID, saying: *"I've had a bunch of teammates who are Olympic athletes that have long COVID and have to drop out of the*

Olympic team, so I think that scared me more now". It was Claudia's personal experience of acquaintances suffering long COVID, rather that it being reported in the media, that fuelled her fear. This was clearly something that deeply affected her.

Claudia acknowledged the public's initial shock and adaptation to the pandemic and recognised public health figures, though sometimes struggled to remember their specific roles. She believed that public health messaging was effective, but wondered if a more self-focused approach might have elicited a stronger response from the public, contemplating: *"I don't know if people would have reacted more if it's like so save themselves because I don't know how much people always care about everyone else"*.

Claudia felt that the media representation of the pandemic, particularly stories and videos from hospitals, helped the public understand the situation better. However, she also noted the confusion caused by inconsistent information, frequently changing narratives and information being presented with a degree of negative spin: *"[The news] put a headline, it was something like "COVID's getting a lot worse, the vaccine's not working because people are increasing in hospital'. It framed it in a way that nothing was working. But really, if you read the article, it was actually non-vaccinated people were in hospital, which they could have phrased in a more positive way, like the vaccine works"*.

4.2.15.1 PETs Derived from Claudia's Story

- Preference for work-based updates over news due to information saturation.
- Recognition of social media's positive role in vaccine promotion.
- Frustration with COVID denialism among healthcare workers' close contacts.
- Observation of disparity between news coverage and hospital reality.
- Personal impact of seeing elite athletes affected by Long COVID.
- Comparison of different countries' media approaches to pandemic coverage.
- Critical of media's negative framing of vaccine effectiveness.
- Professional desensitisation leading to news avoidance behaviours.

4.2.16 Ivana's Story | A 24-29F Clinical Project Associate

Ivana, a 25-29 year old female clinical project associate, shared several themes aspects related to the pandemic, social media, and mental health. With 2020 becoming the year that: *"really pushed social media up a notch"*. A significant increase in dependence on social media was noted, as Ivana explained that it has become an even larger part of people's lives due to its role in supporting small businesses and careers. This was not without its disadvantages. She acknowledged that her own time spent on social media had increased as a result of reduced opportunities for socialising outdoors: *"I'm on social media more… it's just mindlessly scrolling"*.

Ivana also discussed the role of media in pandemic awareness, admitting that she initially underestimated the situation: *"I didn't believe that it was going to escalate as much as it did"*. Once it did, she took government advice very seriously and it really impacted on her behaviour: *"I took the government advice very seriously. I have a lot of allergies, and my family was calling and saying, 'you're in the risk group, you need to shield, you need to be careful'. Probably for two weeks I didn't go anywhere. Then I started going to the shop or going on walks very early in the morning, around seven. I remember that I had to do a whole grocery list, buy food for two and a half weeks"*.

Social media platforms like Instagram and Facebook became Ivana's primary sources of news updates. This reliance on social media for information also highlighted its impact on mental health and well-being. Ivana mentioned feeling isolated after a few months of limited human contact and noticed changes in her sleep patterns due to increased screen time. Social media being a source of news for her friend was a theme also touched upon: *"My flatmate said 'I read Instagram' which I think is funny because I think a lot of 20 to 30 year olds do exactly the same thing. You wouldn't go to thetimes.com, you would just go on Facebook or YouTube, and it will pop up and we would read about it there"*.

Reflecting on her own social media use Ivana states: *"[I take social media] with a pinch of salt, but there's some truth to it and it's good to compare to other resources"*. Regarding trust in media, Ivana

expressed scepticism: *"I can't say that I believe the media hundred percent because it's all biased"*. Her family's reluctance to get vaccinated also demonstrated a lack of trust in government decisions. Nevertheless, she praised the government's initial response to the pandemic for being proactive in closing borders.

Ivana described her efforts to adapt to pandemic measures by taking government advice seriously and shielding herself. However, she acknowledged the shock of restrictions, such as not being able to go outside: *"Now [there] haven't been any rules ever that you can't go outside, but now you can't do the most basic human thing to breathe fresh air"*. Pandemic fatigue also emerged as an issue, with Ivana explaining how people had become tired of the constant influx of news about the virus.

The role of social media in shaping public perception was another topic discussed by Ivana, who noticed that some people were not as cautious as they should have been in following safety measures. She also touched on the importance of targeted communication and adapting messaging for different age groups, citing the government's failure to explain the situation adequately, which led to mass panic and hoarding. Ivana also shared social media combined with government corruption was a particular platform that enabled misinformation to spread in her native Bulgaria: *"because Bulgaria is quite corrupt and for every COVID case you have in the country you get EU aid. So, they were saying 'you're negative but we're going to say you're positive so the government can get more money in'... I think that's why people didn't believe that it existed. And I think now they do believe that it exists but the vaccines chip you so the company can follow you around and they're going to manipulate you"*.

Ivana mentioned lack of clarity in messaging from the UK government led to panic: *"There was mass panic and mass buying, and I remember that I went into three different shops and couldn't find a bag of rice because people didn't know what was happening, and the government didn't really explain it very well. They just said, 'something is happening, and we might close, but we don't know'. No guidance whatsoever"*. She also commented on the issue of information fatigue and how it affected her: *"Because it's around you so much and it's so loud, you kind of tone it down and lose interest. At*

the start I was really intrigued, I wanted to know, I was researching, but now I've just let it pass... No one wants to engage that much anymore. Everyone's very tired of it and I think I fall into that category as well". Given these points Ivana felt government messaging should be targeted into age groups: *"I think it should be targeted into age groups... I don't think something targeted for me would be helpful for my cousins who are eight years younger than me and vice versa. I wouldn't really understand their TikTok dances. I have seen on social media how a lot of doctors and dentists and dermatologists do these TikTok dances to get into that age group which I think was really smart because they were engaging and going to that level that different generations can understand".*

4.2.16.1 PETs Derived from Ivana's Story

- Evolution of social media dependence during pandemic for news and connection.
- Initial pandemic scepticism transformed by family pressure about health risks.
- Generational observation of 20-30 year olds preferring social media news sources.
- Critical awareness of media bias while still using it as information source.
- Recognition of native country's corruption influencing vaccine scepticism.
- Criticism of UK government's unclear messaging leading to panic buying.
- Experience of pandemic fatigue affecting information engagement.
- Support for age-targeted messaging including social media platform selection.

4.2.17 Martin's Story | A 50-54M Emergency Medicine Consultant of British Origin

Martin, a 50-54-year-old male Emergency Medicine Consultant, identifying as right wing and felt media sensationalised COVID by: *"Whipping up public fear when evidence didn't back it up".* Martin also went on to lament how he feels: *"media has become too politicised"* and: *"frustrated by a lack of middle-ground in media coverage".* Martin also highlighted how hysteria and fear were exacerbated by media and government decisions, stating: *"There was a lot of fearmongering in the media which created unnecessary panic"* and pointing out that: *"misinformation led to public confusion about PPE and testing".* Martin also spoke of: *"feeling almost a wave of hysteria and I felt as if nothing was done*

to stem the wave of hysteria. Everything just fed into it constantly". The hysteria had very real consequences on Martin's ability to run a hospital service as he alluded to: *"If we lost our staff [due to not turning up due to fear] the injury would be far worse and that was my concern over this hysteria. How do you keep your front-line workers on the front-line when everybody's shitting themselves?"*.

Martin reflected on his initial thoughts and how they changed over the course of the pandemic in relation to the severity of COVID: *"I went through a phase of thinking 'this [COVID] is a significant health risk', then because of media and everything we saw, it seemed to become something completely different... it seemed to become something fairly monstrous back in March 2020. But when I look back now, when I look at the statistics, I actually think my first interpretation was more accurate and it seemed to be blown out of proportion, which is not detracting from the fact that it is a significant public health event, but I felt as though it was turned into a zombie apocalypse... We were whipped up into a state of frenzy, people became scared, there was lots of rumours, people focusing on the wrong things"*.

The role of media, both mainstream and social, in shaping public opinion and professional debates is evident in throughout Martin's account. He cited division among medical professionals regarding the use of face masks, driven in part by differing interpretations of scientific evidence and media coverage, mentioning: *"There was a lot of debate among professionals about masks, and the media didn't help by presenting conflicting information"*.

Martin discussed the impact of media bias, conspiracy theories, and misinformation on public opinion, emphasising the polarisation of society. He noted that media organisations should provide unbiased facts and details, allowing individuals to formulate their own decisions based on accurate information. He explained: *"The media's role should be to present objective facts without bias, so people can make informed choices"*.

Martin also touched on the role of social media in spreading fear, anxiety, and misinformation during the pandemic. He remarked: *"Social media played a big part in spreading fear and anxiety, as well as*

false information". This highlights the need for effective public health communication strategies that leverage the advantages of social media while mitigating its potential harms. The consultant encouraged individuals to be aware of biases, urging them to practice critical reasoning when evaluating information on social and mainstream media platforms, saying: *"People should be critical consumers of news and question the information they receive"*.

Martin also had very distinct views on masks: *"I actually see this [wearing masks] as a symbol of how fragile we've become as a population in our minds and our strength... It's almost as if we're scared so we're hiding behind this mask and that, to me, is not the British spirit that I used to know 30 years ago... It's almost like we're running and hiding, I've seen people driving in their car on their own wearing masks. To me it's become a symbol of fear, it just shows how people can be manipulated"*. This proved to be quite a divisive position among Martin's fellow professional colleagues: *"Even amongst our own profession. I posted on social media a fairly innocuous comment about 'isn't it time now to move on from the mask wearing because there is no evidence for actually wearing masks' and I cited the evidence as a scientist and as a medical practitioner and I got berated even from my own medical profession, telling me I was irresponsible and should not be advocating this dangerous approach. And it amazed me that even intellectual, educated people aren't reading the evidence. They've been sucked into this mass hysteria about what we should be doing and what this illness is and how it's going to kill us all"*.

Slogans such as "Follow the Science" proved to be another area around which Martin shared rich insights: *"To me 'Follow the Science' means two things. I believe in following the science but that was used as a slogan, and I think it's been used as a slogan to mean 'follow the science that I put forward to you'. The thing about science is science can fall either way. There's science in favour of masks, using that example, and science not in favour. If you apply confirmation bias to 'follow the science', that means 'follow my science'. So yeah, in principle, follow the science is a great thing to do but I actually believe that slogan was used to say, 'follow my science' because my science is correct"*.

"Most of the public would then have defaulted to believing that was science and that was correct and that was the right thing to do. If you're not a scientist and you don't understand the indecision in science, the inability to reach consensus... People think science is fact. It's the pursuit of fact but it isn't always fact. I think the public interpreted that as 'you know what you're talking about, everything else that is not your opinion is bullshit and what you're saying is fact and that's it, it's not arguable'. You can shut any argument up by claiming that something's the fact and it's difficult to argue if you don't know the counter arguments. To argue with that you've got to be scientifically trained because I'd ask what science it is that you actually want me to believe".

As a content creator posting his own videos on COVID, often from the hospital car park Martin felt they did well as they tapped into a desire among his audience to escape the negativity: *"The overall reason those videos became popular was because there was positivity. The comments that I got back were in the thousand, about 'thank God somebody is speaking positively because I'm sick of all the negativity'... The pulse of that was that people were sick of negativity. They wanted positivity. They wanted people to say, 'this is how great everything is despite that' rather than 'we're all going to die' and that kind of thing".*

On the use of political slogans overwhelming people and therefore giving over too much power to the government Martin has this to say: *"This is the lead into totalitarianism, isn't it? When you have a blanket population of people who have now given up trying to understand what happens above, who just automatically accept the voice of what's above them, suddenly you find yourself being controlled. Ultimately the government is supposed to reflect the will of the majority of the people. And if it stops doing that because people aren't telling you what they want and what they think then you become a totalitarian state. The government becomes a government where it governs and tells everybody else what to do. And I'm fearful that's what's happening in society".*

In conclusion, the interview with Martin, an Emergency Medicine Consultant, underscores the significant impact of social and mainstream media on global public health communication during a

pandemic. The interplay between these media forms shapes public opinion, professional debates, and healthcare policies, emphasising the importance of accurate, unbiased reporting and critical reasoning in fostering informed discussions and decision-making.

4.2.17.1 PETs Derived from Martin's Story

- Strong criticism of media's role in creating "zombie apocalypse" level fear.
- Evolution from seeing COVID as significant health risk to viewing media as exaggerating threat.
- Frustration with polarisation and lack of middle-ground in media coverage.
- Professional concern about fear affecting frontline staff attendance.
- Controversial stance on mask-wearing leading to conflict with medical colleagues.
- Critical analysis of "Follow the Science" slogan as potentially misleading.
- Success with positive messaging in personal social media content.
- Concern about public's passive acceptance of government messaging leading to totalitarianism.

4.2.18 Phoebe's Story | A 20-24F Medical Student of British Origin

Phoebe, a 20-24 female medical student, offers valuable insights into the experiences of a young medical student who was also working as a healthcare assistant and vaccinator on the front line during the pandemic. Her experiences emphasise the importance of reliable information sources, such as the World Health Organisation (WHO) and the NHS, in shaping public understanding and behaviour stating: *"big organisations like the WHO and the NHS [I] definitely trust those"*.

Phoebe identified unclear communication and guidelines as one of the main challenges. Despite widespread access to information through social and mainstream media, people still experienced difficulties understanding the rules and recommendations surrounding the pandemic. This confusion may have been exacerbated by the interplay between various media sources, leading to contradictory or misleading messages.

Pheobe highlights the need for trusting experts over friends and celebrities when seeking pandemic-related information, as experts are: *"less likely to have been influenced by other sources that aren't as reliable"*. This underscores the challenge of discerning credible information amidst the vast amount of content available through social and mainstream media. Government messaging and slogans played a role in public health communication, with mixed reactions to their effectiveness. Some slogans, such as: *"stay alert"*, were criticised for their ambiguity, potentially resulting from attempts to simplify complex information for mass consumption through both mainstream and social media.

It was interesting to see how Pheobe described her knowledge on the origins of COVID and how stories circulating early on social media clearly influenced the thoughts of both her and her peer group: *"Well the classic one is that some random man ate a bat and now COVID is a thing. To be fair I haven't looked into it that much, I'm not an epidemiologist or interested in that sort of thing, but if someone asked me where it came from, I understand that in China they have these big food markets with lots of random different animals that they eat, and as far as I'm aware it came from that. The food hadn't been prepared fresh, and the virus was in one of those"*.

Pheobe also expressed the confusion caused to the public with the rules keeping changing thus the public were unsure what to do and given her role in the hospital they gravitated towards her for advice: *"There's those government slogans, 'hands face space'. They're good because they're simple and people will remember it, but I think sometimes people aren't too sure what the right thing is to do. I remember my parents being like 'am I allowed to do this now?' and obviously I understood it a bit more than them because I read more sources than them and they trusted me because I work in hospital"*. This did however place Pheobe in a difficult situation: *"I was thinking, I shouldn't be answering these questions. I'm happy to, and I'm able to, I was confident I knew the right thing to do, but I was still thinking if they can't get hold of this information or understand it, then how does somebody who doesn't use the internet or doesn't have a phone, how are they supposed to know what to do?"*. Building on how this was communicated to the public Pheobe explained people were either

scared to attend hospital or unsure if their GP practice was open, while COVID was focussed on to the detriment of other condition both purely as a result of the media coverage: *"I remember A&E was super quiet at the start because people just weren't coming in. Just because COVID is here doesn't mean the other health conditions aren't. People are still having heart attacks, people are still having strokes, people are still falling off ladders. So that was something we tried to get across, but I don't think necessarily was"*.

Finally, Phoebe felt the public found the government's numbers and dates arbitrary: *"I think a lot of people found the numbers quite arbitrary. The rule of six, what happens when I have seven?' The same with lockdown dates. 'We're going to lock down on this day, we're going to come out of lockdown on this day' and it's like 'why have you chosen that day? Does COVID not exist the day after that?' I certainly questioned it a few times, finding the numbers quite arbitrary and sometimes it did feel like they'd plucked these numbers from thin air. That's something that could have been done better... I think it would have been helpful for people to have understood how the government came to the rule of six"*.

4.2.18.1 PETs Derived from Phoebe's Story

- Strong trust in major health organizations (WHO, NHS) over other information sources.
- Tension between being informal medical advisor to family while feeling unqualified.
- Recognition of arbitrary-seeming rules creating public confusion and scepticism.
- Early acceptance of social media narratives about virus origins despite medical education.
- Concern about COVID focus overshadowing other serious health conditions.
- Observation of public confusion over changing guidelines affecting hospital attendance.
- Complex position as both medical student and frontline worker during crisis.
- Recognition of communication challenges for less digitally connected populations.

4.2.19 Peter's Story | A 50-54M Patient Organisation CEO of British Origin

Peter, a 50-54 year old male CEO, shared how his personal experience influenced how he interacted with mainstream media, such as Sky News, during the initial stages of the pandemic. Despite the initial dismissive attitude of many people towards the pandemic, Peter's prior experience with swine flu and subsequent development of heart failure made him more vigilant and responsive to the emerging crisis. He recalls watching news coverage and taking immediate action, such as sourcing masks for personal use: *"I was watching Sky News and I said to my wife, we need to get some more masks"*. This demonstrates the power of mainstream media in driving public response to pandemic-related news and updates, particularly for individuals with heightened awareness due to their personal experiences and health conditions.

Peter shared an interesting perspective that anti-vax sentiment was present pre COVID. His occupation involved working with NHS England and through this he was invited to a conference at Facebook's head office before the pandemic hit in mid-2019: *"Basically a whole room of us was told that you'll lose your social pages if you don't manage the anti-vax stuff and we will banish your group and not allow access to it'... that was the policy coming in because they had been pressurized by the WHO.... So, all social media companies locked down on the anti-vax stuff in mid-2019"*.

This directive did mean during the pandemic, the onerous task placed on the page owner to moderate their content, meant several people having to cover 24 hour shifts, due to the explosion of people asking legitimate questions about their heart failure and COVID-19. The sensitivity however of the situation meant many comments were flagged, which were not contentious – merely people seeking help.

Patient advocacy groups, such as the CEO's organisation, had to adapt their communication methods in response to the pandemic. They utilised social media and digital technologies to engage diverse audiences through webinars and online events. These online platforms allowed them to continue

providing support, information, and community-building activities to patients when traditional communication channels became inaccessible or insufficient.

Peter was a vocal critic of the government's communication strategy during the pandemic, emphasising the importance of both mainstream and social media in disseminating accurate information and guiding public behaviour. The government's messaging was often criticised for being confusing and ineffective, leading to public anxiety and confusion: *"Throughout the pandemic that communication was juvenile, to say the least, in fact, it was embryonic in quality and delivery"*. Peter believed that more effective use of mainstream and social media channels by public health authorities could have improved communication and better managed public response during the pandemic.

Peter highlighted the challenges faced by the public during the pandemic, with a particular emphasis on the inadequacy of communication from central authorities. He described: *"the communication from the centre as atrocious"*. An example given was the initial mask messaging which he felt led to significant mortality: *"The bullshit about PPE, we should have been prepared, and the ridiculous statements by leaders in the Department of Health and the NHS about not needing masks killed thousands of people... It's a Coronavirus, it's airborne. It's not about droplets, it's not about spitting all over anybody, it's an aerosol... Telling people that you don't need masks is ridiculous when it's a respiratory virus"*. According to Peter this poor approach to messaging had very real impacts on them as a patient charity: *"We had to brace ourselves every time there was a big [government] announcement because we knew that, however many times you tell people, there was blind panic from patients who didn't know what to do... We said 'if you've got a real problem, message us'. I had two or three messages going at once for three or four hours in the evening, every evening"*. This reaction Peter went onto say was not due to a lack of intelligence, but rather a sense of blind panic experienced by patients who were uncertain about how to proceed. Peter points out that these patients were fortunate to have the support of patient advocacy organisations stepping in and filling the gap by providing them with essential guidance and assistance during what was a difficult time.

4.2.19.1 PETs Derived from Peter's Story

- Early pandemic vigilance due to personal swine flu experience affecting media consumption.
- Pre-COVID insight into social media companies' anti-vax content moderation policies.
- Challenge of moderating patient support groups during pandemic information surge.
- Adaptation of patient advocacy communication to digital platforms.
- Strong criticism of "embryonic" government communication quality.
- Particular frustration with early mask messaging viewed as costing lives.
- Recognition of patient panic following government announcements.
- Role of patient advocacy groups in filling government communication gaps.

4.2.20 Aiste's Story | A 25-29F Surgical Trainee of Lithuanian Origin

Aiste, a 25-29 year old female surgical trainee, shared valuable insights about how she felt a deep sense of responsibility to correct people online about COVID related misinformation. Some of this was rooted in feeling a sense of sympathy for the general public as she felt there was too much information being shared about COVID for them to take in.

Misinformation on social media platforms, such as Facebook, emerged as a significant concern for Aiste. She noted that inadequate management of misinformation led to fear and anxiety among the public, ultimately affecting their decision-making and behaviour during the pandemic: *"I think a lot of this misinformation spreads a lot of fear amongst people"*.

Aiste also stressed the importance of trusted sources of information, acknowledging that one's social media experience may depend on their network and educational background: *"Your level of education, your immediate surrounding friends, so if you're in the medical field it's easy to get access to the right information that is trustworthy"*. Aiste felt, Government websites serve as an appropriate source of information for the general population: *"The government website, if it is kept up to date appropriately would be the go to source for the general population, I think"*. However, Aiste also

recognised the negative impact of misinformation via social media on public perception. She highlights the challenges faced in managing misinformation on social media platforms like Facebook: *"It's very difficult, it's so difficult to manage all of it because there are so many people posting anything at any time, any point, and it doesn't have to be necessarily true, whatever they're sharing"*. The ease with which false information can spread creates a vicious cycle of misinformation that is difficult to combat: *"And it's like an ongoing chain of misinformation"*. Aiste also notes the negative reactions people may have when their beliefs are challenged, making it even more challenging to address misinformation: *"And then tracking back that information may be really hard and getting it checked, and people get angry if you challenge them on this"*. This underlines the importance of creating effective strategies to counteract misinformation and promote accurate, reliable information on social media platforms.

Medical professionals were identified as having a crucial role in mitigating the negative impact of misinformation on public health communication. Aiste emphasised the responsibility of medical professionals to set a good example in real life and on social media by providing evidence-based facts and engaging in civilised discussions: *"Show presence on social media as well and try and spread the right information and if discussions take place just like give them the evidence, give them the facts and try and make sure that there is a civilised discussion going on"*.

Direct experience with COVID-19 patients allowed Aiste to observe the challenges in decision-making, remote communication with families, and the impact of treatment trials. Her perception of government messages and international government approaches highlighted the importance of clear and consistent communication to maintain public trust: *"because the government was so strict about things, I think it had an impact on the general population's views"*. Rule-breaking by government officials, on the other hand, was seen as detrimental to public confidence in medical professionals and authorities: *"What first of all, what sort of people it's like you know we touched a little bit like you know government officials breaking certain rules definitely sets a very, very bad example"*.

4.2.20.1 PETs Derived from Aiste's Story

- Strong sense of professional duty to correct COVID misinformation online.
- Empathy for public struggling with information overload.
- Recognition of educational background affecting access to reliable information.
- Frustration with difficulty in tracking and correcting viral misinformation.
- Emphasis on medical professionals role in social media fact-sharing.
- Challenge of maintaining civilised discussion when correcting false beliefs.
- Impact of government rule-breaking on public trust in medical authority.
- Focus on evidence-based communication to counter misinformation spread.

4.3 Healthcare Professionals - Group Experiential Themes (GETs)

Table 3: HCP GETs as derived from Personal Experiential Themes

Group Experiential Theme (GET)	**Personal Experiential Themes (PETs)**
Professional Identity and Media Responsibility	• Professional duty to correct misinformation (Aiste) • Strong advocacy for frontline healthcare professionals' role in education (Pravin) • Tension between being informal medical advisor while feeling unqualified (Phoebe) • Professional commitment to verified information in patient communication (Simon) • Complex navigation of professional responsibilities (Becky)
Evolution of Pandemic Perception	• Evolution from initial dismissal to serious concern (Agnieszka)

	• Journey from initial pandemic disbelief to frontline reality (Radha) • Evolution from initial pandemic scepticism to deep fear after personal experience (Becky) • Evolution from seeing COVID as health risk to viewing media as exaggerating (Martin) • Evolution of trust in different information sources during pandemic (Simon)
Strategic Information Management	• Professional approach to information seeking through medical databases (Anjali) • Strategic use of Twitter for direct information (Agnieszka) • Strategic use of WhatsApp groups as news aggregator (Becky) • Strategic approach to media consumption, balancing BBC with expert Twitter (Louise) • Preference for work-based updates over news (Claudia)
Digital Communication Transformation	• Recognition of social media's transformative role in professional communication (Pravin) • Adaptation of patient advocacy communication to digital platforms (Peter) • Recognition of global communication's unprecedented value (Owen)

	• Challenge of moderating patient support groups during information surge (Peter) • Observation of rural elderly adapting to social media (Claire)
Professional Versus Public Understanding	• Concern about public confusion when even medical professionals uncertain (Pravin) • Recognition of privilege in accessing research journals (Hannah) • Complex position as both medical student and frontline worker (Phoebe) • Dual perspective as healthcare professional and social media user (Radha) • Critical awareness of media bias while using as information source (Ivana)
Impact on Professional Practice	• Professional isolation and feeling unsupported (Christina) • Exhaustion from managing misinformation in patient interactions (Christina) • Professional desensitization leading to news avoidance (Claudia) • Professional concern about media's impact on mental health (Evelyn) • Impact of government rule-breaking on public trust in medical authority (Aiste)

Communication Clarity and Trust	• Strong advocacy for simple, clear messaging (Agnieszka) • Emphasis on transparency's role in building trust (Agnieszka) • Focus on evidence-based communication (Aiste) • Recognition of faith leaders' importance in building community trust (Pravin) • Support for honest communication of pandemic severity (Pravin)

5.0 Results – General Public

This chapter presents the outcomes of 20 in-depth, semi-structured interviews conducted to explore lived experiences of the general public with media during the COVID-19 pandemic. In the same way as the interviews with healthcare professionals in Chapter 4.0, the results are structured around individual case summaries for each participant. Again, I manually applied an IPA methodology that enabled deep immersion in the idiographic details of each account to derive PETs and then GETs.

5.1 Overview

As in the case of the healthcare professional interviews, I have carefully selected quotes that best represent the corpus of data for that specific participant. I made the deliberate decision to write up each participants experience individually as felt this was the best way to accurately represent their invaluable contributions to this research while also aligning to the phenomenological approach of this research (Alase 2017).

Through presenting each case individually, like Chapter 4.0, I was able to maintain an idiographic focus, staying consistent to the essence of the IPA methodology and developing a deep understanding of each participant's lived experience, while also gaining multiple perspectives from the participants in order to explore this phenomena in a broad manner (McInally and Gray-Brunton 2021). This approach also facilitated cross-case analysis, enabling me to compare and contrast participants' experiences and identify commonalities and differences across cases, which was crucial for generating insights relevant to the broader complex phenomenon under study.

Table 4 provides a summary of the baseline characteristics of the participant group, offering a clear overview of the diverse backgrounds and experiences represented within the study. Note names have been replaced with pseudonyms.

Table 4: Summary of General Public Participants' Baseline Characteristics

#	Pseudonym	Nationality	Age & Sex	Occupation	Highest qualification
1	Graham	English	65-69 M	Retired researcher (molecular virology)	Masters
2	Chloe	English	25-29 F	Pharmaceutical Medical Affairs	Bachelors
3	Howard	English	70-74 M	Retired Research Chemist	Masters
4	Nadeem	Pakistani	50-54 M	Taxi Driver	A-levels
5	Margaret	English	50-54 M	Account director	Not specified
6	Nigel	English	45-49 M	Journalist / News Presenter	Doctorate
7	Kenneth	English	65-69 M	Deputy Head Teacher	Post Graduate Certificate
8	Sakura	Japanese	30-34 F	Pharmacist Medical Affairs	Masters
9	Lena	German	30-34 F	Flight Attendant	Bachelors
10	Tariq	Indian	35-39 F	Business director & Hypnotist	Bachelors
11	Charles	British	35-39 M	Filmmaker	Bachelors
12	Marcia	Jamaican	40-44 F	Director at Big Pharmaceutical Company	Masters
13	Angela	British	50-54 F	Carer	Bachelors
14	Clifford	British	60-64 M	Comedian/Actor/Writer	Masters
15	Ritu	Indian	30-34 F	Lawyer	Masters
16	Kamran	Pakistani	25-29 M	Salesman	Masters
17	Sophie	British	35-39 F	Scientist & Pharmaceutical Professional	Masters
18	Ben	British	25-29 M	Medical Affairs – Pharmaceuticals	Bachelors
19	Alice	British	25-29 F	Strategy Director – UK Government	Bachelors
20	Maddison	Australian	25-29 F	Medical Affairs – Pharmaceuticals	Bachelors

5.2 General Public Participant Summaries

In this section I summarise general public participant's story, presenting an accurate representation of what I as the researcher considered the most significant and relevant aspects of their lived experience interacting with COVID-19 content and communication across various media. Throughout each summary representative quotes have been incorporated. At the end of each summary Personal Experiential Themes (PETs) are listed.

5.2.1 Graham's Story | A 65-69M Retired Virologist of English Origin

Graham, a 65-69 year old male retired research virologist, shared several thoughts around how media coverage of COVID impacted him, such as his reliance on trusted sources, the disappearance of certain scientists, and scepticism towards government claims. Graham also emphasised the importance of obtaining information from reputable sources examples he would class as such included BBC News whether that be across TV or Radio and the 'New Scientist' magazine.

The disappearance of specific scientists from public discourse, such as Professor Sir Johnathan Van Tam, raised particular concerns for Graham. Graham highlighted a strong preference for front-line scientists, expressing that: *"the front line scientists should actually be talking on TV and radio"* to provide accurate and reliable information for members of the public. This was referring to the infamous press conference by Prof Van Tam following the Dominic Cummings 'Barnard Castle' debacle, where Prof Van Tam stated in his view the rules were clear and applied to everyone. Following this he was then not picked to speak at government press conferences for a significant period thereafter. Something which was of great concern to Graham.

Government messaging was also discussed, with Graham questioning the government's motivations for promoting certain personal protective measures. Despite taking his own precautions, such as maintaining at least two meters of distance from others, Graham expressed scepticism towards the government's opening up claims, saying: *"I think the most important thing is space to be honest and I just gave people a wide berth. At least two meters"*.

Polarisation and the resistance to change people's opinions were acknowledged as significant challenges, drawing parallels to the Brexit debate. Graham was particularly frank in expressing distrust in Chinese reporting, specifically related to the COVID-19 pandemic, and raised concerns about the possibility of an accidental escape from the Wuhan laboratory.

Graham was quite dismissive of celebrity influence as he believed that celebrities lacked sufficient knowledge and credibility to provide reliable advice on the matter. Instead, Graham much preferred and appreciated clear communication from authorities, such as the: *"hands, face, and space"* slogan, which he felt was successful and easily understood by the public.

Graham did feel there were: *"elements of scientists falling into line with government messaging"*, yet also criticised celebrities for: *"spouting what they have been told to say"*.

He was particularly critical of: *"follow the science"* as a slogan feeling it was: *"a misnomer, as what the government mean is they are listening to the science but then have to balance with all other issues"* e.g., the economy and maintaining public order. Graham also felt there were members of the public with fixed beliefs around topics such as vaccines not working, and regardless of what you say, this view cannot be changed.

In conclusion, Graham's experience of media coverage of COVID-19 emphasised the importance of relying on trusted sources, prioritising information from front-line scientists, and fostering clear communication.

5.2.1.1 PETs Derived from Graham's Story

- Evolution of social media dependence during pandemic for news and connection.
- Initial pandemic scepticism transformed by family pressure about health risks.
- Generational observation of 20-30 year olds preferring social media news sources.
- Critical awareness of media bias while still using it as information source.
- Recognition of native country's corruption influencing vaccine scepticism.

- Criticism of UK government's unclear messaging leading to panic buying.
- Experience of pandemic fatigue affecting information engagement.
- Support for age-targeted messaging including social media platform selection.

5.2.2 Chloe's Story | A 24-29F Pharmaceutical Professional of English Origin

In the early stages of the pandemic Chloe, a 24-29 year old female pharmaceutical professional, took a very relaxed approach: *"I can remember going out with a bunch of girlfriends the night before the lockdown announcement, without a care in the world"*. Although vaguely aware of COVID-19 in China she initially thought of it as a very much: *"Them, rather than us, issue"*.

This changed pretty soon into the pandemic, where Chloe noted the intensity and lack of variety in pandemic news, stating that it was: *"unlike anything"* she had ever experienced. This: *"overwhelming nature"* was exacerbated due to the lack of variety, everything was COVID-19 related. She adds: *"We have all got very used to this constant news and 24 hour access to everything around the world, but I think the difference has been there has been no news except pandemic news for the last 18 months"*. Chloe went on to make the important point around the difficulty in fact-checking when being constantly bombarded with messages from various sources. It was something she felt was just: *"Incompatible with the way news is broadcast nowadays"*. Chloe also expressed concern that news sources often focused on negative aspects, contributing to misinformation and paranoia.

As a young, new media native Chloe admits she listens to news more than reading it. In her view media played a significant role in implementing lockdowns, acknowledging that mainstream media was used to communicate guidelines in a generally positive manner. However, she also believed that social media contributed to spreading paranoia and misinformation, with some individuals capitalising on the attention in order to spread fake news, and further their own individual profile. Chloe explained: *"The fact that anybody has a platform to spread information is a great thing, but it makes it impossible to monitor. So, you've almost got to move away from the source of news and focus your efforts on the*

people digesting the news and try to support them to do so in a constructive way and decide for themselves what is useful and what is not".

In terms of personal experience, Chloe recounted her initial exposure to the pandemic through more niche sources like *'The Economist'* and seeing COVID as: *"a bit of a far flung scientific curiosity that wouldn't have affected us"*. Chloe's perception of the pandemic's severity evolved over time as she watched the daily press conferences and began to grasp the magnitude of the situation.

The role of social media in pandemic communication was evident in Chloe's experience, as she observed friends posting about the seriousness of the situation. She was quite shocked to realise such a limited scientific understanding among her peers: *"who were quite bright girls"*. As she continued to observe she witnessed her friends' paranoia and reliance on 'advice' shared on platforms like WhatsApp: *"I watched the WhatsApp group, literally hundreds of messages every day giving very dubious advice to each other"*.

As a result, Chloe expressed mistrust in social media, opting for alternative sources such as: *"podcasts from New Scientist, The Economist, and The Guardian"*. She appreciated these sources for providing a more comprehensive and informative perspective on the pandemic, while also addressing: *"intriguing possibilities and conspiracy theories"* but in a more balanced and substantiated manner. That being said Chloe had a self-awareness of how she perceived and interacted with her preferred sources: *"I trust these sources so much, that I take what they say as gospel, so things like the New Scientist or Economist if I read a good piece I am sold"*.

While on one level Chloe felt social media has helped a lot, as never before have we been able to have a global picture of the pandemic, she also mentioned how she would judge friends' behaviours depending on their preferred news source: *"I think a couple of friends who were changing their behaviours earlier were the ones that I tend to associate with being quite paranoid and love click bait news or reading The Daily Mail and so I think that almost validated for me that they were the ones panicking"*.

Chloe was quite candid, discussing both denial and delayed behaviour change, influenced by friends' opinions and behaviours, as well as her family's scepticism towards the pandemic. She also mentioned high levels of personal trust placed in scientific reports and the importance of understanding virus dynamics to make informed decisions.

Increased media consumption was another aspect of Chloe's experience during the pandemic, even if they did not fully understand some elements of the situation. Chloe felt: *"Catchy public health messaging, such as "hands, face, space"* were appreciated by less scientifically literate peers who found it: *"memorable and effective"*.

Lastly, Chloe commented on rule-breaking and shaming, which she believed had both negative and positive impacts on the public health response. Chloe was also vocal about wishing to see a more positive approach to mainstream media news reporting: *"I think it's so rare for the mainstream media outlets to focus on positive or constructive news because negativity sells"*. However, Chloe was realistic this was unlikely given people have short attention spans, and many crave clickbait.

5.2.2.1 PETs Derived from Chloe's Story

- Evolution from seeing pandemic as "them not us" issue to full awareness.
- Recognition of unprecedented single-topic news coverage creating overwhelm.
- Observation of friends' pandemic behaviour correlating with news source choices.
- Self-awareness about uncritical trust in preferred news sources.
- Preference for audio news consumption reflecting young media consumer habits.
- Critical view of social media enabling unqualified voices to spread misinformation.
- Appreciation for simple public health messaging helping less scientific peers.
- Complex relationship with media driving both global awareness and paranoia.

5.2.3 Howard's Story | A 70-74M Retired Research Chemist of English Origin

Howard a 70-74 year old male retired research chemist, shared several examples, providing insights into his lived experience and perception of the media environment surrounding the COVID-19 pandemic. He was clearly made to feel quite nervous and anxious through the whole experience. The first was a deep sense of uncertainty leading to panic, as Howard expressed feeling overwhelmed by the rapidly changing environment: *"I got really, really panicky you know".* He further stated: *"There's so much [information] I don't know what to believe"* indicating an ongoing struggle to understand and process the speed and volume of information surrounding him.

Misinformation and fake news emerged as another theme, with Howard admitting to being: *"taken in by fake videos".* He expressed frustration with the abundance of misinformation, again stating that it contributes to panic: *"I started panicking with the media [covering] things like that, I got a bit panicky".*

Howard was clear in attributing what had not helped with regards to his panicked disposition – the media: *"All these people are dying in hospital, and you hear about the care homes crisis. The media has not helped, they've gone over the top with it, they're getting people to panic so I think everybody's panicked recently over what's been happening".*

In fact, Howard reminisced how the briefings reminded him of previous military briefings when we were at war: *"It was like, when the Iraq war was on and George Bush Sr used to have a meeting every day with a General, there was a podium with the President and a General in a military uniform, frightening it was... It was the same during the Falklands. When that [COVID-19] happened, you had people coming on every day giving a daily [briefing]. It was like we were at war".*

Howard also shared his views on government and media communication, expressing scepticism about the transparency of the government: *"I don't think the government's been upfront they're holding things back".* He mentioned having greater trust in the deputy chief medical officer and deputy chief scientific officer, compared to mainstream media sources like the BBC: *"You've got Boris Johnson in*

the middle, and you've got the Chief Scientific Officer and the Chief Medical Officer. The person I trust better is the Deputy Chief Scientific Officer, Professor Van Tam. He seemed to be more amenable to questions". He also felt: *"Sky seem to be interrogating better than the BBC do... The BBC seems more biased with the government".*

Personal experiences and observations shaped Howard's perceptions, with daily encounters influencing his understanding of the situation: *"I'm seeing people will carry face masks now".* He expressed frustration with some of the publics' behaviours, calling them: *"ludicrous"* for not engaging or following advice.

Trust in sources of information was another theme, with Howard asserting the importance of expert opinion: *"When it comes to keeping my loved ones safe – I'm most likely to listen to an expert, obviously".* As a scientist himself, he expressed scepticism but still valued reliable information.

The impact of social media and online information was also discussed, as Howard noted that misinformation often spread through platforms like Facebook and Twitter. Mixed messaging causing confusion was another significant theme, with Howard pointing out that inconsistencies in world leaders' behaviour contributed to the confusion. Howard cited examples both sides of the Atlantic including the Prime Minister's insistence on handshaking during the early stages of the pandemic: *"If you see the Prime Minister shaking hands, you just assume it's okay".* While also specifically mentioning dubious advice given out by the President of The United States: *"[Trump] should have had a scientific advisor with him. He obviously didn't take scientific advice... Any scientific advisor wouldn't have told him to say 'inject yourself with bleach'... It must have come out of his own head".*

5.2.3.1 PETs Derived from Howard's Story

- Strong anxiety reaction to media coverage creating sense of panic.
- Comparison of COVID briefings to wartime military communications.
- Personal struggle with information overload and identifying reliable sources.

- Greater trust in deputy medical officers than political leaders.
- Recognition of being susceptible to fake videos despite scientific background.
- Critical comparison of different news outlets' government scrutiny.
- Frustration with inconsistent leadership behaviour undermining health messages.
- Impact of international leaders' unscientific statements on public trust

5.2.4 Nadeem's Story | A 50-54M Taxi Driver of Pakistani Origin

Nadeem a 50-54-year-old male taxi driver, expressed his initial disbelief regarding the COVID-19 pandemic, stating in the beginning, it seemed like just a rumour: *"I'll be very honest I didn't really believe it because, when it started, like before we had some cases in England, I heard that something started in China so for the first couple of days it was just a rumour that something is coming".* Nadeem reflected on a situation, with the tests (for COVID-19) starting: *"News just shot up so quickly".* He also mentioned that there were mixed reactions among his customers, with some believing it would eventually affect England, while others thought it would not reach our shores.

As the pandemic unfolded, he noted unclear information from the media and government, which likely contributed to the public's confusion: *"Everyone, I think, at the very beginning, the information wasn't that clear. On media no clear guideline from the government as well and that's that probably was the reason because everybody was going to do their own things every day".* Despite the lack of clear information, Nadeem took personal precautions to protect himself and his passengers, such as providing masks and sanitiser, and stopping work before the official lockdown was announced. Given Nadeem's public facing role this provided him with another avenue to receive pandemic related information he got the following advice from a customer: *"It's best when somebody sits in, keep the windows open, more ventilation with air in and out means you have less chance to catch something".* This was information he acted upon before hearing it in the media or via government channels.

Nadeem relied on trusted media sources like the BBC for accurate information, as he had a: *"long time history"* with them. The pandemic's perceived threat became all too real for him when he could

not attend a family funeral due to the restrictions, which was: *"a bit of a shock for everybody"*. He acknowledged the ongoing presence of the virus and its variants, expressing concern that new strains might emerge every six months.

He also observed negative public responses to government actions, with people questioning the logic of certain restrictions: *"If we [one specific group] are not able to meet each other, why, are they [another specific group] doing it and risking other people's lives"*. This highlights the difficulty of communicating the easing of lockdown restrictions, on a group by group basis.

Nadeem emphasised the importance of clear communication from the government in order to better manage public sentiment and response to the pandemic: *"I think public information was not very clear from the government and they could have acted a little bit more promptly"*.

5.2.4.1 PETs Derived from Nadeem's Story

- Evolution from initial COVID disbelief as "just a rumour" to serious concern.
- Early adoption of safety measures before official guidance due to public-facing role.
- Learning practical safety measures from passengers before official channels.
- Trust in BBC based on long-term relationship with broadcaster.
- Personal impact of restrictions realised through inability to attend family funeral.
- Observation of public confusion over group-specific restriction changes.
- Value of practical experience in public-facing role informing pandemic response.
- Criticism of delayed and unclear government communication.

5.2.5 Margaret's Story | a 50-54F Account Director of English Origin

Margaret a 50-54 year old female account director shares her pandemic experience, focusing on her extensive consumption of both social and mainstream media to actively seek public health

communication from various governments. She emphasises that every country has a unique situation, stating: *"I think, every country is different... I think everyone has to have an individual approach"*. She believes seeking out information about different approaches: "*is hugely positive because there are some things that will work that we could potentially, use here or could share with some other countries that would be useful for them"*. *She also finds the inconsistencies between countries can also lead to confusion: "I think from a media perspective, it's confusing when you look at what Sweden does, and I don't really understand why that won't work here?"*.

Margaret is notable for her proactive engagement with diverse media sources to better understand COVID-19 guidelines. She expresses difficulty in finding useful information, saying: *"I think it's been quite difficult to get information that you find useful and that can help you determine whether you want to take the risk to go to the shop or... send your children to school"*. She feels that people are not given enough options to take charge of their lives and must rely on unclear guidance.

Though aware of the rising number of cases, she is unsure about the potential impact of virus variants. Her main concern is obtaining reliable information, which she feels is scarce. This lack of control and guidance, combined with the uncertainty surrounding the pandemic, has significantly affected her personal decisions, such as allowing her children to attend social events. She primarily relies on social media to gauge her comfort level in these situations, saying: *"my kids [going] to a party, for example"*.

Her exposure to international media has led her to compare different government approaches, which has further confused her and diminished her trust in institutions and authorities. Consequently, she has adopted a more individualistic approach to risk management and decision-making: *"For instance, right at the beginning of the pandemic I was talking to my husband about 'why we are sending our children into school, this is clearly a problem,' whereas the school are still booking trips to the transport museum, and I'm thinking 'well, I'm not okay with that.' I'm not comfortable with someone else having all the control and taking charge of something which is quite serious"*.

Conversations with friends and social networks have exposed her to a range of pandemic perspectives, including conspiracy theories, which has led to increased anxiety and stress. For example, she recalls feeling overwhelmed by pandemic-related restrictions at a restaurant. She also questions the credibility of certain information sources and criticises their: *"lack of connection to reality"*.

Margaret was quite strong in condemning sensationalism in the media, arguing that it detracts from other pressing global issues and exacerbates the challenges of navigating the pandemic. Referring to sensational headlines, she says: *"Yes, in the newspapers that I don't read, and their headlines, and I don't respond to because I think it's ridiculous, and they put the fear of god into people and also distracts"*.

As someone who sought several international media sources, while also condemning: *"the sensationalism aspects of reporting"* this clearly had an impact on Margaret: *"I go through stages of leaving the house fully masked and gloved up"* to thinking: *"I can't keep scaring my children any longer"*. Margaret also described the effect of her demeanour on her children: *"The more panicked I get about something the more panicked the children get. My 11 year old is permanently washing his hands, he walks around with antibacterial gel and is really quite germophobic, not wanting to play in the garden, it's quite debilitating to be honest"*.

Margaret felt she was a smart person who did not need to be spoon fed information, stating she will look at government documents, appraise them and act on them. Equally she does appreciate the need that some people will need spoon feeding.

Finally, Margaret expressed times where she was surprised by people, she had known for 30 or 40 years and the positions they were taking on COVID. However not wanting to delve into the whys of their beliefs as she felt it would cause an argument; she likened the situation to religion a very emotive topic that is often not talked about.

5.2.5.1 PETs Derived from Margaret's Story

- Active seeking of international media perspectives on pandemic approaches.
- Struggle between wanting detailed information and finding it overwhelming.
- Personal conflict over institutional control versus individual decision-making.
- Impact of parental anxiety affecting children's behavioural responses.
- Evolution between extreme caution and desire to protect children from fear.
- Self-identification as capable of processing complex information while recognising other's needs.
- Observation of pandemic beliefs becoming taboo topic like religion.
- Frustration with sensationalist media distracting from other global issues.

5.2.6 Nigel's Story | A 45-49M News Anchor of British Origin

Nigel, a male news presenter aged 45-49, shared several of his thoughts concerning public health communication during a pandemic. Initially, both the media and much of the public reaction was calm and dismissive, as people thought the crisis was: *"a big fuss over nothing".* Nigel's attitude was influenced by comparisons to past health crises he had covered such as Ebola and SARS, which turned out to be not as serious as initially feared.

Nigel emphasised the importance of proximity, noting that the situation became more real when deaths occurred nearby: *"I think the big change for us was Italy when things absolutely went to shit. And that's obviously a country that a lot of us can relate to and isn't very far away... ... it's all about being relatable, isn't it? We do live in this global world, and we do global coverage, but it's still not, unless it gets a bit closer to home that you pay a great deal of attention".*

Preventive measures were not widely adopted until they were mandated, suggesting a slow adaptation process. As a news presenter, Nigel was keen to highlight and emphasise the importance of delivering clear and simple information to the public. Interestingly, Nigel felt the news conferences were PR

exercises, with the presenter stating: *"It's a PR exercise ultimately. The whole public questions thing is a total waste of time and the total PR exercise... It's nonsense, but it makes people feel better, presumably, which is fine, but it doesn't actually achieve anything"*. Nigel also questioned the necessity of having specialist health reporters cover the pandemic.

Different age groups reacted differently to the pandemic, and as a presenter he stressed the difficulty of tailoring media output to meet the needs of various demographics, due to the significant costs involved. Despite potential sensationalism and shocking headlines, Nigel argued that broadcast media has been largely responsible in its coverage due to strict regulations.

Social media, however, was seen as a: *"complete disaster"* something he had thought for: *"a long time before the pandemic [that social media was dangerous] but it was an issue that was amplified during the pandemic"* , given social media creates echo chambers, spreads conspiracy theories and misinformation: *"The anti vaxxers get so much traction because it's a closed room and anyone who disagrees with them isn't allowed in so they're not hearing any alternative views and that's very dangerous"*. Nigel stressed the importance of relying on trusted sources and clear messaging, such as memorable slogans like: *"hands, face, space"* which make it palatable for audiences potentially not otherwise interested.

Confusion in messaging and rules contributed to difficulties in public health communication, the presenter also noted the importance of community support during the pandemic. When talking about contrasting messaging Nigel admits to it becoming totally confusing towards the end of 2020. When people used to ask him what we can do he would reply he had no idea. One example cited was the constantly changing traffic light system for travel he went on to say he didn't know whether those decisions were right or wrong, but it just caused confusion and he wasn't sure how to avoid it: *"you either let things go back to normal or continue with caution and locking down"*.

Nigel discussed the negative impact of social media on information dissemination and the content on those channels when compared with mainstream media. Clarity in communication, the importance of

facts and expert opinions, and the role of mainstream media were all highlighted as crucial aspects of public health communication during a pandemic: *"It's all about facts, there is a great responsibility when people are tuning in to find out what the hell is going on. You could create a panic. It's all about delivery it has to be calm and considered"*. Nigel saw his role as a news anchor and that of fellow professionals in the industry to: *"translate information for people down the pub so it's simple and clear while also challenging contributors in order to facilitate clarity"*.

The influence of politics on public health communication was acknowledged, with Nigel suggesting that politicians should prioritise protecting the public over playing politics. Adapting to different audiences and subsets posed a challenge, but the importance of admitting uncertainty in a public health crisis was emphasised as key to effective communication.

Nigel concluded his interview with the following advice for those communicating to the public in pandemic situations: *"Clarity is the big thing, even if clarity is only saying we don't know"*. He went on to say this maybe down to media training or a lack thereof, but it would be particularly useful for politicians who feel their obliged to provide an answer, even if they fudge it. On the point of politicians, the news presenter was keen to emphasise how very important the use of language is in such pandemic situations citing Trump: *"I mean calling it the 'China virus' just makes division worse"*.

5.2.6.1 PETs Derived from Nigel's Story

- Evolution from initial dismissal based on prior health crisis coverage experience.
- Recognition of proximity effect making pandemic "real" through Italy crisis.
- Strong criticism of press conferences as PR exercises rather than information tools.
- View of social media as "complete disaster" creating dangerous echo chambers.
- Professional insight into challenge of delivering clear information to diverse audiences.
- Personal confusion over constantly changing rules despite media insider position.
- Emphasis on "facts first" approach in mainstream media coverage.

- Recognition that admitting uncertainty is key to effective pandemic communication.

5.2.7 Kenneth's Story | A 65-69M Deputy Head Teacher of English Origin

Kenneth, a 65-69 year old male deputy head teacher, discussed his perceptions of the pandemic and its handling by authorities. He expressed a general mistrust towards politicians, and other people in authority. Kenneth talked openly and was particularly concerned about the increasing reliance on behavioural science in public health communication, stating: *"this whole business of behavioural science has been adopted by governments increasingly... and also the use of language and how language can get people to respond in a way that a government wants"*.

Kenneth's personal experiences, such as having a daughter on the front line, influenced his perception of the pandemic's severity. He observed public fear and confusion, suggesting: "just a little drop of uncertainty into the cocktail is very destabilising". He also compared different countries' approaches, mentioning Sweden as an example, while acknowledging the prevalence of myths and misinformation.

Kenneth criticised the government's chaotic strategies and questioned possible hidden agendas, stating: *"I think this government is chaotic and therefore you can't necessarily rely on them to choose strategies which are appropriate"*. He recognised public compliance with pandemic restrictions but also noted resistance, particularly to vaccines.

The impact of media and information exposure on public perception was evident in his statement: "the more I read the more confused I become". He highlighted the pandemic's effects on mental health, citing personal examples of stress experienced by his daughter and a colleague.

Regarding the virus's origins, he was aware of the suspicions but did not subscribe to conspiracy theories. He expressed trust in reputable journalism sources, such as: *"The Financial Times, New York Times, London Times, and the BBC"*. While he trusted the World Health Organisation to some extent, he was unsure about the direction of their investigations.

Kenneth emphasised the importance of public adherence to pandemic restrictions, sharing anecdotes of both compliance and disobedience. His insights provide a valuable perspective on the varied experiences people have had throughout the pandemic, regardless of the sources of media they consume, with Kenneth focussing exclusively on sources from reputable journalists.

5.2.7.1 PETs Derived from Kenneth's Story

- Strong scepticism of behavioural science use in government messaging.
- Personal connection to frontline worker (daughter) informing pandemic views.
- Recognition of uncertainty as destabilising force in public response.
- Critical view of government chaos preventing appropriate strategy selection.
- Experience of information overload leading to increased confusion.
- Trust limited to traditional reputable journalism sources.
- Observation of compliance variations despite inconsistent messaging.
- Concern about hidden agendas in pandemic management strategies.

5.2.8 Sakura's Story | A 30-34F Pharmaceutical Professional of Japanese Origin

Sakura a 30-34 year old female pharmaceutical professional, relied on multiple platforms for information during the pandemic, stating: *"There were loads of posts on LinkedIn, Facebook and Instagram I was getting things via push notifications on my phone"*. Sakura initially believed that the coronavirus situation would: *"blow over and not be too severe"*. However, her perceptions changed within two weeks as she recognised the seriousness of the pandemic: *"Okay, this is serious, you know people are actually dying, they actually calling it a pandemic"*.

Sakura noted a distinct lack of professional education and communication among healthcare professionals: *"It was more like guessing, we don't know anything from the government, we think it's this or this might come about because of this, it was kind of just assumptions, there was no proper training that was that was given out"*. This lack of reliable information, coupled with conflicting views

among healthcare professionals, led some to believe in conspiracy theories and regard the pandemic as a: *"political game"*. Public perception of fairness was influenced by the lockdown measures, with some people feeling that the economic consequences for younger individuals and families were not justified in order to save older or more vulnerable populations. Sakura acknowledged the importance of flattening the curve and achieving herd immunity through vaccination: *"I just remember that statement, to flatten the curve, you know, the more people get immune to the disease, then you would get eventually herd immunity in a population"*.

Sakura's trust in sources of information varied, expressing some confidence in BBC News but also criticising the potentially misleading nature of their data presentations: *"I don't know about of some of the graphs, I remember, they did present seemed a bit misleading. I remember speaking to some colleagues about it"*. Reflecting on the overall preparedness for the pandemic, she felt that the UK was unprepared for such an outbreak: *"I don't think we were prepared for anything like this, especially in a country like the UK"*. However, she believed that future pandemics would be met with a greater sense of preparedness: *"I think an outbreak like this could happen, but I think we would feel more prepared"*.

5.2.8.1 PETs Derived from Sakura's Story

- Reliance on multiple social platforms with push notifications for updates.
- Evolution from initial dismissal to recognition of pandemic severity.
- Frustration with lack of proper healthcare professional training and guidance.
- Observation of conspiracy theories emerging among healthcare colleagues.
- Recognition of intergenerational tension over lockdown economic impact.
- Critical view of BBC data presentation despite general trust in source.
- Reflection on UK's lack of pandemic preparedness.
- Optimism about future pandemic response based on learned experience.

5.2.9 Lena's Story | A 30-34F Flight Attendant of German Origin

Lena, a 30-34 year old female flight attendant, revealed several themes related to anxiety, misinformation, and the need for clear communication in the context of the ongoing pandemic. She also shared her coping strategy and emphasised the importance of carefully selecting media sources in order to alleviate anxiety, stating: *"You need to pick the sources of media wisely... I'm not following the media on a daily basis, to be honest with you, it saved me a lot of anxiety".*

Misinformation and sensationalism were identified as problematic, with Lena sharing an anecdote about a flight attendant colleague's behaviour who believed the virus could be transmitted via water saying: *"I've heard that the virus can be transmitted via water from your shower, so I won't be showering and need 6 large bottles of water (from the flights supplies for crew) to keep clean".* Lena also mentioned that people tend to believe everything they read without questioning, especially if it comes from sensational media outlets like: *"The Daily Mail or its equivalent in Germany".*

To combat misinformation, the Lena discussed the importance of seeking information from trusted sources, such as the BBC News, which she described as: *"the source that I would trust".* She also emphasised the value of consulting trusted individuals, saying: *"I would ask a partner, a good friend, that I trust, that I can ask a stupid question".* However, she also acknowledged the influence of conspiracy theories, admitting that she knows: *"a few people who are conspiracy theorists"*, who make claims without any scientific knowledge behind them.

Lena underscored the importance of trusting experts and relying on mainstream media for information while maintaining a healthy scepticism towards various viewpoints. Lena's partner who was in the same room, commented on this mentioning his scepticism over people's views and observed that: *"a lot of people say to me, listen to experts, but really they are subconsciously listening to this, excuse my French, shit".*

In terms of public health guidelines, Lena expressed her awareness of general advice to keep distance and work from home if possible, describing the guidelines as: *"Keep distance and stay at home... work from home if you can work from home"*. However, she also noted her difficulty in recalling the names of public health officials and assessing the trustworthiness of public figures, referring to one as: *"she doesn't have the best charisma, so not a very trustworthy person"*.

The impact of social media misinformation on society was evident in her observation of friends with strong opinions despite lacking medical or scientific expertise: *"Some of my friends have very, very strong opinions and without even being a doctor or scientist, they make strong statements about it, which might split society"*.

Lena ultimately stressed the significance of clear communication between experts and the public, highlighting the need for a: *"connector between the people and the medical world"*. Overall, her insights emphasised the challenges posed by anxiety, misinformation, and communication during the pandemic and the necessity of continually fostering trust and clarity in public health messaging.

5.2.9.1 PETs Derived from Lena's Story

- Strategic limitation of media consumption to manage personal anxiety.
- Witness to extreme colleague behaviour based on water transmission misinformation.
- Recognition of sensationalist media's role in spreading misinformation.
- Strong preference for BBC News as trusted information source.
- Observation of friends making strong claims without scientific expertise.
- Partner's scepticism about people claiming to "listen to experts".
- Difficulty assessing trustworthiness based on public figure charisma.
- Emphasis on need for "connector" between medical experts and public.

5.2.10 Tariq's Story | A 35-39M Businessman & Hypnotist of Indian Origin

Tariq is a 35 to 39 year old male businessman and hypnotist, who owns a health food shop. Reflecting on his experiences during lockdown as: *"a good time"* given he was able to spend more time with his family while also being able to keep his business open to the public. It was that regular contact with his customers during lockdown that formed a substantial part of his thoughts around media consumption during COVID. In his line of business Tariq believes he saw a more unspoken result of the government's response to the pandemic than the physical health risks that were predominantly focused upon- mental health risks, particularly prevalent in his body conscious customers: *"two of my customers... over the last 12 months have actually killed themselves"*. He goes on to say: *"the biggest killer [off the pandemic] isn't going to be COVID it's going to be the subconscious mind [with media playing a significant role]"*. He blames stress-induced cortisol that weakens the body's immune system, and from his perspective the stress is a direct result of media consumption during the lockdowns. He sees two main reasons for this. Firstly, an image-obsessed society who have nothing else to do during lockdowns but stay in and judge themselves against other people's social media profiles: *"They live for the likes and going out, going to the gym [but] now they're not being able to do that"*.

The role of social media as a source of misinformation was highlighted, with the gentleman explaining that people: *"just don't know who is right, who is wrong"*. This mistrust extends to government and institutions, with people questioning the motives behind their actions. Public health communication was further discussed, with the rise influence of alternative voices, such as Russell Brand, gaining traction over more traditional sources of information: *"Russell Brand. He's massive on the whole conspiracy theory and he knows a lot of people are taking his advice now rather from Boris [Johnson]"*. This was a very clear example of how mistrust in mainstream media has grown, with people questioning the news and turning to alternative sources of information.

Tariq was clearly affected and concerned by the mental health impact of the pandemic driven by social media. Tariq also expressed concerns around social media, its adverse impact on mental health, and

the fact many people are: *"always on it [social media]"* and *"exposed to so much negativity"*. Tariq also reflected on the contemporary culture of people: *"continuously craving click bait"*. Something which led to: *"A constant stream of conflicting views"*. He went on to state this makes things so hard to trust anyone whether that be in the online or physical world. Tariq's access to a broad spectrum of opinion for social media, led to him deciding to choose what he decides to listen to when it came to government messaging: *"what social media has done it's given everyone a voice – and there's so much false news out there you just don't know who is right [and] who is wrong"*.

Tariq went on to define the constant barrage of negativity people received from all media outlets – social media, news, and official government messaging. *"[Facebook] used to be a form of escapism... but now it's like: NHS, Government, NHS"*. He sees the same problem with: *"turning on Sky [News]... and being bombarded with negativity"*.

It's got to the point where he has hidden any posts related to the NHS and Government, and he says that people he know have started to abandon Facebook as well. Tariq summarised with: *"Historically, we used to use the internet to escape the real world. But now we do out into the real world to escape the internet"*.

Despite social media leading to significant stress and despair that Tariq has seen among his customers and social group, he sees it as a positive in terms of enabling the public to make up their own minds: *"Twenty years ago, we had no voice. We had TV, we had radio. Now, we can type out a big essay on Twitter. Tweet Boris, tweet Dr Ranj"* and not only make our opinions heard but decide which opinions to listen to. Tariq feels: *"You have to get everyone's point of view. Sometimes even experts are wrong... They're only listening to other experts"*.

Tariq shared some interesting comments on his views about news: *"I've not watched the news since 2013... before it all. And I've been the happiest. I'm always full of energy... But obviously COVID came [and] you can't avoid it"*. Tariq found some of his colleagues and friends started thinking the same: *"A lot of people now started the question the news as well... Thinking 'is this real?' Because*

there's different stories going about. Are the death rates actually real?". This wasn't the case from the start and something that took time to develop: *"In the first couple of months, it was 'okay, let's [stay] quiet, there's something going on' but eventually humans always want to ask why".*

Because of the factors discussed, Tariq is still to have the vaccine, which has led to some tension within his family – especially since his brother was on the vulnerable list and received the vaccine early. Tariq justifies this: *"I'm not anti-vax, I'm pro-common sense"*, he says: *"I'd rather take my time [to research]".*

5.2.10.1 PETs Derived from Tariq's Story

- Recognition of media's role in pandemic mental health impact through customer suicides.
- Connection between social media consumption and stress-induced health impacts.
- Observation of shift from internet as escape to real world becoming escape.
- Strategic avoidance of news media since 2013 for personal wellbeing.
- Evolution of public trust from initial acceptance to questioning official narratives.
- View of social media as double-edged sword - causing stress while enabling voice.
- Complex family dynamics around vaccine decisions.
- Perspective as business owner witnessing unspoken mental health pandemic.

5.2.11 Charles's Story | A 35-39M Filmmaker of British Origin

Charles, a 35 to 39 year old filmmaker and cinema worker, could not properly remember when he first heard about the pandemic: *"I can't properly clearly remember [when I first heard] because I wasn't taking it in. It was just another news story".*

He initially did not perceive the pandemic as a major concern, recalling that it was just one of many topics he discussed with colleagues in the staff room at work at work. Charles gave an example: *"I guess I wasn't taking it seriously at all then, because I remember I tore a customer's ticket, coughed into my elbow and then handed it back and I remember the customer took a step back and the*

colleague I was with remarked how I really freaked out that customer". Reflecting on that experience Charles remembered thinking: *"Oh yeah we're not supposed to be coughing I guess coughing might symbolise something and obviously it did for the rest of the year"*.

There was also a distinct lack of clarity from his seniors in the early days of the pandemic: " *There was a point just before we properly locked down. I remember the manager just handing whoever was on shift some sanitizer and some j-cloths and saying, 'just make sure we're sanitizing and you're doing it quite often in front of the customers, just so they know we're doing something,' to put their minds at ease".*

Charles also reflected on the initial messaging around hand washing and masks: *"I remember for the first month or so of the actual lockdown there wasn't really a big thing about masks, it wasn't compulsory. It was all about washing your hands. I guess at the time they [the experts] didn't know enough about it. Also, I imagine behind the scenes they didn't want the optics of making everyone in the country wear masks. It's a bit Orwellian, as the phrase is now"*.

Charles shared his media consumption was mainly through The Guardian and Twitter, but he also checked The Daily Mail to: *"keep up with a variety of perspectives"*. He noted a political divide, stating that people on the left were often quick to criticise the government's response to the pandemic, and that social media was driving polarisation. He argued that, as a child growing up in the 90's, there was more room for nuanced debate, and attributes the explosion of social media as significant in driving this societal change.

Charles discussed the role of mainstream media and the influence of social media, asserting that everything had become politicised due to the extreme nature of online discourse. He believed that the pandemic and the response to it had been politicised as well, with people forced to: *"pick a side"*. He also mentioned the presence of bias in the media, stating that some outlets clearly had an agenda.

Charles felt the initial public perception of the pandemic's limited impact on England led to a delayed response, and he expressed doubts about the necessity of lockdown measures. Charles wondered what would have happened if the government had taken a less extreme stance, treating the virus as a: *"new kind of flu type thing"*. He mentioned that the people he knew who contracted COVID-19 experienced relatively mild symptoms, which caused a degree of cognitive dissonance given the severity of reporting at the time.

Charles expressed compliance with lockdown measures, stating that he was willing to follow guidelines: *"if that's what they are telling me to do, fine I'll go along with it"*, even though he may have had reservations. He discussed the impact of the pandemic on businesses, using the example of the delayed James Bond film release, which signalled the severity of the situation to him.

He observed that public reactions to lockdown were initially positive, even with some people potentially excited about the novelty of the experience: *"people were kind of quite excited about it... it was a new thing wasn't it and everyone thought... it was kind of novel"*. However, he admitted that he was unaware of the possibility of a national lockdown until the day it was announced.

Acknowledging the influence of mainstream media in shaping public opinion, Charles shared concerns about government control and potential authoritarianism, stating: *"it's not up to the government to take our freedom to decide when they get to give it back to us"*. He also expressed his fears about societal collapse and the erosion of freedoms: *"This is kind of a nightmare I've always been worried about... ... some kind of more authoritarian dictatorship was going to come into place, and this is maybe how it starts"*. He also reflected on the role of social media in creating information overload and desensitising people to news events: *"When you look at your phone, you look on the internet... and it's just white noise and all these different kinds of shit happening, so you just block it out"*. He hypothesised such use of media leads to a lack of political accountability in situations such as the handling of the COVID-19 pandemic.

Charles pointed out that the democratisation of news has provided a variety of perspectives, but the rapid cyclical flow of content can make concentrating on one topic difficult, due to the pervasive nature of the internet. His interview highlights the overwhelming and constant flow of information in today's world, creating a: *"white noise"* that makes it difficult to focus on specific issues or hold politicians accountable. Such events were, according to Charles, wide-ranging including issues such as the Israel-Palestine conflict, the pandemic, Brexit aftershocks, and the Capitol riots all contributing to information overload, for an audience that finds themselves bombarded with information and saturated. Charles felt the fast-paced news cycle allows politicians to avoid accountability, as controversies, including the COVID pandemic, are quickly forgotten: *"So you look on your phone, you look on the internet, and that's where most people work nowadays, so even if you just log on to do some work you see all that stuff and it's just white noise, all this kind of different shit happening so you just block it out and you haven't got time to just concentrate on one thing and be angry or see that there's any accountability for one thing. That's why politicians don't have to resign about anything. Because they know people are going to forget about it the next day"*. Charles went on to elaborate with an example particularly pertinent to the pandemic: *"Think about the Dominic Cummings thing when he went to Bernard Castle last year... There was no accountability, there was no fallout. He'd broken the lockdown rules... the worst thing that anyone could do at that point, but he just made some statement, and it all got forgotten about and the government knew that was going to happen. There's no accountability anymore and that's because of how the public consumes content. Because it's constant and what's big one day is not going to be what's big the next day. And the public are just sleepwalking into this wave of white noise which is constant content. And the politicians know that so it's only going to get worse"*. This phenomenon leads the public to become desensitised and potentially slip into a situation where accountability is lacking, further exacerbating the diminishing trust in traditional news sources. This is particularly concerning in the midst of a pandemic, where accurate and reliable information is crucial for public safety and effective decision-making. Charles was clear as to what was driving this phenomenon: *"This is a social media, internet thing where you can't*

escape the think-pieces and the articles. On Twitter everyone's a bloody thought-leader and everyone's a journalist. Everyone's putting up their opinions all the time and in order for it to carry any weight or get any attention they've got to be quite extreme opinions. It's got to be 'Boris Johnson is doing this and it's wrong' or 'the way this is happening is right and it's because of this'... It's this extremism that everything on the internet breeds. And because of that, literally everything has become political, and it was happening before the pandemic".

Charles shared an interesting perspective as to the changing role of the news and how different generations may see things: *"Back in the old days, if you wanted to see the news, you'd watch The News, and it would be one news bulletin happening. It would be someone saying, 'this is what we're talking about now for the next 10 minutes' or you'd read a newspaper, and it would be 'this is on the front page and here's the article on the next page.' For example, if I go on the Guardian website right now, I'll click on the front page and there will be an article here, an article here, an article here, all about different things, saying 'choose which one you want.' You haven't got time to just focus on one thing. And some people would say that's good. That's the democratization of the news. A 20-year-old might look back at how we received the news in the 90s or the 80s and [think], so they told you what to think about the news?"*. Charles concluded: *"I don't think it's a coincidence that since then, and with this 'democratisation' of the news there has been this absolute eradication of any kind of responsibility or accountability for anyone when they basically commit crimes, which is what politicians have been doing"*.

5.2.11.1 PETs Derived from Charles's Story

- Initial dismissal of pandemic as "just another news story" until personal incidents.
- Evolution of workplace safety measures from performative to serious.
- Critical view of media's role in political polarisation compared to 1990s discourse.
- Complex relationship with news sources, deliberately seeking varied perspectives.
- Observation of initial public excitement about lockdown novelty.

- Concern about authoritarian control through pandemic measures.
- Analysis of social media's role in creating "white noise" of information.
- Insight into how modern news consumption prevents political accountability.

5.2.12 Marcia's Story | A 40-44F Procurement Professional of Jamaican Origin

Marcia, a 40-44 year old female procurement professional, discussed her experiences and perceptions during the COVID-19 pandemic. Initially made aware of the virus through her extensive use of social media, she recalls her family in the Caribbean sending her an article about the outbreak in China. Her early concerns were not taken seriously, as she (part) jokingly asked a medically qualified friend if she should stock up her fridge, only to be met with a dismissive response.

Marcia expressed frustration with the lack of information from authorities particularly inadequate communication from her child's school. In her workplace, there was a slow response to the pandemic, and she did not receive any warnings or news about travel restrictions. This uncertainty fuelled her growing anxiety about personal risk, fearing she would: *"catch it and die"* due to the extreme news coverage. This led to a difficult discussion between Marcia and her boss two weeks prior to lockdown being announced saying she was uncomfortable working from the office and would be working from home. As the pandemic progressed, she noted drawbacks such as the loss of social connections and increased formality in communication: *"the screen made us more formal"*.

Her experience with healthcare during the pandemic was less favourable. With phone consultations as the primary mode of medical care, she felt: *"completely let down by the GP type service"*. Additionally, concerns about contracting COVID-19 made her hesitant to seek help at emergency rooms.

She questioned the communication and governance within the NHS, believing that the medical community had knowledge of the virus's severity but did not share it with the public. She perceived a sense of British arrogance that contributed to the UK's response to the pandemic, comparing the

situation to Italy's outbreak: *"So I think the arrogance of the British population, especially the politicians and the medical professions to say well we're British we don't kiss on the cheek and Italy that's their problem we're never going to be like Italy come three weeks after we're like bloody Italy"*. This quote highlights her perception of the UK's initial complacency and the eventual realisation of the gravity of the situation. Something she was only able to assess through her connection to the topic via social media.

Marcia was aware of COVIDs global impact and maintained connections with people from various countries. She also encountered conspiracy theories about the virus's origins. The pandemic has influenced her personal decision-making, leading her to be more cautious about travel and rely on vaccines for protection. Emphasising the importance of social distancing, she shared her commitment to following guidelines and frustration with those who don't: *"I can't believe they're being so selfish"*.

Finally, she recognised key figures in the pandemic response and recalled government messaging such as: *"stay at home"* and: *"face, hands, space"*. Overall, her experience reflects a mix of concerns, frustrations, and adaptations during a time of global uncertainty.

5.2.12.1 PETs Derived from Marcia's Story

- Early awareness through Caribbean family sharing social media news about China.
- Initial warnings dismissed by medical friends despite personal concerns.
- Frustration with slow workplace response leading to self-directed remote work.
- Experience of formal communication barriers through screen interactions.
- Disappointment with GP services during pandemic transition.
- Critical of perceived British arrogance in early pandemic response.
- Strong personal adherence to guidelines with judgment of non-compliant others.
- Reliance on international connections for broader pandemic perspective.

5.2.13 Angela's Story | A 50-54F Mental Health Practitioner of British Origin

Angela, a female mental health practitioner aged 50-54, expressed her concerns about mainstream media's influence on the public perception of the pandemic. She referred to the mainstream media as: *"death porn"* and described the response to the pandemic as: *"disproportional and insanity"*. These were quite strong terms I had not encountered in other interviews thus far, so I asked Angela to share her thoughts behind these beliefs. Her response showed how content covered by the BBC actually changed her view as to the media she would consume: *"At the beginning I was still watching mainstream news. But the thing that broke me when it came to mainstream media was when they said they were having a surge of cases and the BBC were sending film crews into London hospitals and filming and interviewing people who were, in inverted commas, 'dying'. And I complained to the BBC, and I said, 'how can you be so irresponsible?' To me you can't have it both ways. Basically, you're telling the public how absolutely deadly this thing is yet you're stupid enough to send people in? You're telling us that the hospitals are so overrun and so busy and it's so terrible, yet you're sending a film crew in, and the justification is, 'well, we've got to show you' and I'm like, 'you don't have to show me someone setting themselves on fire for me not to do it, you don't show me someone jumping off a cliff, so I don't do it'. The complete infantilisation and patronising of the public. It was just death porn"*.

Angela was also critical of public health communication, stating focus should be placed on ensuring the accuracy and balanced nature of reporting: *"Approximately 1,600 people die every day in this country, why are you not talking about any of them? Why are you not talking about cancer? Why are you not talking about Alzheimers? Why are you not talking about things which really kill people and people suffer from?"*.

Angela highlighted the impact of both social media and mainstream media on shaping public perception, as she found herself consuming media, she never thought she would, such as talk radio.

She was highly critical of the public's willingness to believe unproven information, calling it: *"nonsense, absolute nonsense"*.

Angela was particularly critical content shared across social media in the earliest days of the pandemic in China: *"Those films of people falling over and dying in China, if you're going to believe stuff like that without any provenance whatsoever, you're just a muppet"*.

Angela also expressed concerns about the reliability of PCR tests, stating in her opinion they are not diagnostic tests yet are used as such. She criticised public health figures, such as Matt Hancock, calling him: *"the most despicable man in the world who deserves to be sacked"*.

Angela, drawing on her background as a mental health practitioner, lamented the detrimental impact of the pandemic and lockdowns on mental health, saying: *"I think everyone's depressed, I think everyone's a bit loony now"*. She specifically pointed to the media's role in contributing to this decline, accusing the BBC of: *"causing mental health decline for the whole population for the last 15 months"*. Poignantly Angela went on: *"in terms of lockdowns and things like that, I would rather die than go through this again. This isn't living"*.

Overall, Angela was very clear in conveying a deeply held and strong mistrust in mainstream media and a perception that media outlets like the BBC are no longer trustworthy. She believed that media's role in shaping public perception and mental health during the pandemic has been negative, and she criticised OfCom for enabling mainstream media to perpetuate the government's narrative.

Angela clearly didn't agree with the media being used as a tool for forcing vaccination on carers, after working for long periods in the early stages of the pandemic without the pre-requisite PPE. This was clearly an emotive issue for her: *"The other day they came out with a story about, 'carers have to be vaccinated'. Carers have worked the whole of the pandemic without any protection, and now you're saying because there's a vaccine [they have to take it]. It's completely up to them if they want to take it or not, but you who have been sitting at home can sit there and go, 'you're a bad person because you*

won't have it'. You haven't been working for the last 15 months throughout the pandemic putting yourself at risk without anything to protect you, and now we're the bad people? You can fuck off". She concluded with: *"I'm not going to take the vaccine because it's the principle of the thing now. If you're going to coerce me, it's not consent. And we have to stand up and be counted. We will not be coerced".*

Throughout the interview Angela clearly expressed her concern over mainstream media and in particular the BBC. Comparing COVID deaths to those from car accidents of smoking for example she went on to state a lot of the coverage was hyperbole: *"More people are hurt in car accidents than hurt by COVID. In America half a million people die from smoking, and we don't tell people to stop smoking and we don't ban cars. So actually, this is the biggest farce ever. Really, really awful. And I think they've treated people in a very, very demonized way. I've not worn a mask in months. Wash your hands, that's all you need to do. We are not vectors of disease".*

She went on to share her beliefs around the origin of conspiracy theories – distrust of the media: *"The only reason people come up with conspiracy theories is that they don't trust the media. No one trusts the BBC anymore. That's why people are like 'defund it'. And you don't want that to happen to the BBC... but the mainstream media won't report anything that won't fit into its narrative and there are loads of people who are really, really disenfranchised".*

5.2.13.1 PETs Derived from Angela's Story

- Strong rejection of mainstream media's "death porn" coverage of pandemic.
- Particular criticism of BBC hospital filming as hypocritical and sensationalist.
- Frustration with media's singular focus on COVID deaths versus other causes.
- Strong scepticism of early viral social media content from China.
- Professional concern as mental health practitioner about lockdown impact.
- Personal resistance to vaccine mandates based on principle of coercion.
- Connection between media distrust and conspiracy theory development.

- Empathy for healthcare workers forced into vaccination after working unprotected.

5.2.14 Clifford's Story | A 60-64M Stand-up Comedian of British Origin.

Discussing with Clifford, a 60-64 year old male stand-up comedian, he shared several areas, highlighting the impact of social media and the pandemic on various aspects of his life. He expressed concerns about disinformation and conspiracy theories, stating social media facilitated: *"the battle between disinformation and conspiracy theory types"*. This has led to a divisive impact of social media on friendships and relationships, as he revealed: *"I've lost a few friends actually... on Facebook lots of friendships been fractured"*. Clifford characterised the underlying dynamic contributing to this as: *"the battle between disinformation and conspiracy theory types"*. Clifford likened the experience to being in a zombie movie: *"For example I think this person's quite reasonable and then suddenly they send me a link to something, and I think they have gone into the QAnon / tinfoil hat wearing wormhole and they are lost to me"*.

Scepticism towards public health measures was evident in his peer group, with Clifford losing friends over issues like social distancing and mask-wearing. Furthermore, the pandemic led to divisiveness within the comedy community, which Clifford described as having: *"tore itself apart"*. He noted individualism and selfishness in response to public health measures, especially in the context of the Edinburgh Festival.

Maintaining mental health and creative outlets were crucial for Clifford, who said: *"I've done Facebook live gigs weekly now for... since October... for my mental health as much as anything else because it forces me to write stuff every week"*. He followed the news about the pandemic closely from the beginning, as evidenced by his diary on pandemic related media. Through analysis of his contemporaneous notes Clifford perceived government corruption in handling the pandemic, stating: *"I think there's definitely a hint of... corruption and... backhanders, etc"*. He also felt that the government was: *"behind the curve"* and attributed some of this to Boris Johnson's personality. Clifford was particularly critical with the Government taking credit for things going right: *"When it was*

going badly, they [the media] kept saying, 'the NHS this, the NHS that', and then when it started to go well they went, 'the government this, the government that'. 'We've done...' and I kept thinking to myself, 'well, you haven't really, have you?' All the while they [the government] have been behind the curve on this".

Anger and tension were prevalent during the pandemic, with Clifford describing it as a: *"pressure cooker feeling"* and noting that: *"people's anger and vituperation was multiplied many times"*.

Social media's impact on public discourse was significant, with the normalisation of certain conspiracy theories being particularly concerning. Clifford relied on mainstream media for information but recognised the influence of political agendas on public health communication. He noted the disregard for scientific data by some and the undermining of scientific expertise on social media, which has led to scientists being perceived as having their own agenda. Clifford went on to say: *"One of the things I found very, very worrying was the undermining of scientific expertise"*.

The pandemic's impact on both personal and professional life was both disorientating and debilitating for Clifford, with periods of isolation and inactivity alternating with periods of engagement. The public's perception of authority figures was also affected, with many viewing the government's handling of the Dominic Cummings incident as a turning point, with Clifford commenting: *"I think Cummings was a turning point, I really do. I think that it made people so, so angry that he had blatantly broken the rules and, in fact, the appearance at the garden compounded it because he was obviously not sorry. The whole look on his face was 'why have you dragged me to this, I don't want to be here, why should I talk to these plebs, what do they know?' So, I do think there was a weakening of people's compliance after that"*.

Communication through metaphors, such as those used by Prof Sir Jonathan Van Tam, was particularly appreciated by Clifford. On using slogans for public health messaging, he felt: *"As a comedian, there's something a bit Orwellian about 'stay at home'... I understood why they said them at first: 'stay at home, protect the NHS'. To be honest I thought that was quite good in a way, it was quite*

clear. It was when they started to change it, they dropped certain ones and then they softened it. And that just made me quite cynical". While other public health messaging, such as: *"stay alert"* was met with ridicule, with Clifford, perhaps leaning into his on-stage comedic persona, describing it as: *"fucking hopeless"*.

5.2.14.1 PETs Derived from Clifford's Story

- Personal experience of social media fracturing friendships over conspiracy beliefs.
- Likening conspiracy conversion of friends to "zombie movie" experience.
- Observation of comedy community division over pandemic response.
- Use of Facebook live performances for mental health maintenance.
- Critical analysis of government claiming credit for NHS successes.
- Strong reaction to Cummings incident as compliance turning point.
- Appreciation for Van Tam's metaphorical communication style.
- Evolution from supporting early clear slogans to cynicism about later messaging.

5.2.15 Ritu's Story | A 30-34F Lawyer of Indian Origin

Ritu, a 30-34 year old female lawyer, details her experience during the pandemic and highlights the impact and interplay of social and mainstream media, through her unique lens as someone having to take the pandemic seriously to support her family and hadn't left the house for 18 months: *"The way I've approached everything is maybe a bit odd compared to some people. I've listened to all the public health announcements and so on, but once it was announced in March... the outbreak, I actually didn't leave my house much at all for 18 months. I probably only left my house six times, physically. I didn't even go outside to walk. And I was forced to go out because my MacBook broke, so I had to go to the Apple Store repeatedly, and that was the only time"*. Reflecting on her social media consumption during the pandemic Ritu recognised the potential of social media as a tool for public health communication, but also expressed caution, sharing the following reflections: *"I do use social media every day but I'm very cautious about what I see on social media, only because of the amount of*

fake news". Ritu shared conflicting views of the utility and effect of fake news instilling fear in people: *"I see my news feed and it's lots of people liking lots of random stuff and you can tell it's just to create a lot more fear. Having said that, though, I think social media can actually be good with the pandemic because of the fear it's created in a lot of people".* Her experience underscores the importance of verifying the credibility of information shared on social platforms to avoid misinformation instilling fear in the population.

Ritu expressed her preference for more official updates: *"I follow WHO and I look at their updates because I know it's going to be factually correct and it's going to be useful, and I like the infographics".* As the pandemic unfolded, she relied on credible news sources to stay informed: *"So BBC every day, I watch it as well [read] The Times and The Guardian, they are the three key ones".* However, she acknowledged the significance of social media in disseminating information, especially among those who do not follow traditional media outlets.

She also noted that people's personal experiences with COVID-19 shared on social media could positively influence public behaviour. Ritu stated: *"But other ones about people getting COVID and their experiences, they start being more mindful and then they start thinking right, I need to do the right things, I do need to social distance. They get the message through social media".*

While she primarily depended on credible news outlets, she acknowledged the role of social media in reaching a wider audience and influencing behaviour. Ritu thought the daily news conferences were helpful: *"I actually like when they did an update, 15 minutes, on what was going on with the virus and how they were approaching it. I actually found that really helpful. I know that a lot of people found that they didn't like to keep hearing their messages over and over again because it was the same repetitive message in some cases and they found it frustrating, but I thought it was quite good. It was a quite concise summary of the government's position and what they're doing".*

Although positive about the news conferences Ritu felt inconsistent and incorrect messaging led to a breakdown of trust between the government and the public, she broke down her thoughts and

provided a detailed elaboration: *"There's two parts, one is the content, and one is the medium. From a content point of view, it's the inconsistent messages that are coming out from the government as to what to do, and the lack of planning that they seem to have in place, or awareness of their own strategy. It changes quite quickly, and I think that's what's created a lot of anxiety for people and mental health issues, but also, they've struggled to buy in to what they're supposed to do because of the inconsistency, and then they lose confidence in the government.*

The other thing is the method of the communication social media can be brilliant with communication, keeping people connected. However, there's been a lot of fake news on social media and less policing and monitoring of that... Last year it was quite bad, the things you were seeing, and people were believing them and that was spreading and with social media it spreads a lot faster and that can be a huge issue in people doing the right things and understanding the risks".

5.2.15.1 PETs Derived from Ritu's Story

- Extreme personal response to pandemic (leaving house only 6 times in 18 months).
- Complex view of social media fear as both problematic and potentially beneficial.
- Strong preference for official sources (WHO) and traditional news outlets.
- Appreciation for daily briefings despite public frustration with repetition.
- Detailed analysis of government communication failures in content and medium.
- Recognition of social media's dual role in connection and misinformation spread.
- Trust breakdown attributed to inconsistent government messaging.
- Appreciation for personal COVID experience stories influencing public behaviour.

5.2.16 Kamran's Story | A 25-29M Sales Professional of Pakistani Origin

Kamran, a 25-29 year old male sales professional, shared valuable insights into the role of media in global public health communication during a pandemic. A central concern he highlighted was the snowball effect of media coverage, stating: *"I believe that there was a snowball effect when it comes to*

the public and the media exposure towards COVID". This observation alludes to the fact more could have been shared about COVID-19 in the earliest stages of the pandemic. Once the media coverage ramped up, this does also demonstrate the amplification of public health messaging and the influence of mainstream media in shaping public understanding and reactions during a pandemic.

In terms of information sources and their reliability, Kamran discussed a variety of news outlets, including: *"Sky News BBC News... Telegraph... Independent..."* while expressing scepticism towards social media, particularly: *"Facebook news"* which was described as: *"terrible"*. Regarding social media generally Kamran shared: *"When it comes to social media I tend to stick to LinkedIn. Facebook News is terrible, and pretty much the same for other social media. They're not informative as such, more just speculative"*. Kamran emphasised the importance of using all avenues, including social media, to share public health messaging, such as: *"hands, face and space"* but also noted the potential pitfalls of relying on social media for accurate information, given the vast differences in quality of information provided on various platforms such as LinkedIn and Facebook.

The role of social media in public health communication is further explored through the discussion on the influence of celebrities and friends. Kamran observed: *"a lot of my friends would be more likely to take the opinions of another friend or a celebrity, for example"*. Thus, highlighting the potential impact of social networks and influential individuals on shaping public opinion and behaviour during a pandemic, sometimes overshadowing official public health messaging.

Moreover, Kamran touched upon the role of social media in public health communication across different countries, stating: *"it would depend on the... country social media"* and noted that: *"some of the social media is aligned with the government"*. This observation suggests that the impact of social media on public health communication may vary depending on the political landscape and the degree of government involvement in information dissemination.

Kamran felt a combination of the constantly changing messaging and the government not obeying the rules led to the public ignoring them: *"There was some sort of misinformation, I would say so. There*

was a lot of back-and-forth from the government in terms of the messages over the course of the lockdown, and that obviously caused a lot of confusion amongst the public".

"I feel the leaders of the nation didn't really practice what they preached and both Boris Johnson and now recently Matt Hancock as well. Things like that don't really reflect well to the public and the public mirror the actions of their leaders. If they're ignoring the rules or taking that as blasé then why would the public take it really seriously?".

Finally, Kamran shared his thoughts on how the pandemic forced the public to migrate to adopting digital channels: *"The pandemic, if it's done one thing, it's forced the channel towards digital whereas traditionally people were growing on digital, but they were traditionalists. They were mainly face-to-face whereas the pandemic entirely took that channel away, so it's almost like they were forced to engage digitally and interact digitally and that really boosted and streamlined the digital processes".*

5.2.16.1 PETs Derived from Kamran's Story

- Recognition of media coverage "snowball effect" in pandemic communication.
- Clear hierarchy of trust in news sources (traditional media over social platforms).
- Observation of friends valuing peer/celebrity opinions over official guidance.
- Understanding of social media's varying role across different countries.
- Criticism of government's "back-and-forth" messaging creating public confusion.
- Link between leadership rule-breaking and public non-compliance.
- Analysis of pandemic forcing digital adoption among traditionalists.

5.2.17 Sophie's Story | A 35-39F Scientist of British Origin

Sophie, a 35-39 year old female scientist, revealed her perspectives on various aspects of media and communication during the pandemic. She initially relied on mainstream media as her primary source of information but eventually switched to more relevant sources due to the rapid change in scientific understanding and the prevalence of misinformation on social media platforms. She emphasised that:

"not everybody's opinion is valid" highlighting the importance of considering the validity of the information shared on such platforms given social media treats everybody's opinion as equally valid even when its isn't: *"Social media, there was so much fake news and commentary on it I just don't see it as a force of good in any way, shape, or form. I think it creates more questions and more misinformation and gives people who aren't qualified the ability to express their points of view on the same level as somebody who is. There's no kinds of filters; there's nothing to stop people saying anything. And yes, everybody is entitled to an opinion but not everybody's opinion is valid and it's the validity of opinions that just goes out the window on social media"*.

Sophie noted initially a lot of people were asking her things from a scientific perspective, but that changed in the summertime as that was when: *"everyone became an expert and people weren't asking the questions anymore and they were repeating what they'd heard in the mainstream media or on social media"*. There was one conversation with her father that particularly stood out: *"I remember having a conversation with my Dad and he was saying 'you know, this virus can mutate' and all viruses mutate... and because everyone had been exposed [via social media] to low-level science, they thought they could understand it and that's what they were repeating as gospel and the nuances behind how viruses change and how science changes rapidly, it took a while for people to grasp that"*.

As a scientist Sophie appreciated the efforts of mainstream media in correcting mistruths circulating on social media. However, she acknowledged the challenges in interpreting scientific data and the misrepresentation of scientific literature, by simplifying it for public consumption. The scientist criticised the media's portrayal of scientific literature, asserting that they tend to focus on: *"juicy, interesting points"* while ignoring crucial aspects, such as study design flaws or conclusions. By taking the: *"click bait"* from a journal article without providing context, the media inadvertently promotes misinformation. The impact of this approach is that people remember snippets of information, which they naively believe to be the whole story. This, in turn, leads to further dissemination of

misinformation and misinformed discussions among the public. Sophie also observed a hindsight bias, wherein people claimed expertise in hindsight.

Regarding communication during the pandemic, Sophie expressed a deep disappointment with the Institute of Biomedical Sciences and the lack of contradiction from relevant bodies, stating: *"I was really disappointed at the Institute of biomedical sciences, lack of communication in relation to testing and the capacity that laboratories have in the country"*. She criticised the government's response to testing capacity, asserting that the claim of lacking capacity in the country back in March was: *"an absolute lie"*.

Sophie also discussed the public's awareness of infectious diseases and prevention measures, expressing surprise at the general public's level of uncertainty. She shared her perspectives on the origin of the virus and natural mutation, trusting peer-reviewed literature and scientific sources over sensationalised media reports.

Sophie criticised the sensationalism of variants, noting: *"I think sometimes the variants get sensationalised, and they talk about variants like it's a new thing"*. She emphasised the importance of clear communication and reflected on the media's role during the pandemic. In her view, the media did not put enough pressure on the government to take stricter measures, such as closing borders, stating: *"part of me thinks they didn't do enough and put enough pressure on the government to close the borders and that type of thing"*.

5.2.17.1 PETs Derived from Sophie's Story

- Strong criticism of social media equalising valid and invalid scientific opinions.
- Observation of public shift from asking questions to claiming expertise.
- Frustration with public's superficial grasp of scientific concepts from media.
- Criticism of media's "click bait" approach to scientific literature.
- Professional disappointment with scientific bodies' communication.

- Concern about sensationalisation of virus variants in media.
- Recognition of changing public attitudes towards scientific authority.
- Critique of insufficient media pressure on government border policies.

5.2.18 Ben's Story | A 25-29M Medical Educator of British Origin

Ben, a 25-29 year old male pharmaceutical company medical educator, highlighted the personal impact mainstream media had on his reaction once the pandemic had been announced. Mainstream media, such as the BBC News, played a significant role in raising pandemic awareness, as he mentioned: *"I remember watching the BBC News for the first two months, seven o'clock in the morning being [right] switch on the news!"*. This was something new for Ben as he was religiously watching news first thing in the morning for the first time. He stopped after the initial phase of the pandemic as it became: *"repetitive and depressing"*. On lockdowns Ben felt they were: *"A bit of a novelty initially, some that would have been fine for 6 weeks – not the 16 months they turned out to be"*.

However, Ben also acknowledged the influence of conspiracy theories originating initially on social media and their gradual seepage into mainstream media: *"I think, I heard that a lot. Initially not in the mainstream media, and then it came into the mainstream media and it's still coming through the mainstream media even now"*.

Ben expressed a personal preference for podcasts as an information source, stating: *"I'd rather just be really specific on what I want to listen to and just straight into [the point]"*. Social media usage during the pandemic increased, with platforms like YouTube and Reddit becoming more prevalent in sharing information and opinions related to COVID-19: *"I also used Reddit a fair amount, and that went off [significant increase of usage] in terms of COVID"*. Ben went on to say he appreciated tools such as Reddit and Twitter as: *"for news can [they] be absolutely incredible because you get first-hand sources, unfiltered, uncensored, straight to you on your phone. So, I use a lot of that for the COVID side of things, I found that really interesting"*. Even though not an avid user of Facebook Ben had the view: *"I*

imagine that [Facebook] would be an absolute firestorm of misinformation. I think if I'd been on it then, I'd have been off it pretty quickly".

Ben had the view the public were confused by conflicting advice and reports for example about masks: *"There was a lot of people saying that masks don't do an awful lot initially. Fauci and his team were publishing things around the fact that the masks weren't effective, initially. So, I think it's quite understandable that people felt like 'I don't need to do these things', but I think as more information came through, I thought 'this is the way to go'. But it doesn't make it easy when you do have these conflicting reports and studies coming out. That is always the risk of publishing this stuff and having to go back on it, you lose trust. I don't think I lose trust; I think that's exactly what science is: you look at the data and you initially think it's X and it turns out it's Y and you change your answer to Y. That's what science is really. But I think a lot of the public will lose trust"*.

Ben placed trust in expert opinions and scientific sources over friends, family, and celebrities who lacked expertise in the subject matter: " *Yeah, so definitely from a trained professional scientist, a doctor, even a sociologist talking about social distancing and things like that... definitely over my mates, over my family, people who probably don't know"*. Ben drew from his own experience of working with flu vaccines in the pharmaceutical industry: *"Thinking about some stuff I did on flu vaccines in the past, having someone of a prominence or standing in a local community or demographic where the uptake is poor definitely has its uses. I think maybe they should have some backing in those areas, because you can have celebrity doctors or celebrity scientists, that absolutely has its uses"*.

The impact of social media was twofold: it provided access to a wealth of information and facilitated communication but also exacerbated the spread of misinformation and conspiracy theories. He noted: *"Social media, I think that is exacerbating what was probably already there and people who are already saying these things, but they're now getting a bigger platform because you had this external environmental factor that was just feeding the flames basically"*.

Celebrities played a complex role in public health messaging. While they could amplify important messages, Ben felt their involvement should be supported by expertise in the field, as they could also inadvertently spread misinformation or come across as preachy: *"I think if they are just promoting things without actually knowing, and they can come across quite preachy a lot of celebrities, a lot of American ones as well"*.

Ben drew on his experience from primary care on the risk of exposing the public to too much information something he felt risked causing fatigue: *"People can get a bit fatigued with overload of information. There's a thing called alarm fatigue, especially in primary care, when you have your GP systems and there's alerts going off all the time around medications and you get totally immune to it. I think there is always the risk of that. And you're also making the public aware of things that often they won't have an awful lot of understanding around, and they might not have the scientific literacy. That can be the negative side of it. But I think on the whole it's better to be telling people those kinds of things and letting them make their own minds up about it"*.

5.2.18.1 PETs Derived from Ben's Story

- Evolution from initial religious news watching to news avoidance due to repetition.
- Complex view of social media platforms' varying utility (Reddit/Twitter valued, Facebook distrusted).
- Professional insight into public information fatigue from primary care experience.
- Understanding of how scientific method conflicts with public trust building.
- Nuanced view on celebrity involvement requiring expert backing.
- Preference for specific, targeted information through podcasts.
- Recognition of conspiracy theories' migration from social to mainstream media.
- Analysis of social media amplifying existing misinformation tendencies.

5.2.19 Alice's Story | A 25-29F Strategy Director of British Origin

Alice, a 25-29 year old female Strategy Director in UK central government, provided relevant insights and also balance as someone working within central government co-ordinating the pandemic response. Alice talked of how the government brought in behavioural psychologists to try and steer and monitor public response to pandemic and messaging. Personally, she felt the elements of governments response to COVID was chaotic and inconsistent, frustrated the public and made the UK a laughingstock to the rest of the world especially the Matt Hancock affair: "We need to be, in the media, taken seriously [in order for UK to be considered a world leader]. Stuff like with Matt Hancock and his aide coming out makes us look like a laughingstock and then other countries don't trust us".

When news of the pandemic first came out Alice's thoughts were consistent with the early advice that only old people would be affected by the virus. This in turn caused her primary concern, something she admittedly felt was selfish, was around her promotion prospects being limited once being forced to work from home. As more people started talking about: *"this virus from China"* and Netflix started showing a few movies about pandemics: *"it started getting a bit more real, a bit scarier. I think the fear of the unknown was definitely a bit scary but initially, probably like a lot of people, I was a bit sceptical"*.

Once news leaked a lockdown announcement may be coming Alice's initial dismissive then sceptical thoughts dissipated*: "I remember when the announcement came out and there was fear of a lockdown in London, and I was one of those people that ran for the train [out of London] because my family's from up north. So, I got the train, took my laptop, and got up here, and the next day it hit in the news that this virus is happening"*. When discussing her news preferences Alice preferred Sky News and didn't trust the BBC because of their connection to the government, through being publicly funded: *"I have the Sky News app, so that's my main thing, Sky News, because I feel like it's more trustworthy than the BBC, and also frankly I just don't like the BBC"*. Alice saw the BBC as an extension of the

government communication team: *"Whereas Sky News are totally independent. The BBC for me is no different than looking at my emails from work, so I'd rather look at Sky News"*.

During a cabinet office meeting Alice was told by senior advisors herd immunity would take care of COVID: *"I remember I was in the cabinet office, and we had an all-staff meeting. The PM came in and then left suddenly. But then there was a former National Security Advisor, the most senior civil servant and at the time who was also head of the whole civil service and he was stood at the front with, the Deputy National Security Advisor. [We were told] 'we've had meetings with SAGE and some of these scientific advisors, and basically herd immunity is going to save us all and it's going to be fine'. He said, 'this is going to be leaked to the press in a couple of days, but I don't want anyone to worry'. Everyone was just so chilled; everyone was hugging each other, and it was fine"*.

Interestingly Alice felt there was a reluctance to accept and own mistakes, such as those relating to herd immunity: *"Even if we do get our position wrong, like we did on herd immunity, own it and apologise and say, 'this wasn't the right approach'. But I think people have too many opinions in the communications team in Number 10 and the cabinet office on what we should do which then means nothing actually gets done. So, I think we need to be a bit more assertive and then just be a bit more grown-up in terms of who we have in power"*.

Alice provided interesting insights on the use of psychologists being brought in by government to predict how the public would react to messaging around COVID rules: *"In the Number 10 comms team, there's a dedicated unit of people who think about how the public are going to react, and there's behavioural psychologists working in government that talk to them about how this is going to be perceived by the public so there definitely was a huge element of 'we need to control public behaviour and not have riots and everything else'. That was definitely thought about. In terms of the health thing, I think that was also thought about, but I think it was a secondary thought after 'how do we control the public?'"*. This was against a backdrop of a disorganised approach to information being relayed throughout the Home Office: *"I found out through work first, sometimes like an hour before it would*

be leaked, which is how unorganised and chaotic it was. The longest advantage I had in terms of getting information was a day... and sometimes I would hear it through the news".

Alice felt the government was not always upfront about when they didn't know things, something somewhat problematic when dealing with a novel phenomenon: *"...there wasn't an open and honest conversation about it... A bit more honesty about not knowing, that would have helped people trust the government a bit more. I don't think government's like to admit when they don't know what's going on, they like to think that they have everything under control. Even on briefings that I've done and meetings that I've sat in, there's a lot of 'faking it' talk and then afterwards people laughing about 'we didn't know shit'".*

The calamitous nature of government rule breaking, and mistakes was particularly damaging to public trust: *"I think it's damaging to a point where you can't turn back from it and the public then just don't trust anything and it has a knock-on effect. So, with Matt Hancock and his aide in the media, it then meant that not only did people not trust him personally, but they also didn't trust the whole health system and I think the conspiracy theories then just got out of control. So, it has a really detrimental knock-on effect. The public are sometimes good at understanding that people make mistakes and one mess-up by a politician on a decision is fine but when it's a constant thing it has a knock-on effect in a really bad way and it's very difficult to come back from".*

On communicating science, with the appropriate level of detail, to the public Alice had the following view: *"The problem is people like myself, my parents, have a really rubbish baseline knowledge of science and biology that if anything comes out in the media about it and goes into too much detail, it deters people from actually reading it. And that's the difficulty, because it needs to be so simplistic that the ordinary man on the street can understand it, but if it's too simplistic, I don't think that's even possible because science isn't simple, so it's tricky".*

Alice provided valuable insights on the use of slogans to communicate science: *"I remember one because my best friend's fiancé wrote it, that was 'Eat Out To Help Out', and also because that was*

taken the piss out of by almost everyone. I also remember 'Hands, Face, Space'. A lot of them are mocked by people, which actually I don't think it's really a negative thing because at least it makes people remember it when they have these memes".

Reflecting deeper on the effect of slogans and the seriousness of messages conveyed Alice shared: *"I think sometimes they do have a positive effect but if you try and over-engineer it, the public aren't stupid and see that it's a campaign rather than something that's in the public interest. I think the 'Eat Out To Help Out' thing was fine because that was about the economy, it was about trying to help people get out there and it wasn't that serious in terms of, 'if you don't go and eat out, nothing's going to happen to you' but in terms of the serious stuff like keeping your distance, washing your hands, I think that needs to be more carefully thought about and it shouldn't be a jovial, washing your hands thing because people then don't take it seriously".* The 'Protect The NHS' messaging was seen as hypocritical especially from a Conservative government: *"I think it's good because it's clear and the public need a clear direction, but I think 'protect the NHS' really wound people up, especially coming from a Tory government. So, I think actually it had the opposite effect on some people if you're trying to politicise the NHS, which I think the messaging could have been perceived as that".*

One phrase Alice felt was particularly damaging was 'Freedom day': *"I think [the name 'Freedom Day'] is quite damaging because that implies that we're never going to have to do this again or go back to any sort of social distancing measures. I think for the younger generation it's quite toxic because it implies that you can do whatever you want, you can break the rules, you're free to do whatever. I think people could go over the top in terms of partying, doing drugs, and not [considering] the fact that this is a pandemic and just because the Prime Minister says so on one day of the year doesn't mean it's vanished forever. I think people are going to think now it's disappeared, and it's gone and when it does come back, which inevitably I think it will do in some form or another, people will be more depressed about going back into a lockdown".*

Alice also shared some thoughts of the pros and cons of social media in a pandemic: *"In some ways [social media] has had a positive effect [on how public perception of COVID] because you can see pictures of people in hospital and there is evidence on social media that this is a real thing and it's a real risk. But I think that can be shown through news sources like Sky News and people can see it that way. So, I think the negatives outweigh the positives in terms of I see people are sharing stuff that is negative and anti-COVID, like conspiracy theories.*

I think people are more likely to form networks that link them to a conspiracy theory that isn't true. If you read something so much, you can convince yourself that it's true, and with all the material out there on social media about conspiracy theories and the fact that the virus is a myth, I think that does more harm than it does good because you can find them so easily".

Mistrust and lack of transparency from the government and media can hinder public health communication. Alice recalls trust issues surrounding leaked information and the subsequent erosion of trust in the government. Furthermore, the lack of scientific understanding among the general public can impede the effectiveness of communication: *"I think the problem is people, like maybe myself, my parents have such a baseline, like a really rubbish baseline knowledge of science, biology that if anything comes out in the media about it and goes into too much detail, it deters people from actually reading it"*.

Alice also discusses the importance of clear and consistent messaging, such as the 'Follow the Science' campaign: *"I feel 'follow the science' was the best one. Yeah, I think that was, I think that was quite good"*. However, the interplay between social and mainstream media can also contribute to the spread of misinformation and conspiracy theories, thus complicating public health communication efforts.

5.2.19.1 PETs Derived from Alice's Story

- Insight into government's use of behavioural psychologists for public messaging.
- Internal perspective on chaotic government communication and information leaks.

- Critical of BBC as government extension, preferring independent news sources.
- Witness to early government confidence in herd immunity approach.
- Recognition of government's inability to admit uncertainty or mistakes.
- Analysis of slogan effectiveness including unintended mockery.
- Concern about "Freedom Day" messaging implications for young people.
- Complex understanding of social media's dual role in evidence sharing and conspiracy spreading.

5.2.20 Maddison's Story | A 25-29F Medical Educator of Australian Origin

Maddison, a 25-29 year old female pharmaceutical medical educator, expressed a range of concerns in her interview, particularly regarding the media's role in communicating information about the pandemic. She highlighted the conflicting information in the media, making it difficult to discern the truth about lockdown measures and other aspects of the pandemic. She noted: *"there's been conflicting news articles, and you can't always believe exactly everything they say. So, one minute I don't know we're coming out of a lockdown. The next minute they're telling us, we're going into a lockdown"*.

Frustration with media coverage was evident as she discussed the need to turn off the news at times to maintain her sanity, stating: *"It can get frustrating. So, I think there was a period of time throughout the lockdown where I just had to turn off the news. Cause I didn't know what was going on. I didn't know what to believe, so I just had to shut it out just to keep my sanity"*. Additionally, she acknowledged the difficulties in assessing the accuracy of information, particularly for individuals without a medical background.

Despite Maddison's frustration, she recognised the reliance on media for guidance and updates, including information on travel restrictions. However, she found the inconsistency in travel restrictions to be: *"a bit of a shambles"*. She also shared her perceptions of lockdown measures, suggesting a

preference for extended lockdowns to prevent further restrictions and the back-and-forth nature of current measures. On the back and forth nature of advice Maddison mentioned: *"We're all just a bit frustrated now. Going back and forth in this swinging of going into lockdowns, coming out of lockdowns, different advice. Different advice in the media. I'm personally frustrated"*.

Maddison's views on pandemic management have changed over time, particularly in relation to vaccine hesitancy and the strictness of lockdown measures. She commented on the effectiveness of vaccination programs, contrasting the UK's success with Australia's fewer effective efforts. Maddison also touched on the role of media in public health communication, the resonance of health messages, the influence of celebrities on health communication, and the impact of conflicting messaging and rule-breaking by government officials on public perception.

Maddison shared interesting insights in how having access to different media reporting on the vaccine, enabled her to see what was happening in the UK and her native Australia with regard to vaccine messaging: *"I follow a couple of Australian newspapers still, and I can see there's a real difference in terms of the vaccine. They've had a real weird vaccination messaging. I think there's a lot of hesitancy in Australia to get the vaccine, there's been a lot of over-reporting of the AstraZeneca side effects and other precautions of taking the vaccine. They've had different messaging about the vaccinations in Australia compared to what we've had [in UK]"*.

Maddison had some interesting views on how lockdowns continued to be communicated as a thing despite the changing circumstances of the pandemic, something which left her conflicted: *"At the started I understood that we had to be in lockdown to prevent deaths and things like that. I still understand that now, but I don't know, this might be a bit contentious, but I don't know if we can keep locking everyone up. The deaths have become quite minimal now, or less than they were before, so I don't know if it's a suitable argument to keep locking everyone up over. So, my views have changed, especially now that the majority of us have been vaccinated"*.

5.2.20.1 PETs Derived from Maddison's Story

- Frustration with conflicting news coverage leading to news avoidance.
- Recognition of interpretation challenges for those without medical background.
- Criticism of "shambles" in travel restriction communication.
- Evolution of view on lockdown necessity as pandemic circumstances changed.
- Comparative insight into UK versus Australian vaccine messaging.
- Experience of media fatigue from constant back-and-forth advice changes.
- Understanding of initial lockdown rationale but questioning continued use.
- International perspective on different national approaches to vaccine communication.

5.3 General Public - Group Experiential Themes (GETs)

Table 5: General Public GETs as derived from Personal Experiential Themes

Group Experiential Theme (GET)	Personal Experiential Themes (PETs)
Evolution of Media Trust and Consumption	• Evolution from initial religious news watching to avoidance (Ben) • Evolution from supporting early clear slogans to cynicism (Clifford) • Evolution of public trust from initial acceptance to questioning (Tariq) • Evolution from seeing pandemic as "them not us" issue (Chloe) • Initial dismissal as "just another news story" until personal incidents (Charles)
Information Source Hierarchy	• Clear hierarchy of trust in news sources (Kamran) • Strong preference for BBC News as trusted source (Lena) • Critical of BBC as government extension (Alice) • Complex relationship with news sources (Charles) • Trust limited to traditional reputable journalism sources (Kenneth)
Social Media Dynamics	• Personal experience of social media fracturing friendships (Clifford)

	• View of social media as “complete disaster” creating echo chambers (Nigel) • Complex view of social media platforms' varying utility (Ben) • Recognition of social media’s dual role (Ritu) • Social media enabling unqualified voices (Chloe)
Mental Health and Media Consumption	• Strategic limitation of media consumption to manage anxiety (Lena) • Recognition of media’s role in mental health impact (Tariq) • Strong anxiety reaction to media coverage creating panic (Howard) • Use of Facebook live performances for mental health maintenance (Clifford) • Experience of media fatigue (Maddison)
Public Understanding of Science	• Recognition of uncertainty as destabilising force (Kenneth) • Understanding of how scientific method conflicts with public trust (Ben) • Frustration with public’s superficial grasp of scientific concepts (Sophie) • Recognition of being susceptible to fake videos despite scientific background (Howard)

	• Recognition of interpretation challenges without medical background (Maddison)
Government Communication Analysis	• Criticism of "back-and-forth" messaging creating confusion (Kamran) • Internal perspective on chaotic government communication (Alice) • Detailed analysis of government communication failures (Ritu) • Critical view of government chaos preventing strategy (Kenneth) • Criticism of UK government's unclear messaging (Graham)
International Perspectives	• Active seeking of international media perspectives (Margaret) • International perspective on different national approaches (Maddison) • Reliance on international connections for broader perspective (Marcia) • Understanding of social media's varying role across countries (Kamran) • Recognition of proximity effect through Italy crisis (Nigel)

5.4 Group Experiential Themes Across Healthcare Professionals & General Public

Table 6: HCP & General Public GETs

Group Experiential Themes	
Healthcare Professionals	**General Public**
Professional Identity & Media Responsibility	Evolution of Media Trust & Consumption
Evolution of Pandemic Perception	Information Source Hierarchy
Strategic Information Management	Social Media Dynamics
Digital Communication Transformation	Mental Health & Media Consumption
Professional Versus Public Understanding	Public Understanding of Science
Impact on Professional Practise	Government Communication Analysis
Communication Clarity & Trust	International Perspectives

6.0 Discussion

This chapter examines how the findings from this research relate to and extend the contemporary literature on media's role during the COVID-19 pandemic. Building upon the Group Experiential Themes (GETs) identified through cross-case analysis and detailed in the results chapter, this discussion explores how participants' lived experiences illuminate broader patterns in public health communication during a global crisis.

The analysis process moved from individual accounts through Personal Experiential Themes (PETs) to identify overarching GETs that captured shared elements of the pandemic media experience. While preserving the idiographic nature of each participant's story, this systematic thematic development allowed broader insights to emerge regarding how social and mainstream media shaped public understanding and response.

Each section of this discussion examines some of the key themes to emerge from this research in relation to existing literature, integrating illustrative examples from participant narratives to ground theoretical insights in lived experience. The chapter concludes by exploring the strengths and limitations of this research approach.

6.1 Summary of Findings

The research questions of this project included:

1. How social and mainstream media shaped public perceptions and responses during the COVID-19 pandemic?"
2. What were the lived experiences and understandings, among both medically qualified and members of the public, of social and mainstream media broadcasting 15 months into the COVID-19 pandemic?

Through the analysis of 40 in-depth interviews, this research revealed distinct patterns in how these two groups engaged with and were affected by pandemic-related media content.

Analysis of the research findings revealed several key dimensions that directly address the central research questions. The first aim of the research was to: "Explore the impact of social and mainstream media on public understanding and behaviour during the COVID-19 pandemic". Regarding how social and mainstream media shaped public perceptions and responses, the data illuminated the emergence of complex information hierarchies and trust frameworks that evolved throughout the pandemic period.

The second aim of the research was to: "Investigate the challenges of information dissemination and consumption in the contemporary media environment during a global health crisis". The research successfully identified critical challenges in information dissemination. The public generally demonstrated greater vulnerability to misinformation. The lived experiences of healthcare professionals and members of the public manifested distinct yet interconnected patterns. Healthcare professionals' narratives centered around themes of professional identity and media responsibility, reflecting their unique position at the intersection of information consumption and dissemination. Concurrently, the general public's accounts revealed evolving patterns of media trust and consumption that shifted substantially as the pandemic progressed. Both cohorts demonstrated significant transitions in their pandemic perception over time, with mental health considerations and media consumption

The fourth aim of the research was to: "Identify key factors influencing the effectiveness of public health communication during the pandemic". The findings demonstrated significant transformations in media consumption patterns, alongside the substantial impact of digital communication modalities on information dissemination. Furthermore, a nuanced interplay between professional and public understanding emerged, accompanied by notable psychological implications of sustained media exposure.

The following discussion, all shaped by participants' perspectives, provides a unique window into the lived realities of media engagement amidst the COVID-19 pandemic. The following sections examine

the findings of this research in relation to the contemporary literature, offering both theoretical insights and practical implications for future public health communication strategies.

6.2 Theoretical Framework & Findings

The findings from this research can be understood through several key theoretical lenses established in communication and media studies. These theoretical frameworks help explain the complex dynamics observed in how social and mainstream media shaped public responses during the COVID-19 pandemic.

Source credibility theory (Hovland and Weiss 1951) provides valuable insight into why participants demonstrated varying levels of trust in different information sources. Members of the public in this study, such as Howard and Graham, expressed particular trust in figures like Professor Sir Jonathan Van Tam, illustrating how perceived expertise and trustworthiness can significantly influence message reception. Conversely, the general public's evolving trust patterns, particularly their scepticism towards celebrity endorsements as expressed by Tariq, align with source credibility theory's emphasis on the importance of perceived authenticity and expertise.

Message framing theory (Tversky and Kahneman 1981) helps explain participants' reactions to different types of pandemic communication. The study revealed how gain-framed versus loss-framed messages affected public response, particularly evident in participants' reactions to government messaging. As Agnieszka noted, the importance of transparency and clear messaging from the start reflects Gallagher et al's findings that carefully framed messages can enhance the effectiveness of health communication strategies (Gallagher and Updegraff 2012).

McLuhan's channel effects theory, proposing that the medium itself shapes message reception, was particularly relevant given the modern multi-platform media environment (Gallagher and Updegraff 2012; McLuhan 1994). This was evidenced in how participants like Louise strategically used different platforms - WhatsApp for close communication and Twitter for broader information gathering. The

findings support Worchel et al's observation that media effectiveness depends on both message alignment with audience beliefs and communicator trustworthiness (Worchel, Andreoli, and Eason 1975).

The evolution of health communication through social media platforms, as outlined by (Moorhead et al. 2013), was clearly demonstrated in this study. Participants' experiences reflected the benefits and challenges of social media in health communication, from increased accessibility to information quality concerns. This was particularly evident in how healthcare professionals like Peter navigated the challenges of moderating patient support groups during periods of intense information flow.

6.3 The Looming Threat of Viral Misinformation

The pre-pandemic warnings about viral misinformation as a significant public health threat (Larson 2018) proved prescient during the COVID-19 pandemic. Larson's research on vaccine confidence, which surveyed 67 countries, had already identified how rapid spread of misinformation was undermining trust in vaccines before COVID-19 emerged. When the pandemic struck, the uncertainty surrounding the virus's aetiology and consequences created conditions where institutional communication often became misaligned with media coverage, resulting in an indistinguishable mix of misinformation, unverified rumours and intentionally manipulated disinformation (Larson 2020).

This research found misinformation to be a significant concern, emerging as a key theme in 24 of the 40 interviews. When discussing the rampant spread of misinformation during the COVID-19 pandemic, most participants agreed it was propagated via social media channels. This concurred with the findings from my narrative review, where it was discussed how the exponential rise in innovative online information sources, such as social media applications, have allowed for instantaneous global dissemination of misinformation through the 'virality' phenomenon (Denisova 2020).

The experiences of these participants illustrated how source credibility theory (Hovland and Weiss 1951) operates in practice - as traditional sources of authority competed with an expanding array of

voices across social media platforms. Healthcare professionals demonstrated distinct patterns in their approach to misinformation, with Personal Experiential Themes (PETs) revealing a strong sense of professional duty to correct misinformation (Aiste) and commitment to verified information in patient communication (Simon).

The general public's experience with misinformation manifested differently, as evidenced by the Group Experiential Theme (GET) of 'Evolution of Media Trust and Consumption'. Participants like Ben described an evolution from initial "religious" watching of news to avoidance, while Clifford's journey from supporting early clear slogans to cynicism exemplifies how trust in information sources evolved over time. This aligns with channel effects theory (McLuhan 1964), demonstrating how different media platforms influenced message reception and trust.

Larson's emphasis on monitoring news and social media for early signals of misinformation remains relevant. The findings from this research, particularly through the lens of 'Professional Identity and Media Responsibility' GET, showed how healthcare professionals like Peter navigated these challenges. Peter's experience with Facebook's approach to content moderation - placing responsibility on group owners while threatening closure for misinformation - illustrated the complex dynamics of managing health information in social media spaces. This is one strategy that could be considered to combat disinformation.

Furthermore, Larson's work emphasises the importance of dialogue and engagement in combating misinformation. The author's argument that addressing existing perceptions and building trust is crucial goes beyond simply providing educational materials and resources. My narrative review also discusses how the concept of trust can be complicated when attempting to distinguish between mis- and disinformation, whether false information has been disseminated unintentionally or deliberately as a propaganda strategy by individuals with vested interests. This approach acknowledges the complexity of vaccine hesitancy and the need for meaningful conversations to address concerns and misconceptions. Interestingly Agnieszka, Evelyn, Margaret, and Maddison all touched on the

importance of empathy and incorporating it into all COVID-19 communications whether that be via mass media or in one-to-one doctor patient consultations.

The lived experiences of participants revealed several key dimensions of the misinformation challenge:

1. Professional Response: Healthcare professionals demonstrated a strategic approach to managing misinformation, as evidenced by their PETs around professional duty and information verification.
2. Trust Dynamics: Both healthcare professionals and the public showed evolving patterns of trust, with many developing more sophisticated approaches to evaluating information sources over time.
3. Platform Dynamics: Social media emerged as both a primary vector for misinformation and a potential tool for combating it, something critical to consider for future pandemics given the ubiquitous nature of the medium.
4. Impact on Practice: The 'Impact on Professional Practice' GET revealed how managing misinformation created additional burdens for healthcare professionals, with Christina reporting exhaustion from managing misinformation in patient interactions.

6.3.1 Countering Misinformation & Encouraging Critical Appraisal

The challenge of countering misinformation during the COVID-19 pandemic highlighted the importance of critical appraisal skills in the modern media environment. Through the lens of Schiavo's framework for effective health communication, which emphasises evidence-based and audience-specific approaches, this research revealed distinct patterns in how different groups approached information evaluation (Schiavo 2013).

The 'Professional Understanding Versus Public Understanding' GET illuminated significant differences within the sample population studied in how healthcare professionals and the general public approached critical appraisal. Healthcare professionals demonstrated what (Stephens, Sarkar,

and Lazarus 2022) describe as uncertainty tolerance, developed through their professional training. This was evidenced in the participants' PETs, with Hannah recognising the privilege of accessing research journals, and Pravin expressing concern about public confusion when even medical professionals were uncertain.

For the general public participants', the 'Public Understanding of Science' GET revealed more complex dynamics. Kenneth's recognition of uncertainty as a destabilising force and Ben's understanding of how scientific method conflicts with public trust demonstrated the challenges of critical appraisal without professional training. Even those with scientific backgrounds, like Howard, acknowledged being susceptible to misleading content, highlighting the sophisticated nature of modern misinformation.

Critical appraisal emerged as particularly crucial in social media environments, where McLuhan's channel effects theory helps explain how platform characteristics influence message reception. Martin and Alice's strong advocacy for source evaluation reflected an understanding of how digital platforms can both facilitate and complicate information assessment. This aligns with Moorhead et al's observations about social media's growing role in health communication and its associated challenges (Moorhead et al. 2013).

This research identified three key approaches to promoting critical appraisal:

1. *Encouraging diverse source consultation*: Participants who actively sought varied information sources, including different news outlets, blogs, podcasts, and expert opinions, reported feeling better equipped to evaluate information quality.
2. *Developing media literacy*: Hannah's observation about the British education system's failure to teach critical thinking points to a broader need for enhanced media literacy education.
3. *Professional-public bridge building*: The 'Professional Identity and Media Responsibility' GET revealed how healthcare professionals like Aiste took on roles in helping others evaluate information, suggesting a potential model for improving public critical appraisal skills.

However, these approaches represent long-term solutions requiring sustained investment in public education and health communication infrastructure. As evidenced by the 'Evolution of Media Trust and Consumption' GET, participants' ability to critically evaluate information evolved at significantly different rates throughout the pandemic, with marked differences between healthcare professionals and the general public. This suggests that while crisis periods can accelerate the development of critical appraisal skills for some when supported by appropriate guidance and resources, others may respond by disengaging entirely from information sources - a finding that has important implications for future pandemic communication strategies.

6.3.2 More Than Merely Misinformation?

There was a complicated interconnected dynamic occurring across social media driving the COVID-19 infodemic, comprising both willing and unwilling participants in the spreading of mal-, mis- and dis-information. A dynamic that is worth exploring in the context of interpreting the results of this research project. While deliberate COVID-19 disinformation campaigns, designed to disseminate confusion and fear, have been documented (Swan 2020) it is not correct to attribute the scale of the infodemic to them alone. The COVID-19 infodemic appears to have been sustained and spread beyond the usually naturally constrictive geographical boundaries by a wider group of online political participants who ended up propagating misinformation inadvertently. This has been labelled as a 'paradox of participation' and is a well-documented phenomena most likely to occur through for example those engaging enthusiastically in online political debate – generating peer-to-peer misinformation transmission (Valenzuela et al. 2019). This situation becomes further complicated by new users coming to either the disinformation or misinformation, adding their own misleading commentary and sharing to their networks (Anspach and Carlson 2020). This additional commentary fuels a further dynamic whereby social media users are more likely to share and spread content from those they trust (Buchanan and Benson 2019), more likely to believe its validity (Sterrett et al. 2019), more likely to attribute importance to the issue (Feezell 2018) and more likely to later trust the source (e.g. external

website) upon which their connection added commentary (Turcotte et al. 2015). This sequence clearly has consequences for the successful communication of public health messaging. The situation however spirals further still as the more widely content is endorsed, via liking, tweeting, re-tweeting with comments or sharing, the more likely it is to be further trusted/shared (Luo, Hancock, and Markowitz 2022) via a 'bandwagon heuristic' (Sundar 2008). The more people are subjected to content containing claims created and compounded in this way by multiple social media users, the more they are at risk of falling victim to an 'illusory truth effect' – wherein individuals have greater confidence in in the truthfulness of a claim given past exposure (Pennycook, Bear, et al. 2020).

6.4 Variable Individual Impact of COVID-19 Related Media

Following review of the literature, there is limited contemporaneous research examining the lived experience and impact of media output and consumption during the pandemic. This research, examining the phenomena 15 months into the COVID-19 pandemic, provides valuable insights into how different groups processed and responded to pandemic-related media content, illuminated through the lens of established communication theories.

The markedly variable responses from participants illustrate how message framing theory (Tversky and Kahneman 1981) operates in real-world crisis scenarios. The 'Evolution of Pandemic Perception' GET among healthcare professionals and 'Evolution of Media Trust and Consumption' GET among the public revealed a common pattern: the moment of realisation regarding COVID-19's seriousness typically occurred when something deeply personal was affected. Whether it was the cancellation of professional conferences, disruption to medical training, postponement of football matches, or exam cancellations, this finding suggests that message impact is significantly influenced by personal relevance rather than abstract risk communication alone.

This personalisation effect was particularly evident in the transformation of individual perspectives. Becky's journey from being a: *"Naysayer at the beginning, thinking it was all a storm in a teacup"* to changing her position after contracting COVID-19 early in the pandemic exemplifies how direct

experience altered media message reception. This aligns with Worchel et al's findings about message acceptance being influenced by alignment with personal experience (Worchel, Andreoli, and Eason 1975).

The 'Professional Versus Public Understanding' GET revealed how different groups processed pandemic information. Healthcare professionals, as evidenced by their PETs, demonstrated what (Geller, Faden, and Levine 1990) describe as professional tolerance for uncertainty. However, this professional perspective sometimes created tensions, as seen in Pravin's concern about public confusion when even medical professionals were uncertain.

Anjali's observation about the pandemic affecting everyone differently highlights the importance of what (Schiavo 2013) terms 'audience-specific' health communication. While mainstream media operated under regulatory frameworks regarding content, tone and volume, social media platforms operated with different imperatives, reaching and impacting upon comparable audience sizes but in the absence of regulation.

This research identified three key patterns in individual media impact:

1. *Professional identity influence*: Healthcare professionals' responses were shaped by their 'Professional Identity and Media Responsibility' GET, with many feeling a duty to interpret and contextualise information for others.
2. *Mental health considerations*: Both groups' experiences aligned with the 'Mental Health and Media Consumption' GET, though their coping strategies differed. Lena and Claudia's strategy of selective media avoidance contrasted with Margaret's intensive engagement that ultimately affected her son's anxiety levels.
3. *Media platform effects*: Supporting McLuhan's channel effects theory, participants' experiences varied significantly based on their primary information sources. The 'Strategic Information Management' GET among healthcare professionals revealed more sophisticated approaches to platform selection and information filtering.

6.4.1 Initial Disbelief & Rolling Realisation

Initial disbelief emerged as a consistent theme across both healthcare professionals and the public, though their journeys to acceptance followed distinct patterns aligned with their respective GETs. Through the lens of message framing theory, this widespread initial scepticism suggests limitations in early pandemic communication strategies.

The 'Evolution of Pandemic Perception' GET among healthcare professionals revealed how even those with medical training initially underestimated the threat. This aligns with Stephens et al's work on medical uncertainty, suggesting that even professional uncertainty tolerance has limitations when confronting novel threats (Stephens, Sarkar, and Lazarus 2022). That this view was shared by Nigel, a news presenter, reinforces how deeply this initial scepticism penetrated across professional boundaries.

For the general public, the 'Evolution of Media Trust and Consumption' GET documented a clear progression: from seeing COVID-19 as a "storm in a teacup" or a problem "many miles away," to gradual realisation through geographic proximity (particularly with Italy's outbreak), and finally to full recognition with domestic lockdowns. The temporal nature of this realisation process supports McLuhan's channel effects theory, as different media channels carried varying levels of impact at different stages of the pandemic (McLuhan 1994).

This research identified three critical factors in this evolution from disbelief to acceptance:

1. *Geographic proximity*: Supporting source credibility theory, information about distant outbreaks carried less weight than geographically closer events, particularly the Italian crisis.
2. *Personal impact*: As evidenced through both groups' PETs, the moment of realisation often coincided with direct personal impact rather than abstract warnings.

3. *Professional framework*: Healthcare professionals' experiences, captured in their 'Professional Identity and Media Responsibility' GET, showed how their clinical knowledge both helped and sometimes hindered early threat recognition.

Looking toward future pandemics, particularly those with higher pathogenicity or mortality rates, addressing this pattern of initial disbelief becomes crucial. The situation with COVID-19 was complicated by asymptomatic transmission, but as Agnieszka noted, there was a need to be "completely open from the start" rather than what she perceived as information being "gatekept" from the public.

The traditional "command and control" approach to communication, which Owen referenced, appears increasingly challenging in today's media environment. As demonstrated by both groups' GETs around information consumption, the democratised and decentralised nature of modern communication platforms requires new approaches to early warning message delivery. This aligns with Moorhead et al's observations about social media's growing role in health communication, suggesting need for more sophisticated early warning strategies that account for modern media consumption patterns (Moorhead et al. 2013).

6.4.2 Factors Driving COVID-19 Related Anxiety

Contemporaneous research has documented high levels of COVID-19 related anxiety and stress even in countries with low disease incidence (Newby et al. 2020; Lim et al. 2021). While traditional epidemiological models would predict anxiety levels proportional to local disease prevalence, hospitalisation rates, and mortality (Gellert and Gellert 2022), this research revealed how modern media ecosystems disrupted this relationship.

The 'Mental Health and Media Consumption' GET among the general public revealed sophisticated patterns of anxiety management. Participants like Lena demonstrated strategic limitation of media consumption to manage anxiety, while others like Tariq showed clear recognition of media's role in

mental health impact. This aligns with McLuhan's channel effects theory, suggesting that the medium of message delivery significantly influenced anxiety levels (McLuhan 1994, 1964).

For healthcare professionals, the 'Impact on Professional Practice' GET revealed distinct anxiety patterns. Christina's experience of professional isolation and exhaustion from managing misinformation in patient interactions exemplifies the unique stressors faced by medical professionals. This supports Geller et al's work on medical uncertainty, showing how professional training in managing uncertainty may be overwhelmed during prolonged crises (Geller, Faden, and Levine 1990).

This research identified three key factors driving anxiety:

1. *Media volume*: The commercial imperatives of both mainstream media and social media influencers drove high volumes of COVID-related content, with advertising revenues dependent on engagement metrics.
2. *Geographic distortion*: Despite typically strong preferences for domestic news consumption, social media enabled rapid global information flow, creating anxiety disconnected from local risk levels.
3. *Cultural context*: International comparisons revealed varying approaches to media coverage. Australian media's evidence-based scientific focus contrasted with U.S. coverage reflecting political and cultural polarisation (Bridgman et al. 2021), contributing to misalignment between perceived and actual risk.

The lived experiences of participants in this research confirmed media's role in anxiety generation, though responses varied significantly. The 'Strategic Information Management' GET among healthcare professionals revealed more structured approaches to managing information flow, while the public showed more varied responses. Some, like Lena and Claudia, chose media avoidance to manage negative feelings, while Margaret's anxiety manifested in concerns about her son's wellbeing.

Through the lens of message framing theory, Radha's description of the pandemic as "exhausting" underscores the need for balanced information consumption. This supports Schiavo's emphasis on audience-specific health communication, suggesting need for guidance on managing media consumption during prolonged health crises (Schiavo 2013). The findings show this balance was crucial for maintaining essential information flow and social connection during isolation, while avoiding the mental and physical fatigue experienced by Radha, Sophie, Ivana, and Ben.

6.5 Social Media - The Beauty, The Beast & The Double Edged Sword

The impact of social media during the COVID-19 pandemic represents a significant evolution in health communication from previous global health crises. Through the lens of McLuhan's channel effects theory, social media platforms created novel dynamics in information flow and reception that traditional communication theories struggle to fully explain (McLuhan 1994). Schiavo's work recognises the prominence of social media platforms, networks and communities with regard to their important role in health communication (Schiavo 2013). This interplay is explored in further detail in *'Chapter 7.0 Conclusions & Recommendations'.*

Previous IPA research examining social media's impact during the pandemic, such as Keles et al's study of adolescents' experiences, identified a duality of positive and negative effects (Keles, Grealish, and Leamy 2023). However, the findings from this research, drawing from a broader adult population, revealed more complex patterns, particularly evident in the 'Social Media Dynamics' GET among the general public.

Of the 40 participants, only seven (Christina, Graham, Nadeem, Kenneth, Sakura, Becky, and Maddison) reported minimal social media impact on their pandemic experience. For the majority, social media functioned as what (Moorhead et al. 2013) describe as a "double-edged sword" - simultaneously providing valuable connection and information while potentially amplifying anxiety and misinformation.

This research revealed distinct patterns in social media engagement:

1. *Professional use*: The 'Digital Communication Transformation' GET among healthcare professionals showed adaptation to new communication methods, exemplified by Peter's experience managing patient advocacy on digital platforms and Owen's recognition of global communication's unprecedented value.
2. P*ublic response*: The 'Social Media Dynamics' GET revealed complex experiences, from Clifford's personal experience of social media fracturing friendships to Nigel's view of it as a "complete disaster" creating echo chambers.
3. *Strategic management*: Some participants developed sophisticated approaches to platform use. Louise's creation of a WhatsApp group to filter Twitter news for friends demonstrates what (Schiavo 2013) terms 'audience-specific' communication adaptation.
4. Disengagement Patterns: Tariq's experience exemplifies the evolution from using social media as escape to avoiding it due to negativity, ultimately leading to disengagement from NHS public health messaging - a concerning outcome for health communication effectiveness.

The findings support Worchel et al's theory about message reception being influenced by medium and source credibility, particularly evident in how participants like Simon made conscious decisions about social media use based on observed impacts on user wellbeing (Worchel, Andreoli, and Eason 1975). The 'Information Source Hierarchy' GET revealed how participants developed sophisticated frameworks for evaluating different platforms' reliability.

Through the lens of source credibility theory (Hovland and Weiss 1951), social media's impact on public health communication reveals particular challenges. The democratisation of information sharing, while potentially beneficial for community engagement, complicated message credibility assessment. This was especially evident in the 'Professional Versus Public Understanding' GET, where healthcare professionals struggled to maintain authoritative voice amid competing narratives.

Generally, participants who used social media in moderation in combination with other media sources as well as face to face interaction were happier. Simon was unusual in that he made a conscious decision early on in the development of social media, where he realised people using it were not particularly happier – hence he avoided it. Tariq summed up his experience with regards to how negative he found social media during the pandemic, lamenting he used to go on social media to escape the real world, whereas now both he and his friends prefer to stay in the real world to avoid the constant negativity of social media. This ended up having a negative effect on the desired behaviours with Tariq disengaging from government public health messaging saying: *"I was fed up (by Facebook). I've actually hidden all adverts by the NHS. Yeah. I (just) can't be bothered with it"*. Interestingly, some participants felt the government's use of social media could be increased – once again highlighting diverging views on the topic. The interview findings validate the concept discussed in the literature review of the "double-edged sword" nature of media and how it can be both a positive and negative force.

6.5.1 The Consumption of News on Social Media

The consumption of news on social media is not limited to content delivery but also includes the conversations that take place in the comments section. This is a vital consideration for pandemic communications. Simon likened traditional news broadcasts to a lecture, while social media was more akin to a conversation. This new dynamic brought an element of immediate feedback on government slogans from the public via social media. One such example was the immediate and widespread criticism across social media and mocking of the UK governments 'Stay Alert' slogan. Figure 1 is a collection of screenshots showing how quickly this slogan received immediate feedback on social media upon its release in May 2020. This demonstrates both the highly interactive nature of these platforms as well as their ability for people to coalesce, communicate and capture the public mood. Interestingly many of the ways the slogan was altered correlates with the thoughts and topics covered in this research, whether that be Barnard Castle, Trump and bleach, Hancock, or the economic choices

and decisions to be made. This is also a particularly nice example of how social and mainstream media are interconnected with a Mail Online article (Middleton 2020) being published driving further engagement of 2.1k shares and 1.8k comments, to another audience. This nicely demonstrates the highly interactive and connected nature of these platforms. This distinction has implications for future pandemics, which could be further explored as a way to improve health communication, as algorithms also serve up content based on users' friends and their opinions.

Figure 1: Collection of 'Stay Alert' memes demonstrating social media's ability for people to coalesce, communicate and immediately contribute their thoughts on public health messaging.

6.6 Role of Celebrity Influencers & Media Doctors

Champion and Skinner's Health Belief Model (HBM) provides a valuable framework for understanding how different message sources influenced health behaviours during the pandemic (Champion and Skinner 2008). The research revealed distinct patterns in how participants responded to celebrity influencers versus medical professionals, illuminating important considerations for future health communication strategies.

MacKay et al.'s study of Canadian influencers' crisis messaging on Instagram identified varying engagement rates across different source types (MacKay et al. 2022). However, this research's findings diverge from MacKay's conclusions regarding celebrity effectiveness. While MacKay found higher engagement rates for celebrities and brand influencers compared to health authorities, participants in this study generally expressed scepticism toward celebrity involvement in health messaging, though this could reflect sample characteristics.

The 'Professional Identity and Media Responsibility' GET revealed how healthcare professionals approached public communication, with emphasis on evidence-based information and clear messaging. This aligns with source credibility theory (Hovland and Weiss 1951), as participants generally expressed greater trust in medical professionals who could communicate complex information accessibly.

Three key patterns emerged regarding message source effectiveness:

1. *Celebrity impact*: While Kamran observed that "a lot of my friends would be more likely to take the opinions of another friend or a celebrity," most participants expressed scepticism toward celebrity-endorsed health information, highlighting potential limitations in their role as health message carriers.
2. *Medical authority*: Through the lens of the 'Government Communication Analysis' GET, participants like Margaret noted how medical leaders would "cut through the fluff of the

politicians," with figures like Professors Whitty and Van Tam described as "two very straight forward clearly intelligent people, doing the best they can."

3. *Trust dynamics*: This research revealed how trust in medical authorities could be undermined by political interference, supporting McLuhan's theory about medium affecting message reception. The disappearance of trusted scientific voices like Professor Van Tam prompted concern among participants like Graham.

The findings suggest that while celebrities may have extensive reach and influence, their effectiveness in health communication requires careful consideration. The 'Public Understanding of Science' GET revealed how participants valued clear, evidence-based communication from credible medical sources. This aligns with HBM's emphasis on perceived benefits and barriers to action, suggesting that medical professionals' expertise adds credibility to health behaviour recommendations.

The research also highlighted the importance of medical communicators possessing both expertise and effective communication skills. This dual requirement supports Schiavo's framework for effective health communication, emphasising the need for messages to be both evidence-based and audience-appropriate (Schiavo 2013). Building trust in these expert voices proved essential for enhancing public health messaging effectiveness and countering potential negative effects of conflicting media influences.

6.7 Centralised "Command & Control" Approach to Communications & The Role of 'Unofficial' Media Medics

The centralisation of communication during the early pandemic period revealed significant tensions between traditional public health approaches and modern media dynamics. The Royal Society of Medicine's expert panel highlighted concerns about this centralised approach, particularly regarding its impact on local engagement and the suppression of individual doctors' contributions to public communication (Medicine 2021). This research's findings provide valuable insights into how this tension manifested in practice.

The 'Professional Identity and Media Responsibility' GET revealed how healthcare professionals navigated these constraints. Owen's experience was particularly telling, noting that general practitioners, despite being experts in translating complex science into comprehensible messaging for patients, were largely excluded from the national response. This observation aligns with Schiavo's emphasis on the importance of multi-level stakeholder engagement in effective health communication (Schiavo 2013).

The following key patterns emerged in how this centralised approach affected communication:

1. *Local-national disconnect*: The 'Digital Communication Transformation' GET showed how healthcare professionals adapted, with Peter's experience demonstrating how patient advocacy groups needed to navigate both central directives and local needs.
2. *Trust implications*: Suppression of medical professionals' voices inadvertently suggested information was being withheld, potentially undermining public trust. This supports source credibility theory (Hovland and Weiss 1951), showing how restricted communication can damage perceived trustworthiness.
3. *Adaptive responses*: The research revealed how frontline medical professionals utilised available social media tools to circumvent centralised controls, creating what McLuhan might term new channels of communication to reach wider populations.

Lena's observation that the medical community needed to act as a "connector or bridge" between national messaging and local implications highlights the limitations of centralised communication approaches. This aligns with Moorhead et al's findings about social media's growing role in health communication, suggesting need for more flexible, multi-level communication strategies (Moorhead et al. 2013).

In the context of increasing emphasis on trust and authenticity in online communication, this research suggests that equipping local healthcare professionals with media skills and resources might prove more effective than attempting centralised control. This approach would better align with modern

media environments' democratised and decentralised nature, while maintaining professional standards through appropriate training and support.

6.8 Filter Bubbles, The Information Age, Echo Chambers, Algorithmic Awareness & Their Effects on Public Perception in a Pandemic

At a meta level, this research identified four key themes specific to social media's role during the pandemic: filter bubbles, the information age phenomenon, echo chambers, and algorithmic awareness. These themes, when examined through established communication theories, provide insight into how modern media environments shaped pandemic perceptions.

The 'Strategic Information Management' GET among healthcare professionals and the 'Information Source Hierarchy' GET among the public revealed sophisticated patterns of information consumption and filtering, though with notably different approaches based on professional background.

6.8.1 Filter Bubbles

Filter bubbles, a term popularised by (Pariser 2011), emerged as crucial contributors to the fragmented online social media environment. Pariser's argument that filter bubbles limit serendipitous learning and cross-disciplinary insight gained new relevance in the pandemic context, particularly evident in the 'Social Media Dynamics' GET.

This research revealed varying responses to these filter bubble effects:

1. *Passive consumption*: Many participants described becoming passive consumers of content, influenced by social media's exploitation of dopamine pathways.
2. *Active disengagement*: Some participants, like Anjali, actively disengaged due to stress.
3. *Strategic management*: Others, like Louise, deliberately leveraged filter bubble mechanics, creating curated WhatsApp groups to filter Twitter news for others.

These varying responses align with McLuhan's channel effects theory, demonstrating how medium characteristics influence both message reception and user behaviour. Louise's approach, as a medical professional curating information for others, represents what (Schiavo 2013) terms audience-specific health communication adaptation.

6.8.2 Echo Chambers

The research supported Cinelli's findings about social media's role in limiting exposure to diverse perspectives and reinforcing shared narratives (Cinelli et al. 2021). The 'Evolution of Media Trust and Consumption' GET revealed how these echo chamber effects influenced pandemic information reception.

Key findings to emerge from this research regarding echo chambers included:

1. *Platform variation*: Different platforms showed varying levels of user segregation, supporting Cinelli's observation about Facebook's higher segregation compared to other platforms.
2. *Professional awareness*: Healthcare professionals, through their 'Professional Versus Public Understanding' GET, showed greater awareness of echo chamber effects.
3. *Impact on trust*: The research supported (Bruns 2019) argument that social and societal factors, not just technological ones, underpin these phenomena.

Echo chambers, mentioned specifically by Nigel, Louise, Hannah, Sebastian, and Claudia, demonstrated how pre-existing beliefs could be reinforced and amplified. Hannah's experience of losing a friend to conspiracy theories represents a particularly compelling example of echo chambers' potential to divide communities and hinder coordinated public health efforts.

6.8.3 The Information Age: A Time of Information Overload & Information Disorder

The contemporary media environment, powered by social media and billions of connected devices, exemplifies what (Floridi 2014) terms the 'Information Age'. The research revealed how this

unprecedented volume of information - enough daily to fill all US libraries eight times over - affected pandemic communication reception and processing.

The 'Strategic Information Management' GET among healthcare professionals revealed sophisticated approaches to managing information flow. Owen's detailed discussion of social media feeds as essential resources for real-time updates demonstrates both the benefits and challenges of this new information ecosystem. This aligns with Zubiaga et al's observations about social media enabling immediate global information sharing (Zubiaga et al. 2016), though with limited trusted intermediation (Eysenbach 2008).

This research identified two critical challenges in the Information Age:

1. Information Overload: Supporting Melinat et al's findings, participants struggled to discriminate between relevant and irrelevant sources (Melinat, Kreuzkam, and Stamer 2014). This was particularly evident in the 'Public Understanding of Science' GET, where even those with scientific backgrounds reported difficulty managing information volume.
2. Information Disorder: The research confirmed Wardle and Derakhshan's description of online ecosystems being 'polluted' with mal-, mis- and dis-information (Wardle and Derakhshan 2017). This manifested in both healthcare professional and public experiences, though with different impacts based on professional knowledge.

6.8.4 Algorithmic Awareness

This research extends Greene et al's findings about social media during quarantine, revealing more nuanced patterns of algorithmic awareness across different user groups (Greene et al. 2022). The 'Digital Communication Transformation' GET showed varying levels of understanding about how social media algorithms shape information exposure.

Key findings from this research regarding algorithmic awareness included:

1. *Professional variation*: Healthcare professionals like Louise and Martin demonstrated sophisticated understanding of algorithms through their content creation experience, though they were in the minority.
2. *Adaptive behaviours*: Some participants, like Radha, actively attempted to influence their algorithmic feeds, showing awareness of how platform mechanics affect information exposure.
3. *Limited understanding*: Most participants, despite regular social media use, demonstrated limited awareness of how algorithms influenced their information exposure, supporting Greene et al's findings about variable algorithmic literacy.

These findings suggest potential for intervention in increasing public understanding of the algorithms that serve them content. This aligns with source credibility theory (Hovland and Weiss 1951), as understanding how information is algorithmically selected could enhance users' ability to evaluate source reliability. Such awareness could promote more balanced media consumption patterns, particularly valuable during future health crises.

6.9 Impact of Infodemics

The World Health Organization's declaration of a parallel infodemic during the COVID-19 pandemic (Hua and Shaw 2020) highlighted a new dimension in public health crisis management. Their definition of an infodemic as 'too much information including false or misleading information in digital and physical environments during a disease outbreak' (WHO 2023) gained particular relevance in the social media age, where information, especially when false, spreads rapidly across networks.

The research findings support Vosoughi et al's observation that false news generally spreads faster than factual information, partly due to its novel nature and capacity to generate emotional responses (Vosoughi, Roy, and Aral 2018). This was evident in both the 'Social Media Dynamics' GET among the public and the 'Professional Identity and Media Responsibility' GET among healthcare professionals.

This research revealed several key findings relevant to infodemic pathways:

1. *Professional response*: The 'Impact on Professional Practice' GET showed how healthcare professionals struggled with increasing volumes of misinformation. Christina's experience of exhaustion from managing misinformation in patient interactions exemplifies the practical challenges this created.
2. *Platform dynamics*: Supporting Bridgman et al's findings, content spread rapidly across geographic boundaries despite usual preferences for domestic media networks (Bridgman et al. 2021). This was evident in participants accessing international news sources and sharing second-hand experiences from global contacts.
3. *Trust implications*: The 'Evolution of Media Trust and Consumption' GET revealed how exposure to conflicting information sources affected trust in health messaging, aligning with source credibility theory (Hovland and Weiss 1951).

This research identified a complex interconnected dynamic driving the COVID-19 infodemic, involving both willing and unwilling participants in spreading mal-, mis- and dis-information. While deliberate disinformation campaigns existed (Swan 2020), the research also supports Valenzuela et al's concept of a 'paradox of participation' which meant well-intentioned enthusiastic online engagement inadvertently propagated misinformation (Valenzuela et al. 2019).

This dynamic was further complicated by what (Anspach and Carlson 2020) describe as layered sharing, where users added potentially misleading commentary when sharing content. This research concurs with contemporaneous work showing how this concept of "layered sharing" created cascading effects during the COVID-19 pandemic:

- Users were more likely to share content from trusted connections (Buchanan and Benson 2019).
- This increased likelihood of believing content validity (Sterrett et al. 2019).

- It led to greater attribution of importance to issues (Feezell 2018).
- Users became more likely to trust external sources referenced by connections (Turcotte et al. 2015).

Significantly, while 'infodemic' wasn't explicitly mentioned by participants, misinformation concerns featured prominently, particularly among healthcare professionals (16 of 24 mentioning misinformation were medically qualified). This suggests even highly qualified individuals may be unaware of their potential role in propagating infodemic dynamics, supporting the need for broader education about how individual social media interactions can be amplified across geographies.

Additionally, the importance of addressing infodemics through further research is highlighted in the narrative review in Chapter 2.0, given the level of detriment they bring to the finding of solutions and the fear they spread across communities (Cinelli et al. 2020).

6.10 Consequences of Politicising & Sensationalising COVID-19 Content

Van Scoy et al's research on public anxiety and distrust during early COVID-19 media messaging provides a valuable framework for understanding this research's findings about politicisation and sensationalism (Van Scoy et al. 2021). Their large-scale study (n=121,573) identified key themes that resonated strongly with the experiences captured in both healthcare professional and public GETs.

In summary Van Scoy et al's study examined public perceptions of COVID-19 messaging during the early stages of the pandemic, with a significant sample size using a mixed methodological approach. The study found that flawed messaging, confusion, distrust, and anxiety were prevalent among the public. These are all themes that resonated with participants in this research 15 months into the pandemic. Such practices were found to lead to anxiety, panic, and irrational behaviour, as well as a skewed perception of the overall threat posed by the pandemic. This is further supported by the findings from Chapter 2 of the narrative literature review, which highlighted the complex relationship between media and psychological health. Sensationalism undermines the role of media as a reliable

source of information and can hinder coordinated public health efforts by fostering confusion, mistrust, and getting people to disengage with the media, precisely the opposite of what you would want them to do in a pandemic.

This research shared several themes with Van Scoy et al's findings, around flawed messaging, impact on trust and anxiety, and political interference. This has been further alluded to below.

6.10.1 Flawed messaging

- Information overload significantly impacted participants, evident in the experiences of Radha, Louise, Charles, Hannah, Claudia, and Ben.
- Sensationalism emerged as a key concern, with participants like Agnieszka, Margaret, Lena, Laura, Simon, Claudia, Martin, and Sophie identifying it as problematic across mainstream and social media.
- Contrasting views emerged, with Pravin arguing COVID-19's seriousness warranted emphasis, while Nigel believed mainstream media regulation prevented sensationalism.
- Angela's description of media's fixation with death counts as "death porn" exemplifies concerns about contextless sensationalism.

6.10.2. Impact on trust and anxiety

- Healthcare professionals' 'Professional Identity and Media Responsibility' GET revealed tensions in managing public anxiety while maintaining professional credibility.
- The public's 'Mental Health and Media Consumption' GET showed varied anxiety responses and coping strategies.
- Margaret's experience of anxiety affecting her son's behaviour ("turning her son into a germophobe") demonstrates intergenerational impact.
- Peter attributed heightened anxiety among heart failure patients to "juvenile communication that was embryonic in quality and delivery" from government sources.

6.10.3 Political interference

- The 'Government Communication Analysis' GET revealed widespread concern about political agendas influencing public health messaging.
- Margaret noted how medical leaders would "cut through the fluff of the politicians" with figures like Professors Whitty and Van Tam described as "two very straight forward clearly intelligent people".
- Sakura's insights about how conflicting views among healthcare professionals led to both conspiracy theories and people regarding the pandemic as a "political game".
- Charles observed how online discourse extremes led to automatic criticism of government actions, while Martin noted the absence of a sensible middle ground in media coverage.

These findings support McLuhan's channel effects theory, demonstrating how different media platforms influenced message reception and trust. The research revealed how such practices led to anxiety, panic, and irrational behaviour, while also creating skewed perceptions of overall pandemic threat levels. This also aligns with source credibility theory (Hovland and Weiss 1951), as politicisation and sensationalism undermined trust in information sources.

6.11 Trust in Authorities

Rieger et al's examination of trust in government actions during COVID-19 provides valuable context for understanding this research's findings about trust in authority and credibility (Rieger and Wang 2022). Their large-scale survey across 57 countries, conducted right at the start of the pandemic between 20 March - 22 April 2020, revealed how media freedom and education levels influenced government trust, themes that resonated with patterns identified in this study's GETs.

The 'Government Communication Analysis' GET revealed complex trust dynamics:

1. *Educational impact*: Supporting Rieger and Wang's findings about education's role in trust, participants with healthcare backgrounds demonstrated more nuanced understanding of government decisions, though this didn't automatically translate to increased trust.
2. *Media freedom effects*: The research confirmed their observation that higher media freedom can reduce government trust through critical coverage, evident in how participants like Alice provided internal perspective on chaotic government communication.
3. *Trust evolution*: The 'Evolution of Media Trust and Consumption' GET showed how trust patterns shifted throughout the pandemic, extending beyond Rieger and Wang's early-pandemic observations.

An analysis of UK-specific trust dynamics (Newton 2020) identified three key areas - secrecy, vagueness, and example-setting - all of which emerged strongly in this research:

Secrecy:

1. This research revealed ongoing concerns about government transparency, particularly evident in the 'Government Communication Analysis' GET. As Agnieszka noted, information was often "gatekept" from the public, damaging trust in official communications.
2. Healthcare professionals' 'Professional Identity and Media Responsibility' GET showed how perceived secrecy complicated their role in public communication.
3. Participants noted how previously undisclosed pandemic preparation exercises (Winter Willow, Exercise Cygnus, Exercise Iris) affected trust when their findings emerged.

Vagueness:

1. Howard's trust in Professor Sir Van Tam stemmed from clear communication style, contrasting with general government messaging.

2. Hannah's criticism of inconsistent messaging around mask-wearing and social distancing highlighted how vagueness undermined compliance.
3. The 'Communication Clarity and Trust' GET revealed strong preference for simple, clear messaging among healthcare professionals.

Example-Setting:

The research revealed how specific incidents of authority figures breaking their own rules had profound effects on public trust and compliance. The Dominic Cummings Barnard Castle incident emerged as a watershed moment in public trust, with participants across both healthcare professional and public groups citing it as damaging to public health messaging effectiveness. Through the lens of source credibility theory (Hovland and Weiss 1951), this incident particularly damaged trust because it came from within the government's inner circle. The impact was magnified through what McLuhan describes as channel effects (McLuhan 1994), with social media platforms enabling immediate public reaction and criticism that traditional media then amplified further.

Matt Hancock's subsequent rule-breaking proved similarly damaging to what participants described as an initially strong sense of collective purpose. The 'Government Communication Analysis' GET revealed how these high-profile breaches of rules created a cascade effect of declining trust. As Kenneth observed, such incidents prevented coherent strategy implementation, while Alice's internal perspective on government communication highlighted how these events undermined broader public health messaging efforts.

These findings align with source credibility theory (Hovland and Weiss 1951), demonstrating how actions inconsistent with messaging severely undermined authority figures' credibility. The research revealed how trust erosion occurred both through direct government actions and through what (Schiavo 2013) terms the 'cascade effect' of amplified criticism across media platforms.

'Section 2.10.5 Miscommunication in Mainstream Media & Social Media Volatility: A UK Example' of my narrative review highlighted how mistakes and examples of miscommunication from government officials, albeit unintentionally, can rapidly spiral into mistrust of government officials, leading to situations where protests can break out, and subsequent social media attention towards such protest can further amplify mistrust in government officials. By reporting on discrepancies in policy, the media can help identify areas where improved communication and coordination are needed to ensure a more effective response to public health crises.

6.11.1 Pandemic Preparedness

The research revealed significant concerns about pandemic preparedness across both healthcare professional and public groups. Through the 'Professional Versus Public Understanding' GET, healthcare professionals like Pravin offered particularly valuable insights, noting how even The WHO had struggled with pandemic preparedness historically. This observation aligns with source credibility theory (Hovland and Weiss 1951), suggesting how perceived preparedness affects trust in health authorities.

The 'Digital Communication Transformation' GET revealed how modern media environments complicated traditional preparedness approaches. As Owen noted, general practitioners' communication expertise was underutilised despite their daily experience translating complex science for patients. This supports Schiavo's (2013) emphasis on stakeholder engagement in effective health communication.

Key research findings regarding preparedness included:

1. Healthcare professionals' concerns about systemic readiness, evident in their 'Professional Identity and Media Responsibility' GET.
2. Public perceptions of preparedness affecting trust in authorities, shown in the 'Government Communication Analysis' GET.

3. The challenge of maintaining surveillance infrastructure post-crisis, a pattern participants noted from historical pandemic responses.

6.11.2 Public Response to Government Actions

Trust in government institutions emerged as crucial for effective pandemic response, though the research revealed complex dynamics in how this trust operated. The 'Evolution of Media Trust and Consumption' GET showed how initial high trust and collective purpose gradually eroded through various factors.

Several distinct patterns emerged:

1. *Initial unity*: Early pandemic stages showed strong collective response, with Agnieszka noting government attempts to create a "war time spirit" and community feeling.
2. *Cultural framing*: Peter's observation about this appealing to a "Rule Britannia and Empire" mentality revealed how cultural frameworks influenced message reception.
3. Trust erosion: The 'Government Communication Analysis' GET showed how inconsistent messaging and poor communication transparency gradually undermined public compliance.

McLuhan's channel effects theory helps explain how modern media environments complicated public health messaging (McLuhan 1964). As news emerged simultaneously through mainstream outlets and social media, the disintermediated cycle created what (Bakshy, Messing, and Adamic 2015) identified as important roles for weak ties in information propagation. This was particularly evident in how participants processed information from distant connections during early pandemic stages.

6.12 Strengths & Limitations

The strengths and limitations of this research must be considered through both methodological and practical lenses, particularly regarding the innovative application of IPA methodology at scale and the specific temporal context of data collection during an ongoing global health crisis.

6.12.1 Methodological Considerations

6.12.1.1 Scale & IPA Application

The study's 40 participants represented an unusually large sample for IPA, which traditionally focuses on smaller, more homogeneous groups. This was facilitated by deploying novel digital technologies, concurrently as the interviews were taking place. For example, conducting the interviews via a recorded Zoom call that provided a transcript within a far quicker timeframe, than conventional methods using external third parties, or proceeding manually allow.

As a researcher I found the conversations fascinating, and it was very easy to immerse myself in the participants' accounts as to how media played a part in their pandemic experiences. The articulation of this rich corpus of data to an external audience was a challenge for two reasons. Firstly, as a dyslexic researcher IPA is very much orientated around the written word – whereas my preference is for the spoken, hence the ease of completing, remembering and continuing with the series of interviews. Secondly, the sheer volume of data meant persisting with traditional means alone would have taken far longer to get meaningful academic output into the world. This meant the innovator in me gravitated towards a solution that entailed using Artificial Intelligence as a tool to help process the vast corpus of data, into manageable chunks, while ensuring methodological rigour and congruity with established IPA principles and practices.

Such an approach certainly provided opportunities and challenges. From an opportunities perspective, it certainly enabled broader exploration of lived experiences across different social and professional groups, which in turn provided richer data for understanding varied media related pandemic experiences. From which came the identification of PETs and GETs, while maintaining a deep idiographic focus across a group of 40 participants. Finally, it demonstrates IPA's potential adaptability to larger scale studies.

There are valid challenges to novel applications of tried and tested research practices, such an approach incorporating AI tools, would not be possible nor recommended without a researcher

immersing oneself deeply within the data before hand – as is essential for IPA. Further work to emerge from this thesis could include a flowchart mapping the ways in which AI tools add value, and perhaps more importantly where they detract from the underlying philosophical positions from which research is undertaken. Another legitimate critique of the application of these tools was the opportunistic nature, hence formalising and professionalising a process may well be of benefit to future researchers.

6.12.1.2 Why not Reflexive Thematic Analysis (RTA)?

While RTA might have offered a more flexible approach for this sample size through its systematic coding and theme development process, IPA was specifically chosen for its phenomenological foundation in exploring lived experiences. The choice of IPA over reflexive thematic analysis reflected the research's primary focus on individual lived experiences of media consumption during crisis, rather than broader pattern development across the dataset.

One of the main issues around IPA is the length of time taken to conduct analysis, requiring a lot of time commitment for extended periods of time from IPA researchers (Clarke 2009). This raises questions around the scalability of IPA, particularly pertaining to this study. However, as discussed in section: *'3.11 Traditional IPA Methodology'*, use of the auto-transcription feature mitigated issues around excessive time consumption, thus enhancing scalability, despite minor transcription errors. Mitigation of excessive time consumption allowed for immersion into the qualitative data to be unimpeded, thus vindicating justification of choosing IPA over RTA, which despite its amenability to larger datasets, would not have allowed for the level of idiographic immersion into the data needed for this study.

6.12.1.3 Sample Characteristics

A cohort of 40 participants provided several methodological advantages. The diverse cohort enabled perspectives from varied ages, backgrounds, and qualifications to emerge. The split between healthcare professionals and public participants allowed consideration of how professional knowledge

influenced pandemic media interpretation, and enabled comparison with members of the public without such training. This provided insights into different social and professional contexts. It could be argued this heterogeneity, while providing rich comparative data, at times challenged traditional IPA's idiographic focus. While I would largely defend this as careful focus has been maintained throughout, I do concede it required particular attention in order to maintain phenomenological depth across diverse experiences.

6.12.2 Temporal Context

6.12.2.1 Data Collection Timing

Conducting interviews 15 months into the pandemic offered unique insights into how perceptions and behaviours evolved. This timing allowed participants to reflect on their experiences with some distance while memories remained relatively fresh. This safe space of reflective distance was always a consideration in terms of maintaining psychological safety. Such a timeframe also allowed for capturing evolved perceptions and behaviours beyond initial crisis response. While also providing insights into how trust and subsequent information processing changed over time. This was of course with a trade-off, however as retrospective data collection may have introduced recall bias, particularly regarding early pandemic experiences.

6.12.3 Additional Use of AI enabled tools

The application of artificial intelligence tools helped manage the larger dataset while maintaining IPA's phenomenological principles, particularly the double hermeneutic between researcher and data. This approach facilitated systematic analysis of extensive interview transcripts while preserving individual voices and presenting stories while maintaining a strong idiographic focus. This approach subsequently led to the PETs and GETs being established for each distinct group – healthcare professionals and members of the public. The methodology demonstrates potential for scaling qualitative research while maintaining analytical rigor. Central to this is maintaining a "Human in the loop" to ensure the benefits of technological assistance never compromise the phenomenological integrity of the research.

The deluge of AI enabled tools since November 2022 has been significant. With some offering significant value and others less so. This is a rapidly changing landscape with different companies offering differing levels of data privacy, a critical consideration when the ChatGPT 3 and ChatGPT 4 models were used in this project – ensuring participant confidentiality was maintained. Additional work and subsequent guidance is needed as to how the benefits the range of new AI enabled tools may, or may not, enhance future qualitative research while ensuring academic rigour, privacy and authentic original output.

6.12.4 Cross-Group Analysis

6.12.4.1 Comparative Insights

The inclusion of both healthcare professional and public perspectives enabled valuable cross-group analysis. The emergence of distinct GETs for each group provided insight into how professional knowledge influenced pandemic media experiences. The broader sample size enabled identification of patterns while still maintaining focus on individual experiences.

These methodological choices reflected pragmatic responses to the pandemic's unique research challenges while maintaining commitment to rigorous qualitative inquiry. The limitations identified suggest valuable directions for future methodological refinement rather than fundamental flaws in approach.

6.12.4.2 Comparing & Contrasting HCP and Public Reactions to COVID-19 Media

This section provides contextual background to *'5.4 Group Experiential Themes Across Healthcare Professionals & General Public'* comparing and contrasting the lived experiences of HCPs and the general public regarding their interactions with COVID-19 media coverage. The analysis draws upon 40 in-depth, semi-structured interviews conducted with both groups, offering a rich understanding of how media consumption shaped their perceptions, behaviours, and emotional responses during the pandemic.

6.12.4.2.1 Similarities in Reactions

Several key similarities emerged from the interviews:

- **Initial Underestimation of the Pandemic:** Both HCPs and the public exhibited an initial tendency to downplay the severity of the COVID-19 outbreak. Many perceived it as a distant threat unlikely to significantly impact their lives.
- **Evolving Perceptions as the Pandemic Progressed:** As the pandemic unfolded, both groups experienced a shift in their perceptions, recognising the gravity of the situation. The intensity and pervasiveness of media coverage played a crucial role in this transformation.
- **Reliance on Trusted Sources:** Participants from both groups emphasised the importance of relying on trusted sources for information. Mainstream media outlets like the BBC were frequently cited, alongside official government websites and communications from professional bodies.
- **Appreciation for Clear and Consistent Messaging:** Both HCPs and the public expressed a strong preference for clear, concise, and consistent messaging from authorities. Conversely, conflicting information and frequent changes in guidelines generated confusion and mistrust.
- **Recognition of Social Media's Dual Role:** Participants acknowledged the dual role of social media in disseminating both valuable information and harmful misinformation. Social media platforms served as crucial communication tools, particularly for local community support and staying connected, but also as breeding grounds for conspiracy theories and unsubstantiated claims.

6.12.4.2.2 Differences in Reactions

Despite the shared experiences outlined above, several notable differences emerged between the two groups:

- **Access to Information:** HCPs generally had greater access to reliable information through professional channels, including medical journals and internal communications. This privileged access contrasted with the public's reliance on a mix of sources, leading to greater potential for exposure to misinformation.
- **Critical Evaluation of Information:** HCPs exhibited a greater tendency to critically evaluate information, applying their professional knowledge and experience to assess the validity of claims. The public, on the other hand, often struggled to discern credible sources and information, particularly in the face of sensationalized reporting.
- **Impact of Misinformation:** While both groups recognised the dangers of misinformation, the consequences for HCPs manifested differently. HCPs expressed frustration and concern over the public's susceptibility to false information, recognising its potential to undermine public health efforts. The public, in contrast, often found themselves grappling with the emotional and psychological consequences of misinformation, leading to heightened anxiety, fear, and division within communities.
- **Focus on Public Health vs. Individual Impact:** HCPs tended to focus on the broader public health implications of the pandemic, advocating for adherence to guidelines and stressing the collective good. The public, while acknowledging the importance of public health measures, often prioritised their personal experiences and individual circumstances, leading to varying levels of compliance and acceptance of restrictions.
- **Perspective on Government Response:** While both groups expressed criticism of government communication and policies, HCPs often demonstrated a more nuanced understanding of the challenges faced by authorities. The public, in contrast, frequently voiced frustration, anger, and mistrust towards government actions, fuelled by perceptions of inconsistency, lack of transparency, and rule-breaking by officials.

7.0 Conclusions & Recommendations

This concluding chapter synthesises key findings and recommendations from this research into COVID-19 media communication. It begins by examining historical parallels through the case of Dr Brinkley's radio broadcasts, demonstrating enduring challenges in regulating health communication across new media platforms. The chapter then presents research findings comparing healthcare professional and public experiences, highlighting shared challenges and distinct patterns in pandemic media consumption. These insights inform practical recommendations for future crisis communication, spanning regulatory frameworks, professional development, and public education. As well as potential areas of future academic inquiry. The chapter concludes by examining how the shift from deferrer to referrer society requires fundamental changes in approach to public health communication.

7.1 Historical Precedent & Today's Parallels

The challenges of managing health communication across borders and platforms are not unique to the digital age. In 1923, Dr John Brinkley secured one of Kansas's first radio broadcasting licenses, using this revolutionary medium to promote questionable medical treatments to an expansive audience. Despite his impressive-sounding credentials, many obtained through purchase rather than merit, Brinkley used radio to reach unprecedented audiences with medical messages that contradicted established practice. When US regulators revoked his license, he simply established a more powerful transmitter in Mexico, broadcasting his medical claims across national boundaries with impunity. The sixteen-year gap between Brinkley's first broadcasts and eventual professional sanctions by the American Medical Association exemplifies how regulatory frameworks can lag behind innovations in communication technology (Hilmes 2013).

This pattern of health misinformation spreading through networks is not unique to either Brinkley's era or COVID-19. During the HIV/AIDS crisis, unfounded conspiracy theories spread through peer-

to-peer transmission (Smith, Lucas, and Latkin 1999). Similar dynamics emerged during the Ebola outbreak of 2014 (Fung et al. 2016) and the Zika virus epidemic (Sharma et al. 2017), though at a smaller scale. However, what distinguishes the modern era is not just the presence of misinformation, but the unprecedented velocity and reach enabled by social media platforms. Each successive health crisis has demonstrated how emerging communication technologies can amplify both accurate information and misleading claims, with traditional regulatory frameworks struggling to adapt.

Additionally, as explored in Chapter 6.0 regarding the underlying human behavioural dynamics of infodemics, modern social networks can create self-reinforcing cycles of misinformation through what researchers term the 'paradox of participation' - where even well-intentioned engagement can amplify misleading claims. These dynamics makes the challenge of managing health communication fundamentally different from previous eras.

During the COVID-19 pandemic, these similar underlying challenges manifested at unprecedented scale and speed, this time propagated via another innovative communication medium – social media platforms. Just as Brinkley exploited radio's reach to bypass national regulations, modern content creators circumvented platform restrictions by migrating between services. While Brinkley operated alone, the democratisation of digital media enabled countless voices to broadcast unverified medical claims globally, creating what the WHO termed a 'parallel COVID-19 infodemic'.

7.2 Addressing Research Aims & Questions

After considering these historical parallels, this section presents key findings addressing the central research aims and questions. Through analysis of 40 in-depth interviews, clear patterns emerged in how healthcare professionals and members of the public navigated the complex pandemic media landscape.

This research explored how social and mainstream media shaped public perceptions and responses during the COVID-19 pandemic, with particular focus on comparing the lived experiences of

healthcare professionals and members of the public. The comparative analysis revealed both striking similarities and significant differences in how these groups engaged with pandemic-related media content.

7.2.1 Impact on Public Understanding & Behaviour

Building on these historical lessons, this research revealed several key patterns in how media influenced understanding and behaviour. Shared experiences and distinct patterns are summarised below.

7.2.1.1 Shared Experiences

- Initial underestimation of the pandemic's severity across both groups.
- Evolution of perceptions as the crisis unfolded.
- Recognition of social media's dual role in information dissemination.
- Strong preference for clear, consistent messaging.

7.2.1.2 Distinct Patterns

- HCPs demonstrated more sophisticated information evaluation strategies.
- Public participants showed greater vulnerability to misinformation.
- Different approaches to evaluating government responses.
- Varying levels of access to reliable information sources.

7.2.2 Information Dissemination Challenges

The study identified several critical challenges in the contemporary media environment. Common and group specific challenges are listed below.

7.2.2.1 Common Challenges

- Navigating the abundance of information across multiple platforms.
- Managing the impact of conflicting messages.

- Balancing rapid information sharing with accuracy.

7.2.2.2 Group-Specific Challenges

- HCPs struggled with bridging professional knowledge and public understanding.
- Public participants faced difficulties in identifying credible sources.
- Different impacts of misinformation on each group's pandemic experience.

7.2.3 Role of Trust in Authorities

Trust emerged as a crucial factor when it came to COVID-19 communication. Shared elements and group differences are listed below.

7.2.3.1 Shared Elements

- Reliance on trusted sources for information.
- Negative impact of inconsistent messaging on trust.
- Importance of clear communication from authorities.

7.2.3.2 Group Differences

- HCPs showed more nuanced understanding of government challenges.
- Public displayed greater frustration with perceived rule-breaking.
- Different approaches to evaluating official guidance.

7.2.4 Factors Influencing Communication Effectiveness

This research found factors affecting communication effectiveness varied between groups, these are listed below.

7.2.4.1 Healthcare Professionals

- Access to professional networks and resources.
- Ability to critically evaluate scientific information.
- Focus on broader public health implications.

7.2.4.2 General Public

- Greater reliance on mainstream and social media.
- More emphasis on personal impact and circumstances.
- Variable capacity for information evaluation.

7.3 Recommendations for Future Practice

Building on both historical lessons and contemporary research findings, this section outlines practical recommendations for improving future health crisis communication. These recommendations span multiple stakeholder groups and address challenges identified at both systemic and individual levels.

7.3.1 Tailored Communication Strategies

- Develop distinct approaches for different audience segments.
- Leverage healthcare professionals as credible information intermediaries.
- Create clear pathways for public access to reliable information.

7.3.2 Enhanced Information Access

- Bridge the information gap between professional and public channels.
- Develop public platforms that combine accessibility with credibility.
- Support public understanding of both critical appraisal and scientific uncertainty.

7.3.3 Professional Development

- Equip healthcare professionals with media communication skills.
- Develop clear guidelines for professional social media pandemic engagement.
- Support professionals in managing public misinformation.

7.3.4 Public Education

- Enhance medical media literacy programs.
- Develop tools for critical information evaluation.

- Build understanding of scientific method and uncertainty.

7.3.5 Professional & Regulatory

- Develop international frameworks for co-ordinating health communication standards.
- Establish expedited review processes for potential medical mis-information.
- Establish rapid response and rebuttal mechanisms, with cross-platform content monitoring.

Figure 2: Optimising Health Crisis Communication Infographic

7.4 Future Research Directions

This research has identified several promising areas for future investigation, which are detailed below.

7.4.1 Long-term Impact Studies

- Analysis of how access to different information sources (professional networks vs public media) shapes trust in health authorities.
- Assessment of lasting changes in media consumption patterns post-pandemic.
- Evaluation of long-term effectiveness of various communication strategies.

7.4.2 Healthcare Professional Role Development

- Investigation of optimal methods for supporting HCPs as information intermediaries.

- Analysis of professional communication training effectiveness.
- Exploration of barriers to HCP engagement with social media platforms.

7.4.3 Emerging Technology Impact

- Assessment of AI and machine learning in health communication verification.
- Investigation of immersive technology potential for health message delivery.
- Analysis of new social media platform effects on information dissemination.

7.4.4 Cross-Cultural Considerations

- Comparative analysis of communication strategies across different healthcare systems.
- Investigation of cultural factors in health message reception.
- Study of international coordination in crisis communication.

These research directions would contribute valuable insights for developing more effective health communication strategies in an increasingly connected world.

7.5 Concluding Remarks

This research has demonstrated how the COVID-19 pandemic marked a decisive shift from a 'deferrer society' to a 'referrer society' in public health communication. Just as Brinkley's radio broadcasts challenged the traditional medical establishment's control over health information, social media has fundamentally altered how health information is disseminated, consumed, and processed. The traditional one-way broadcast model of crisis communication proved insufficient in a media environment characterised by instant sharing, rapid feedback, and complex networks of information exchange.

This transformation manifested differently among healthcare professionals and the public. Healthcare professionals, trained in the deferrer society's model of authoritative knowledge dissemination, found themselves navigating new roles as information mediators in the referrer society's more democratic information landscape. The public, meanwhile, experienced unprecedented access to information but struggled with the challenges of evaluation and verification in this new environment.

The tension between these two communication paradigms - the controlled, hierarchical nature of traditional public health communication and the dynamic, networked nature of social media - emerged as a central challenge in pandemic response. As analysed in Chapter 6.0, this challenge manifested through what researchers termed the 'paradox of participation', where complex social media dynamics enabled both deliberate disinformation campaigns and inadvertent sharing of misinformation through trusted networks. Social validation, repeated exposure, and peer endorsement created self-reinforcing cycles that could transform unverified claims into widely accepted beliefs. Governmental spokespeople, including healthcare professionals, often sought to maintain the authority and clarity of traditional communication with only some adapting to new channels, while the public increasingly engaged in collaborative sense-making through social networks and peer-to-peer information sharing. This creates both challenges and opportunities for future public health communication.

These findings highlight the need for future pandemic responses to embrace the reality of the referrer society while preserving the benefits of professional expertise. This requires developing sophisticated, multi-level communication strategies that can:

- Harness the speed and reach of social networks while maintaining message integrity.
- Bridge the gap between professional and public understanding.
- Support both groups in navigating complex information landscapes.
- Balance traditional authority with new forms of collaborative knowledge creation.

The enduring parallels between Brinkley's era and modern challenges underscore how technological innovation consistently outpaces regulatory frameworks in health communication. However, this research suggests that solutions lie not in attempting to control information flow, but in building resilient systems that can adapt to new flexible communication paradigms while maintaining message integrity and public trust.

The study's comparison of healthcare professional and public experiences provides valuable insights for developing crisis communication strategies suited to an age where information flows not just from

authorities to public, but through complex networks of professional and peer referral. Success in future crises will require understanding and adapting to this fundamental shift in how society processes and shares critical health information.

Dr Kishan Rees

Isle of Dogs, London, February 2025.

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Appendix I – Approval Letter From Ethics Committee

Hull York Medical School

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University of Hull
Hull, HU6 7RX, UK

York
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25 June 2021

Dr Kishan Rees
MD Medical Sciences Student
Hull York Medical School

Dear Kishan

21 14 – What is the impact of, and interplay between, social & mainstream media on global public health communication during a pandemic? (Social/mainstream media and a pandemic)

Thank you for submitting your application to the HYMS Ethics Committee. The application has been reviewed on behalf of HYMS Ethics Committee with respect to the documents received on 8th June 2021.

I am pleased to inform you that I do not have any HYMS specific ethical concerns and am happy to confirm HYMS Ethics approval.

On behalf of the Ethics Committee, we wish you success with this study.

Kind regards

Yours sincerely

Professor Thozhukat Sathyapalan
Chair
HYMS Ethics Committee

Appendix II – Invitation to Participant Text & Artwork

Would you like to take part in an interview-based study, investigating the impact of, and interplay between, social & mainstream media on global public health communication during the COVID-19 pandemic and how you used these media to communicate during the pandemic?

As part of my MD studies with Hull York Medical School, I am looking to interview a range of people, from varying backgrounds, both medical and non-medical. It is hoped to explore the impact of media in the pandemic.

Your interview, via an online platform, will last between 45 and 60 minutes. The interviews will be recorded and transcribed, but your answers will be anonymised and kept confidential.

A £5 gift voucher will be offered to thank you for your participation and volunteering your time.

If you are interested in participating, please email Dr Kishan Rees on kishan.rees@hyms.ac.uk or via WhatsApp / Signal / Telegram / Text on 0787 4645 007.

Appendix III – Research Study Information Sheet

Research Study Information Sheet

Introduction

Thank you for considering participating in this research study. Before you decide to take part, there are a few things I would like to explain about the study, including the rationale behind the study and what participation will involve.

I am, and will remain, mindful that the COVID-19 pandemic has caused a tremendous amount of stress on individuals both personally and professionally. So, I really do appreciate you volunteering your time to take part in this study.

Please take time to read the following information carefully and feel free to ask if there is anything you do not understand or would like more information on. My contact details are at the bottom of this sheet. I would like to reiterate that you are under no obligation to accept this invitation and should only agree to participate if you desire to do so.

Thank you for your interest,

Dr Kishan Rees

1. Title of the study

What is the impact of, and interplay between, social and mainstream media on global public health communication during a pandemic?

2. What is the purpose of this study?

This study seeks to explore what impact the interplay between social and mainstream media has on the mass communication of public health messaging during a pandemic. What elements help a public health response and what elements hinder it. What are the salient points of what went well? What

aspects need further consideration and refinement? It is hoped that this study will contribute to the literature, so that when it comes to communicating the public health issues pertaining to a future pandemic, healthcare professionals will be in a better place to use the tools available for mass communication, thus, members of the public will be in a better position to comprehend, assimilate and apply such information so they can make decisions that are in their best interests.

3. Why have I been chosen to take part?

You have responded to an advertisement inviting you to participate circulated through social media.

4. Do I have to take part?

No, participation is entirely voluntary, and you are free to withdraw at any time without explanation. You would need to contact the student investigator, Dr Kishan Rees, to confirm withdrawal.

5. What will happen if I take part?

At a mutually beneficial time, an interview will be arranged via an online platform, Zoom. This will be a one to one semi structured interview. There are no right or wrong answers. The investigators are interested in getting a wide range of views, exploring the impact of, and interplay between, social and mainstream media on global public health communication during a pandemic.

The interview process is expected to last 45-60 minutes in duration. However, there is a wide degree of flexibility depending on the progression of the discussion. The entire length of the interview will be screen recorded. This is to ensure that what is stated can be noted accurately and aid data analysis. This combined with the data from other interviews will form the conclusions of the study.

6. Expenses and/or payment

As a show of appreciation for your time, you will be offered a certificate of completion along with a £5 gift voucher at the process.

7. Are there any risks in taking part?

There are no risks to your health by taking part in this study. The topics covered in the interview should not be considered sensitive, embarrassing or otherwise uncomfortable. However, if you do have any concerns about your participation, please contact the student investigator or the supervisory team directly to discuss.

8. What if I am unhappy or of there is a problem?

If you are unhappy, or if there is a problem with the interview, please feel free to let the investigators know by contacting the student investigator or their supervisory team, whose details are below. If you remain unhappy or have a complaint about the conduct of the study, please contact the HYMS Research Support Office directly (01904 321780 or research@hyms.ac.uk).

9. Will my participation be kept confidential?

Recordings from the interview will be anonymised and stored without any identifiable information. They will be destroyed upon your withdrawal or at your specific request. If neither of these occur, the recordings and other documents will kept as long as they remain of academic interest or research relevance.

10. What happens if I am unwell taking part in this study?

In the extremely unlikely event that you become unwell during the interview, the process will stop, and the incident documented and reported to both the project supervisory team and HYMS.

11. What happens to the results of the study?

The anonymised results will be used to formulate the conclusions of the study, which will feature as the dissertation of the student investigator, Dr Kishan Rees, as part of an MD project in Medical Sciences. This will end up in the public domain at the completion of the MD and on publication.

12. What will happen if I want to stop taking part?

You retain the right to withdraw from the project at any time, for any reason, without explanation. If you are happy for this to occur, results up to the period of withdrawal may be used. If not, you are free to request that they are destroyed, and no further use is made of them. To do so, contact the student investigator, Dr Kishan Rees, or a member of the supervisory team.

13. Who can I contact if I have further questions?

The student investigator, Dr Kishan Rees, is the first point of contact. Questions should be addressed to him initially. If this is not appropriate, then you may contact a member of the supervisory team: Professor Martin Veysey, Professor Gabrielle Finn, or Dr Paul Crampton.

Student Investigator

Dr Kishan Rees – kishan.rees@hyms.ac.uk or 0787 4645 007

Supervisory Team

Professor Martin Veysey – martin.veysey@nt.gov.au

Professor Gabrielle Finn – gabrielle.finn@hyms.ac.uk

Dr Paul Crampton – paul.crampton@hyms.ac.uk

The study information sheet was distributed via - Research Study Information Sheet - Google Docs

Appendix IV – Participant Consent Form

Project Title: What is the impact of, and interplay between, social & mainstream media on global public health communication during a pandemic?

Name of Student Investigator: Dr Kishan Rees

Name of Participant: _____

Please tick the statements below

I confirm I have read the Participant Information Sheet in its entirety and understood its contents. ( )

I confirm I have had the opportunity to ask questions about my involvement in this project. ( )

I understand that my involvement is entirely voluntary and that I am free to withdraw from the project at any time, without giving reason or excuse. ( )

I understand that I will be expected to take part in a 45-60 minute zoom interview, and that my involvement is voluntary. ( )

I understand that audio/video from the interview will be recorded and stored securely, and then transcribed. I understand that anonymised recordings and transcriptions may be kept so long as they are deemed to be of academic use. ( )

I agree to take part in this research as an interviewee. ( )

Initials:

Date:

Signature:

Consent forms collected via: - COVID communication - Consent form - Google Forms

Appendix V – Questions Prepared for Semi-Structured Interviews

Listed below are a series of proposed prompts, questions, and sub-questions for the semi-structured interview for the study.

1. **Introductory statement**

"2020 has been a year like no other, the purpose of this interview is to explore your views on the role various forms of media has had on how you personally have processed and reacted to evolving news of the pandemic."

Check with participant to see if any reflections on that opening statement?

2. **Opening question: What are your recollections of when you first heard about COVID-19?**

   a. What source of media do you use to get your news?

   b. What was the first country you heard was affected by COVID-19?

   c. How did that news make you feel?

   d. Did you change any behaviours, on hearing the news, if so what?

   e. How did your views vary as compared with your friends and family?

3. **Origins of COVID-19**

   a. What is your awareness on theories as to how COVID-19 came into existence?

   b. What would you deem as a trusted source as to get this information specifically?

   c. Does detailed scientific knowledge of the science behind COVID-19 help or hinder your day-to-day response?

   d. Has your understanding of this increased or decreased over the past 12-15 months?

   f. This has been widely described in the media as a 'once in a century event'. In your view could an outbreak such as this happen again in our lifetimes?

4. **Subsequent pandemic behaviours?**

   a. Three world slogans have been a big part of UK government communications, are there any that particularly resonate with you, and why?

   b. The vastly varying way COVID-19 affects people has meant shielding & asymptomatic transmission have been vital. What do these terms mean to you?

   c. Are you more likely to listen to a friend, expert or celebrity when it comes to adopting behavioural modifications related to keeping you and your loved ones safe?

d. When stories arose about people breaking the rules, do you think that helped, hindered or had no effect on the public health response?

e. Are there any phrases or words that spring to mind about 2020 and the COVID-19 pandemic as a whole?

Faces & Phrases of the Pandemic

a. Chris Witty

b. Jonathan Van Tam

c. Matt Hancock

d. Jenny Harries

e. Devi Sridhar

f. Dominic Cummings

g. Stay at home, messaging pixelated

h. Stay Alert messaging pixelated

i. Hands, Face, Space, Ventilate pixelated

Appendix VI – Example of Transcript Processed into ChatGPT 4

Model: GPT-4

Copied below is a section of a transcript from an Interpretative Phenomenological Analysis (IPA) study. The research question I am seeking to answer is "What is the impact and interplay of social and mainstream media on global public health communication in a pandemic?". I need you to draw a table finding "themes" relevant to the research question on the left then "substantiating quotes" from the transcript on the right. Here is the first part of the transcript:- Well, on the bit about how quickly the world has been evolving and. Honestly, the first thing I thought, when he said that was gosh it's been a bit of a mess. it's just been chaos I just feel like it's like no other time we had such intense and the kind of intensity of updates and news and paranoia has just been unlike anything. And I think the reason it's felt so intense has been because it's all been on one topic I think we've all been we've all got very useful through. Constant news we've all got very used to this like 24 hour access to everything and hearing everything around the world in live stream, basically, but I think the difference has been has been no news except pandemic news for the last 18. So the variety is gone that makes it feel even more overwhelming than constant us about various topics And I think it becomes difficult because you think well. I'm not hearing anything new it's just, day after day it's not news anymore, because it's just yeah same thing, day after day after day. When it gets a little bit monotonous, I think, and that's why it's about so intense. Gosh it's such a big question isn't it. No, I think I feel undecided about how to move forward, because On one level my immediate thought is Oh, we need to be fact checking things before it goes out because there's been a lot of obviously fake news is like a huge issue now, so my immediate thought is Oh, we need to fact check things before they go out, but that is incompatible with the way news is broadcast nowadays, and the fact that anybody has a platform to spread information which I think is a great thing I think that's brilliant, but it makes it impossible to monitor and so you've always got to move away from the source of the news and focus your efforts on the people digesting the news and try and support them to do so in a constructive way and decide for themselves what's useful and what's not. Yeah it's difficult isn't it because you can't facts check everything and it's the nature of our kind of immediate access to information that. Yeah he never going to be able to do that. But I think also, I think what I what I would love to see change in the news is the focus on the negative I think it's so rare for the mainstream media outlets to focus on at least positive or constructive news because negativity cells, and that's what I hate about mainstream media is that there could be a great story, but they'll find a negative twist on it, because that's what people seem to love reading. I didn't know if they do I don't know but that's what sells and I think that's the kind of larger change that I'd love to see is for last negativity and more like rounded communication, but we have quite short attention spans, I think, and on the whole, which means that people want clickbait they love the headlines that's what sells and that's it that's what gets written about the thought pieces they kind of like well research slow journalism type of stuff. So I suppose on one level it's helped a lot, obviously, because never before we've been able to have this global picture of the pandemic and see what's happening in other places, maybe try and kind of communicate that learn from the lessons make people aware that this is a global issue and it's a big problem. So I guess in that was actually influenced at well because I mean that's how they issue the lockdown instructions and the kind of public health. Yeah, I

suppose, they use mass media mainstream media to communicate the guidelines and so on for lockdown so that's influenced, I guess, in a positive way that that's been the tool that they've been able to get across and, of course, those look down to pick three had quite a positive impact on the spread of the virus, so I guess in that way it's positive, and I think negatively it's made people very paranoid. But then it's difficult because it is, it is a scary thing, many people so maybe kind of rightly paranoid that way um. But yeah was this the question kind of how the communication influence the pandemic, because then I can influence the proceedings of the pandemic. Yeah I mean I guess from that behaviour one minute is that the media has enabled the implementation of the lockdowns and so on um gosh I think. I'm thinking about now, I'm just trying to, I think it may be goes back to the thing that you can't control the messaging and you can't fact check. But I think a lot of new sources and maybe even individuals capitalized on the great attention that's being paid to it Yeah and use that to maybe build a platform and spread fake news because I think a lot of the time people don't regard to speak, that is just there what they think is the right thing. But you know misleading means or what all the news about side effects of vaccines and I think yeah maybe the kind of maybe the influence than it is also going into the way that the vaccines have been communicated out to the public, actually has to see before the new stories about certain side effects and so on, and the way that's all being communicated. Yeah and it feels excited to play that so I started reading about it very early on, because I read the economist and they were there was a whisperings about and the January issues started talking about it and at first honestly, it was very it was the kind of sounds terrible now, but it was out for them issue, not an issue I just don't genuinely did not see it as a threat to US and me, and our lives and our society so First it was like reading our kind of fascination I go and watch the spread of you know this, but when it's when it's such isolated cases I think they've been confirmed the 14 linked cases. You just don't understand that doing it, I know you said you kind of clocks on quite early but I definitely didn't click on that this could be could ever affect us, so I think At first it was just reading I had an idea about it through kind of January, February, but not really from news like mainstream media, but from kind of The Economist and me, scientists and so on but wasn't particularly sad about it at that point and honestly I remember the first time I really caught on to it was the end of March, and I had some friends to stay in Cambridge and we just gone to a gig out on the Sunday night, which now is the last day I went to for a long, long time, but I really was it wasn't even on my radar I think people have started to think about not going out and doing things are going to nightclubs or concerts because it was starting to bubble, it was just totally out of my mind and I just didn't even have that as a consideration, and I remember after that gig and people, the next morning starting to post on social media saying you know people should really stop going out to clubs, this is serious and I just I just had no idea that that was in the kind of minds of some people anyway, it was that day after it was on the Monday, my friends are still staying off the weekend and I went out for a run and I came back and open the door and someone said, for us, is told everyone stay inside. And that's what my friend said yeah and I just remembered my heart sunk and I thought, what and this kind of panic set in and then 20 seconds at my phone rings it's my dad and I pick up these Oh, have you seen this and I was so confused I just thought like whoa this this thing that we've kind of been you know, been very much in the back of my mind, a couple of months I thought, if I'm honest right, this is quite exciting what's going to happen here. The thing is yeah but anyway, so we kind of had been talking about it and we're worried like what's going to happen, what is this about and I just assumed, it would be a week or two you know I just I still had not really grasped the full scale of it. And then started watching the

point where they pose like daily briefing things, maybe they weren't even daily at that point but started watching be versus press conferences, where he be in that room and that kind of thing and they're very I remember, they really kind of hit me and it's quite severe and suddenly say okay this actually is a thing and it's time to us it's going to affect us even at that point, I didn't grasp the full magnitude of it, and I still assume that it would just be a couple of weeks and containment measures or whatever, but yeah there was a lot of frenzy around that time. I honestly don't remember hearing much about it and I actually think the first couple of weeks I think I was still maybe under the impression that it was just like a flu like it wasn't much worse than the flu. It was so confused, I mean I didn't think, I guess, a lot of us didn't know a lot of people, scientists and then the medics didn't know what it was. But I didn't grasp the severity of it, I think, even for a bit longer than that and had just assumed I didn't know, maybe I assumed, it was no reaction I don't really know, maybe I just didn't want to believe that this was going to be a huge. Something huge impacts us Maybe it was that I don't feel like I fully grasp. A quite a while every day um, it is hard, looking back on it, because of course we had to say much sense it's very difficult remembering in those initial weeks what my thinking was because obviously it's changed so much. Sure, and with others, I still didn't fully I didn't feel too panicked I, as I said, there's a bit more interested in the deal what's this going to be it's quite exciting and new and what's going on. Yeah just thinking, like, I think, so the funny thing, so in my kind of close Friendship Group for the universe, to the six of us girls we live together and we're still kind of best of friends.

Theme	Substantiating Quotes
Intensity and lack of variety in pandemic news	"I just feel like it's like no other time we had such intense and the kind of intensity of updates and news and paranoia has just been unlike anything." "So the variety is gone that makes it feel even more overwhelming than constant us about various topics"
The difficulty of fact-checking and controlling messaging	"my immediate thought is Oh, we need to be fact checking things before it goes out, but that is incompatible with the way news is broadcast nowadays, and the fact that anybody has a platform to spread information" "But I think also, I think what I what I would love to see change in the news is the focus on the negative"
Impact of media on implementing lockdowns	"So I guess in that was actually influenced at well because I mean that's how they issue the lockdown instructions and the kind of public health." "Yeah, I suppose, they use mass media mainstream media to communicate the guidelines and so on for lockdown so that's influenced, I guess, in a positive way"
The role of media in spreading paranoia and misinformation	"I think negatively it's made people very paranoid." "But I think a lot of new sources and maybe even individuals capitalized on the great attention that's being paid to it Yeah and use that to maybe build a platform and spread fake news because I think a lot of the time people don't regard to speak, that is just there what they think is the right thing."
Personal experience and perception of the pandemic	"At first it was just reading I had an idea about it through kind of January, February, but not really from news like mainstream media, but from kind of The Economist and me, scientists and so on" "And then started watching the point where they pose like daily briefing things, maybe they weren't even daily at that point but started watching be versus press conferences, where he be in that room and that kind of thing and they're very I remember, they really kind of hit me and it's quite severe and suddenly say okay this actually is a thing and it's time to us it's going to affect us even at that point, I didn't grasp the full magnitude of it" "I didn't grasp the severity of it, I think, even for a bit longer than that and had just assumed I didn't know, maybe I assumed, it was no reaction I don't really know, maybe I just didn't want to believe that this was going to be a huge. Something huge impacts us"

Theme	Substantiating Quotes
The role of social media in pandemic communication	"I remember after that gig and people, the next morning starting to post on social media saying you know people should really stop going out to clubs, this is serious and I just I just had no idea that that was in the kind of minds of some people anyway, it was that day after"

Copied below is a section of a transcript from an Interpretative Phenomenological Analysis (IPA) study. The research question I am seeking to answer is "What is the impact and interplay of social and mainstream media on global public health communication in a pandemic?". I need you to draw a table finding "themes" relevant to the research question on the left then "substantiating quotes" from the transcript on the right. Here is the second part of the transcript:- They always used to call me Dr Chloe because I was the only scientist and a half, and they are all they're all clever girls, but they are. Like, Very paranoid and have absolutely like a shocking level of side understanding like what them lcs to bring her chickens me out of the fridge and say Connie does this have salmonella, can you see. They just had no and he's obviously very clever girls and some of them are now doing less than doing very, very well in their careers, but their scientific understanding was shocking. Yeah, and so I watched the WhatsApp group hundreds of messages every day of them saying you know, giving this very dubious almost advice to each other and I remember, one of my friends that just make sure guys when you're out cycling don't cycle behind anyone because, because when you breathe it's going to come into you behind and I just remember being like oh my God that's like to. Okay just to quickly kind of answer your question that I think the frenzy wasn't. And I'd say, probably the typical BBC News stream. At that point, I found it quite shallow reporting is in there wasn't much depth through any of the stories, I found so that's why I kind of prefer to use new scientist and where they do much longer and more like informed issues last news less like click it and more information and, gosh what else did I use, I mean I listened to quite a lot of podcasts, so I would have listened to the times daily news briefing The Economist daily news briefing the Guardian I kind of more listen to news rather than read I think I yeah I think I am a bit vibrating with some new sources that I trust them so much that I take what they say as possible, so things like New Scientist or the economist, I read a good piece in there I'm sold. Whereas I'm very sceptical if I hear if I see a headline or you know just the same the same story going round and round on the BBC TV channel something. So when they started when there was some doubts cost around the origins. Yeah, I think, so I don't know if I actually. I think, so I think I did just take care I can't remember questioning it we got to say that the kind of conspiracy theory of the labs maybe we can't even call it a conspiracy theory, but that was one of my favourites. And then just I just thought that that whole idea was so silly of lab accidentally is experimenting with dangerous Newton and it gets really stirred this whole kind of bio. Oh what's it called like bioterrorism that kind of thing I did, I have to say I found it quite interesting and intriguing because, I don't think I believe that it was anything but natural. But I was also very happy almost with the full picture that a lot of these longer. Our schools were giving us and I don't feel like they were just dismissing things they were giving a voice and opinion to some of these lesser kind of or more intriguing possibilities. I think China know, I guess, not before that. End of March for the announcement I don't think I changed any behaviours before that, I mean as I said, I was still one of those people still going out going to parties going to nightclubs going to gigs up literally up until the last day yeah and probably looking back, I feel like that that was

irresponsible but, honestly, at the time I can't even say that I thought about it just wasn't even on my radar I shouldn't maybe be doing now. So, I don't think so not immediately I think there was that denial, because even when that announcement came on I didn't immediately feel like you know I want you to. Yeah exactly, yeah and I think a couple of my friends who were changing their behaviours earlier that are the ones that I tend to associate with being quite paranoid and love clickbait news and love reading the Daily Mail and so I think that almost validates that for me that they were the ones panicking and sharing these things I was like honestly I don't really you know they're the same ones that share with me articles about you know just ridiculous kind of dirty mouth science stories, and so I didn't kind of invalidate it, but they were the ones reacting to it for me which maybe shows low level of trust and my friends, but you know. So, I think in terms of my colleagues, similar to me I think everybody seems kind of this medium risk where they'd heard about it we're kind of talking about it, but it didn't feel like an immediate threat or even a huge deal to anyone, it was more like what's happening here what's you know what's this thing It was more intrigue. With my family very similar although they I say even further down the line, in terms of not Covid deniers but kind of like they want to hold on to their freedoms and see lockdown as you know they're kind of against their freedoms and all the best, so they wouldn't even bother down not wanting to accept that this could be a thing for us you would love to talk to my dad he is I mean has some very extreme views on the best but I kind of think better those and I think he's fascinating he's a scientist he's incredibly clever man, but when it comes to this, he got so caught up in the kind of frenzy and yeah has not caught up in the frenzy sorry almost like anti the frenzy, and things anybody that is scared about cave it is stupid and that kind of thing so it's very yeah I think you'd have an interesting discussion. Not a tool, I really don't I really don't remember any kind of names. Yeah that's a good point actually when Trump yeah with his theories, I guess, it would invalidate kind of anything that he sort of dives I would question. Yeah that's a good For it, I was he kind of one of the first ones talking about. Yeah I guess so possibly I mean maybe it is the case that if he has something that you think is so ridiculous you don't even give it a consideration a second thought, because you don't feel like it's kind of worthy of it. I don't know that I think so, so the origins, I mean, I think, because I studied virology at epidemiology and I understand how biases we company and repurchase and variants arise, and all of that I just didn't think I didn't think that it was particularly crazy that this has arisen, I mean, I think I was one of those people that was like I just find it incredible that we aren't all infected by millions of things that are killing us every second because it's just so much you know there's so much going on in the human body, and so I don't think I was a tool looking for an alternative other than just a naturally arising new virus, I mean I just find it incredible that pandemics don't happen every single yeah so much out. yeah so I didn't think I was looking for another alternative so it's kind of didn't but then I think for a lot of people that don't understand where how viruses come about what It is how it can mutate change, new variants maybe it's more it's nicer to have an explanation that a scientist creates that rather than you know it's just like incubating and pegs and Growing mutations and you know Spreading amongst species and adapting and maybe it's easier to believe that scientists were tweaking and messing about then understand the evolution of variants of viruses and so on. Yeah exactly so yeah I kind of understand what they are, and the idea that in kind of contained environments in order to help us prepare for potential new viruses new variants new pathogens that could come to be one day it's a good idea to experiment with them and almost have an understanding of how more deadly pathogens can arise and, therefore, be better prepared for them, so I understand that those studies exist, and in

a way ominous I'm in support of them as a kind of a song with a scientific background, and you know trust, maybe trust and containment measures and safety procedures and so on, and I just understand that we're always on this quest for kind of third their scientific not mentioned, and so on. But then yeah I mean when I started to hear if you know we're hand is one of these places that only a few facilities and the walls, where they do actually take back for into viruses and do these studies on them you do you think wow what a what a coincidence and I mean I'm still yet to be convinced that I think it probably was natural, but even just last week, I was reading something where a lot of people aren't satisfied with the WHO report and hasn't Biden given a group of special so it kind of special, as you know, scientists and time to go away and further investigate the so I'm yet to be convinced like I'm not against I'm not totally in disbelief that idea I think it'd be crazy If we think about you know that this pandemic is potentially being caused by a leak it's just very SCI fi, as I say, quite exciting really. I would trust official report, so I would trust the findings of a say who report probably from an independent body, I don't think I would trust it if it was government funded either by our government or especially maybe Chinese government who may have ulterior motives Something like that And I suppose everybody does um and then it's impossible really get to see impartial. I mean, my understanding was that was because it was very difficult for them to get access for quite a while. I mean I think, when you say how do I feel is in like do, I feel that was appropriate. No, I didn't think so, I mean I think if anything leaks down the line it's being considered, they have more time to fully investigate I think I would still trust the outcome if they did, change the outcome, I think they would I would still trust it Because you know that as long as they kind of had scientifically sound methods

Themes	Substantiating Quotes
1. Limited scientific understanding among peers	"Very paranoid and have absolutely like a shocking level of side understanding like what them lcs to bring her chickens me out of the fridge and say Connie does this have salmonella, can you see."
2. Influence of social media	"I watched the WhatsApp group hundreds of messages every day of them saying you know, giving this very dubious almost advice to each other."
3. Mistrust in mainstream media	"At that point, I found it quite shallow reporting is in there wasn't much depth through any of the stories... I am a bit vibrating with some new sources that I trust them so much that I take what they say as possible... Whereas I'm very sceptical if I hear if I see a headline or you know just the same the same story going round and round on the BBC TV channel something."
4. Alternative sources of information	"So that's why I kind of prefer to use new scientist and where they do much longer and more like informed issues last news less like click it and more information and, gosh what else did I use, I mean I listened to quite a lot of podcasts, so I would have listened to the times daily news briefing The Economist daily news briefing the Guardian."
5. Skepticism towards conspiracy theories	"But I was also very happy almost with the full picture that a lot of these longer. Our schools were giving us and I don't feel like they were just dismissing things they were giving a voice and opinion to some of these lesser kind of or more intriguing possibilities... But I was also very happy almost with the full picture that a lot of these longer. Our schools were giving us and I don't feel like they were just dismissing things they were giving a voice and opinion to some of these lesser kind of or more intriguing possibilities."
6. Denial and delayed behavior change	"So, I don't think so not immediately I think there was that denial, because even when that announcement came on I didn't immediately feel like you know I want you to."

Themes	Substantiating Quotes
7. Influence of friends' opinions and behaviors	"Yeah exactly, yeah and I think a couple of my friends who were changing their behaviours earlier that are the ones that I tend to associate with being quite paranoid and love clickbait news and love reading the Daily Mail and so I think that almost validates that for me that they were the ones panicking and sharing these things I was like honestly I don't really you know they're the same ones that share with me articles about you know just ridiculous kind of dirty mouth science stories, and so I didn't kind of invalidate it, but they were the ones reacting to it for me which maybe shows low level of trust and my friends, but you know."
8. Family's skepticism towards the pandemic	"With my family very similar although they I say even further down the line, in terms of not Covid deniers but kind of like they want to hold on to their freedoms

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themselves to any potentially virus infested areas. So we kind of like to me it's like an extra level of protection, like everyone's taking measures, but for the particularly vulnerable shielding as like yet another method. Right um and then the second one, was what sorry. yeah I mean yeah the theory that it's possible to be infected With current of ours and the acm so not displaying any symptoms and unknowingly unwittingly transmitting it to other people, which could then develop more severe infection so yeah I mean, in general I think any virus that produces a symptomatic infections is particularly worrying. Because it's not it would be a much nicer if everybody immediately on day one got if everybody got a horrible cough then it's very easy to know to stay inside. yeah, but I think that's The worrying thing, and it did cause a lot of nerves actually I think over the pandemic, knowing that a lot, while sharing that a lot of younger people, especially were asymptomatic. It caused a lot of worry because I thought, well, I could at. Any point be infected and I probably be fine. yeah and could be out there, spreading it, so I think it definitely did cause bit of worry and then and I think it's misleading, though, because I remember sometimes people would say. You know I feel like I'm not in fact I feel fine and then you say okay it's probably a lot of asymptomatic infection as well. But yeah. On the public health response um. gosh I think a bit of both I mean, I think it hindered it in there as soon as you hear that not everybody is following the Rules you think, and I send you plural not me not you just like people may think. Okay, if they're not sticking to it, and neither will I so it kind of reduces adherence but I say on the flip side, the response, the shaming of people when they. You know, someone was caught driving somewhere on a fishing trip the shape that that person got you know, like named and shamed or national media you do think wow Okay, some people are now going to really comply because they're terrified of things out. So I think probably I definitely think effects that I didn't think it would have no effect, but I think two different people, it would do different things. I didn't think anything additional to what everything we've spoken about. Oh God it's. Know it's funny maybe. going to be. Terrible at. And what their Jones. So this might be totally wrong I'm probably going to really embarrass myself I don't know this guy's name, but I think he has something to do with the WHO it's potentially the director of it. Oh, absolutely no idea honestly. No idea. Oh, she she's my friend's mom I can't remember her name but she's the she was sometimes on gosh what's her title. I know she was sometimes on the podium um. yeah gosh I can't I really can't remember I know she's a medical doctor, she was a medical doctor. And I remember her name or. I don't know. Wasn’t she in like the same team as Chris Whitty I'm not quite. high security agency. Honestly, this isn't going well and I'm not redeeming myself here because I have no idea. So again, not sure that I have is this who guy. me because I was just gonna say direct Sir off, but maybe that maybe, can I say something like I just made direct towards like pandemic response. yeah okay. Congratulations to you, I thought the first guy was I thought this was there. That no I didn't miss. I kind of I started saying the director of the WHO and then I thought is that even more specific than that, so I tried to qualify with a of kindness. No idea. I recognize that now, I do. Yes, I have I've watched us speak yeah. I haven't real problem with names, you know. Have a real partner with. So, and sometimes. Oh yeah Dominic Cummings. I remember that interview so well, where he was out in the garden in his linen shirt. I'm what you call it the right hand man, Boris Johnson boycott by. Would you call it the advisor Is it the divisor. Something was protects the NHS. stay at home tech manager NHS save lives. And this was a different message. say it wasn't Stat hey I can't remember till now. stay. stay, and that was it yeah. Oh, I know exactly who he is. Do you ever find this when you get put under pressure with like a face, like watch this guy every day. soon as you pull him up I'm like no I did. I mean, it really is this, this is Chris Whitty. Matt Hancock's that. Minister how. Of

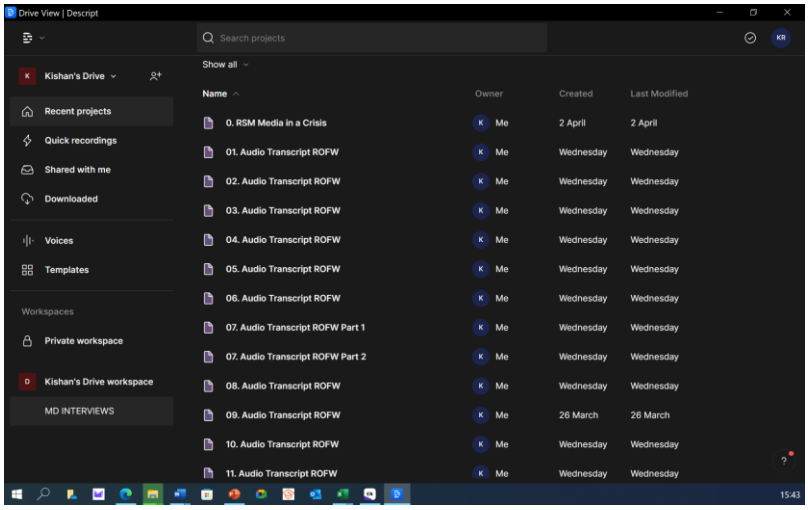
course it I literally watched him every day. yeah it is. uh huh. yeah I thought lunch at some point that I can meet half about I'm probably going to take with the whole thing that that's fine yeah no. God I can't believe I didn't recognize matt Hancock that is just me. which I think the most I mean very recently I watched the most hilarious video Matt Hancock I'm. Doing park or have you seen it oh it's so funny and his like clemson's he looks like a little boy did.

Theme	Substantiating Quotes
Trust in scientific reports	"So you know I didn't think the delay in the report was doing anything, the delay and the kind of report and the outcomes would make me trust it any less."
Understanding virus dynamics	"I feel like if I really understand how a virus works mutate spreads exists on surfaces that kind of thing I feel like I'm better prepared to analyse...I feel like I'm better equipped with scientific knowledge to be able to analyse it think for myself and reach a conclusion, rather than just having to believe everything I read because they don't have the scientific skills to question it."
Increased media consumption	"Definitely increased like I read about [COVID-19] every day so... but actually at the same time, maybe there's still a lot I don't maybe understand or if I'm not quite There with I don't fully understand some elements of it..."
Globalization and pandemic spread	"I Jenny will maybe yeah I genuinely think so because I just think a couple of reasons, firstly globalization like we just travelled everywhere now we've got no hope of containment. I mean I just think that if any virus is arising or any pathogen is arising somewhere it's everywhere, within two days or something I just think that so globalization's of massive one."
Catchy public health messaging	"Yes, the expert. hmm. The three word ones, not the ones that are all hands face space yeah I like that. I just think it's catchy and it's nice that it right."
Shielding and asymptomatic concerns	"So shielding I would say If a vulnerable person wants to kind of apply an extra level of protection against themselves...So we kind of like to me it's like an extra level of protection...I think any virus that produces a symptomatic infections is particularly worrying. Because it's not it would be a much nicer if everybody immediately on day one got if everybody got a horrible cough then it's very easy to know to stay inside."
Rule-breaking and shaming	"On the public health response um. gosh I think a bit of both I mean, I think it hindered it in there as soon as you hear that not everybody is following the Rules you think, and I send you plural not me not you just like people may think. Okay, if they're not sticking to it, and neither will I so it kind of reduces adherence but I say on the flip side, the response, the shaming of people when they."
Familiarity with public figures	"Oh, she she's my friend's mom I can't remember her name but she's the she was sometimes on gosh what's her title. I know she was sometimes on the podium um...Oh yeah Dominic Cummings...Oh, I know exactly who he is. Do you ever find this when you get put under pressure with like a face, like watch this guy every day. soon as you pull him up I'm like no I did. I mean, it really is this, this is Chris Whitty. Matt Hancock's that."

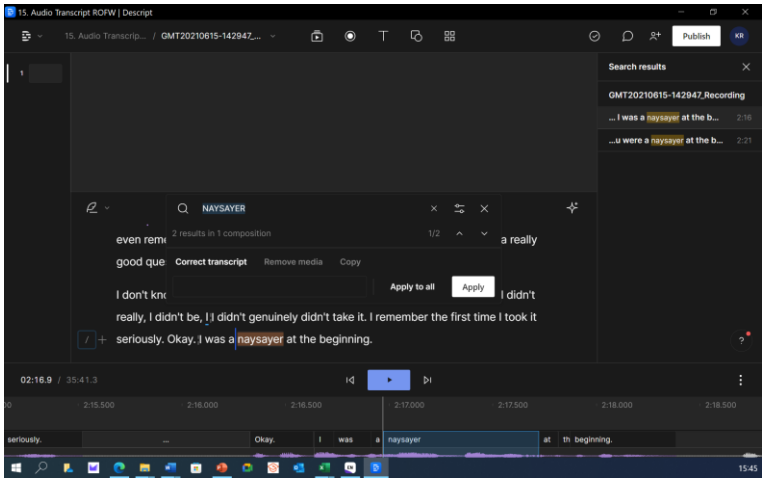
Appendix VII – Miscellaneous Material

This appendix contains materials that while not pertinent to the main body of the thesis are useful when considering this work in its entirety.

Screenshot Showing Example of Descript Interface & Audio Transcripts



Screenshot Showing Example of Descript Search Functionality



Reflecting on Adding AI Tools to IPA

While AI can significantly augment IPA, i.e., making something greater by adding to it, when applying IPA methodology to larger data sets it is important to remember IPA is still heavily dependent on the human researcher's understanding and judgement. Therefore, all AI generated outputs of this study were thoughtfully considered and critically reviewed to ensure the analysis remains true to the participants' lived experience, the human process of immersing oneself in the data is essential to that process.

It is important to emphasise commercially available AI has not yet reached a point where it can fully grasp or interpret the nuance and depth of human experience the same way a human researcher can. What AI, can do and where I propose it adds value, as certainly has been the case in this research project – is to augment and scale the application of IPA principles and methodology to a far larger data set, in this case of 40 participants, then the original and classical application of the methodology was intended for.

There are six core components of conducting an IPA study, that I propose make it a particularly well suited research methodology for innovation and adaption by augmenting with AI enabled tools and processes. Thus, maximising a hybrid human and AI driven approach to applying IPA on a broader scale. These are: Phenomenology, Hermeneutics, Idiography, Transparency, Double Hermeneutics, and Participants Voice. These components were derived from and considered in the context of Smith's seminal paper introducing the IPA methodology (Smith 1996). The following considers these six principles of IPA when used with addition of AI tools and applied to larger heterogeneous groups rather than the usual small homogeneous groups IPA is traditionally applied to.

For a phenomenon as significant and impactful as the COVID-19 pandemic it is proposed such an approach is warranted to get a broader picture of participants' lived experience, the issues they faced and how the communication of COVID-19 impacted upon them. In this section each of the six core components listed above are introduced, briefly explained, and then offered as to how AI may or may

not augment that step and the degree to which its role differs from the human component to conducting qualitative research.

Phenomenology

Firstly, phenomenology is a philosophical movement originating in the 20th century, which has had a 'long, controversial, and often confusing history' within the social sciences (Rehorick and Taylor 1995). Moreover, depending on one's epistemological and ontological position as (Goulding 2005) allude, it is either conceptualised as a philosophy, for those who adhere to the thinking of Husserl (1962) and Heidegger (1962), or a methodology, for those who adopt the position put forward by Schutz (1967).

In this research the goal of the phenomenological approach has been to enlarge and deepen understanding of the range of immediate experiences related to COVID-19 media coverage. My primary concern as a researcher was the direct investigation and description of this phenomena as consciously experienced, by as broad and diverse range of participants as possible. While, considering practical constraints such as time available for a single part-time researcher to complete the data collection, analysis and writing up phases within the submission deadline for the MD programme.

IPA as a research methodology is firmly rooted in phenomenology thus is concerned with exploring and a detailed examination of human experience. Importantly this is an examination without, considering theories as to the causal explanation of that human experience. Ideally it is also as free as possible from unexamined preconceptions and presuppositions. Augmenting the IPA research process with AI enabled tools allows for a consideration of human experience on a more detailed and broader scale, via analysing and signposting to relevant sections of transcripts that are related to the research question and worthy of human cognitive capacity when examining in relation to the research questions. Underpinning this study is 40 interviews and over 35 hours of audio and video footage which have been painstakingly poured over, each watched, rewatched and then specific sections revisited several times to achieve that detailed examination of human experience. The human to

human connection during the interviews, where participants expressed a particularly strong desire to share following a traumatic experience – often commenting the process was quite cathartic – and subsequent interaction and interpretation of the data set amassed are at the very core of this process and hence study. I am aware the AI augmented element of this research may attract both positive and negative attention. Its deployment as a tool to examine the lived experience of a broad group, should not detract from the fundamental human desire to learn about peoples lived experience of COVID-19 in the media, such that lessons can be learned for the next pandemic, and I hope insights from this research may prove valuable in that regard.

Hermeneutics

The second core component of an IPA study particularly relevant to this novel methodology is hermeneutics - the theory and methodology of interpretation. In an IPA context it refers to the process of understanding and interpreting the participants' experiences and perspectives. This iterative interpretive process is influenced by the researchers own conception, experiences and are processes described and acknowledged as a 'Hermeneutic circle' (Bontekoe 1996). Two levels of transcription each powered by varying degrees of AI aided and enabled the interpretation of each participant's lived experience. By using the transcription feature in Zoom, a transcript was available within an hour of each interview. Important to state these did contain some minor errors, but the transcript was available far faster than other more conventional and expensive methods. The rapid availability of the transcripts aided in the interpretation of each participant's lived experience in between interviews. Going back and correcting the transcript also made me realise aspects I hadn't properly heard, contemplated, or reflected on during the initial interview itself. This proved to be an incredibly valuable part of the interpretive process. These interviews were conducted over June to July 2021. This was a period when Descript, the other more powerful AI enabled transcription tool, deployed in this research, was not available. From March 2023 onwards, when writing up this project, the hermeneutic elements of this research were further strengthened. Each audio file was input into

Descript a transcription tool that also allowed for the removal of filler words and therefore nicely formatted transcripts and associated audio files. By filler words, I mean 'umms, aahhs, ers, kindas' etc. Also, important to note that the first round of transcripts being reviewed included all these being present. This significantly aided the interpretative process when seeking to navigate to and revisit a specific part of the corpus of data. Descript also clearly labelled interviewer and participant. Individual transcripts were exported and then aggregated into one large Word document. This Word document was particularly useful in that it allowed for rapid searching of terms or phrases using the 'control + F' function across the entire corpus of data. Descript also makes it possible to easily access and listen back to specific sentences for tone and intonation. I would suggest this allows for a deeper level of interpretation than reading transcripts alone. Therefore, a double transcription process of varying levels of detail was deployed. With first low level transcripts being immediately available after the interview and used over the intervening period of immersion while manually applying IPA methods from August 2021 to October 2022. Then a deeper level of detail during March 2023 to May 2023, enabled by Descript, in a concentrated period of time which aided the interpretive process greatly.

Idiography

Thirdly, Idiography plays a significant role in IPA (Shinebourne 2011). This refers to the detailed, in depth study of individual cases or events. There is some overlap between Hermeneutics and Idiography when it came to transcription. AI enabled tools augmented the IPA methodology from both a hermeneutic and idiographic perspective by assisting with automated, high quality transcription reducing manual labour, minimising errors, and creating a fully searchable corpus of data that can be revisited and or audited.

In the context of IPA, idiography emphasises the importance of understanding the unique personal experiences of each participant. IPA is a methodology committed to exploring how individuals make sense of their personal and social world. The idiographic focus of IPA therefore allows for a detailed examination of the participant's lived experience and provides an opportunity to establish a rich,

nuanced understanding of their experiences. AI enabled tools were used in this study to augment the idiographic focus in a distinct way particularly relevant for a dyslexic researcher.

The idiographic focus of this work was significantly strengthened via text analysis. AI enabled systems, such as ChatGPT 4 can process and analyse large volumes of text data identifying key themes and substantiating quotes in a fully auditable and reproducible way, and example of which is provided in *'Appendix VI – Example of Transcript Processed into ChatGPT 4'*. Which shows how all themes and substantiating quotes were extracted using ChatGPT 4, they were then manually reviewed and put into an Excel tab compiling all those relevant to the research question. This in conjunction with the Word and Descript files detailed above proved incredibly powerful for both the hermeneutic and double hermeneutic elements of this research. As a dyslexic researcher this is a far stronger approach than a purely manual process dependent on sticky notes and paper cuttings, within which I often found myself lost and unable to access or interpret insights from the vast corpus of data this research yielded.

Such an approach not only aids the researcher when applying AI tools to IPA with a larger dataset - by signposting them to areas of interest but also allows an auditable approach where those interested can see which themes and quotes were pulled out and further elaborated on by the researcher.

Transparency

Transparency is a key principle when conducting IPA research. It is related to the clear and detailed reporting of the research process from data collection to analysis and interpretation. In this case it also allows for replication of the application of AI tools to IPA. I believe the addition of said tools to the qualitative research process greatly increases the transparency of said research, whether it is the detailed excel file collated with all themes and substantiating quotes or the various appendices detailing outputs.

The Double Hermeneutic

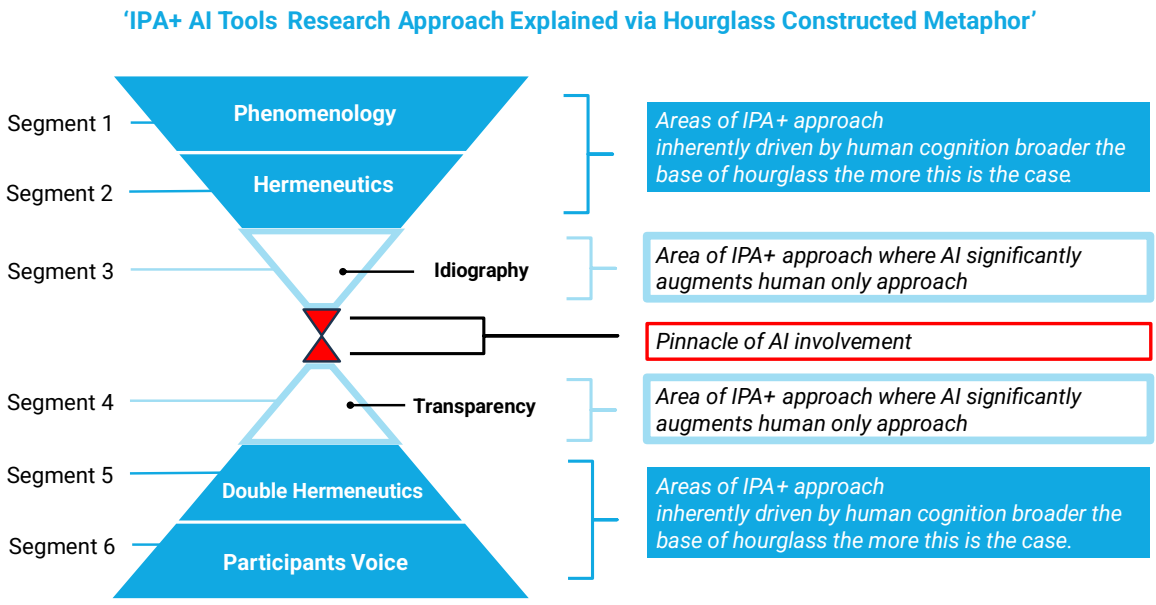
The double hermeneutic (Montague et al. 2020) is an integral part of the IPA research process and refers to the process of 'intersubjective meaning making' i.e. the participant interprets their experience of the phenomena under investigation within the research interaction and the researcher interprets the resulting accounts through their interaction and analysis of the data. This interaction and analysis of the data has occurred over significant period of time to allow for immersion. The AI tools used to create a fully searchable word document containing transcripts from all interviews, a fully searchable excel file with themes and quotes, these in conjunction with the audio loaded into the Descript application were the AI enabled building blocks that significantly aided and assisted the double hermeneutic approach to this research. For complete transparency had it not been for the emergence of these AI tools it would have taken far longer to present the findings of this research and arguably it would have been a less comprehensive representation of participants lived experience.

Participant's Voice

Finally, the sixth and perhaps most critically important component of IPA research is the participant's voice (Shinebourne 2011). This really is central to IPA, with the aim being to explore the participant's view of the world and the phenomenon under investigation and as far as possible adopt an 'insider's perspective' of the phenomenon under study. The participants voice in IPA is not just a source of data but the primary means through which, as a researcher I was able to gain insights into their lived experience. I hope through completing this research project I was able to provide a rich, detailed and nuanced understanding of each of the participants lived experience of how COVID-19 was communicated, how they interacted with various forms of social and mainstream media, the associated impact on their lives and their subsequent beliefs and behaviours. AI merely served as a tool to sort, categorise, and interrogate the vast corpus, thus allowing the participants voice to shine through.

Having broken down each of these six core components of IPA and discussed how AI can augment the human research process I would like to use the constructed metaphor of an hourglass to illustrate areas within IPA that are predominantly if not exclusively reliant on human expertise and those areas where I believe AI can add value, above and beyond human capability alone.

'IPA + AI Tools Research Approach Explained via Hourglass Constructed Metaphor'



The hourglass has the six core IPA components discussed above overlaid, the upper and lower extremities phenomenology and participants voice respectively symbolise areas within the IPA research process that are predominantly, if not exclusively, reliant on human connection, research expertise and empathy. 'Segment 1 – Phenomenology', positioned at the top signifies a need for deep empathetic understanding of lived experiences, a realm presently inaccessible to the comprehensive interpretation of AI. Similarly at the opposite extreme of the hourglass in 'Segment 6 - The Participant's Voice' has been positioned. As it was via inherently human interactions both in terms of how the raw data was generated through the interview and how that data was interpreted via the additional IPA lenses of hermeneutics and double hermeneutics – the participants voice was heard.

Therefore, these are positioned as segments 2 and 5 respectively – the closest to segments 1 and 6. The aspects unique to each participant demands the nuanced comprehension of the human researcher another highly human centric process that presently outstrips the abilities of AI. As we navigate towards the central constriction of the hourglass, outlined in red, encompassing idiography in the top segment and transparency in the bottom, areas where the symbiotic integration of AI can significantly augment the IPA process are demonstrated. For instance, AI, with its ability to identify patterns and themes can lend substantial support to the idiographic process while maintaining transparency especially when dealing with large volumes of individualised qualitative data as was the case in this research project.

Within the bottom half of the hourglass AI can be of assistance in the double hermeneutic process by providing an organised framework for the analysis of patterns in language use thereby enabling a more robust and auditable approach. For example, in understanding not just how participants make sense of their lived experience, but also which sections and quotes were of particular interest to the researcher. However, the human process of a researcher interacting with and interpreting the data is vital, hence this is placed in a segment related predominantly to human cognition.

With regards to transparency, AI's capability for meticulous record keeping and structured approach to presentation of themes are both factors that can enhance the clarity, reproducibility and hence transparency of the overall research. Thus, while the extremities of the hourglass represents the innate human experience vital to IPA, the closer we approach the hourglass nexus, as shaded in red with the mini hourglass, the more pronounced becomes the potential role of AI augmenting the IPA research process.

Glossary

AI	Artificial Intelligence
AIDS	Acquired Immunodeficiency Disease
API	Application Programming Interface
BCE	Before Common Era
CDC	Centres for Disease Prevention and Control
CFR	Case Fatality Rate
ChatGPT	(AI Enabled Chatbot featuring a) Generative Pre-trained Transformer
COVID-19	Coronavirus Disease-2019
CPM	Cost Per Mille
DNA	Did Not Attend
FCC	Federal Communication Commission
FRC	Federal Radio Commission
GETs	Group Experiential Themes
GM	Genetically Modified
GP	General Practitioner
GPT	Generative Pre-trained Transformer
GT	Grounded Theory
HBM	Health Beliefs Model
HIV	Human Immunodeficiency Virus
HPE	Health Professions Education
HPV	Human Papilloma Virus

IPA	Interpretative Phenomenological Analysis
JCVI	Joint Committee for Vaccines and Immunisations
LLM	Large Language Model
MD	Doctor of Medicine
MERS	Middle Eastern Respiratory Syndrome
MMR	Measles Mumps Rubella (Vaccine)
N/A	Not Applicable
NERC	National Ebola Response Centres
NGO	Non-Governmental Organisation
OfCom	Office of Communications - UK Media Regulator
PETs	Personal Experiential Themes
PhD	Doctor of Philosophy
PMC	Population Media Centre
PTSD	Post Traumatic Stress Disorder
R0	Reproductive Number
RSM	Royal Society of Medicine
RTA	Reflexive Thematic Analysis
SARS	Severe Acute Respiratory Syndrome
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
TPB	Theory of Planned Behaviour
TTM	Transtheoretical Model

TV	Television
UK	United Kingdom
USA	United States of America
WHO	World Health Organisation