Organisational Crisis Management: A Qualitative Investigation using a Crisis Lifecycle Framework

by

Jonathan Finnegan

This thesis is submitted to the School of Business at the National College of Ireland in partial fulfilment of the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION



August 2021

ABSTRACT

The COVID-19 pandemic had a destabilising impact on organisations across the globe. Arguably, none more so than the organisations providing healthcare services in response to increased healthcare demands. The purpose of this research study apply crisis management frameworks to the context of public and private healthcare services providers in Ireland. The research will explore the lived experiences of individuals in positions of leadership within their respective organisations and investigate the suggestion that effective and legitimate crisis management is enhanced by the performance of several managerial functions, in the context of the unprecedented healthcare demands. Understanding the effectiveness of crisis management models could provide improved crisis response in future crises.

To best answer the research question and achieve all research objectives, a conceptual model based on existing literature was constructed and tested using qualitative research techniques. Purposive sampling was used to select five participants who provided leadership across public and private organisations during the pandemic. Semi-structured interviews were conducted, with transcribed data undergoing extensive thematic analysis. The six managerial functions were identified as key to effective crisis management. Importantly, it is acknowledged that as the world increases in complexity, so too does the frequency of crises experienced by organisations. Reflectively learning from major global events is critical in being prepared for future crisis events.

SUBMISSION OF THESIS AND DISSERTATION

National College of Ireland

Research Students Declaration Form

(Thesis/Author Declaration Form)

Name: Jonathan Finnegan Student Number: 19174799

Degree for which thesis is submitted: Masters of Business Administration

Title of Thesis: Organisational Crisis Management: A Qualitative Investigation using a

Crisis Lifecycle Framework

Date: 18/08/2020

Material submitted for the award

B. I declare that all verbatim extracts contained in the thesis have been distinguished by

quotation marks and the sources of information specifically acknowledged.

C. I agree to my thesis being deposited in the NCI Library online open access repository NORMA.

 \checkmark

 $\sqrt{}$

D. *Either* *I declare that no material contained in the thesis has been used in any other submission for an academic award.

A. I declare that this work submitted has been composed by myself.

Or *I declare that the following material contained in the thesis formed part of a submission for the award of Master of Business Administration

 \checkmark

Signature of research student:

Fis

Jonathan Finnegan

18th August 2020

SUBMISSION OF THESIS TO NORMA SMURFIT LIBRARY, NATIONAL COLLEGE OF IRELAND

Student name: Jonathan Finnegan
Student number: 19174799 School: National College of Ireland
Course: MBA
The degree to be awarded: Master of Business Administration
Title of Thesis: Organisational Crisis Management: A Qualitative Investigation using a Crisis Lifecycle Framework
Signature of Candidate:
For completion by the School: The aforementioned thesis was received
by Date:
This signed form must be appended to all hard bound and electronic copies of your thesis submitted to your school

ACKNOWLEDGEMENTS

Firstly, I would sincerely like to thank Dr Colette Darcy. Colette's supportive and encouraging words convinced me to not defer the second year of the MBA, at the very last minute. At times during a difficult year, I had thought back on that phone call and cursed my decision, but in hindsight, it was the best decision I could have made.

I would like to thank all of the lecturers and staff behind the scenes at the National College of Ireland. Crisis Management, the topic of this research study, is pertinent to your experience over the last year and a half. Initially having to manage the scenario of COVID-19 lockdowns and a closed campus, then a cyber-security attack to compound the issue. You've all worked tirelessly behind the scenes to keep the show on the road and I'm very appreciative of that.

I would like to express my gratitude to all of the participants who voluntarily gave up their time to partake in this research study.

I would like to give a special thanks to my Mother and Father. I'm forever grateful for their unwavering love and support.

Most importantly, I would like to thank my partner Emma and son PJ. You fill me with inspiration every day. Through some very difficult times over the past couple of years, you have given me all of the motivation and determination I've needed to keep going.

TABLE OF CONTENTS

Abstract	ii
Submission of Thesis and Dissertation	iii
Submission of Thesis to Norma Smurfit Library, National College of Ireland	iv
Acknowledgements	v
List of Figures	viii
List of Tables	viii
List of Appendices	viii
List of Abbreviations	ix
Chapter 1: Introduction	1
1.1. Background and context	1
1.2. Identified problem	2
1.2. Proposed research	3
1.3. Scope	3
Chapter 2: Literature Review	4
2.1. Introduction & Scope	4
2.2. Leadership and the Organisation	4
2.2.1. Defining Leadership	5
2.2.2. Major Leadership Theories	6
2.3. Crisis	10
2.3.1 Crises, the Organisation & the Macro Environment	11
2.3.2 Organisational Crises Management - Case Studies	14
2.3.3 Crisis Management Models	15
2.4. Gaps in existing research	19
2.5. Conceptual Model	20
2.6. Conclusion.	24
Chapter 3: Research Questions	25
3.1. Research question & Aim	25
3.2. Research objectives	26
3.3. Conclusion.	26
Chapter 4: Methodology	27
4.1. Introduction	27
4.2. Research Philosophy	27
4.3 Approach & Design	28

4.4. Research Method	29
4.5. Sample Selection	31
4.6. Time Horizon	32
4.7. Data Collection & Analysis	32
4.7.1. Thematic analysis	33
4.8. Reliability and Validity	35
4.9. Ethical considerations	35
4.10. Conclusion	36
Chapter 5: Analysis and Findings	37
5.1. Introduction	37
5.2. Thematic Analysis	38
5.2.1. Early Detection	39
5.2.2. SenseMaking	40
5.2.3. Critical Decision Making	41
5.2.4. Crisis Coordination	43
5.2.5. Meaning-making	44
5.2.6. Accounting for performance	45
5.2.7. Learning Lessons	45
5.2.8. Leadership Styles	47
5.2.9. Change Management	48
5.3. Conclusion.	49
Chapter 6: Discussion	50
6.1. Introduction	50
6.2. The conceptual Model Fit	50
6.2. Quality Management System	52
6.3. Leadership Styles	52
6.3. Updated Conceptual Model	54
6.4. Research Limitations	55
6.5. Recommendations for future research	56
Chapter 7: Conclusion	57
Reference List	59
Appendix 1 - Interview Questions	69
Appendix 2 - Interview Consent Form	70

LIST OF FIGURES

Figure 2: Distributed perspective and key players involved in Leadership Practices (Spillane, 2006)	9
Figure 3: Frequency of the use of the terms 'leadership' and 'crisis' (Google.com/ngrams, 2019)	14
Figure 4: Mitroff Crisis Management Framework (Pearson and Mitroff, 1993).	16
Figure 5: Burnett's crisis classification matrix (left) and crisis management model (right) (1998)	17
Figure 6: 'The Crisis Approach' framework adapted from Boin et al (2018).	21
Figure 7: The Research Onion (Saunders, Lewis and Thornhill, 2015)	29
Figure 8: Conceptual Model	37
LIST OF TABLES	
Table 1: Goleman's 6 Leadership Styles (Goleman, Boyatzis and McKee, 2002)	8
Table 2: Table of Major Crisis Models	18
Table 3: Table of participants for the research study	31
LIST OF APPENDICES	
Appendix 1 - Interview Questions	69
Appendix 2 - Interview Consent Form	
Appendix 2 - Interview Consent Form	/0

Figure 1: Leadership styles proposed by the Full Rage Leadership Model (Bass and Avolio, 1990)......8

LIST OF ABBREVIATIONS

COVID-19	Coronavirus Disease 2019					
CM	Crisis Management					
GDPR	General Data Protection Regulation					
GP	General Practitioner					
HSE	Health Service Executive					
NCI	National College of Ireland					
NPHET	National Public Health Emergency Team					
PCR	Polymerase Chain Reaction					
QMS	Quality Management System					
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2					
SOP	Standard Operating Procedure					

Organisational Crisis Management: A Qualitative Investigation using a Crisis Lifecycle Framework

CHAPTER 1: INTRODUCTION

1.1. BACKGROUND AND CONTEXT

The coronavirus disease 2019 (COVID-19) is a respiratory illness first observed in December 2019. The virus (SARS-CoV-2) quickly spread across the globe and greatly affected many aspects of health and society around the world in 2020 and 2021. Irrespective of the quality of a national health care system in place, all levels of healthcare services quickly became overwhelmed in many countries.

On 29th February 2020, the Health Protection Surveillance Centre confirmed the first detection of SARS-CoV-2 in Ireland; and within three weeks, there were confirmed cases in every county in Ireland (NPHET, 2020). Unlike many industries which experienced an almost instant rise in unemployment in March 2020, those involved in providing primary healthcare (such as general practitioners), and secondary healthcare (hospitals and diagnostic testing laboratories) had workloads dramatically increase.

In Ireland, the Health Service Executive (HSE) - a publicly funded organisation responsible for the provision of public health and social care for everyone living in the country, provided free COVID-19 testing service for a variety of patient types; including symptomatic patients, asymptomatic close contacts of confirmed positive cases and serial workplace testing (COVID-19 Ireland, 2021). The scale and speed of the Covid-19 outbreak necessitated large scale SARS-COV-2 PCR testing. Shortcomings in terms of the availability of skilled staff, PPE, testing consumables, chemicals and equipment triggered mass disruption of processes within the organisations providing healthcare services. Furthermore, the 'crisis' situation was further compounded by the fear amongst employees presented by the disease, along with the social distancing requirements in the workplace.

Although the COVID-19 pandemic has highlighted significant gaps in the ability of organisations across a range of industries to respond to crises such as virulent new pathogens to continue to function, the Irish healthcare system has continued to match the increased requirements of public health needs. This provides an interesting context to explore the leadership and crisis management methods applied within the HSE and in the organisations subcontracted by the HSE to provide healthcare services – specifically the organisations tasked with meeting the exponential growth in the demand for COVID-19 PCR testing.

1.2. IDENTIFIED PROBLEM

Outside of the self-evident crisis relating to the national public health implications from the spread of COVID-19, the HSE along with many private healthcare service provider organisations experienced their own internal 'crises' caused by the unexpected and unprecedented job demands resulting from the spread of the disease.

PCR testing large numbers of patient samples requires significant coordination across multiple disciplines. Nasopharyngeal swab samples are taken by trained healthcare workers at drive-through testing centres or GP practices across the country and are transported to laboratory facilities to be processed by medical scientists, 24 hours a day. Results for each sample require analysis and authorisation by clinical scientists, before being reported to both the patient, their GP and the Public Health contact tracing team – all within a 24 to 48-hour timeline; 7 days per week, 365 days a year. To date, close to 4.5 million COVID-19 tests have been performed in Ireland (COVID19 Ireland, 2021). To achieve this, significant cooperation from multiple public and private organisations was required, facilitated by leaders within the organisations.

Although the context of the independent variable (COVID-19 testing services) is quite specific, the effectiveness of the project's performance is critical to the social, economic and public health of the country. It is proposed that reflection and learning lessons from a crisis are the most underdeveloped aspect of crisis management (Broekema, 2016; Boin, Hart and Kuipers, 2018). The success of the COVID-19 testing program and continued routine healthcare services provided by Irish organisations provides not only a relevant and relatively novel context to research but a potentially valuable research study.

1.2. PROPOSED RESEARCH

An extensive review of the literature will be carried out, with a conceptual model formed during the research study. This research will use a qualitative interview method to obtain the personal cache of experiential knowledge from those who have provided leadership and crisis management within the public and private organisations affected by the exponential growth in the demand within healthcare service providing organisations. A thematic analysis of the research interviews will be conducted and used to test the conceptual model.

1.3. SCOPE

In the context of the Irish COVID-19 crisis, the National Public Health Emergency Team (NPHET), chaired by Dr Tony Holohan, and the government lead by the Taoiseach of Ireland in the office provide the senior leadership in response to the COVID-19 crisis. The purpose of this research is not to investigate leadership or crisis management from leaders on a national level or an international level. Instead, the purpose of the research is to explore the lived experiences of individuals in positions of leadership within their respective organisations and explore the suggestion that effective and legitimate crisis management is enhanced by the performance of several managerial functions (Boin, Hart and Kuipers, 2018) - in the context of the unprecedented upscaling in COVID-19 testing services in Ireland.

When using the term 'organisation' in this paper, the writer is referring to the commercial businesses, healthcare organisations or hospitals which are involved in some form, in the testing for the detection in SARS-CoV-2.

CHAPTER 2: LITERATURE REVIEW

2.1. INTRODUCTION & SCOPE

The two cornerstone topics discussed in the literature review chapter are 'leadership' and the 'crisis'. As both leadership and crisis are very broad, extensively examined subjects, subcategory topics with specific relevancy to the context discussed in Chapter 1 will be examined. Theoretical models which the researcher deems seminal or principle works relevant to the topic of the broader subjects will be detailed with an emphasis on research conducted on

With that said, the chapter is presented in two main subcategory discussions. The first discussion will look to detail relevant academic discourse on leadership definitions and theoretical concepts. The second discussion will examine aspects and perspectives on organisational crises. The term crisis is also commonly linked with the term 'crisis management' which will also be explored in detail. Again, definitions, theoretical concepts and frameworks will be explored. Past macro-environmental shocks which required effective organisational leadership to respond to an organisational crisis will be studied, with comparisons drawn to the current situation experienced by Irish healthcare service providers will be discussed.

The discussions which are based on a systematic review of the subjects will help frame the topics into a digestible conglomerate and facilitate the construction of a conceptual model which will be detailed within the chapter. This model will be the focus of the primary research being conducted in this study.

2.2. LEADERSHIP AND THE ORGANISATION

Historical events are often correlated to individual figureheads. Religions, wars, conflicts, social changes, political and business successes and failures are more often than not, associated with an individual leader. Pulitzer Prize-winner and seminal literary author, James MacGregor Burns acknowledges such notable, historical events and associated leaders however, he

postulated that leadership is deficient in modern-day society; citing influential leaders of a previous generation - such as Joseph Stalin, Adolf Hitler, Nelson Mandela, Mahatma Gandhi, Martin Luther King and John F. Kennedy (Burns, 1978). The current complexion of leadership however is much different than that of previous generations (Bennis and Nanus, 1985). As the speed of change in our current world accelerates, so too is our understanding of the concept of leadership.

The concept of leadership is a nebulous phenomenon that has engrossed academics across multiple disciplines for thousands of years. From psychology, sociology, political, management and education to modern-day neuroscience and genetic studies – our concept of leadership continues to evolve. Leadership is by nature quite an intangible subject with multi-dimensional factors and variables – and it is a highly coveted and extremely valued commodity in all sectors of society (Northouse, 2016).

Definitions and theories on the subject seek to delineate the reasons as to 'how' and 'why' some people make good leaders, where others simply fail to stimulate any engagement and creativity among their followers (Chen et al., 2020). The purpose of the following sub sections aims to give a brief overview of the range of leadership definitions and theories which have been postulated over the last century. Aspects of these concepts will be extracted from the research to form a leadership aspect of a conceptual model.

2.2.1. DEFINING LEADERSHIP

The terms leadership and management are often used synonymously and often misinterpreted, but they are in essence, quite different (Kotter, 2008; Kruse, 2013). The consensus within academia is that there are significant overlaps within the characteristics and the practical nature of both terms however, the degree to the overlap is hotly debated (Yukl, 1989; Kotterman, 2006; Algahtani, 2014; Yukl and Gardner, 2020). When differentiating leadership and management, Karl Weick proposes that the gap between the terms is founded in the context. Weick uses French phrases to distinguish the difference, comparing management to déjà vu, meaning 'already experienced'; and leadership to Vu jàdé – 'never seen before' (Weick, 1993; Grint, 2008). Leadership generally embodies longer time frames, more strategic approaches, and the need to address novel problems (Bratton, Grint and Nelson, 2004; Grint, 2008).

Yukl states the obvious when writing 'a person can be a leader without being a manager (e.g., an informal leader), and a person can have the job title "manager" with no subordinates to lead" but suggest that most scholars agree that most people in management positions in modern-day organisations will require leadership skills if they are to be successful in the role (Morgan, 2015; Yukl and Gardner, 2020, p. 26).

When defining leadership, Yukl and Gardner (Yukl and Gardner, 2020) describe a process that looks to "influence others to understand and agree what needs to be done" and one which looks to facilitate "individual and collective efforts to accomplish a shared goal". Fred Fiedler definition similarly involves the follower, stating that leadership is the act of directing and coordinating the work of group members (Fiedler, 1964). Lee Bolman and Terrence Deal postulated that where an interpersonal relationship between an individual and one or more other persons in which power and influence are unevenly distributed and one person directs and controls the behaviours of others (Wren, 1995; Bolman and Deal, 2017). Notably, however, Warren Bennis', a pioneer in contemporary leadership studies defined leadership as "the capacity to translate vision into reality" — omitting the existence of the followers - thus highlighting the difficulty in having a singular definition for the term leadership.

2.2.2. MAJOR LEADERSHIP THEORIES

Pre-1940's, studies conducted on leadership was concentrated on the innate characteristics of a leader – attempting to recognise and pinpoint the personalities traits and specific qualities of effective leaders (Johns, 1989; Organ, 1996). From 19th century studies such as 'The Great Man' theory suggested that leadership skills cannot be gained or learned, with the fundamental belief that great leaders were born with leadership abilities to shape the history with their actions.

Later trait theories (the 1930s-1940s) identified characteristics such as charisma, self-confidence and intelligence, and suggested that such traits are key to determining the effectiveness of the leader (Benmira and Agboola, 2021). Although intuitive, trait theories have a critical problem in that no definitive list of leadership traits is achievable. Furthermore, as

individuals display many traits, it is difficult to determine which traits make an effective leader. Situational factors and variables within the interactions of a leader and subordinates are also omitted from consideration. Furthermore, it is difficult to empirically measure some traits due to their intangible nature. Such inconsistencies are highlighted in numerous studies, namely research conducted in Ohio State University (1945) and Thomas Stogdill's research in 1948 which initiated a shift in the academic mind-sets regarding leadership(Hollander and Julian, 1969).

The Ohio State University model identified two styles of leadership behaviour: 1. Considerate and 2. Initiating Structure. Combining these two approaches differentiates four types of leadership variations are proposed. The study suggests that effective leaders possess the ability to structure in which tasks can be attained while having the interpersonal skills to build a cohesive team.

Stogdill's research supported the suggestion that an individual's behaviour was key to effective leadership and proposed that leadership did not rely on personality traits of the leader, rather, that leadership exists between the person or persons within a social situation (Stogdill, 1948; Hoffman et al., 2011). This proposal suggested that effective leadership by an individual in one scenario, may not transfer as effective leadership in another – and that what the leader 'does' in certain situations can be learned. This recognition of context was the foundation of seminal writings and the construction of theories such as Hersey and Blanchard's Situational Theory (Hersey and Blanchard, 1969) and Fred Fiedler's Contingent Theory (Fiedler, 1964).

From the 1990s, a new era of leadership was borne – with a move away from the unidirectional, top-down influencing processes. In a world that was evolving into a rapidly changing environment with increasingly challenging and complex, there was a recognition that leadership theories need to be multidimensional (Van Seters and Field, 1990). The Full Range Leadership Model (FRLM) was conceived by Bass and Avolio which focused on the situational circumstances and the behavioural response of the leader (figure 1). The FRLM included three core leadership styles based on the behaviour of the leader: laissez-faire, transactional and transformative leadership concepts. It is argued that inspiring followers to commit to a shared vision and goals for an organization or unit and developing follower's through coaching, mentoring, and the provision of both challenging and supporting behaviour will enhance effective leadership (Bass and Avolio, 1990, 1994).

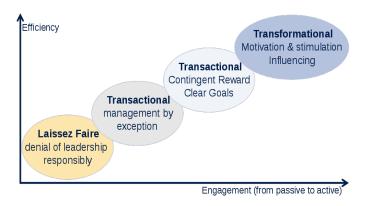


Figure 1: Leadership styles proposed by the Full Rage Leadership Model (Bass and Avolio, 1990)

Daniel Goleman's further suggests that strong emotional intelligence skills are crucial for effective leadership (table 1)(Goleman, 2000). This proposition is supported by several academics whose research suggest incorporating emotional intelligence into leadership development programs to improve their effectiveness (Leban and Zulauf, 2004; Sadri, 2012). Emotional intelligence is also suggested to be of significant relevance during times of crisis when the uncertainty of decisions is increased and leadership behaviours may have to be adapted to fit the situation (Goleman, 2000). When researching 3,871 executives, Goleman's concludes that there is 6 styles of leadership: Visionary, Coaching, Affiliative, Democratic, Pacesetting, Commanding/coercive (figure 2).

Goleman's 6 Leadership Styles

Visionary	Motivates people towards a vision	"Come with me"	Self-confidence, empathy, change catalyst	
Coaching	Developing people for the future	"Try this"	Developing others, self awareness, empathy	
Affiliative	Creates harmony and builds emotional bonds	"People come first"	Empathy, building relationships, communication	
Democratic	Forges consensus through participation	"What do you think?"	Collaboration, team leadership, communication	
Pacesetting	Sets high standards for performance	"Do as I do now!"	Conscientiousness, drive to achieve, initiative	
Commanding	Demands immediate compliance	"Do what I tell you"	Drive to achieve, initiative, self-contro	

Based on Primal Leadership by Daniel Goleman, Richard Boyatzis, and Annie McKee

Table 1: Goleman's 6 Leadership Styles (Goleman, Boyatzis and McKee, 2002)

Modern concepts such as the Distributed Leadership Practice seeks to understand the interactions and complexities of leadership, and an outline of the 'actors' involved in the leadership practice, namely the leader, the followers and the situation (Spillane, 2006; Latta, 2019). Distributed leadership postulates that responsibilities, accountability and power are distributed across skilled persons within the organisation, rather than to an individual leader (figure 2). Similarities can be drawn between other modern concepts such as the Collective leadership approach which observes the organisation as a 'system' where decision making is shared and assumes its people are inherently capable and can be trusted to do the right thing. The collaborative nature of the approaches facilitates innovation and the formation of new practices (Fitzsimons, James and Denyer, 2011). Such theories have been put into practice on a relatively large scale with considerable success, for example, Birmingham's Total Place Pilot which aimed to foster collective responsibility to individuals in the voluntary sectors, private, academic, cultural and sports sectors of the city to solve many systemic problems in the city (Birmingham City Council, 2010).

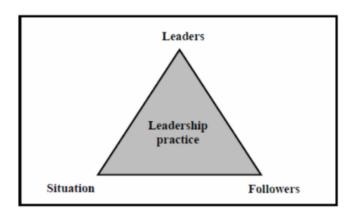


Figure 2: Distributed perspective and key players involved in Leadership Practices (Spillane, 2006)

The most current leadership models are built on over a century of leadership research and practice. Notably, Systems Leadership Theory acknowledges the interconnected systemic nature of the modern world and proposes the necessary collaboration to tackle today's complex, wicked problems (Grint, 2008). Contradicting James MacGregor Burns' statement regarding a deficiency in modern-day leadership, discussed earlier in the chapter, today's research affirms that leadership has moved away from individual ego's to a collaboration for the common good. Today's great leaders are 'first and foremost for the cause, the

organisation and its purpose, not themselves" (Collins, 2009). The new leadership paradigms emphasise an awareness that qualities such as empowerment, collaboration, expertise, change management and a higher ethical purpose are needed to motivate and solve today's increasingly difficult problems. It is commonly accepted that leaders must have strategic direction and a vision to attain the collective goal.

It is proposed that without appropriate leadership guidance to instate and improve quality and productivity, an organisational crisis can worsen (Deming, 1986); and that ensuring 'everybody is doing their best' is inadequate management for a crisis. The following section will discuss crises and crisis management.

2.3. CRISIS

"Management practices that work well in one phase may bring on a crisis in another." - Larry

Greiner

The term 'crisis' has become synonymous with the COVID-19 pandemic in public and academic discourse. When discussing crises, it is important to differentiate and define the terms 'crisis' and 'disaster'. Both of the words are often used interchangeably but in academic discourse, both terms may signal different research interests and approaches(Boin, Hart and Kuipers, 2018). Both of the terms are related to situations that can be described as unexpected, undesirable, unimaginable and potentially unmanageable (Hewitt, 1983; Boin, Hart and Kuipers, 2018).

The term 'disaster' is defined as an event that can be interpreted as harmful, causing human suffering or damaging to infrastructures. Such events can pertain to natural disasters such as floods, earthquakes, hurricanes and tsunamis; or relate to manmade causes such as terrorism, economic collapses and technical failures. The term 'crisis', on the other hand, is used in academic literature to describe a critical, decisive point, and potential antecedent of a disaster. (Boin, Hart and Kuipers, 2018).

A crisis can be defined as a temporal slice preceding a potential disaster (Boin, Hart and Kuipers, 2018). An example of a recent episodic organisational crisis is the 2021 ransomware attack on the HSE which caused all of its IT systems to be shut down – the most significant cybercrime attack on an Irish state agency (BBC News, 2021). Without effective management of the situation, the health outcome for thousands of patients may have been critically affected if essential patient data was lost or deleted. This could then be considered a disaster due to the event which could be collectively interpreted as very harmful (Boin, Hart and Kuipers, 2018). Likewise, if the organisations providing COVID-19 testing in Ireland failed to manage their circumstance effectively, the health of many people would have been at an increased risk. In this regard, crisis management can be viewed as disaster prevention.

The emphasis of this research will be specific to crises within relevant healthcare organisations. The following sub sections will detail definitions and crisis management approaches that can be applied to the context of the paper.

2.3.1 CRISES, THE ORGANISATION & THE MACRO ENVIRONMENT

"Some problems are so complex that you have to be highly intelligent and well informed just to be undecided about them" - Laurence J. Peter

The topic of large scale organisational crises has been extensively researched, both conceptually and empirically over the last number of decades (Pearson and Clair, 1998; Carmeli and Schaubroeck, 2008; Fischbacher-Smith, 2014; Barasa, Mbau and Gilson, 2018). Defined as a "low probability, high impact event which threatens the viability of the organisation", organisational crises are suggested to be initially abstruse; with the means of resolution unclear and requiring imminent action (Pearson and Clair, 1998). Therefore, as the crisis has affected the ability of an organisation to work successfully, effective actions must be taken. Furthermore, it is proposed that a crisis share six characteristics which are rare, significant, high impact, ambiguous, urgent and involve high stakes. A crisis is also characterized by a period of discontinuity, a circumstance in which the organization's or

system's core values are threatened, necessitating important decision-making (Zamoum and Gorpe, 2018).

The nature of organisational crises can vary considerably; ranging from micro-level sources such as security information sabotage and malicious rumours and security breaches to macro-level origins such as terrorist attacks and natural disasters which may disrupt major products or services. Similar academic perspectives consider organisational based crises as a consequence of either social, technological, organisational, or natural hazards (Gephart, 1984).

Larry Greiner (1972) proposes that as an organisation expands, with each phase of growth, the company must overcome several internal crises where major organisational change is required if the company is required to continue its growth (Greiner, 1972).

From a macro-environmental level, it is postulated by Thomas Friedman that the rate of change in today's world is far greater than that experienced in the past. Due to the speed of everevolving technological advancements and increase globalisation in this "new era", the probability of disruptions and crises on a larger scale has increased – widening the reach of people being affected either directly or indirectly by a disruptive event (Friedman, Thomas L. Ikenberry, 2005). Even before the COVID-19 pandemic and its effects on organisations, this current business environment which firms are said to inhibit have been coined VUCA – an acronym to describe the "Volatility, Uncertainty, Complexity and Ambiguity" of the general conditions and circumstances in which firms exist (Bennis and Nanus, 1985). Bennis and Nanus, among others (Bennett and Lemoine, 2014), described the characteristics of each category as follows:

Volatility: Described as a situation that has the potential for frequent, fast-moving changes. The situation is unstable and with the duration of the event unclear. The root cause of a volatile situation is often easily identifiable. The COVID-19 crisis has caused global markets to be "volatile", with fluctuations to market prices described by analysts as 'volatile' by many analysts (Abodunrin, Oloye and Adesola, 2020). Rising costs and access to consumables can cause a major crisis in the organisation. The suggested management approach when dealing with situations of a volatile situation is to develop or bring in resources with specialist skills required to manage the situation. Agility and flexibility within the organisation is key for preparedness

Uncertainty: A situation whereby the cause and effect are understood however it is unknown whether it will cause significant change or negative consequence. Mutant variants of the SARS-CoV-2 virus has caused the COVID-19 crisis to be notably uncertain. We understand and acknowledge that the virus naturally mutates however, it is uncertain whether any of these mutations will affect the vaccination strategy undertaken by many countries. Investing, gaining and sharing further information is the suggested approach in dealing with such events.

Complexity: The situation may have many interconnecting parts which form a complicated system. Although potentially predictable, the extent of the situation may be difficult to understand. The upscaling of COVID-19 testing services created an extremely complex situation whereby a magnitude of networking and communications between patients, doctors/testing centres, laboratories, service providers/agents, contact tracing teams, HSE, consultants, NPHET and the government; compounded by a different crisis (the HSE cyber-attack) and multiple uncertain scenarios in demand for testing. The proposed approach is to address structures to adequately manage the complexity of the systems and processes - such as IT and/or organisational structures.

Ambiguity: A situation or problem which may be novel, with no precedent to model or forecast potential fluctuations in the situation. Describes as a 'lack of knowledge of the basic rules of the game' (Bennett and Lemoine, 2014). From the onset, the COVID-19 pandemic landed many organisations in unfamiliar circumstances where they knew very little about how a 'lockdown' scenario affects the workforce and also was unable to predict the success of any planned reaction to the situation. The approach suggested overcoming this is intelligent experimentation to test the new business environment.

The proposed increased rate of change should not always be looked at in negative terms. Across all industries, the 'rising tide of volatility, uncertainty, and business complexity' provides leaders with an opportunity to evolve and gain an advantage over competition (Bennett and Lemoine, 2014). In this regard, effective leadership and communication, alongside effective crisis management can be considered ever more essential in the modern organisation (Coombs, 2007). This is supported by trending the frequency of the terms 'leadership' and 'crisis' found in sources printed between 1900 and 2019 (Google.com/ngrams, 2019). Figure 3 below indicates an upwards trend in the use of both terms:

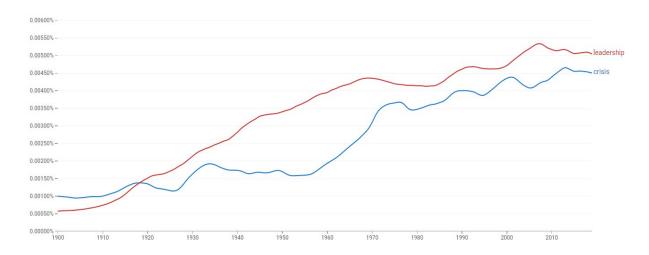


Figure 3: Frequency of the use of the terms 'leadership' and 'crisis' (Google.com/ngrams, 2019).

The following section will look to detail some of the major crisis lifecycle models which attempt to provide frameworks to prepare, prevent, coordinate and recover from a crisis.

2.3.2 ORGANISATIONAL CRISES MANAGEMENT - CASE STUDIES

A crisis management response can have a potential compounding effect on the situation if done incorrectly. Therefore, appropriate and effective leadership along with a crisis management approach is necessary to withstand and negate the crisis.

United Airlines have found it difficult to recover since a 2017 incident where live video footage of a passenger was dragged from a plane for refusing to give up his seat following an overbooking mistake on behalf of the airline. The incident created a reputational crisis for United Airlines however chief executive, Oscar Munoz, issued an insensitive statement that appeared to justify the removal of the "belligerent" passenger, Dr David Dao. The mishandled communication from the organisations most senior leader caused considerable damage to the organisation's reputation, specifically in the Chinese market where Dr Dao was from, resulting in the company's stock falling by over a billion dollars.

American food chain Chipotle Mexican Grill similarly suffered reputational and financial damage after the company 2015 outbreak of E Coli. Initially identified in July 2015, the issue lasted until January 2016. The company's crisis management strategy was heavily criticised with co-CEO Monty Moran stating 'sensationalist media' as the biggest problem. As the scandal evolved for an extended period, the organisation experienced an 82% decrease in profits, with the stock falling by 15% (Prater, 2019). On the other hand, another American food chain, KFC, had to close over 450 stores in the United Kingdom due to a change in their delivery provider. After assessing the crisis in which the organisation had found itself, the food chain took full ownership of the situation by issuing a sincere but very funny print campaign apology – protecting the company's reputation and mitigating the financial loss.

The Irish healthcare system responded relatively successfully to the COVID-19 crisis. The coordination of hospital and laboratory resources when challenged with an increased number of patients, compounded by the need for large scale SARS-CoV-2 testing resulted in very positive feedback (HSE, 2021). The crisis is not diverted, however, as SARS-CoV-19 infection rates remain high. Additionally, the increased stress on the healthcare system is leading to the burnout of the workforce (Crowley and Hughes, 2021). The organisations involved in providing healthcare services must continue to implement and re-assess their crisis management strategies.

The above examples of crisis management/mismanagement suggest that appropriate and effective leadership is essential when trying to manage a crisis that has caused a destabilising effect on the organisation.

2.3.3 CRISIS MANAGEMENT MODELS

Crisis management models are conceptual frameworks that allow leaders and managers to acquire situational context to better apply best practices. It involves all elements from preparation, prevention, coordination and recovery from a crisis.

Early concepts of crisis management consisted of three main elements: Pre-crisis, Crisis and Post-crisis. Furthermore, approaches to crises usually fell under either pre-emptive, proactive, responsive and reactive strategies (Marker, 2020). The study of crisis management accelerated

however in the 1980s due to several large scale industrial disasters (Mitroff, Shrivastava and Udwadia, 1987). Stephen Fink, a pioneer in crisis management, proposed a model for the management of crises, consisting of four stages: prodromal, acute, chronic and resolution. Importantly, Finks model suggested the unfolding of a crisis in sequential stages(Fink, 1986).

Similar to Fink's model, Ian Mitroff further developed crisis management theories when positing his own sequential 5 stage crisis management framework (figure 4) (Pearson and Mitroff, 1993). Mitroff model notably included the practical implications in terms of resources within the organisation, noting that companies cannot attempt to prevent every potential scenario – as well as identifying the stakeholders involved in the crisis, along with their "archetype" characteristics such as the hero, enemy, victim and allies. Mitroff further proposed an additional step (2005) in the framework to include a "redesign" of the crisis management strategy after the learnings phase.

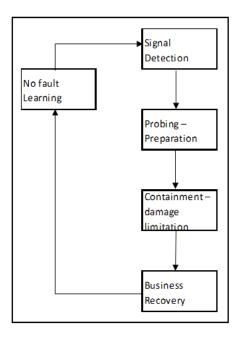


Figure 4: Mitroff Crisis Management Framework (Pearson and Mitroff, 1993).

Another very important piece of work on crisis management was John Burnett's 1998 journal paper, "A strategic approach to managing crises". Burnett used an accumulation of previous frameworks to present a simplistic yet all-inclusive crisis management construct. The lifecycle model consisted of 6 steps: 1. goal formation, 2. environmental analysis, 3. strategy formulation, 4. strategy evaluation, 5. strategy implementation, and 6. strategic control

(Burnett, 1998). Burnett also included a strategically focused crisis classification matrix to help bridge the gap between identification and confrontation of the crisis (figure 5).

	Time Pressure	Inter	ise	Minis	nal
Threat Level	Degree of Control Response Options	Low	High	Low	High
Low	Many	(4) Level 2	(3) Level 1	(2) Level 1	(1) Level 0
	Few	(8) Level 3	(7) Level 2	(6) Level 2	(5) Level 1
High	Many	(12) Level 3	(11) Level 2	(10) Level 2	(9) Level I
uisu	Few	(16) Level 4	(15) Level 3	(14) Level 3	(13) Level 2

Figure 5: Burnett's crisis classification matrix (left) and crisis management model (right) (1998).

Research conducted by Boin, Hart and Kuipers (2018), suggests that effective and legitimate crisis management is enhanced by the performance of several managerial functions: 1. Early recognition, 2. Sense making, 3. Critical decision making, 4. Crisis coordination, 5. Meaning-making, 6. Accounting for performance, and 6. Learning lessons. Table 2 below indicates the four crisis management models discussed and their respective proposed stages.

For this research study, "The Crisis Approach" framework proposed by Boin et al. (2018) will be used as the foundation for the study. The model provides a comprehensive framework in which the researcher can assess the themes of crisis management when applied to the context of the organisational crisis presented by the COVID-19 crisis. The research will be conducted to ascertain whether the crisis approach process and its detailed elements were reflected in the experiences of the leaders and managers during the organisational crisis caused by COVID-19 in a secondary healthcare services setting.

	Fink's Model of a Crisis (1986)	Mitroff's Five- Stage Crisis Management Model (1993)	Burnett Model of Crisis Management (1998)	Boin et al Crisis Approach (2018)
3 stage	4 stage	5 stage	6 stage	7 stage
Pre-crisis	Prodromal	Signal Detection	Identification - Goal Formation	Early Detection
Crisis	Acute	Probing – Preparation	Identification - Environmental Analysis	Sense Making
Post-crisis	Chronic	Containment – damage limitation	Confrontation - Strategy Formulation	Critical Decision Making
	Resolution	Business Recovery	Reconfiguration - Strategy Evaluation	Crisis Coordination
		No-fault Learning	Reconfiguration - Strategy Implementation	Meaning Making
			Reconfiguration - Strategy Control	Accounting for Performance
				Learning Lessons

Table 2: Table of Major Crisis Models

2.4. GAPS IN EXISTING RESEARCH

After an extensive literature review relevant to crisis management, it is clear that there is a broad range of crises typologies along with crisis and leadership concepts that are suggested to help mitigate the effect of the crisis. There are however very few research studies conducted that apply crisis management frameworks to organisational crises in real-time. Furthermore, there are no research studies relevant to crisis management in Irish healthcare organisations impacted by the stresses and demands of COVID-19.

Although many research studies have applied crisis management frameworks to a variety of contexts such as tourism (Evans and Elphick, 2005) and hospitality (Racherla and Hu, 2009). The majority of research studies relating to healthcare focused on tertiary healthcare (hospitals) delivery (Wu, Yang and Wu, 2004; Shirali, Azadian and Saki, 2016; Steier and Moxham, 2020).

It has been highlighted that there are significant difficulties associated with the integration of crisis management theories due to the cross-disciplinary nature of organisation specific crises (Pearson and Clair, 1998). Moreover, due to the lack of evidence observed in the literature in applying CM frameworks at an organisation level, this research will look to determine if the CM approach is applicable and add to the academic understanding of crisis management.

2.5. CONCEPTUAL MODEL

Based on the learned information from the literature review, the researcher suggests that effective and legitimate leadership and crisis management is enhanced by the performance of several managerial functions.

Drawing from the studies conducted by Boin, Hart and Kuipers (2017), "the crisis approach" will be used as a conceptual model to be tested in this research study. The crisis approach is a proposed crisis lifecycle framework that incorporates all managerial functions required when reacting to a crisis. The crisis approach was proposed and applied to national and political crises and disasters however, this research study will assess the legitimacy of the framework when applied to crisis management in Irish healthcare organisations during the COVID-19 pandemic.

The researcher also suggests that having a crisis strategy in place alone will not nullify the situation, that it should be used in conjunction with effective leadership. It is the responsibility of organisational leaders to provide appropriate guidance through means of effective communication and the successful implementation of crisis response protocols.

The below image (figure 6) is a visual adaption of the framework to be applied to the research context.



Figure 6: 'The Crisis Approach' framework adapted from Boin et al (2018).

Below is a summary of the seven managerial themes of the crisis approach posited by Boin, Hart and Kuipers (2018), and adapted as a conceptual model for use in the context of this research study:

Early recognition:

It is suggested that a crisis appears to pose a simple challenge: once a problem has manifested, crisis managers must take action to cope with its ramifications. The reality, on the other hand, is considered far more complicated. It is proposed that most crises do not begin in an instant, but are caused as a result of an escalation. Policymakers must not only detect the emergence of a danger based on ambivalent, ambiguous, and conflicting indications. This implies that they must characterise the emerging situation and reach a consensus on its potential extent and implications. Effective crisis management starts with everyone agreeing that the early signals have developed to a point that constitutes and demands quick action.

Sense making:

Regardless of the context of the crisis, the stakeholders managing the crisis will have to evaluate the threat posed by the scenario and how the situation is likely to develop. It is proposed that it can be extremely difficult to process rational information during periods of uncertainty. This can be compounded by the practical difficulties at an organisational level to discuss and come to a consensus; along with impaired judgment abilities brought on by the stresses of the situation. To facilitate effective information processing, two-way communications, collective agreements, determine mid and long term consequences, and coordinate a potent response, an established process must be in place to interpret crisis signals and their impact as a potential future threat. The 'sense making' phase described by Boin et al. is similar to that of a 'Risk Assessment' phase as the overall method of analysing and evaluating the risk associated with the potential hazard (Pursiainen, 2017).

Critical decision making:

Responding to a crisis often presents leaders with a resource supply and demand imbalance. Regardless of the context, decisions will need to be made as a reaction to the situation however, there is often an assumption that these critical decisions are taken by an individual leader. This is generally not the case, with a collective agreement and coordination of decisions playing a role in the organisational response.

Crisis coordination:

Crises can often necessitate intensive collaboration across a network of entities that may be unfamiliar with one another. To achieve adequate coordinated behaviours within the organisation, vertical and horizontal cooperation must be organised. It is proposed that as the nature of crises is threatening and often requires an urgent response, yet the network of stakeholders within the organisational teams is not always hierarchical, organising a response can require a delicate mix of persuasion and "command and control."

Meaning-making:

It is proposed that during a crisis, it is proposed that crisis leader is expected to provide an authoritative account of the situation, and lay out their rationale to accept their definition of events. By providing meaning to events unfolding will enhance their managerial effectiveness. Failing to 'make meaning' of the situation can lead to decisions being

misunderstood and not respected. Boin et al. (2018) suggest that if "other actors in the crisis are dominating the meaning-making process", the ability of the leader to effectively manage the situation is severely constrained.

Accounting for performance:

It is suggested that the crisis leaders must render account for the actions which had occurred during the crisis. It is also suggested that the leader must prove beyond doubt that they are not responsible for the crisis event, nor are they responsible for a spiralled escalation of the event. Although Boin et al. (2018) discuss 'accounting for performance' as a phase more in line with PR management, politics and government policies, research will be conducted to determine the value and relatedness of the phase in an organisational setting.

Learning lessons:

It is suggested that reflection and learning lessons are some of the most underdeveloped aspects of crisis management theories and in practice (Broekema, 2016; Boin, Hart and Kuipers, 2018). A crisis event will provide a pool of data that can be transformed to enable proactive crisis prevention. It is suggested that there should be processes within the organisation to facilitate collective agreement to enhance contingency and business continuity planning, along with the implementation of preventative actions.

2.6. CONCLUSION

The literature research examined above indicates that leadership and crisis management in the organisation often go hand in hand. Although the concepts of leadership and crisis management originated centuries apart, it is apparent that both concepts are becoming ever more essential topics in the modern business environment.

Although extensively researched, leadership as a concept continues to evolve as it is applied to modern-day, fast-paced and complex scenarios. Furthermore, macro-environmental factors at play are increasing crises to which the organisation must triumph.

The Crisis Approach model has been detailed and modified during the chapter, to form a conceptual model, and will be applied to the context of this research study. The conceptual model will look to provide a dynamic framework to aid in the understanding and progression from the genesis of a crisis, through to its conclusion.

CHAPTER 3: RESEARCH QUESTIONS

Research can be defined as logical, systematic novel and potentially useful information, or lead to new contributions to existing knowledge (Rajasekar, Pitchai and Veerapadran, 2006). Information can be gained through many sources such as academic journals, books or human experiences which in turn, creates knowledge about a topic (Gounder, 2012). When forming the research question, the writer began by reviewing academic literature on the broad and extensively researched topics of leadership and crisis management, before narrowing the focus of research. This chapter aims to detail the question to which this research study aims to answer.

3.1. RESEARCH QUESTION & AIM

Following an extensive literature review on the topics of leadership and crisis management, detailed in the preceding chapter, the writer poses the following research question:

"Does the application of a crisis management framework increase the effectiveness of the crisis management response, when applied to healthcare service organisations in Ireland?"

The research aim is to construct and validate a CM framework in the specified context. The researcher has considered the aim of this research to be in line with SMART guidelines – specific, measurable, attainable, relevant and timely.

3.2. RESEARCH OBJECTIVES

The objectives of this research study are:

- Complete an extensive literature review of leadership, with a focus on crisis management to construct a robust crisis management framework.
- Conduct exploratory interviews of leaders involved in providing Irish healthcare service in response to the COVID-19 pandemic
- Interpret interview findings using thematic techniques to identify themed categories observed in organisational crisis management

3.3. CONCLUSION

The research question chapter outlines the questions that this research study intends to answer. The chapter, although short, directly influences decisions made during the methodology section of the research study.

CHAPTER 4: METHODOLOGY

4.1. INTRODUCTION

Research is the controlled process involved in the search for new and potentially useful information (Rajasekar, Pitchai and Veerapadran, 2006). The methodology is a contextual framework used in research to form the logically designed system, which in turn justifies the chosen research method to obtaining the research aims (Kennedy, 2019). Therefore, in this chapter, the researcher will look to detail the research methods chosen to satisfy the requirements of the primary research objectives detailed in the previous chapter.

To be considered as a research study, Gounder (2012) proposed that the process is undertaken within a defined framework of philosophies, and uses research methods that have been tested for their reliability and validity. It is also critical that the research is designed to be unbiased, with the researcher's interests not influence the results.

With that said, the chapter will look to elucidate the philosophical assumptions upon which the study is founded, as well as explaining the approach the researcher has chosen to best address the research topic. The processes for sampling, data collection, and analytic procedures used in the research will be described. Furthermore, an outline of the ethical considerations taken along with the research's assessment of the reliability and validity of the study will also be evaluated.

The research onion model (figure 7) posited by Saunders et al. (2009) is used in this study to assure the validity and credibility at each level of the research process.

4.2. RESEARCH PHILOSOPHY

According to Saunders et al. (2009), research philosophy is the production of knowledge for a given subject. It comprises assumptions and beliefs about the researcher's worldview. These assumptions and beliefs serve as the foundation for research strategy and methodology (Saunders, Lewis and Thornhill, 2015). When addressing research philosophies, Moon and Blackman (2014) posit three fundamental concepts: ontology, epistemology and philosophical

perspective. Ontology is the study of the nature of reality, reasoning the confidence they can have about the nature and existence of topics under investigation. Epistemology is concerned with how knowledge is created. The philosophical perspective is concerned with the philosophical orientation of the researcher that guides their actions when conducting research (Moon and Blackman, 2014).

Saunders et al. (2009) highlight the research topic as a critical factor for selecting the right research philosophy, regardless of the research position. Although the interpretive philosophical outlook is inherently more subjective than a positivist approach, it argues that the study of human society must go beyond empirical and supposedly objective evidence to include subjective views, opinions, emotions and values (Grey David E., 2014; Saunders, Lewis and Thornhill, 2015). The interpretive approach is based on the concept that the researcher is a part of the research, interprets data, and hence can never be completely impartial and separated from the research. It deems it necessary to recognise the difference between humans as 'social actors' as opposed to objects that can be directly observed or counted. An interpretive philosophy is most suited to answering the research question for this study as the views and opinions of the participants are critical to answering the research questions.

4.3. APPROACH & DESIGN

The research onion model (figure 7) posited by Saunders et al. (2009) is used in this study to assure the validity and credibility at each level of the research process. This method leads to a structured approach in which the understandings and judgments made in the outer layers of the onion, offer context for the approaches and decisions made in the interior layers of the onion (Saunders, Lewis and Thornhill, 2015).

The goal of this research study is to test the "the crisis approach" model to discover if its principles were applied within organisations of the participants of the study. As this study sets out to test a broad set of theories via participant views, opinions and experiences, the researcher has decided to use qualitative, deductive research methods. Deductive methods employ previously existing knowledge about a subject, which is subsequently subjected to empirical inspection (Denzin and Lincoln, 2018; Xu and Zammit, 2020), which the researcher proposes is the most fitting approach when considering the research questions of this study.

Furthermore, there has been prevalent recognition among researchers that both quantitative and qualitative research paradigms can be beneficial and can add value if they adhere to appropriate underlying assumptions (Rubin and Rubin, 2012; Creswell and Poth, 2018). A semi-structured interview

The research questions look to systematically investigate the leadership displayed during the phases of the crisis approach model, then aims to test the implications and effectiveness of the theories.

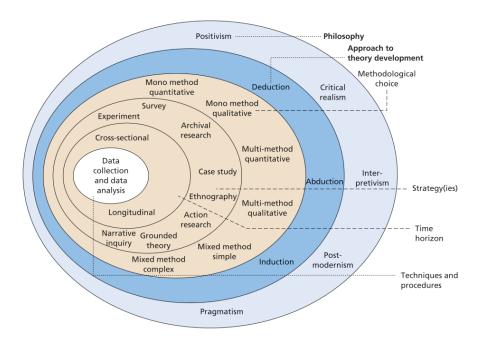


Figure 7: The Research Onion (Saunders, Lewis and Thornhill, 2015)

4.4. RESEARCH METHOD

Research methods can be described as the tools, techniques and procedures used to gather and analyse data (Edmonds and Kennedy, 2020). The use of qualitative data, such as interviews, records, and participant observation, in qualitative research is used to understand and explain social phenomena. Qualitative research approaches are suggested to be increasingly useful as the focus of information systems research moves from technological to managerial and organisational concerns which are harder to quantify (Myers, 1997; Edmonds and Kennedy, 2020).

According to Saunders et al. (2009), semi-structured interviews are qualitative forums where questions are open-ended to facilitate participants to digress the conversation into topics they feel important. Interviews also include a narrative aspect to the data collecting technique. Narrative research is described as the process of collecting data through qualitative interviews to gain an account of the life situations experienced, and the consequent analysis and interpretation of the events (Overcash, 2003; Andrews, Squire and Tamboukou, 2008). This study will cover a series of CM themes described in the conceptual model, but will also probe to allow participants to expand on their replies.

Grounded theory is a well-established approach that is used in a wide range of research investigations. In grounded theory research, both qualitative or quantitative data gathering approaches might be employed. The grounded theory seeks to find or create a theory using evidence that has been collected consistently and analyzed through comparative analysis (Creswell and Poth, 2018). In this study, questions were carefully designed and phrased the same across all interviews. The resulting data were comparatively analysed to triangulate and validate the data.

Secondary research will be gathered by synthesizing existing data that will be sourced from peer-reviewed journals, government archives and libraries.

Throughout the last decade, there has been prevalent recognition among researchers that both quantitative and qualitative research paradigms can be beneficial and can add value if they adhere to appropriate underlying assumptions (Rubin and Rubin, 2012; Creswell and Poth, 2018). Qualitative Research is heavily dependent on the semantic interpretation and analyses of the data generated (Appleton, 1995; Adcock and Collier, 2001). With the inherent ambiguity of individual words, analysis of large pieces of text (in this case, transcribed interview material) can be quite challenging; and unlike quantitative research, validity is often overlooked in qualitative research (Appleton, 1995). 'Validation' in quantitative research is considered to be the assessment of the accuracy of results as described by the participants, the researcher and the reader; which indicates that a research report is a representation by the author (Creswell and Poth, 2018).

4.5. SAMPLE SELECTION

The research study will use purposive, no-probability sampling techniques when selecting participants for the study. In this sense, the researcher is using one's judgment to produce a panel of samples (Table 3) which can be logically assumed as representative of the relevant population – leaders in the Irish healthcare services setting who have been involved in the crisis management lifecycle caused by the COVID-19 pandemic. The panel of participants are considered heterogeneous and an appropriate cross-section of the population, determined by the researcher applying expert knowledge in the field (Patton, 2002). An expert sampling was also utilised whereby experts in the particular field were selected to be the subjects of the purposive sampling (Alkassim *et al.*, 2016).

The participants of the qualitative research study will be key stakeholders in leadership roles within healthcare service settings during the pandemic. The demographic of the sample selection is both male and females between 45 - 60 years of age. Interviewees will also fulfil roles across both public and private sectors which provide healthcare services such as COVID-19 diagnostic testing and support services.

The sample size will be relatively small, however, due to the homogeneity of the samples in terms of age, experience and education(Guest, 1999). Additionally, due to the sample size, the researcher will use a more structured approach to the interview to ensure the validity of the data produced (Guest, 1999).

Participant ID	Job Title	Industry
Participant 1	Capacity Manager	Private Healthcare
Participant 2	Commercial Director	Private Healthcare
Participant 3	Senior Manager	Private Healthcare
Participant 4 Principle Clinical Scientist		Public Healthcare
Participant 5	Scientific Director	Public Healthcare

Table 3: Table of participants for the research study

4.6. TIME HORIZON

When evaluating research design, the time horizon is suggested to be a key layer of the research onion to consider. According to Saunders et al., research might be a snapshot in time known as cross-sectional, short term study, involving collection of data at a specific point of time; or longitudinal where the collection of data repeatedly over a period of time in order to compare data (Melnikovas, 2018).

To answer the research questions, a cross-sectional approach was taken, allowing a study of a phenomenon at a point in time (Saunders, Lewis and Thornhill, 2015). The snapshot was captured through semi-structured interviews over a one-week period. Using the proposed CM framework originally constructed in 2018 (Boin, Hart and Kuipers, 2018), a cross-sectional method facilitated a comparative analysis of the knowledge gained during this research study.

4.7. DATA COLLECTION & ANALYSIS

Primary research was conducted through one-to-one qualitative interviews with the sample population. The interviews were conducted using a video conferencing platform, 'Zoom'. Participants were also given the option of taking part in a standard phone conversation or, preferably face-to-face were available. Permission was requested and granted in advance via the consent form and reaffirmed at the outset/introduction of each interview. This opening introduction before each interview was used to ensure the participant was relaxed and comfortable within the situation. It also included a brief definition of organisational crisis as "a temporal slice preceding a potential disaster" (Boin, Hart and Kuipers, 2018). Interviews lasted between 26 and 46 minutes, not including the introductory period and closing 'small talk' – which are not included in the interview transcriptions.

When asking interview questions, when the interviewee answers a later planned question without being prompted, the researcher may use additional probing questions such as "Tell me more about...", "I'd like to hear more about..." and "Give me more detail about what you did when..." (Roberts, 2020). It is suggested that in an interview, the first interview question could theoretically suffice if the "whole story tumbles out" (Charmaz, 2006). This was usually not

the case for the majority of the interviews, however, as the researcher progressed the interview through the crisis approach framework lifecycle.

As the interviews sessions took place online, the researcher ensured that the networks are secure, the PC used had updated anti-virus software and accounts accessed through it have secure passwords. Interviews were recorded using a separate audio-recording application ('Otter') on a mobile device that has a secure password, to avoid using the functionality built into the Zoom platform. The recordings were deleted when transcription and note-taking were complete. The principles of good practice were applied throughout the process to ensure both the research participants and researchers were both protected and reassured. Before collecting any data, the researcher has referred to the guidelines contained in the NCI, Quality Assurance Handbook to determine if the information to be received should be classified as 'Confidential'. The guidance outlined that all the data included in this report falls outside of these classifications can be regarded as non-sensitive, and therefore can be discussed within the research study. Any personal data relating to additional parties other than the requesting data subject has been omitted from the report. Involved. All types of personal data will be handled, managed, and ultimately destroyed under GDPR and good research practice requirements. Any personal data relating to another

4.7.1. THEMATIC ANALYSIS

Thematic Analysis (TA) is a simple, adaptable, and growingly popular approach to analysing qualitative data. It provides a qualitative researcher with the fundamental skills required to interact with qualitative data analysis approaches (Braun and Clarke, 2006). TA is an interpretative approach to qualitative data analysis which facilitates the recognition and analysis of patterns or themes in a given data set (Braun and Clarke, 2006).

It is suggested that many researchers fail to adhere fully to the principles of reflective thematic analysis (Byrne, 2021). Braun and Clarke (2006) explore the power and adaptability of theme analysis in qualitative research but pointed out that there was no clear consensus in the literature on how to use it correctly. Without a theoretical foundation underpinning the analysis of qualitative data can result in an extensive list of topics that do not accurately represent the data collected, and therefore have little value. This approach aimed to effectively apply the TA

framework to counteract this and to extract themes from literature and give a theoretical foundation for the interview questions.

Braun and Clarke (2006) proposed a straightforward, step-by-step approach to conducting a TA – since re-termed 'reflective thematic analysis'. They propose a six-phase paradigm for data analysis, which this researcher followed (Braun and Clarke, 2006; Xu and Zammit, 2020; Byrne, 2021):

- 1. Review and familiarise with data
- 2. Generate initial codes
- 3. Search for themes
- 4. Review themes
- 5. Define and name themes
- 6. Produce the report

Braun and Clarke (2006) provide details on what constitutes a 'theme' and defines the difference between inductive and theoretical (deductive) thematic analysis. Inductive analysis is performed by looking at the data without a pre-conceived coding framework; whereas theoretical (deductive) TA is guided by a theoretical interest within the subject. In this research study, a conceptual model was generated during the literature review which influenced the structure of the interview and the questions. For this reason, a thematic (deductive) TA approach was applied in this study.

It is suggested that the first stage in being familiar with data includes not only conducting and transcribing interviews by the researcher, but also planning, observing, and documenting lessons – which has been conducted and documented during the literature review chapter of this report (Braun and Clarke, 2006). This stage allows for reflection as well as "becoming intimately familiar with practically every word passed between you and the participant." (Saldaña, 2011). Furthermore, the researcher listened to each interview, and sub sections of the interviews on many occasions. This helped when coding key points within the transcribed data. This was completed by systematically analysing each theme, which is extensively discussed in the *findings and analysis* chapter. Upon review of the themes, it was decided to include a

'leadership' theme to be assessed. Other themes identified were deemed outside of the scope of this research project.

4.8. RELIABILITY AND VALIDITY

The reliability of a research study refers to the quality of a measurement process that provides accuracy and repeatability of the information gained. The validity refers to the correctness of the chosen and applied procedure to answer the specific research questions (Gounder, 2012).

From a naturalistic perspective, people build their understandings from prior life experiences. From this basis, it can be accepted that the researcher and interviewee may make interpretations based on prior experience - and that all biases or beliefs cannot be fully eliminated. It is an important point to note and as a result, the researcher remained aware of how one's expectations could affect what was said during the interview; therefore, ensured no expectations were imposed on the participants throughout the interview (Rubin and Rubin, 2012).

According to Lincoln and Guba, the trustworthiness of a research study is critical when determining its usefulness. Determining trustworthiness entails establishing four key aspects of the study: its credibility, transferability, dependability and confirmability. Credibility is the belief that the result is genuine and reliable. Transferability entails demonstrating that the findings are applicable in other settings. Dependability entails demonstrating that the findings are consistent and repeatable. Confirmability is a degree of neutrality or the amount to which a study's conclusions are moulded by the respondents rather than researcher bias, motive, or interest (Lincoln and Guba, 1985). Each aspect was considered before use within the research report.

4.9. ETHICAL CONSIDERATIONS

This research strictly adhered to the National College of Ireland's (NCI) guidelines on research ethics. A letter of informed consent was written which detailed the exact nature of the research and its intended use within the college. The National College of Ireland's ethics form was

completed and delivered to NCI's ethics committee as part of the research proposal exercise in January 2020.

All participants had the opportunity before the Zoom interview session to discuss the content of the letter of consent, the nature of the project, and to ask any questions they may have. Participation was voluntary, which was communicated to the participants. All information provided by the participants will be treated in the strictest confidence to ensure anonymity and confidentiality and in line with GDPR protocols. The interview recordings and transcripts will only be identifiable by a participant number and will not bear the name of the individual participants. The audio recordings from the session were deleted on request, however, transcriptions totalling over 25,000 words will be available to the researcher's immediate supervisor if required. The transcripts are stored on an end-point encrypted hard drive only accessible to the researcher.

4.10. CONCLUSION

This chapter has detailed the research technique that was utilized to ensure the research question was effectively answers. Research philosophy was discussed with the research onion method selected to be used to detail the research technique, method, and sample selection. Details on data collection and analysis, as well as procedures used to assure reliability and validity, were provided. Additionally, descriptions of the ethical considerations considered throughout the process were presented. The findings and analysis from the qualitative interviews will be presented in the following chapter.

CHAPTER 5: ANALYSIS AND FINDINGS

5.1. INTRODUCTION

This research study aims to evaluate and test 'The Crisis Approach' conceptual model detailed in the literature review chapter when applied to the crises experienced in healthcare service organisations during the COVID-19 pandemic. After an extensive literature review, a conceptual model (figure 8) was produced which identified seven themed managerial functions observed during crisis management. All seven managerial themes were explored through semi-structured interviews with five voluntary participants. All interviews were transcribed, with the data analysed as stated in the methodology chapter. The interviews lasted between 28 to 46 minutes with the transcribed interviews totalling 25,165 words.

This chapter aims to summarise the data analysis and findings collected from the study. This summarisation includes analysis of data obtained via the use of analytical and logical reasoning to identify patterns, connections, or trends in the transcribed data.

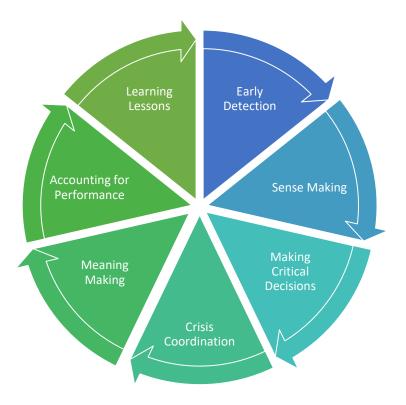


Figure 8: Conceptual Model

5.2. THEMATIC ANALYSIS

The thematic analysis section aims to detail the themes identified during the analysis of the transcribed interviews which were conducted on crisis managers in leadership positions within Irish healthcare service providing organisations during the COVID-19 pandemic. The interview questions were designed to prompt discussions relating to the proposed functions of CM.

The responses from the interview questions have been categorised into the seven functional themes of CM:

- Early Detection
- Sense-Making
- Making Critical Decisions
- Crisis Coordination
- Meaning Making
- Accounting for Performance
- Learning Lessons

Additionally, a common theme identified across the interviews was the styles of leadership which the CM's applied when communicating and managing the scenario':

Leadership Styles

The following sections will look to simply and objectively report the finding from the analysis of the interview transcripts, with a detail of the proposed reasoning to the findings detail in the later Discussion chapter.

5.2.1. EARLY DETECTION

It is proposed that most crises do not begin in an instant, but are caused as a result of an escalation. Leaders must not only detect the emergence of a danger based on ambivalent, ambiguous, and sometimes conflicting indications. Two participants in the study stated that even when the early signs were identified, their organisations did not anticipate the extent of the impact that COVID-19 would have on their respective organisations. Notably, Participant 1 feels like the company started on the "back foot", suggesting that the situation could have been better managed at the start of the crisis:

"Once these early signs are ignored, they can tend to evolve into something much bigger. Covid [sic] was a good example of this. When all of this kicked off, we assumed it would last a month or so and not have the effect it ended up having. To be honest, that started us on the back foot." (Participant 1)

"...what happened this time is the pandemic came up, and nobody was able to foresee such a thing..." (Participant 2)

Effective crisis management starts with everyone agreeing that the early signals have developed to a point that constitutes and demands quick action. Interestingly, all participants noted the importance of an internal system within the organisation which has functions to detect and record early signs of a destabilising threat. Within the healthcare service industry, strict regulation is in place which requires internal policies to metric internal anomalies. Monitoring and trending data were discussed by all leaders when answering question 3 on how they would go about identifying early signals:

"...surveillance is important in trying to establish the norms that are there and then you continuously monitor" (Participant 5)

"So for instance, we talk about preventative maintenance on our equipment, we talk about monitoring the quality of the asset when you have those things in your operating procedures for a reason, and when there are signals... those signals can be used to indicate that something is going to happen." (Participant 3)

"When you're not able to provide the service under the terms you've agreed with the customer..." (Participant 4)

Importantly, Participant 3 alluded to already having prior consideration and a fundamental understanding of the red flags, and mentions the fact that metrics are in to identify the early sign of a potential crisis. This suggests a prior stage before the 'early detection phase of the model, supporting the format of a cyclical framework.

"...in cases where we've caught things early, that have developed into a crisis, it's usually as a result of following our SOP's, and already having a good understanding what they are doing." (Participant 3)

A number of the interviewee's suggested that although metric is in place, sometimes signals can be detected by a "gut feeling".

"...you have to sometimes use your intuition" (Participant 5)

"There are signals that you can get that are not necessarily written up in an SOP. So for instance, I started to notice that people are finishing later and later, every morning, I would traditionally say arrive in at eight o'clock everyone's gone home." (Participant 3)

This is supported by another participant who also suggests vague cues which would be indicative of a potential disrupting event:

"...anything starts to disrupt their day and takes them away from status quo" (Participant 2)

All participants saw early detection of a crisis as part of their role within the organisation. Most participants suggested that everyone within the organisation has a responsibility to detect early 'red flags' of a crisis:

"...early detection would certainly be part of my role, and everybody's role I feel." (Participant 1)

5.2.2. SENSEMAKING

To facilitate effective information processing, two-way communications, collective agreements, determine mid and long term consequences, and coordinate a potent response, an

established process must be in place to interpret crisis signals and their impact as a potential future threat.

A 'sense making' theme is inferred by all participants - all acknowledging the value of meeting to review data and discuss operation at all levels of the business. All participants discussed that 'sense making' meetings are already established within their companies.

"So investigation has to be the key thing to do. When you notice something outside of normal, you have to go and ask the questions", "we have operations meeting on a Monday morning, we have a quality meeting on a Tuesday, we have a management meeting on a Thursday to go through non-conformances and discuss improvements." (Participant 3)

Participant 1 highlighted the importance of a group sense making meeting rather than individual 'sense making' exercises, especially when dealing with red flags that they may not have seen before.

"...staring into the abyss because it's something that we've never seen before. Having a group forum for problem-solving – putting this puzzle of signals together – is in my opinion, essential when trying to determine the effects." (Participant 1)

The 'sense making' phase described by Boin et al. is similar to that of a 'Risk Assessment' phase as the overall method of analysing and evaluating the risk associated with the potential hazard (Pursiainen, 2017). This is directly supported by participant 4, along with indirectly supported by the other 4 participants who mentioned an internal QMS which is inclusive of risk assessments.

"We do risk assessments in all aspects and functions of the business" (Participant 4)

5.2.3. CRITICAL DECISION MAKING

There is often an assumption that these critical decisions are taken by an individual leader. This is generally not the case, with a collective agreement and coordination of decisions playing a role in the organisational response. This collective agreement is supported by Participant 4:

"what I would tend to do is to present a picture which I've framed from collecting multiple sources of data and ensure the key stakeholders mutually agree before implementing decisions or chance." (Participant 4)

Participants also refer to the implications of the decision-making process. All participants mentioned the importance of wider considerations to the organisation:

"...but it's not as simple as that, because you want to hold on to company culture and make sure you're bringing the right people. So that in itself is a crisis." (Participant 2)

"From a process point of view for staffing, can lead to huge organisation crisis... if you think of all your enablers, let's take your business, from IT team to your human resources, to all the resources that are needed." (Participant 4)

"I genuinely have to think of the whole company, and the direction of the company, does it fit our goals? Does it fit our morals? Does it fit the mission plan?" (Participant 1

Participant 2 also highlights the nature of the industry suggesting that critical decision making can be more difficult when the effects of a crisis might not only be in terms of financial or reputational damage but could affect patient's health – in turn adding pressure and stress to the decision making process.

"...because of the nature of what we do, and remember what we're dealing with. It's testing for people's health; we take it extremely seriously." (Participant 2)

Participant 3 alludes to these additional stresses caused by the context when discussing how he reacts to voluntary admissions of failure or mistakes during a crisis.

"I'll react more aggressively... that's the frustration coming out" (Participant 3)

5.2.4. CRISIS COORDINATION

It is proposed that as the nature of crises is threatening and often requiring an urgent response, yet the network of stakeholders within the organisational teams is not always hierarchical, organising a response can require a delicate mix of persuasion and "command and control." After an analysis of the data, it is suggested that the coordination of the crisis is dictated largely by the leadership styled applied.

"I try to encourage people to come along with me" (Participant 2)

"You need to tailor communications of the decisions depending on the team, and the stage of their development." (Participant 4)

Participant 3 who's role is to coordinate and control operations actions during organisation crisis suggests that a command and control leadership approach is more effective in times of crisis:

"I tend to use simple direct language, which is "go downstairs, get that thing". Yeah. And I'd say to somebody else to say, I tend not to use them, you know, persuasive. Because I don't think in a crisis that you should have to persuade someone times of crisis." (Participant 3)

Participant 5 who worked in key leadership positions in both the public and private organisations during the COVID-19 pandemic disagrees with participant 3's method of leadership:

"I think everybody needs to buy into a situation and recognize so I don't believe in the situation where somebody is just doing something that they're told to do it" (Participant 5)

Leadership style was a focal theme identified within the interviews. Diverse methods of leading and managing within the crisis were clear and will be expanded further in section 5.2.8. below.

5.2.5. MEANING-MAKING

The conceptual model suggests that the crisis leader is expected to provide an authoritative account of the situation, and lay out their rationale to accept their definition of events. By providing meaning to events unfolding will enhance their managerial effectiveness. Failing to 'make meaning' of the situation can lead to decisions being misunderstood and not respected. Boin et al. (2018) suggest that if "other actors in the crisis are dominating the meaning-making process", the ability of the leader to effectively manage the situation is severely constrained. This suggestion is supported by Participant 3's authoritative language used throughout the interview:

"It's about making sure everybody's up with the decision because what will happen in a crisis is if you have someone 'fighting you' or not fully on board (with your decisions), it will make things worse, because you don't then have a definitive line of action. And therefore, your response to it might be a little bit slow or woolly or, you know, it's like someone trying to hold back." (Participant 3)

Furthermore, Participant 1's comments seem to back up the statement, stating that he has seen authoritative approaches used to good effect when communicating the leader rationale of events:

"I've seen people utilise that command and control approach perfectly especially in the time of crisis." (Participant 1)

Participant 2 suggests the effectiveness of a pushy, command and control style of leadership is short-lived.

"You've just given them a crutch that and that's it. When you walk away and you take the clutch we tend to fall over immediately. So while in the time it might seem like the best thing to do long term it's such a bad strategy." (Participant 2)

5.2.6. ACCOUNTING FOR PERFORMANCE

It is suggested that the crisis leaders must render account for the actions which had occurred during the crisis. It is also suggested that the leader must prove beyond doubt that they are not responsible for the crisis event, nor are they responsible for a spiralled escalation of the event.

Although the aim of questions 17, 18 and 19 was to explore this managerial function (accounting for performance) of the CM cycle, answers to the questions did not quite fit with the proposed period of CM. In this context, none of the leaders faced any significant feedback or had to prove that they were not responsible for escalating any specific situation.

Participant 3 suggests that COVID-19 provided a tough scenario for decision making however, the wider public health crisis partially exonerated responsibility of ineffective decisions:

"you've got a very politically sensitive test result turnaround times, you've got a disease that people are worried about, you've got the image of older people waiting to go to hospitals, you've got, you know, the immunocompromised people waiting to hear back." (Participant 3)

5.2.7. LEARNING LESSONS

It is suggested a crisis event will provide a pool of data that can be transformed to enable proactive crisis prevention. It was clear that all participants are confident that the lessons learned in the crises experienced over the past 18 months have made the organisations more resilient for future events.

"If you look at the lessons that we have taken from the, from COVID-19 so we recognise that the medical landscape wasn't very resilient was lacking capacity... and so we are going to be hoping to bridge the gaps" (Participant 4)

"We have 100% learned and grown because of this, and the information has gone from the bottom up to executive management, like we're so much more robust because of the changes we were, at times, forced to make." (Participant 2) It is suggested that there should be processes within the organisation to facilitate collective agreement to enhance contingency and business continuity planning, along with the implementation of preventative actions. All candidates mentioned quality systems in which non-conforming events were recorded or actioned. Therefore, it is suggested that in the healthcare industry, a Quality Management System is critical to the effectiveness of the learning process, and all aspect of the crisis management cycle.

"that our organization, because of our quality system learns lessons from our mistakes, which I think is the most valuable part of any organization" (Participant 5)

"...our Quality Management System is the proper tool of the vehicle to learn lessons" (Participant 5)

As much as one can prepare for a crisis, Participant 3 supports the conceptual model's cyclical nature.

"I mean, look, if we all knew what would happen if we could cover every base that could cause a crisis, we would do it and then we would never have a crisis, there wouldn't be such a thing as a crisis – but there is." (Participant 3)

It is noted that there seems to be a disconnect between management and employees, with no reflective learning forum incorporating all levels of the organisation. Participant 1 doesn't think the lessons and learned experiences from the 'people on the ground' are given enough consideration.

"I'm not quite sure how far up to the top they (lessons) might go." (Participant 1)

This opinion was supported by Participant 4's view that leadership level employees have learned the most valuable lessons. Participant 3 also validates this opinion of a divide when stating:

"If I'm being honest with you, I think the soldiers (lower-level employees) probably don't appreciate what we've learned." (Participant 3)

5.2.8. LEADERSHIP STYLES

Several different leadership styles, behaviours and approaches can be identified by analysing excerpts from the transcribed interviews. Participant 3, whose role as a senior manager to manage daily operations and ensure strict protocols and procedures are being followed, strongly leans towards a more "command and control" approach:

"Someone who comes to me and says, I made a mistake. And, you know, I can deal with that. I think that's pretty much most of the time, but there's the odd time when I'll react more aggressively, and that's when either the person is blasé about it and doesn't care, or has made the same mistake many times. That's the frustration coming out because it didn't have to be like this." (Participant 3)

This commanding leadership style is also apparent when Participant 3 discusses the approach he applies to communication techniques applied during a crisis:

"I tend to use simple direct language, which is "go downstairs, get that thing" ... "I don't think in a crisis that you should have to persuade someone (to do a task)" (Participant 3)

Other crisis managers express contrasting styles. Participant 5, who provided executive leadership in both public and private healthcare sectors expresses her use of affiliative and visionary leadership styles by building emotional bonds with individuals and mobilising them towards a common goal:

"...in an organisation, you have to have mechanisms where you can get the information you need, easily, that's building relationships with people who have the information..."

(Participant 5)

Participants 1, 2 and 4 also naturally lean towards positive climate leadership coaching and democratic leadership styles:

"I try to encourage people to come along with me I wouldn't" (Participant 2)

"It means that as a group or as a company we can avert the crisis together." (Participant 1)

"I think my style in working with people is to bring them with me. Yeah. You know I would draw them in." (Participant 4)

All participants appeared to utilised situational leadership and emotional intelligence when communicating:

"There are certain individuals who you know will need more background in something or somebody who will not want on the background. They just want the bones of it, or there are the other individuals who have the sense to set certain elements of it" (Participant 4)

"So for some people being clear on what you want means a brief instruction. For others, it's more exhaustive." (Participant 3)

Participant 3 states that in times of organisational crisis, he tends to use a more directive approach. Simple, unambiguous language is used to ensure there is no misinterpretation to further compound the issue.

"I tend to use simple direct language, which is "go downstairs, get that thing". Yeah. And I'd say to somebody else to say, I tend not to use them, you know, persuasive. Yeah. Because I don't think in a crisis that you should have to persuade someone times of crisis." (Participant 3)

5.2.9. CHANGE MANAGEMENT

All crisis managers expressed their openness to change and recognised that crisis reactions must entail some sort of change to normal processes in the organisation. Participants 2 and 3 both highlight the importance of technology in adapting to uncertain situations.

"...unfortunately, it's nearly impossible to ensure that mistakes never happen again, but you can always try. And technology helps us within that regard." (Participant 2)

"We spent some time going through new software's that could help us... in the crisis, there is an apparent need for change" (Participant 3)

Although change management was a common theme observed in the analysis of the interviews, the subject is extensive and outside of the scope of this research project. It could however be subject to future research to build on the conceptual model.

5.3. CONCLUSION

This chapter has details the findings observed when completing a systematic and comprehensive analysis of five interview transcriptions. All components of the conceptual model were observed with the exception of the 'accounting for performance' CM function. This information will be discussed and compared to the relevant knowledge gained during the literature review. The finding will also facilitate the construction of an updated conceptual model in the following *discussion* chapter.

CHAPTER 6: DISCUSSION

6.1. INTRODUCTION

The aims of this research study is to evaluate and test 'The Crisis Approach' conceptual model detailed in the literature review chapter, when applied to the crises experienced in healthcare service organisations during the COVID-19 pandemic. Semi-structured interviews were used to gather data during the study. This chapter will compare the empirical data from the findings and analysis chapter, to the existing literature. A revised updated conceptual model will be constructed and presented as part of the discussion.

As the complexity of the interviews was relatively low whereby interviewees discussed relatively recent and quite precise experiences. As suggested by Ryan and Bernard, each research technique has its pros and cons, stating that some narratives are more suited to short responses to open-ended questions (Ryan and Bernard, 2003). Although some theorists suggest limiting the total number of questions to between 5 and 10 questions for an effective qualitative research method, the researcher believes this would not have sufficed to attain a sufficiently in-depth amount of data for the study. The small dataset was not suggested to have an impact on the data and knowledge generated by the study with the he interview transcripts totalling 25,165 words which was a significant amount of data to analyse.

6.2. THE CONCEPTUAL MODEL FIT

Although none of the participants utilised a CM framework in their setting, it was inferred from the all participant interviews that they agreed with the model, and the managerial functions contained. Every participant expressed an opinion that although much of their decision making was based on rational choices deduced from data available, there is a definite element of intuition during a crisis. This can be explained by research suggesting that much of cognition occurs automatically, outside of the conscious mind (Sadler-Smith and Shefy, 2004). Sadler-Smith and Shefy propose that intuition is the "skill of focusing on potentially important but sometimes faint signals". Notabley, during early crisis detection phase, these faint signals can be critical to detect for effective CM (Boin, Hart and Kuipers, 2018). Rather than being set in

opposition to each other, intuition and rational analysis are better conceived of as two parallel systems of knowing. Boin et al. (2018) suggested that it can be extremely difficult to process rational information during periods of uncertainty, therefore it is proposed that unconscious knowledge gained through experience plays a part in CM.

Furthermore, both the early detection phase was influenced by both the preceding phase (learning lessons) or the following 'sense making' phase. The knowledge gained from these neighbouring phases influenced the early detection phase. This fact is considered when revising the conceptual model (figure 9).

The division that was observed during the learning lessons section during the analysis and findings can be associated with the nature of crisis management at a practical level. When looking at the definitions of crisis frameworks, the earlier, unembellished frameworks suggest simplified, two-pronged approaches to crisis management – dealing with events "on the ground" and dealing with the instability caused by the events (Fink, 1986; Boin, Hart and Kuipers, 2018).

To facilitate effective information processing, Boin et al. (2018) suggested that two way communications, collective agreements and a coordinated response is essential, with an established process in place to interpret crisis signals and their impact as a potential future threat. In all interviews, the participants mentioned regular meeting with relevant stakeholders. For this reason, the researcher also considers a forum in which crisis signals can be discussed is essential to effective CM.

When conducting interviews, it was clear that the interviewees all had subtle nuances in their perception of what merited the term 'crisis'. This supported previous research positing crisis as a semantic construction which people use to characterise an atypical episode it an intrinsic threat and risk to the organisations being (Boin, Hart and Kuipers, 2018).

There was an agreement that a collective agreement and coordination of decisions played a significant role in the organisational response. All leaders discussed horizontal or upwards communication when making critical decisions.

Boin et al. also suggest that during the coordination of a crisis, a very delicate mix of persuasion and command and control behaviours are to be applied. For the most part, participants leaned

strongly towards a persuasive behaviour, with only one participant (Participant 5) admitted to occasionally using a coercive approach when required during a crisis. Participants also agreed that by providing a meaning to events unfolding will enhance their managerial effectiveness to mobilise teams towards their goal.

Mitroff's (1993) CM model included the practical implications in terms of resources within the organisation, noting that companies cannot attempt to prevent every potential scenario. This was supported but the discussions of most of the participants, noting that preventative measures cannot account for all scenario's.

6.2. QUALITY MANAGEMENT SYSTEM

Although the initial conceptual model did fit the organisations with regards to observing each themed category, the model omitted a key system that records and facilitated effective crisis management within the organisations – a quality management system (QMS). A QMS is a structured system for documenting processes, procedures, continuous professional development, training, auditing and responsibilities in order to achieve quality policies and objectives within an organisation (Stoichev, 2014). A QMS aids in the coordination and direction of an organization's activities in order to fulfil customer, and more importantly in this context, regulatory requirements, while also continuously improving its effectiveness and efficiency. All participants either directly mentioned a QMS or indirectly referred to it. In Ireland, all healthcare service providers must be accredited by the Irish National Accreditation Board for standards such as ISO 15189 (medical laboratories). Although the accreditation ensures business continuity measures in place, it doesn't negate crisis within the organisation. However, crisis management in the healthcare industry will be directly integrated with a QMS and therefore be considered for the revised conceptual model (figure 9).

6.3. LEADERSHIP STYLES

It is argued that leadership agility and adaptability is now a critical skill in today's modern VUCA world (Lawrence, 2013). During the interviews with leaders in healthcare service

providers who all experienced organisational crises within the last 18 months, it is clear that their openness to change played a key role in the successful re-stabilising of their respective organisations.

When applying Daniel Goleman's leadership styles, it is apparent that all of the interviewees assess their situations and switch their styles of leadership depending on the task at hand. Participant 3 specifically came across as the most open and adaptable to change of leadership styles and behaviours. When discussing voluntary admissions of human error, he reacts in a progressive, logical manner "most of the time". When discussing anomaly data which could be an early sign of a crisis, he projects a visionary style of leadership, whereby he mobilises people towards a vision.

"...if they're on board, or if they understand what you're trying to do, it will work better." (Participant 3)

Participant 3 was also very honest in consciously using a commanding leadership style in times of crisis, which he recognises can be unpopular. It is proposed that "Persuasion does usually not suffice to reach a state of optimal cooperation" (Boin, Hart and Kuipers, 2018), which is verified by Participant 3's who suggests that he reverts to a commanding/coercive style when faced with novel challenges.

"I tend to use simple direct language, which is "go downstairs, get that thing" (Participant 3)

Each of Daniel Goleman's six leadership styles has a unique impact on those who are led. It is up to the leader to choose which style is most appropriate in a given scenario. It is crucial to highlight that when the styles are blended and tailored to the context, the most effective leadership style is achieved. It indicates that a leader can employ a variety of emotional leadership approaches. Ultimately, leaders are the ones accountable for establishing a positive working environment to achieve organisational goals.

6.3. UPDATED CONCEPTUAL MODEL

Although the initial conceptual model did fit the organisations with regards to observing each themed category, the model omitted a key system that interacted with the crisis management cycle within the companies – a quality management system. As all managerial functions are integrated under a QMS, this has been added to the updated conceptual model (figure 9).

Although the CM model is for most parts a linear and cyclical model, the CM functions outlined in the conceptual model are clearly not independent of each other. The initial conceptual model suggested that as one phase end, another one starts. This is not the case however as all of the participants suggested that the boundaries of the phases within the model tend to overlap. For this reason, a structural change to the original conceptual model was require (figure 9) whereby managerial functions overlapped to the contiguous phase during the crisis lifecycle.

It is proposed that the addition of a crisis audit by senior management during the learning lessons phase of the framework would aid in assessing the gap between where the organisation is in reality, and where they need to be in terms of crisis prevention (Mikušová and Horváthová, 2019). Such audits would exist within the QMS.

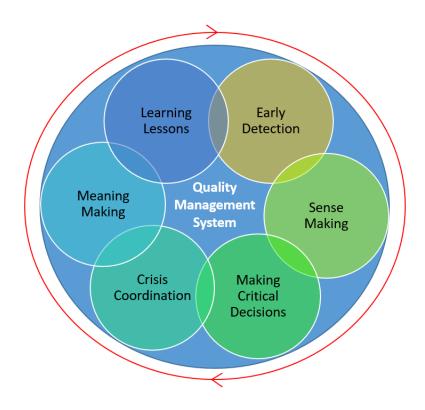


Figure 9: Updated Conceptual Model

6.4. RESEARCH LIMITATIONS

The limitations of any given study refer to possible flaws that are typically beyond the control of the researcher and are closely related to the research strategy adopted in the methodology chapter.

The research study used purposive, no-probability sampling techniques when selecting participants for the study. Therefore, the researcher is using his judgment to produce a panel of samples in which an assumption was made that the sample was representative of the relevant population. This non-random sampling is limited as it introduces bias when choosing the sample.

The researcher was also subject to a limited timeframe in which to complete the research due to professional demands, working in what can be termed an organisational crisis environment. The sample size was lower than initially planned due to the implications and effects of the COVID-19 pandemic, specifically on candidates working in a public healthcare setting.

The interviews were conducted via one-to-one online interviews. Furthermore, all participants and the interviewer worked in organisations that required personal protective facemasks to work at all times. This restricted non-verbal ques such as enthusiasm or discomfort to certain questions, along with restricting the assessment of facial expressions, behaviours and emotions – the dynamic dimensions collected during an interview (Roberts, 2020)

Every attempt was taken to guarantee the validity of the data. However, the reliability of qualitative data, as opposed to quantitative data, is impacted by the researcher's judgment and therefore cannot be guaranteed (Denzin and Lincoln, 2018).

6.5. RECOMMENDATIONS FOR FUTURE RESEARCH

This research has provided a conceptual model that can be used as a tool for crisis managers at an organisational level. The model was tested only in healthcare service providing organisations however, further validation of the model should be conducted with a larger sample. Validation should also be completed for use in other organisational settings and contexts.

During the thematic analysis of the research interviews, there were other sub-leadership themes identified during the analysis, notably 'collaboration' and 'change'. Research conducted by Lv and Zhang suggests that a collaborative leadership strategy is an effective style to adapt to change. (Lv and Zhang, 2017). Moreover, 'change' comes hand-in-hand with the atypical nature of crises. To focus on the application of the conceptual model, these themes were not heavily discussed or reviewed in this research project.

Additionally, crisis management in the healthcare industry, among other regulated industries, will likely be directly integrated with a QMS. Further research is advised to detail the interactions between a QMS and the functions within the CM framework.

CHAPTER 7: CONCLUSION

Understanding the COVID-19 pandemic's direct and indirect influences on organisational operations within healthcare services companies is critical when planning for future pandemics. Decisions that led to delays in patients receiving COVID-19 test results early on in the pandemic may have had a detrimental impact on the health and wellbeing of infected patients. It may also have played a role in slowing the spread of the virus, resulting in added stress on hospital care.

The main aim of this paper was to answer the research question that asked whether the application of a crisis management framework increased the effectiveness of the crisis management response, when applied to healthcare service organisations in Ireland. By completing an extensive literature review of leadership and crisis management, and constructing and testing a conceptual model, this research suggests that when all managerial functions within a CM model is effectively performed, it will positively impact the response to the crisis.

Although the CM model is for most parts a linear and cyclical model, the CM functions outlined in the conceptual model are clearly not independent of each other. The initial conceptual model suggested that as one phase end, another one starts. This is not the case however as all of the participants suggested that the boundaries of the phases within the model tend to overlap. Research also highlighted integrated nature of crisis management with a QMS in regulated environments. Further research into this interplay of all stakeholders under an effective QMS could provide an interesting and useful model.

This research also looked at the leadership styles observed by the leaders within the setting. It is clear that there is a place for traditional leadership styles for short periods during times of a crisis, which this research suggests was effective in the context applied, as long as it is balanced with a more positive leadership approaches.

The common goal in any primary or secondary healthcare service provider is to bestow a timely service, with no compromise to the integrity of the results provided. The COVID-19 pandemic destabilised such organisations, disrupting routines, affecting supply, increasing demand and adding significant stresses to the companies and their workforce. It is also noted by the researcher the critical role that leaders and managers at an organisational level in the wider

healthcare services industry played in reducing the impact of the COVID-19 crisis in Ireland. Collectively, the expertise, resilience and collaboration have, to date, minimised the impact of COVID-19 testing and primary care on the wider routine processes of the organisations and hospitals. Moreover, as the environment in which we live is becoming increasingly VUCA, the importance for reflective research in how major crises were averted cannot be undermined. It is acknowledged that as the world increases in complexity, so too does the frequency of crises experienced by organisations. Reflectively learning from major global events is critical in being prepared for future crisis events.

REFERENCE LIST

- Abodunrin, O., Oloye, G. and Adesola, B. (2020) 'Coronavirus panemic & its implication on global economy and its implication on global economy View project', *International Journal of Arts, Languages & Business Studies*, 4(1), pp. 14–20. Available at: https://www.researchgate.net/publication/341946622 (Accessed: 21 July 2021).
- Adcock, R. and Collier, D. (2001) 'Measurement validity: A shared standard for qualitative and quantitative research', *American Political Science Review*, 95(3), pp. 529–546. doi: 10.1017/S0003055401003100.
- Algahtani, A. (2014) 'Are Leadership and Management Different? A Review', *Journal of Management Policies*, 2(3), pp. 71–82. doi: 10.15640/jmpp.v2n3a4.
- Alkassim, R. S. et al. (2016) 'Comparison of Convenience Sampling and Purposive Sampling', American Journal of Theoretical and Applied Statistics, 5(1), pp. 1–4. doi: 10.11648/j.ajtas.20160501.11.
- Appleton, J. V (1995) 'Analysing qualitative interview data: addressing issues of validity andreliability', *Journal of Advanced Nursing*, 22(5), pp. 993–997. doi: 10.1111/J.1365-2648.1995.TB02653.X.
- Barasa, E., Mbau, R. and Gilson, L. (2018) 'What is resilience and how can it be nurtured? A systematic review of empirical literature on organizational resilience', *International Journal of Health Policy and Management*. doi: 10.15171/ijhpm.2018.06.
- Bass, B. M. and Avolio, B. J. (1990) 'From transactional to transformational leadership: Learning to share the vision', *Organizational Dynamics*, 18(3), pp. 19–31. doi: 10.1016/0090-2616(90)90061-S.
- Bass, B. M. and Avolio, B. J. (1994) *Improving Organizational Effectiveness Through Transformational Leadership*, sage producitons. Available at: https://books.google.ie/books/about/Improving_Organizational_Effectiveness_T.html?id=_z3_BOVYK-
 - IC&printsec=frontcover&source=kp_read_button&hl=en&redir_esc=y#v=onepage&q&f=false (Accessed: 10 August 2021).

- BBC News (2021) 'Cyber attack "most significant on Irish state" BBC News', *BBC News*. Available at: https://www.bbc.com/news/world-europe-57111615 (Accessed: 20 July 2021).
- Benmira, S. and Agboola, M. (2021) 'Evolution of leadership theory', *BMJ Leader*, 5(1), pp. 3–5. doi: 10.1136/LEADER-2020-000296.
- Bennett, N. and Lemoine, G. J. (2014) 'What a difference a word makes: Understanding threats to performance in a VUCA world', *Business Horizons*, 57(3), pp. 311–317. doi: 10.1016/J.BUSHOR.2014.01.001.
- Bennis, W. G. and Nanus, B. (1985) 'Leading others, Managing yourself', *Leaders: the strategies for taking charge*.
- Birmingham City Council (2010) Birmingham Total Place Pilot.
- Boin, A., Hart, P. 't and Kuipers, S. (2018) 'The Crisis Approach', (December), pp. 23–38. doi: 10.1007/978-3-319-63254-4 2.
- Bolman, L. G. and Deal, T. E. (2017) *Reframing Organizations*, *Reframing Organizations*. doi: 10.1002/9781119281856.
- Bratton, J., Grint, K. and Nelson, D. (2004) *Organizational Leadership, London:*Southwestern/Thompson Press. Available at:

 https://www.research.lancs.ac.uk/portal/en/publications/organizational-leadership(f27ed088-69d8-42ca-95c5-84c0085af054)/export.html (Accessed: 25 July 2021).
- Braun, V. and Clarke, V. (2006) 'Thematic analysis.', APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological. doi: 10.1037/13620-004.
- Broekema, W. (2016) 'Crisis-induced learning and issue politicization in the EU: the braer, sea empress, erika, and prestige oil spill disasters', *Public Administration*, 94(2), pp. 381–398. doi: 10.1111/padm.12170.
- Burnett, J. J. (1998) 'A strategic approach to managing crises', *Public Relations Review*, 24(4), pp. 475–488. doi: 10.1016/S0363-8111(99)80112-X.
- Burns, J. M. (1978) 'Leadership (Harper Perennial Political Classics)', p. 544. Available at:

- https://books.google.com/books/about/Leadership.html?id=knMrdtmEIYEC (Accessed: 10 July 2021).
- Byrne, D. (2021) 'A worked example of Braun and Clarke's approach to reflexive thematic analysis', *Quality & Quantity 2021*, pp. 1–22. doi: 10.1007/S11135-021-01182-Y.
- Carmeli, A. and Schaubroeck, J. (2008) 'Organisational Crisis-Preparedness: The Importance of Learning from Failures', *Long Range Planning*, 41(2), pp. 177–196. doi: 10.1016/J.LRP.2008.01.001.
- Charmaz, K. (2006) 'Constructing Grounded Theory', Slideshare.
- Chen, L. *et al.* (2020) 'Participative leadership and employee creativity: a sequential mediation model of psychological safety and creative process engagement', *Leadership & amp;* Organization Development Journal, 41(6), pp. 741–759. doi: 10.1108/LODJ-07-2019-0319.
- Collins, J. (2009) 'Good to Great (Why Some Companies Make the Leap and others Don't)', NHRD Network Journal, 2(7). doi: 10.1177/0974173920090719.
- Coombs, W. T. (2007) 'Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory', *Corporate Reputation Review 2007 10:3*, 10(3), pp. 163–176. doi: 10.1057/PALGRAVE.CRR.1550049.
- COVID-19 Ireland (2021) *Ireland's COVID19 Data Hub ICU, Hospitals & Testing Data*. Available at: https://covid19ireland-geohive.hub.arcgis.com/pages/hospitals-icutesting (Accessed: 12 July 2021).
- Creswell, J. W. and Poth, C. N. (2018) 'Qualitative inquiry and research design (international student edition): Choosing among five approaches', *Language*, 25(459p).
- Crowley, P. and Hughes, A. (2021) 'The impact of the COVID-19 pandemic and the societal restrictions on the health and wellbeing of the population, on our staff and on health service capacity and delivery: A plan for healthcare and population health recovery Title: The impact of COVID-19 p'. Available at: https://www.hse.ie/eng/about/who/qid/covid-19-qi- (Accessed: 7 August 2021).
- Deming, W. E. (1986) *Out of the crisis / W. Edwards Deming*. Available at: https://books.google.ie/books?hl=en&lr=&id=RTNwDwAAQBAJ&oi=fnd&pg=PR7

- &dq=crisis&ots=V1nuh4D3N3&sig=aMjrfEOm5s0b003v1iRx4TvowTg&redir_esc= y#v=onepage&q=crisis&f=false (Accessed: 14 July 2021).
- Denzin, N. K. and Lincoln, Y. S. (2018) *The SAGE Handbook of Qualitative Research Fifth Edition, Synthese*.
- Edmonds, W. A. and Kennedy, T. D. (2020) 'An Applied Guide to Research Designs: Quantitative, Qualitative, and Mixed Methods', *An Applied Guide to Research Designs: Quantitative, Qualitative, and Mixed Methods*. doi: 10.4135/9781071802779.
- Evans, N. and Elphick, S. (2005) 'Models of crisis management: an evaluation of their value for strategic planning in the international travel industry', *International Journal of Tourism Research*, 7(3), pp. 135–150. doi: 10.1002/jtr.527.
- Fiedler, F. E. (1964) 'A Contingency Model of Leadership Effectiveness', *Advances in Experimental Social Psychology*, 1(C), pp. 149–190. doi: 10.1016/S0065-2601(08)60051-9.
- Fink, S. (1986) *Crisis management: planning for the inevitable*. iUniverse. Available at: https://books.google.com/books/about/Crisis_Management.html?id=hVtqPAAACAA J (Accessed: 15 August 2021).
- Fischbacher-Smith, D. (2014) 'Organisational ineffectiveness: environmental shifts and the transition to crisis', *Journal of Organizational Effectiveness: People and Performance*, 1(4), pp. 423–446. doi: 10.1108/JOEPP-09-2014-0061.
- Fitzsimons, D., James, K. T. and Denyer, D. (2011) 'Alternative approaches for studying shared and distributed leadership', *International Journal of Management Reviews*, 13(3). doi: 10.1111/j.1468-2370.2011.00312.x.
- Friedman, Thomas L. Ikenberry, G. J. (2005) 'The World Is Flat: A Brief History of the Twenty-First Century', *Foreign Affairs*, 84(5). doi: 10.2307/20031715.
- Gephart, R. P. (1984) 'Making Sense of Organizationally Based Environmental Disasters', *Journal of Management*, 10(2), pp. 205–225. doi: 10.1177/014920638401000205.
- Goleman, D. (2000) 'Leadership that gets results', in *Leadership Perspectives*, pp. 78(2), 4–17. doi: 10.4324/9781315250601-9.
- Goleman, D., Boyatzis, R. and McKee, A. (2002) 'Primal Leadership: Realizing the Power of

- Emotional Intelligence', 56(3).
- Google.com/ngrams (2019) Google Ngram Viewer. Available at: https://books.google.com/ngrams/graph?content=crisis%2Cleadership&year_start=19 00&year_end=2019&corpus=26&smoothing=3&direct_url=t1%3B%2Ccrisis%3B%2 Cc0%3B.t1%3B%2Cleadership%3B%2Cc0#t1%3B%2Ccrisis%3B%2Cc0%3B.t1%3 B%2Cleadership%3B%2Cc0 (Accessed: 12 August 2021).
- Gounder, S. (2012) 'Chapter 3 Research methodology and research questions', *Research Methodology and Research Method*, (March 2012), pp. 84–193.
- Greiner, L. E. (1972) 'Evolution and Revolution as Organizations Grow', *Harvard Business Review*, 50(4).
- Grey David E. (2014) 'Doing Research in the Real World (3rd edition)', Sage.
- Grint, K. (2008) 'Wicked Problems and Clumsy Solutions: the Role of Leadership', *Clinical Leader*, Volume I N(ISSN 1757-3424), p. 12. Available at: www.bamm.co.uk (Accessed: 25 July 2021).
- Guest, G. (1999) 'Handbook of methods in cultural anthropology', *Choice Reviews Online*, 36(09), pp. 36-4846-36–4846. doi: 10.5860/choice.36-4846.
- Hersey, P. and Blanchard, K. H. (1969) 'Management of Organizational Behavior: Utilizing Human Resources.', *Industrial and Labor Relations Review*. doi: 10.2307/2521543.
- Hewitt, K. (1983) 'Interpretations of calamity from the viewpoint of human ecology.' doi: 10.2307/214106.
- Hoffman, B. J. *et al.* (2011) 'Great man or great myth? A quantitative review of the relationship between individual differences and leader effectiveness', *Journal of Occupational and Organizational Psychology*, 84(2), pp. 347–381. doi: 10.1348/096317909X485207.
- Hollander, E. P. and Julian, J. W. (1969) 'Contemporary trends in the analysis of leadership processes', *Psychological Bulletin*, 71(5), pp. 387–397. doi: 10.1037/h0027347.
- HSE (2021) *Big thanks to you healthservice.ie*. Available at: https://healthservice.hse.ie/staff/news/coronavirus/thank-you-healthcare-heroes.html (Accessed: 7 August 2021).
- Johns, H. E. M. (1989) 'From Trait to Transformation: The Evolution of Leadership Theories',

- *Education*, p. 115. Available at: https://www.psycholosphere.com/From trait to transformation The evolution of leadership theories by Johns & Moser.pdf (Accessed: 22 July 2021).
- Kennedy, K. M. (2019) 'Promoting the qualitative research approach in the discipline of forensic and legal medicine: Why more qualitative work should be promoted and how that can be achieved', *Journal of Forensic and Legal Medicine*, 62, pp. 72–76. doi: 10.1016/j.jflm.2019.01.009.
- Kotter, J. P. (2008) Force For Change: How Leadership Differs from Management John P. Kotter Google Books, Simon and Schuster. Available at: https://books.google.ie/books?hl=en&lr=&id=CN3XeWDVyWkC&oi=fnd&pg=PR7 &dq=kotter+force+for+change&ots=2Bf0eU1Fnv&sig=Y1Fom0PUJpIC9DU5EtBmJ_hDhMU&redir_esc=y#v=onepage&q=kotter force for change&f=false (Accessed: 12 July 2021).
- Kotterman, J. (2006) 'Leadership Versus Management: What's the Difference?', *The Journal for Quality and Participation- ProQuest Central*, 29(2), pp. 13–17.
- Kruse, K. (2013) 'What is leadership?', *Forbes.com*. Available at: https://www.forbes.com/sites/kevinkruse/2013/04/09/what-is-leadership/ (Accessed: 22 July 2021).
- Latta, G. F. (2019) 'Cracking the Code of Distributed Leadership: New Insights from a Study of Leader Practitioners', *Journal of Management Policy and Practice*, 20(2). doi: 10.33423/jmpp.v20i2.2095.
- Lawrence, K. (2013) 'Developing Leaders in a VUCA Environment'. Available at: www.execdev.unc.edu (Accessed: 19 July 2021).
- Leban, W. and Zulauf, C. (2004) 'Linking emotional intelligence abilities and transformational leadership styles', *Leadership & Organization Development Journal*, 25(7). doi: 10.1108/01437730410561440.
- Lincoln, Y. S. and Guba, E. G. (1985) 'Lincoln and Guba' s Evaluative Criteria', *Naturalistic Inquiry*, (1985).
- Lv, C.-M. and Zhang, L. (2017) 'How can collective leadership influence the implementation of change in health care?', *Chinese Nursing Research*, 4(4), pp. 182–185. doi:

- 10.1016/J.CNRE.2017.10.005.
- Marker, A. (2020) *Crisis Management Models & Theories l Smartsheet*. Available at: https://www.smartsheet.com/content/crisis-management-model-theories (Accessed: 2 August 2021).
- Mikušová, M. and Horváthová, P. (2019) 'Prepared for a crisis? Basic elements of crisis management in an organisation', http://www.tandfonline.com/action/authorSubmission?journalCode=rero20&page=in structions, 32(1), pp. 1844–1868. doi: 10.1080/1331677X.2019.1640625.
- Mitroff, I. I., Shrivastava, P. and Udwadia, F. E. (1987) 'Effective Crisis Management', https://doi.org/10.5465/ame.1987.4275639, 43(11), pp. 31–34. doi: 10.5465/AME.1987.4275639.
- Moon, K. and Blackman, D. (2014) 'A Guide to Understanding Social Science Research for Natural Scientists', *Conservation Biology*. John Wiley & Sons, Ltd, pp. 1167–1177. doi: 10.1111/cobi.12326.
- Morgan, J. (2015) 'Why All Managers Must Be Leaders', *Forbes*. Available at: https://www.forbes.com/sites/jacobmorgan/2015/01/21/why-all-managers-must-beleaders/?sh=50f280527fd3 (Accessed: 25 July 2021).
- Myers, M. D. (1997) 'Qualitative research in information systems', *MIS Quarterly:*Management Information Systems, 21(2), pp. 241–242. doi: 10.2307/249422.
- Northouse, P. G. (2016) 'Leadership seventh edition', *Journal of Molecular Spectroscopy*, 7(1–6), p. 489.
- NPHET (2020) gov.ie Statement from the National Public Health Emergency Team Thursday 31 December. Available at: https://www.gov.ie/en/press-release/166a4-statement-from-the-national-public-health-emergency-team-thursday-31-december/ (Accessed: 13 July 2021).
- Organ, D. (1996) 'Leadership: The great man theory revisited'. Available at: https://www.sciencedirect.com/science/article/pii/S0007681396900014 (Accessed: 22 July 2021).
- Patton, M. Q. (2002) 'Two Decades of Developments in Qualitative Inquiry: A Personal, Experiential Perspective', *Qualitative Social Work*, 1(3), pp. 261–283. doi:

- 10.1177/1473325002001003636.
- Pearson, C. M. and Clair, J. A. (1998) 'Reframing crisis management', *Academy of Management Review*, 23(1), pp. 59–76. doi: 10.5465/AMR.1998.192960.
- Pearson, C. M. and Mitroff, I. I. (1993) 'From crisis prone to crisis prepared: a framework for crisis management.', *Academy of Management Perspectives*, 7(1), pp. 48–59. doi: 10.5465/AME.1993.9409142058.
- Prater, M. (2019) *Crisis Management Examples: Learn From These 5 Brands, Brandfolder.*Available at: https://brandfolder.com/blog/crisis-management (Accessed: 7 August 2021).
- Pursiainen, C. (2017) 'The Crisis Management Cycle', *The Crisis Management Cycle: Theory and Practice*, pp. 1–186. doi: 10.4324/9781315629179.
- Racherla, P. and Hu, C. (2009) 'A Framework for Knowledge-Based Crisis Management in the Hospitality and Tourism Industry':, http://dx.doi.org/10.1177/1938965509341633, 50(4), pp. 561–577. doi: 10.1177/1938965509341633.
- Rajasekar, S., Pitchai, P. nathan and Veerapadran, C. (2006) 'Research Methodology'.
- Roberts, R. (2020) 'Qualitative Interview Questions: Guidance for Novice Researchers', *The Qualitative Report*, 25(9), pp. 3185–3203. doi: 10.46743/2160-3715/2020.4640.
- Rubin, H. J. and Rubin, I. S. (2012) *Qualitative Interviewing: The Art of Hearing Data*. 3rd edn. Northern Illinois University: Sage. Available at: https://books.google.ie/books?hl=en&lr=&id=bgekGK_xpYsC&oi=fnd&pg=PP1&dq=Chapter+2:+Research+Philosophy+and+Qualitative+Interviews&ots=tJ5DiNjaOf&sig=4gCVSzhSIbGLFApWeyhihEuVoOo&redir_esc=y#v=onepage&q=Chapter 2%3A Research Philosophy and Qualitative Inte (Accessed: 7 August 2021).
- Ryan, G. W. and Bernard, H. R. (2003) 'Techniques to Identify Themes', *Field Methods*, 15(1), pp. 85–109. doi: 10.1177/1525822X02239569.
- Sadler-Smith, E. and Shefy, E. (2004) 'The intuitive executive: Understanding and applying "gut feel" in decision-making', *Academy of Management Executive*. doi: 10.5465/AME.2004.15268692.
- Sadri, G. (2012) 'Emotional intelligence and leadership development', *Public Personnel*

- Management, 41(3). doi: 10.1177/009102601204100308.
- Saldaña, J. (2011) Fundamentals of Qualitative Research, Fundamentals of Qualitative Research. Oxford University Press. doi: 10.4324/9781315231747.
- Saunders, M., Lewis, P. and Thornhill, A. (2015) 'Understanding research philosophies and...', (January 2009), pp. 122–161. Available at: https://www.researchgate.net/publication/309102603_Understanding_research_philos ophies and approaches.
- Van Seters, D. A. and Field, R. H. G. (1990) 'The Evolution of Leadership Theory', *Journal of Organizational Change Management*, 3(3), pp. 29–45. doi: 10.1108/09534819010142139/FULL/HTML.
- Shirali, G. A., Azadian, S. and Saki, A. (2016) 'A new framework for assessing hospital crisis management based on resilience engineering approach', *Work*, 54(2), pp. 435–444. doi: 10.3233/WOR-162329.
- Spillane, J. P. (2006) 'Distributed leadership', p. 119.
- Steier, J. and Moxham, J. (2020) 'The load and capacity model of healthcare delivery: considerations for the crisis management of the COVID-19 pandemic', *Journal of Thoracic Disease*, 12(6), p. 3022. doi: 10.21037/JTD-2020-054.
- Stogdill R. M. (1948) 'Leadership, membership and organization.', *Psychological Bulletin*, 47(1), pp. 1–14. Available at: https://psycnet.apa.org/journals/bul/47/1/1/ (Accessed: 22 July 2021).
- Stoichev, K. P. (2014) 'Kiril Petrov Stoichev. The Role of Business Continuity Management in the Business Management System', *Science Journal of Business and Management*, 2(3), pp. 97–102. doi: 10.11648/j.sjbm.20140203.12.
- Weick, K. E. (1993) 'The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster', *Administrative Science Quarterly*, 38(4), p. 628. doi: 10.2307/2393339.
- Wren, T. (1995) The Leader's Companion.
- Wu, D., Yang, L. C. and Wu, S. S. (2004) 'Crisis management of SARS in a hospital', *Journal of Safety Research*, 35(3), pp. 345–349. doi: 10.1016/J.JSR.2003.11.010.
- Xu, W. and Zammit, K. (2020) 'Applying Thematic Analysis to Education: A Hybrid Approach

- to Interpreting Data in Practitioner Research', *International Journal of Qualitative Methods*, 19. doi: 10.1177/1609406920918810.
- Yukl, G. (1989) 'Managerial Leadership: A Review of Theory and Research', *Journal of Management*, 15(2). doi: 10.1177/014920638901500207.
- Yukl, G. and Gardner, W. (2020) 'Leadership in Organizations (Ninth Edition Global Edition)', in *Essex: Pearson*, pp. 235–240. Available at: https://ebookcentral.proquest.com/lib/ed/reader.action?docID=5892202&ppg=396.
- Zamoum, K. and Gorpe, T. S. (2018) 'Crisis Management: A Historical and Conceptual Approach for a Better Understanding of Today's Crises', *Crisis Management Theory and Practice*. doi: 10.5772/INTECHOPEN.76198.

APPENDIX 1 - INTERVIEW QUESTIONS

Question Number	Theme	Question	
1	Early Detection	In your experience, how are organisational crises signals detected and what would you consider to be an early sign?	
2	Early Detection	Do you see early detection of crises as a part of your role?	
3	Early Detection	How would you go about identifying an impending org crisis?	
4	Early Detection	What would you consider an early crisis warning signal/Red flag?	
5	Early Detection	When observing fragmented, vague or ambivalent signals of a potential crisis, how do you respond?	
6	Early Detection	How would you react to false alarms, voluntary admissions of failure of near misses?	
7	Sense-Making In your organisation, is there a forum in which relevant stakeholders in the company can discuss a potential destabilising situation?		
8	Sense-Making	Do you think this forum has/may have value?	
9	Sense-Making	How open are you to change when dealing with a crisis in the organisation?	
10	Critical Decision Making	What is your approach when presented with making critical decisions?	
11	Critical Decision Making	Do you alter your communication of critical decisions made depending on the individual(s)?	
12	Critical Decision Making	Do you think the crises caused in the organisation by COVID required more critical decision making than previously experienced crises?	
13	Crisis Coordination	When attempting to achieve cooperation across teams/departments, what leadership style do you find most effective? Or where do you see the balance between 'persuasion' and 'command and control'?	
14	Crisis Coordination	Does the team stage of development change that view?	
15	Meaning-making	Was it essential during the crisis bestowed by COVID-19 to explain why critical decisions were made?	
16	Meaning-making	Do you justify decisions made? (Upwards or downwards)	
17	Meaning-making	Do you personally frame the message or is the message delegated throughout teams?	
17	Accounting for performance	Do you personally frame the message or is the message delegated throughout teams?	
18	Accounting for performance	Have you experienced any negative feedback from decisions made during times of uncertainty? If so, how would you communicate?	
19	Accounting for performance	Does it make it easier to 'account for performance' because it's a pandemic?	
20	Learning Lessons	Learning Lessons In your opinion, has there been many lessons learned over the past 18 months that will enable the organisation to become more resilient?	
21	Learning Lessons	Do learned lessons travel throughout the organisation?	
22	Learning Lessons	Looking back, what would you do differently now, if anything?	
23	Learning Lessons	Do you think the organisation crisis caused by COVID-19 is over?	

APPENDIX 2 - INTERVIEW CONSENT FORM

Interview Consent Form

National College of Ireland

"Organisational Crisis Management: A Qualitative Investigation using a Crisis Lifecycle Framework"

Research investigator: Jonathan Finnegan

Research Supervisor: Dr Colette Darcy, Dean School of Business, National College of Ireland.

Research Participants name:

Consent to ta	ke part in research
---------------	---------------------

•	voluntarily agree to partic	cipate in this re	search study.

- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I understand that participation involves an interview lasting no longer than 60 minutes discussing personal experiential knowledge of leadership and crisis management during the COVID-19 pandemic.
- I understand that the researcher will not benefit directly from participating in this research.
- I understand that signed consent forms and original audio recordings will be retained on an encrypted
 USB drive accessible only to the researcher until the exam board confirms the results of their dissertation.

• I understand that a transcript of my interview in which all identifying information has been removed

will be retained until September 2023

I understand that all information I provide for this study will be treated confidentially and that in any

report on the results of this research, my identity will remain anonymous. This will be done by changing

my name and disguising any details of my interview which may reveal my identity or the identity of

people I speak about.

• I understand that under freedom of information legalisation I am entitled to access the information I

have provided at any time while it is in storage as specified above.

I understand that I am free to contact any of the people involved in the research to seek further

clarification and information.

Thank you very much for your participation.

Jonathan Finnegan

Masters of Business Administration, National College of Ireland

Phone: 085-7577855

Email: X19174799@student.ncirl.ie

Signatures of research participation:				
Signature of research participant	 Date			
Signature of researcher: I believe the participant is giving inform	ned consent to narticinate in this study			
Signature of researcher	Date			

71