

**Messy problems and messy solutions:
Ways of Being when engaging with Wicked Problems.**

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Messy problems and messy solutions: Ways of Being when engaging with Wicked Problems.

Abstract.

Considerable research has been carried out on the growing occurrence of Wicked Problems. The literature predominantly has a focus on understanding and defining the nature of Wicked Problems, but there are gaps concerning what abilities, skills, and mindsets, named here as *Ways of Being*, are required by leaders when engaging with such problems. The nature of Wicked Problems involves an increased amount of complexity and interrelatedness, and as such, calls on new *Ways of Being* for leaders and managers.

Drawn from sixteen interviews with leaders in care and healthcare environments with a range of seniority and experiences, this research offers new insights into *Ways of Being* which are brought to bear when engaging with Wicked Problems.

This research utilises Lewin's Field Theory (Lewin, 1952) as a lens to understand Wicked Problems, especially showing that the field in which a Wicked Problem exists, is in a constant state of movement and any attempt to define the problem as static and isolated will not offer a true representation of its complexity. Further, this highlights the importance of leaders appreciating and considering the relationship between the ever-changing constellation of interrelating factors and the Wicked Problem itself.

It demonstrates how the framing process for individuals, groups, and organisations, influences and changes how the Wicked Problem is addressed, plus how context and field awareness allow for more choice when informing leaders how and where to intervene.

In the absence of a known solution, leaders are drawn to experimenting as a way forward. This requires a specific set of abilities and mindset, including the ability to effectively manage risk, work with others, including stakeholders, by effective influencing and sense-giving.

Although the uniqueness of each Wicked Problem requires an equally unique approach to intervening, this thesis discusses and highlights that there are four *Ways of Being* that leaders need to consider:

Ways of perceiving, Ways of engaging, Ways of interacting, Ways of feeling.

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Author's declaration.

I declare that, except where explicit reference is made to the contribution of others, that this dissertation is the result of my own work and has not been submitted for any other degree at the University of East Anglia, University of Suffolk, or any other institution.

Signature:

A handwritten signature in black ink that reads "W D Scott". The letters are cursive and slightly slanted to the right.

Printed Name: **Warren Duncan Scott.**

Chapter 1 - Introduction.

1.1. Introduction to the chapter.

This chapter outlines the research carried out for a doctoral thesis on the **Ways of Being when engaging with Wicked Problems**. It explains the background that led to this study and why such a study is needed and justified, further discussing the significance of the outcomes. From this, the research questions are outlined alongside the scope of the study. Overall, this chapter forms the foundation for the following literature reviews, the methodologies and method chapter, the research analysis, and the conclusions.

1.2. Background to the study.

Since Rittel and Webber's (1973) publication *Dilemmas in a general theory of planning*, there have been numbers of papers published regarding the nature of these dilemmas, now often referred to as Wicked Problems. Whilst the focus of the original study was on policy studies, there has been a gradual emergence into other fields. Since then, in relation to societal and organisational problems, the concept seems to have gathered increasing popularity, which, as Raisio and Lundstrum (2015) point out, is not surprising as the Wicked Problems we engage with seem to be increasing in numbers. In my opinion, this emergence is still in progression, however, it seems that the *term* Wicked Problems is still not in general currency in many organisations yet. There is a substantial number of publications which explore and attempt to expand the *definition* of Wicked Problems, but literature and empirical research regarding Ways of Being to engage with them, is very limited (Raisio, *et al.*, 2019).

Wicked Problems are emerging as a phenomenon of interest in the health and care sectors (Blackman *et al.*, 2006; Carter Anand *et al.*, 2019; Chawla and Learmonth, 2019; Grint, 2008; Thomas and Hollingrake, 2019). Since its original introduction the literature has been sparse regarding the *engagement* with Wicked Problems. More recently some literature and research has been appearing with the aim of applying the understanding of Wicked Problems to known situations (Bhat, 2021; Coleman-fountain and Beresford, 2019; Danken et al, 2016; Geyer, 2010; Strudwick 2019). Less research is available which can guide leaders and managers towards *how to engage* with these problems (Struminska-Kutra, 2019), especially in an organisational setting. This participants in this research work in the health and care sectors primarily, as outlined in Chapter 4. However, many of them have backgrounds in

commercial organisations and drew on their experience from both sectors during the interview and data gathering process. I therefore consider this research to be based primarily in the health and care sectors, but further research may also show its applicability to other sectors.

There has been a call for more research on the abilities to engage with Wicked Problems (Norton, 2012; Head, 2019; Raisio, Puustinen, *et al.*, 2019). Norton (2012) highlights that there is no comprehensive science or theory for addressing Wicked Problems and that rational analysis, however sophisticated, cannot be brought to bear upon these situations, stating '*With respect to Wicked Problems, we face an analytical void*' (p 451). This study aims to help fill this void.

1.3. Justification of the study.

Alongside the increasing recognition of Wicked Problems in fields such as healthcare, we need to consider the abilities of people who lead the engagement of such problems. If organisations wanted to develop the leaders of the future, in *Ways of Being* when engaging with Wicked Problems, there is some disparate literature on doing this with Wicked Problems (Danken, Dribbisch and Lange, 2016; Ferlie *et al.*, 2010; Raisio *et al.*, 2019; Termeer *et al.*, 2013), but few empirical studies dedicated to this. There are suggestions (Termeer *et al.*, 2015), opinions and inference in the literature (Grint, 2005; Grint, 2008; Head, 2019) concerning some skills, abilities and mindsets that are required to navigate engaging with a problem that has wicked characteristics, but there is no dedicated research-based work on *Ways of Being*. This study uses the term *Ways of Being* to encapsulate 'skills', 'abilities', 'qualities', and 'mindset'. This research will enable leaders, organisational development (OD) professionals, management development experts, M.B.A. designers and business schools to re-evaluate the current offerings for developing leaders of the future and then to build development for leaders to meet the growing need.

Further, this research proposes that our current understanding of Wicked Problems is limited by a focus on definition rather than characteristics, and by description as a static phenomenon rather than one that is constant movement. By utilising a fresh lens, we can build on this current understanding by paying attention to the movement within a Wicked Problem, plus its interrelatedness and characteristics. To utilise a new and different lens to examine both

the concept of Wicked Problems and Ways of Being, will bring different insights, new understandings in the current government and organisational climate, leading to better engagement of a Wicked Problem. There is commonality from Rittel and Webber's understanding of Wicked Problems and that of Lewin's (1946) Field Theory (see table 3i p59). Whilst this commonality with Field Theory was not a *choice* made by Rittel and Webber, it does allow us to use a Field Theory perspective (Lewin, 1946; Parlett, 1991; Stevenson, 2018), to re-examine Wicked Problems and subsequently, the Ways of Being when engaging. This research responds to this literature gap, adds new insights and views on Wicked Problems as residing in a field of interrelated influences which are in constant movement, and then uses the findings from the research to form a view for the Ways of Being that are needed to engage with the Wicked Problem through perceiving, engaging, relating, and feeling.

Considering the gap in the current research regarding Ways of Being when engaging with Wicked Problems (Termeer *et al.*, 2015; Danken *et al.*, 2016), not only are the Ways of Being with Wicked Problems under researched, but using a Field Theory lens will enable a more holistic view of Ways of Being when engaging with Wicked Problems. It is possible to derive from other fields especially around organisational development (OD), and around leadership development, however, these are usually contextualised without reference to Field Theory or Wicked Problem principles. By drawing from literature around how Gestalt psychology and Field Theory works with the field, I can draw from this to understand and explore this in an organisational setting. This will bridge a gap in the literature on Ways of Being and add to the literature regarding the application of Field Theory in organisations.

1.4. Statement of the problem.

The problem under investigation has a number of facets:

- How can I add to the knowledge of Wicked Problems in a way that increases and challenges our understanding of its nature and characteristics, and improves our ability to engage with its interrelated, emergent, and holistic nature?

The current understanding of Wicked Problems from the literature seeks to label a problem in a categorical way, rather than attempt to understand characteristics, or to take account of its full complexity and the uniqueness of each problem. The same literature can *imply* a Wicked Problem is static in nature. Instead, we need to consider and examine Wicked

Problems as a moving and emergent phenomenon and not as categorical. This view of emergence and movement is new and challenging. Once this is understood, I can start to address the next element of the problem:

- What are the Ways of Being required for leaders that engage with Wicked Problems?
- How can I meet a gap in the literature regarding the skills, abilities and mindsets of people who engage with Wicked Problems?

With the growing interest in Wicked Problems, attention can be turned further to the engagement and leadership of them. There is a significant gap in the literature regarding how leaders engage with Wicked Problems, which leads to the next element of the problem statement:

- What actions and interventions do leaders make in order to engage with this ever changing, emergent and unsolvable phenomenon?

Can we learn what engagement strategies leaders take within organisations? If I can find this out, it will inform our understanding about the necessary and required Ways of Being. All of the above problem statements have implications for the field of organisation development and of new insights into leadership development, for leaders and organisations themselves. These problems lead to the following research objectives/questions described below.

1.5. Objectives of the study and research questions.

This research is designed to elicit views and experiences that will enable the research to understand the ways in which participants experience Wicked Problems, how they subsequently engage with these Wicked Problems, and the Ways of Being adopted. These led to the following research objectives/questions:

RQ 1. – To understand what are the ‘Ways of Being’ utilised by leaders¹ when engaging with Wicked Problems.

Sub-research objectives/questions:

RQ 2. – To understand how leaders view Wicked Problems and how it is reflected in their Ways of Being.

RQ 3. – To explore how leaders intervene with a Wicked Problem and the implications for Ways of Being.

RQ 4. - To meet a gap in the literature regarding the abilities of leaders to engage with Wicked Problems, by bringing together the Ways of Being discovered in this research together with those outlined in literature into one place and to validate these in an organisational setting.

RQ 5. – To provide a new and unique insight into Wicked Problems by applying principles of Field Theory to the concept of Wicked Problems and to leaders that engage with Wicked Problems.

The first suggestion underlying these research questions is that there *are* specific Ways of Being that are required to engage effectively with Wicked Problems. In this case I am asserting that current literature does not fully explore these and as such, management and leadership development is not focussed on preparing leaders to address such Wicked Problems.

The second assertion is that Wicked Problems are, in many cases, discussed and written about as if they are binary, static, and semi-independent of other variables, whereas I see them as non-binary, in constant movement and as part of a constellation of interrelated influences. The assertion being, that if we consider Wicked Problems in this different way, we will more accurately understand the Ways of Being needed to engage with them effectively.

The contribution will be two-fold. Firstly, an empirical data-driven understanding of the Ways of Being needed for engaging well with Wicked Problems that can be utilised when developing

¹ The term ‘leader’ in this research refers to any person who is leading the engagement of a Wicked Problem. It does not denote a title or hierarchical position.

managers and leaders. Secondly, a new view on the nature of Wicked Problems, which will add to and further the debate and discussion and understanding.

1.6. Significance of the study.

1.6.1. Significance for the debate and discussion on Wicked Problems.

This study draws from, discusses, and responds to, a number of key pieces of literature regarding the nature of Wicked Problems, especially that of Danken *et al.*, (2016), Grint (2005, 2008), Head (2019), Levin *et al.* (2012), Norton (2012), Raisio *et al.*, (2019), Rittel and Webber (1973), and Xiang (2013). From an academic perspective, this study addresses a number of needs. Firstly, I propose that the current literature regarding Wicked Problems has a strong bias toward definition and categorisation of Wicked as if it is a binary construct (discussed in Chapter 2). In other words, that the problem is Tame *or* Wicked, Wicked *or* Super Wicked, critical *or* non-critical. Whilst such definitions have usefully explored the concept, the binary nature of such definitions is misleading, and as such this research proposes that a less binary and more fluid definition adds to our understanding that problems have wicked *and* tame characteristics. These are not mutually exclusive. It is in understanding the nature, amount, and severity of the wickedness where we can find greater understanding of the problem itself. This will add a new strand to the debate and discussion on Wicked Problems, away from a definition focus, towards an understanding of its nature, and in turn, more focus on amount and severity of wicked characteristics.

This highlights the second main significance of this study when understanding the Wicked Problem concept, that of *emergence and movement* in the problem. Following on from the categorical and binary nature description in some literature mentioned above, this study will focus on emergence and movement in the Wicked Problem and its surrounding field. Wicked Problems rarely, if ever, suddenly appear. Instead, they grow, emerge, re-form, and change. This also has implications for how to intervene and Ways of Being. If people engage with a Wicked Problem as if it were static, then this is a very different mindset to that of seeing the problem as being in transit. This itself opens up another new strand of debate (and perhaps research), regarding *how* this emergence happens. This research focuses on the implications on Ways of Being for this, but there are more avenues to explore as discussed in Chapter 8, section 8.7.1.

Thirdly, this research is significant as it considers the interrelatedness of aspects in the field (or context) of a problem as highly important. This demonstrates a link, not only into Field Theory which is researched here, but also possible links to systems thinking and chaos theory which are both possible future avenues for research. This has implications both academically in the form of discussion, literature, and research, but also from a practical perspective. Take, for example, the change manager or the OD specialist who now understands the issues they are addressing as a constellation of interrelating factors, rather than a single point or cause which needs addressing alone. It can change their whole view of the problem. Drawing all three of these points together will allow the theory and subsequent models to be re-considered and updated.

1.6.2. Significance for the discussion and debate on Field Theory.

This study draws from, discusses, and adds to the literature on Field Theory, especially that of Burns and Cooke (2013), Chidiac (2018), Lewin (1946), Parlett (1991), and Stevenson (2018). Whilst Field Theory and Gestalt Psychology is established in contexts such as the therapeutic field, its overt application in organisations is still sporadic. The amount of literature where these principles are overtly applied to organisational thinking are limited. As such, finding organisationally based empirical research is much scarcer than that, for example, of its application to individuals or groups. I still believe that this is a field that is in its infancy in terms of debate and literature. This research, and subsequent papers, will add considerably to this gap and encourage others to carry out further organisationally based research using these theories and principles.

1.6.3. Significance for the development of leaders.

This study draws from, discusses, and responds to a number of key pieces of literature regarding the development of leaders, especially that of Danken *et al.* (2016), Fairhurst (2005), Head (2016, 2019), Norton (2012), Raisio *et al* (2019), Rittel and Webber (1973), Termeer and Dewulf (2015).

There is a greater recognition of the occurrence of problems that can be considered as wicked (Raisio and Lundstrum, 2015). The health and care sectors in the UK have, and continue to face, a number of problems which can be considered as wicked; Covid pandemic, emergency care, GP appointments, nurse and doctor recruitment and retention, availability of beds in

hospitals, post hospital care, finances, to name but a few. Such problems are not restricted to macro/governmental level interest. Each hospital, department, and even individuals also face problems that can be considered as having wicked characteristics.

This research asserts that much of the development of people who engage with such problems, is not based on an understanding of the nature and characteristics of wickedness. Much of the existing development is based around linear cause and effect thinking in a restricted, not expansive, or inclusive, context, drawing heavily on such processes as project management, cause-effect thinking, problem-solving methods and single intervention solutions. For example, the OD professional who addresses a change situation using a singular intervention without reference to context. This study concludes with a discussion regarding what the abilities, skills, and mindset, that a person who engages with Wicked Problems, requires. This adds in two ways, firstly, to the debate of what is required when engaging with Wicked Problems. Not only does it conclude based on empirical information, but it also draws this debate together into one place. Secondly, this has a very practical addition, in that leaders, management and leadership developers, OD professionals, MBA designers, business schools, and organisations, can draw on the findings of this research, to redevelop their work, in order to more effectively engage with the growing occurrence of Wicked Problems.

1.7. Definition of terms.

- Ways of Being.

In designing this research, I found many definitions of terms such as 'skills', 'abilities', 'qualities', and 'mindset'. It is not the aim of this research to enter into a discussion regarding the definition of such terms. Instead, the collective term used for these in this research is **Ways of Being**. In more specific terms, the research is designed to discover answers to **Ways of Being when engaging with Wicked Problems**, as outlined in Figure 1A below:

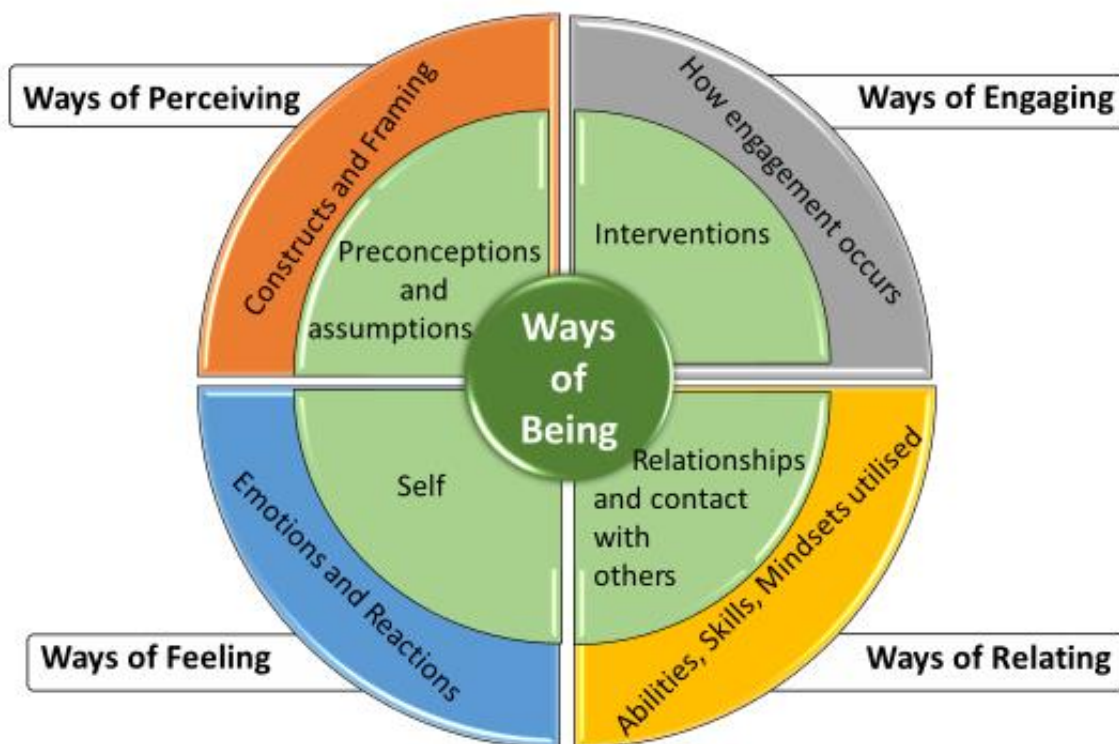


Figure 1A. Framework for *Ways of Being* used in this research.

This model was developed after reading extensively around Wicked Problems literature. Emerging from the reading of this literature and what was *omitted* from the literature, gave rise to a number of questions and thoughts with regards to Wicked Problems. The coding of the interview transcripts then seemed to fall into the above four categories (see Chapter 4). Further exploration of Field Theory literature added to and shaped these questions and thoughts, leading to the development of the above as a theoretical model.

This model went through a number of iterations. It was initially heavily focussed on abilities and skills of a leader. As my thinking developed it became evident that this definition was restrictive. There was a certain way that leaders needed to *think* about Wicked Problems, which I characterised as *Mindset*. Following this the interest moved to the question of how leaders actually engaged with the problem, what did they actually do? It became evident the way a leader engaged with a Wicked Problem differed between individuals, and this, together with reading literature regarding, framing, and sense-giving, gave rise to a whole raft of considerations *prior* to any Wicked Problem engagement taking place. It is about perception of the problem. Finally, both from personal experience and from talking to others, I realised that being held accountable for an unsolvable problem in an organisation, is not always

conducive to being highly motivated. From this the consideration came an understanding that regarding emotions and reactions as important was key understanding the wholeness of Ways of Being.

Whilst this model was developed over a long period of time, mainly during the literature review, coding, and analysis process, I realised that any of these aspects could not be examined in isolation. They interrelate and as such needed to be considered holistically. The above model was then used as a framework for the research and analysis of the data.

In reading the analysis and the discussion in Chapters 5, 6, 7, 8, the conclusions and learning drawn from the data can all be related to the above model. Further, when the findings from this study are utilised for application by leaders, management and leadership developers, OD professionals, M.B.A. designers, business schools, and organisations, this above model and definition provides a framework for structuring this work.

Other terms

- **Leader** – For this research this term is referring to any person who is leading the engagement of a Wicked Problem. It does not denote a title or hierarchical position.
- **The Field** – all the coexisting mutually interdependent factors of a focal point (such as a Wicked Problem) and its context.
- **Figure** – that which we notice, is in ‘focus’ and is taking our attention.
- **Ground** – that which is still relevant, but we are temporarily focussing on it.
- **Projection** – a thought belief, feeling or behaviour which belongs to an individual, but who assumes it is true for others.
- **Introjection** – taking in the thoughts, views, and beliefs of others without questioning or evaluating them as true.
- **Polarities** – having two opposite or contradictory opinions or aspects.
- **A fixed Gestalt** - represents repeated attempts to meet a need that is never resolved by the actions taken.
- **Norms** – in this study is used to describe something that is usual, typical, standard, or accepted as ‘normal’ by any group, organisation, or society.
- **Bricolage** - construction, creation or problem-solving, using experimentation, from a diverse range of available sources and resources.

1.8. Scope, limitations, and delimitations of the study.

This research was carried out using participants from healthcare and care organisations. Their backgrounds, as discussed in Chapter 4, are varied, from commercial organisations, from nursing and medicine, and from general management. Mainly they were working as managers and leaders in a medical function apart from four participants who were working in an OD department within a healthcare environment. They were asked to participate based on current and past Wicked Problems in which they were leading engagement. Further information on the participants is outlined in Chapter 4. So, whilst the research findings, I believe, have implications for all organisations, the data is predominantly set in a health and care context, but across a number of different functions, including leadership, management, medical, nursing, organisation development, leadership development, whistle blowing, and care homes. The participants came from a wide cross section in relation to hierarchical position from CEO through to junior manager. Predominantly though, the participants were senior managers or leaders who are specialist in their fields. It was in *leading* that this research focussed its attention, due to the important impact that leadership has on a Wicked Problem. The problems discussed were led from the participants and as such included a variety of different Wicked Problems including national healthcare issues through to team-based problems. This gave a helpful cross section of Wicked Problems and as such allowed the research to find commonality despite the expansiveness of each problem.

The academic scope drew from a number of fields. These include studies and literature from: Wicked Problems, Field Theory, Gestalt Psychology, Framing, Phenomenology and to a lesser extent, Systems Thinking and Chaos Theory. Once the choice of Wicked Problem and Field Theory literature was made, the other disciplines studied came from working to understand the data in the analysis. The research, as explained in Chapter 4, drew from phenomenological concepts but not from quantitative methodology or method. This choice was made after examining a number of possible approaches (see Chapter 4). It was Phenomenology that had a strong alignment with Field Theory and assumptions of Gestalt psychology (as discussed in Chapter 4 – Methodology). This choice allowed the data to be led by the participants rather than me as the researcher. It enabled the research to start with a relatively small set of assumptions about Wicked Problems and about direction of the study.

This research did not explore the participants ideological views and assumptions of the NHS and care, although it is recognised that this can have an impact on how problems are framed, made sense of, and subsequently addressed. Similarly with the concept of 'Power' and where it resides will also influence how a Wicked Problem is framed. The research recognises the importance of these and suggests that these may be helpful future avenues of research (see chapter 8 section 8.7.1).

The above aspects of the study were delimitations, that is, they were *chosen* as the form of this study. There were also limitations. Access to leaders, especially those in senior positions was restricted by their time availability and geographical location. All were restricted to a two-hour maximum length interview. This was also close to the height of the Covid pandemic and as such I had to covid test prior to and post each interview, some interviews had to be moved to an online teams meeting. This impacted on the chosen research methodology.

Most of the participants were especially aware and sensitive to the issue of confidentiality. This ranged from not wanting the organisation to be named (as for some of the participants, it is the only organisation of its type in the UK), through to the problem itself, in its uniqueness, not being named or identified. Finally, some individuals were nervous about being identified, as the issue they were discussing was political and, in their view, had the potential of damaging their careers. This may have been partially due to the ongoing organisational changes that were in progress at the time.

1.9. The Thesis.

This chapter lays the foundation for the research proposal and the thesis itself. It explains the background that led to this study and why such a study is needed and justified, plus why its findings are significant. From this, the problem being studied is summarised followed by research questions and scope of the study. Finally, following an explanation of key terms, it explains the limitations and delimitations that were encountered during the study. Overall, this chapter forms the foundation for the following literature reviews (Chapters 2 and 3), the methodologies and method (Chapter 4), and the analysis chapters (Chapter 5, 6, 7).

Chapter 2 provides a literature review for Wicked Problems, discussing the form and direction of the literature and how this research will contribute to this. Chapter 3 provides a literature review on Field Theory, with a particular focus on the aspects of this utilised in this research.

Both of these Chapters consider the implications from the literature for Ways of Being. Chapter 4 explains and discusses the choices of Method and Methodology, plus how and why these were used to gather and analyse the data for this study.

Chapters 5, 6, and 7, take the data gathered and the literature, to draw insights and learning from the data. These cover three main areas arising from the data, that of framing of Wicked Problems (Chapter 5), experimentation when engaging with Wicked Problems (Chapter 6), and Ways of Being when engaging with Wicked Problems (Chapter 7).

Chapter 8 brings these findings into an overall discussion and reviews the process of this study.

Chapter 2. Literature review chapter – Wicked Problems.

2.1. Introduction.

This chapter outlines the emergence of the term ‘Wicked Problems’ and the ongoing realisation that many societal, organisational, managerial and leadership challenges are increasingly considered to be Wicked (Peters, 2017; Raisio and Lundstrum 2015). It discusses the literature which highlights differing ways of understanding Wicked Problems, and how this is developing, concluding that much of the literature attempts to describe Wicked Problems as a binary wicked/non-wicked definition, which is not portraying the phenomena in its truest form. Instead, the chapter discusses how problems have more or less wicked *characteristics*, and it is the *amount* and *severity* of wicked characteristics that defines the problem. The chapter asserts that there is a gap in the literature and moves on to clarify how Wicked Problems can be better understood.

Drawing from other lens including Gestalt and Field Theory literature, the chapter discusses how many of the definitions of a Wicked Problem seem to consider it a static phenomenon and as such hold a definition formed it at a single point in time, whereas a Field Theory (Lewin, 1951; Parlett, 1991; Stevenson, 2018) perspective challenges this and suggests that the nature of Wicked Problems is that they are ever re-shaping, morphing, and developing. As such, a static definition in time will soon be inaccurate. This chapter proposes that due to this emergent and moving nature of Wicked Problems, that static diagrammatic representations of Wicked Problems can be helpful but ultimately do not carry the full meaning. Again, drawing from Field Theory literature, it discusses how considering the impact of the context (or *field* as it will be named) within which a problem exists, shapes the definition of the problem itself as does the framing of the problem by a person involved.

The chapter examines the role of social constructivism and interpretivism on how problems are framed and labelled. Using discussions prompted from sense-giving literature, the chapter outlines how perception is key when viewing a problem and in itself impacts on the understanding of a problem as wicked. This highlights the issue and meaning of the word ‘solved’, as depending on a person’s definition of a problem, there will be differing views on the success and achievement of an intervention. In fact, the lens through which an individual frames a problem has major implications not only for the understanding of such a problem,

but also for how the problem is engaged with. This chapter continues to consider and discuss the influences on how a problem is understood, asserting that firstly, naming a problem as wicked, does not necessarily mean that the problem is understood. Secondly, that there are many more influences on the understanding of a Wicked Problem than the current literature would suggest, including group and context influence, followed by the internal influences that form the framing process for individuals.

Finally, given the focus of this research being 'Ways of Being' when engaging with Wicked Problems, this chapter reviews the current literature on this and makes the case that it is under researched and further research is warranted to bring together and add to the current body of knowledge. Given the varied understanding of Wicked Problems, there is a lack of clarity in the literature surrounding ways in which leaders approach Wicked Problems, which might be addressed by using a Field Theory lens. This literature review highlights a number of questions that this research aims to investigate, examine, and ultimately add to the body of thought.

2.2. The search for an understanding of Wicked Problems.

The term 'Wicked Problems' first entered the awareness of thinkers, academics, and planners when Rittel and Webber (1973) used the word in relation to particular social problems that they were highlighting to mean malignant, vicious, tricky and aggressive. Rittel had heard C. West Churchman speak about Wicked Problems in 1967 at the University of California, Berkeley prior to this, and Churchman subsequently wrote a guest editorial 'Wicked Problems for management Science' (Churchman, 1967). The cultural environment was significant, with Rittel and Webber (1973) noting that most problems that engineers and scientists focussed on were tame or benign. They further suggest that there is societal change away from '*an expert will resolve this*' to wider groups in society being interested in commenting on some of the problems faced. Since then, in relation to societal and organisational problems, the concept seems to have gathered increasing popularity, which, as Raisio and Lundstrum (2015) point out, is not surprising as the Wicked Problems we engage with seem to be increasing in numbers. Until further research is carried out, we do not know whether they are increasing or whether the name 'wicked' seems to be given to 'complicated' problems which may or may not be wicked. So firstly, discussing how the literature defines Wicked Problems is important if we are to understand its nature.

Rittel and Webber (1973) outlined ten original characteristics of Wicked Problems (see table 2iii, [Appendix 2A](#)). They describe that defining the Wicked Problem is the problem. Other writers (Van Bueren, Klijn, and Koppenjan, 2003) point out that one issue with Wicked Problems is problem definition. Ordinarily, defining a problem can implicitly lead towards a suggested resolution, for example saying that the problem with the NHS is lack of funding, suggests that more money would resolve all NHS problems. However, defining a problem in such a way that suggests a solution, can be misleading in the case of a Wicked Problem. Understanding the context or environment in which the Wicked Problem sits is essential, as attempting to understand it in isolation does not enable the understanding of different influences, tensions, polarities that have led to and sustain it as a problem. Wicked Problems are unresolvable, at least in their current form. Rittel and Webber (1973) also describe tame problems, where problem formation is possible, and all information is available for the problem solver to understand and solve the problem. A tame problem can still be complicated but is solvable (Grint, 2008), so a Wicked Problem is *not* defined as such by the amount of complication. It can have occurred before, leading to greater expertise in resolving the problem. Tame problems have a far lower degree of uncertainty than Wicked Problems. The early literature often indicates a dichotomous relationship between tame and wicked in which they are at polarities as in figure 2A.



Figure 2A. Basic representation of Wicked Problems.

Since the original description outlined by Rittel and Webber (1973), the literature has attempted to develop this understanding further. Grint (2005), suggests a third category which he called ‘critical’ problems. A critical problem is associated with an emergency situation where there is no or little time for involvement of others in the decision-making process and where there is virtually no uncertainty about what needs to be done. Raisio *et al.*, (2019) offer a refinement to the definition of wicked and tame problems by saying that some problems are not wicked or tame but are ‘messes’. These are clusters of problems that cannot be resolved in isolation of the environment or each other, and in which people work together eventually reaching a consensus of understanding. They see the aim with these is to reduce uncertainty and not-knowing, which may be achieved through and with others.

Further progressing the linear visual view of these definitions, figure 2B offers a visual representation:

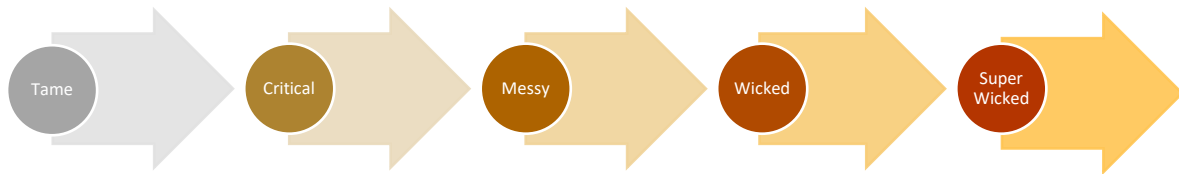


Figure 2B. Linear representation of definitions around Wicked Problems

Again, although more refined, figure 2B still suggests a linear progression in categorisation of problems, which this research challenges.

The 10 characteristics offered by Rittel and Webber (1973) ([Appendix 2A](#)) have been refined and grouped into categories. Rittel and Webber (1973) outlined the issues as *defining problems, locating problems and actions that will help resolution*. Raisio *et al.*, (2019) highlight that several researchers (Conklin, 2005; Norton, 2012; Xiang, 2013) have commented on the overlapping nature of these characteristics. Others (Danklin, Dribbisch, Lange, 2016) have commented on the lack of a clear-cut definition. Raisio *et al.*, (2019) helpfully suggest that these characteristics can be clustered into 3 headings:

- A. **Problem definition** - the complexity and uncertainty related to trying to understand the problem. Wicked Problems are multi-faceted and ambiguous.
- B. **Non-resolvability** - any attempt to resolve a Wicked problem will change the problem and cause new (often unpredicted) consequences.
- C. **Multi actor environments** – those people both involved in and impacted by a Wicked Problem have a wide range of views, backgrounds, and cultures. This results in many different and diverse proposed solutions and interventions for a Wicked Problem.

(These groupings can be seen in relation to Rittel and Webber's original ten characteristics in table 2iii, [Appendix 2A](#)).

What we can see from the above literature is that there has been and is, a large focus on defining and redefining the term, adding nuances and refinement based on Rittel and Webber's (1973) original understanding. All of these definitions can hold true and go some way to allowing us to understand Wicked Problems and add to the debate. However, there is

a lot of attention in the literature on the definition of what a Wicked Problem *is* rather than the characteristics or Ways of Being to engage with it. This chapter has a focus on understanding the *characteristics* of a Wicked Problem, rather than an agreed definition. Although definitions and characteristics are inextricably connected, understanding the characteristics will assist greatly when I come to consider and discuss the Ways of Being needed when engaging with Wicked Problems.

Many of the descriptions of Wicked Problems mentioned above are still forms of *static* description. They are suggestive of an orderly world view (Geyer and Rihani, 2010) which can offer an accurate definition of a Wicked Problem at a point in time, which can then be taken forward and acted upon. In fact, by the nature of Wicked Problems they are not static or fixed at a point in time. Raisio, Puustinen, *et al.*, (2019) state '*problem types are not static, but constantly re-evaluated as part of the dynamic, complex contextual variations*' (p7). Wicked Problems are ever changing and are divergent in nature, in itself resisting a static label in any point in time (King, 1993). Problems might be more or less wicked - or characteristics might become more or less challenging, and a problem may be more or less wicked given a certain context, a view shared by using a Field Theory lens. So, there is not a clearly agreed definition and understanding (Danklin, Dribbisch, Lange, 2016).

The changing nature of Wicked Problems (Rittel and Webber, 1973) will mean that as soon as we frame a problem, that definition is outdated. Naming or framing a problem is an intervention in itself and in turn will alter the field, the view of people in the field, the interventions, and the problem itself. Wicked Problems are not independent of other factors. They do not sit in isolation. As Rittel and Webber (1973) point out, a Wicked Problem is a symptom of other problems. This is further confirmed as demonstrated by the Field Theory principle of possible relevance (Parlett, 1991) which says that every part of the field impacts on the field and therefore no part of the field can be excluded as irrelevant. This adds to the degree of wickedness by widening the field from which understanding can be gained. So, whilst the variety of current descriptions offers us insight, it is not the whole picture. Taking this wider view of Wicked Problems highlights that most if not all Wicked Problems will *also* have tame elements within them. Take for example the recent COVID pandemic, considered by many to be wicked, but it still had tame elements within it. This then further disputes the definitions of Wicked Problem/non-wicked problem as a binary choice. Instead, problems

have characteristics which are predominately (but not exclusively) wicked. Coyne (2005) argues that all problems (even math or puzzles) have the characteristics of Wicked Problems. Whilst this is a bold statement, and as such may or may not be correct, it does highlight the assertion that it is the amount and severity of wickedness rather than a binary choice that leads to a definition of wicked.

2.2.1. Drawing from a wider ontology and epistemology in order to help understand Wicked Problems.

To inform this discussion further, I have drawn from a wider range of literature in order to highlight the comparative nature of these definitions with complex adaptive systems (Waddock *et al.*, 2015), with conscious complexity (Geyer and Rihani, 2010) and with Field Theory (Lewin, 1952). If I examine the concept of Wicked Problems through other lenses then how might this add to the current definition and understanding in the literature? Wicked Problem literature pre-dates many of the complexity theories, but has similar characteristics (Klijin and Snellen 2009; Peters, 2017)

Raisio *et al.*, (2019) summarise a table by Puustinen and Lehtimäki (2016) outlining the different ontology or assumptions of an orderly world compared to the ontology of conscious complexity (Geyer and Rihani, 2010). In table 2i below, I have added a Field Theory (Lewin, 1952; Parlett, 1991; Stevenson, 2018) view to demonstrate the differences with an orderly world assumptions and similarities to complexity assumptions and how this can reflect on the view of Wicked Problems:

<p align="center"><u>Orderly world</u> (adapted from Geyer and Rihani, 2010).</p>	<p align="center"><u>Conscious Complexity.</u> (adapted from Geyer and Rihani, 2010).</p>	<p align="center"><u>Field Theory</u> (drawn from Lewin, 1952; Parlett, 1991; Stevenson, 2018).</p>
<p>Order: Given causes lead to known effects at all times and in all places.</p>	<p>Partial Order: Systems exhibit both orderly and chaotic behaviours</p>	<p>Partial Order: Order may emerge from chaos, but each configuration of the field is unique.</p>
<p>Reductionism: The system is reducible to its parts.</p>	<p>Reductionism and holism: some phenomena are reducible, others are not.</p>	<p>Holism: In order to achieve understanding, awareness of the whole is very helpful.</p>
<p>Predictability: Once global behaviour is defined, the future can be predicted by applying the appropriate inputs to the model.</p>	<p>Predictability and uncertainty: can be partially modelled, predicted, and controlled.</p>	<p>Predictability and uncertainty: Once we assume predictability, we influence the outcome.</p>
<p>Determinism: processes flow along orderly paths that have clear beginnings and rational ends</p>	<p>Probabilistic: general boundaries but within these boundaries, precise outcomes are always uncertain</p>	<p>Probabilistic: boundaries are permeable and changing. Precise outcomes are always uncertain.</p>
	<p>Emergence: systems exhibit elements of co-evolution, adaption, and emergence.</p>	<p>Emergence: systems exhibit elements of co-evolution, adaption, and emergence.</p>
	<p>Interpretation: actors are aware of themselves, the system and their history and strive to interpret and direct the system</p>	<p>Interpretation: Awareness leads to choices for how we interpret. Choice of interpretation leads to different actions.</p>

Table 2i. Ontological assumptions from three perspectives of an Orderly world, Conscious Complexity, and Field Theory in relation to understanding Wicked Problems. (Adapted from Raisio *et al.*, 2019. P12).

These views and literature have highlighted the similarities between complex adaptive systems (Waddock *et al.*, 2015) and Field Theory (Lewin, 1952). The similarities include the difficulty in defining the problem, attempting clarity on the boundaries of a problem, thinking holistically, an assumption about the non-linear nature of problems, the moving nature of a problem plus the inextricable link between problems and the unpredictability of outcomes.

Table 2i highlights some key differences between an orderly world view and those of conscious complexity. In particular, the more linear suggestion of cause and effect and the 'knowability' of this against the conscious complexity view of both order and chaos. It also highlights the difference against the Field Theory view that Wicked Problems are not orderly or predictable and that even if a cause effect relationship is established, it is in transition, multi-faceted (as opposed to single cause and effect) and unpredictable (Parlett, 1991). The orderly world view of Wicked Problems also views clear beginnings and endings. This is challenged by a Field Theory view that Wicked Problems do not have clear endings, instead they morph, change and move as time goes on and interventions are made. As can be seen in the analysis chapters (Chapters 5 and 6 particularly), the assumptions that are often made by stakeholders and organisations are often that of an orderly world. In contrast, Rittel and Webber (1973) talk about narrowing the gap between what is and what ought to be, further stating that societal problems are rarely solved, but just re-solved.

With reference to the differing ontological assumptions in Table 2i, an orderly world solution may look more like the completion of and *full resolving* of a problem in what can be considered the more historically traditional view of solution. Within the assumptions held in a conscious complexity ontology, a solution aim may be considered to be gaining a form of *partial control* over the Wicked Problem, whilst not completely achieving a full resolution. With the assumptions from Field Theory, solution may be to *understand the influences* both from and to the Wicked Problem (Parlett, 1997; Stevenson, 2018) and to be able to *intervene for improvement or greater understanding*, based on ever-changing parameters. Therefore, the definition of solved is a moving and changing one. Drawing from Lundstrom and Mäenpää (2017), if Wicked Problems cannot be solved in the more traditional sense of the word, then the definition of 'solving' can be to progress them, understand them, define them, move them towards a place where they can be tackled or even coped with. In this case Lundstrom and Mäenpää (2017) portray the leader's efforts/aim is to move the problem on or direct it rather

than resolve it. This might involve addressing some of the criteria rather than the problem itself.

The work by Levin *et al.*, (2012), although not drawn directly from a Field Theory understanding, is more aligned with the Field Theory view (Parlett, 1991; Stevenson, 2018). In particular the emphasis on the point that a Wicked Problem is not static, that anyone, such as a leader involved in the problem, is part of the problem, emphasising the constellation and interconnectedness (Lewin, 1952), and that to intervene in a Wicked Problem that a solution never sits within a central singular place.

Defining a problem by the degree of complexity may also confuse the understanding. A complicated problem is not necessarily a Wicked Problem, although there is a tendency for complicated problems to be given a label of wicked (Peters, 2017). Attempting to address a Wicked Problem as if it were tame, is something that people often do (Glouberman and Zimmerman, 2002) and can lead to less successful interventions. Wicked Problems consist of interconnected causes and subsets of issues, (Levin *et al.*, 2012; Parlett, 1991; Stevenson, 2018) and so cause and effect is much more difficult to understand compared to a tame problem, so a diagnosis of a Wicked Problem, using a tame frame, can miss some essential features. The preference to simplify, can make it easier to deal with complexity (Waddock *et al.*, 2015) but is not always helpful. This is not to say that we do not engage with a problem unless we understand it fully. Instead, we need to understand that framing is ambiguous, understand what type of problem we face, what might be the next action, and understand that the problem is complex (Raisio *et al.*, 2019).

If then we turn our attention to tame problems, this may add to our understanding about wickedness. Tame problems are described as a '*counterpoint to Wicked Problems*' (Raisio, 2019. P4), suggesting that they can be defined clearly and permanently. However, drawing from the principle of changing process (Parlett, 1991), where the field is in a constant state of flux and nothing is fixed (Lewin, 1951), we can establish that even a problem with largely tame characteristics may evolve and change. As soon as it is labelled as tame, the understanding is out of date. If we also draw from the Field Theory principle of organisation (Parlett, 1991), which states that no situation exists in isolation (Lewin, 1952; Parlett, 1991; Stevenson, 2018), then even a tame problem does not stand alone, it is part of a constellation of interrelated factors within the field. Given a certain frame then all tame problems can be seen as

contributing to, or at least impacting on, something else. Instead, we view a tame problem as having mostly tame *characteristics*, not as an isolated problem. This then highlights the importance of drawing from the literature of framing and in particular both Rittel and Webber's (1973) view that '*There is a choice about how we see the problem, but how we see the problem determines which type of solution we apply*' (Raisio *et al.*, 2019. pp5), and also the Field Theory principle of singularity (Parlett, 1991; Stevenson, 2018) that states that each construction of meaning is unique. This literature and the following section serve to help us understand that a static and permanent definition and understanding of a Wicked Problem is unlikely to be accurate for everyone.

Where an individual does name a problem as wicked/non-wicked, there is a danger of failure to recognise the nature of the problem and hence engage in a way which will not help. It is an emergent process where over a period of time (short or long) the type, seriousness and potential impact of the problem emerge or subside (Parlett, 1997). It moves and changes (Rittel and Webber, 1973) and over time the nature of the problem becomes 'figural'/into focus and can also become 'ground'/in the background² (Clarkson and MacKewn, 1993). A labelling process suggests a defined typology of problems, suggesting a much greater binary labelling process rather than, a continuum of moving and overlapping definitions, where a problem can move and shape depending on the interventions made to address it, and where most problems have wicked elements to them and might be more or less wicked. Wicked Problems are ever changing and are divergent in nature, in itself resisting a static label in one point in time (King, 1993).

Diagrammatically then, a static model as outlined above in figure 2A and 2B above, does not represent the true complexity of a wicked model especially if it is drawn in a linear fashion. Instead, perhaps a metaphor might be better in showing the complexities of Wicked Problems? I am drawn to the metaphor of clouds as a metaphor for Wicked Problems. Clouds are moving, shape shifting and changing, they resist a single definition, people will interpret them differently, there is a no stopping rule – any intervention will change the problem forever, there is no 'right' answer, clouds are inextricably linked to other systems (such as

² 'Figure' and 'Ground' are concepts from Field Theory to represent in or out of a person's focus and attention (see Chapter 3).

pressure), Clouds can be dense or thin. Clouds are 'unresolvable' (even if we wanted to solve them!).

Some literature such as Grint (2008), highlights a further consideration, which is that not only do we need to understand the characteristics of a problem as wicked, subject to its ever-changing nature, its interconnectedness with the field, but in order to understand a Wicked Problem we also need to examine its relationship to issues of perception, individual influence, group influence and contextual influence.

2.3. Influences on the decisions made regarding the wickedness and characteristics of a problem.

A problem may be seen in different ways by different people according to perspective and how it is framed. Coyne (2005) points out that some would reject the idea that Wicked Problems exist, or that Wicked Problems are just the norm, arguing that all problems are just problems differentiated only by levels of complexity and our abilities to comprehend and address them (Cortrell and Peterson, 2001; Coyne, 2005; Peters, 2017; Sieber, 1980). In that sense then, a Wicked Problem could be seen in more than one of these ways by different people. Rittel and Webber (1973) emphasised, in their first characteristic, that there is not a definitive form, so there is not a *singular* form and definition that a problem is wicked. Instead, a view of wickedness is socially constructed (Creswell, 2007; Lincoln and Guba, 2000), it is based on interpretation and is influenced by field conditions surrounding the problem (Lewin, 1952; Parlett, 1991; Stevenson, 2018).

2.3.1. Social constructivism, interpretivism and the framing of Wicked Problems.

The perception of a problem impacts on whether a problem is seen as Wicked (Fairhurst, 2005; Grint, 2005). The sense made of a Wicked Problem can depend on the performance criteria placed upon the problem in the first place. If I use the HS2 (described by the government as a *state-of-the-art, high-speed line critical for the UK's low carbon transport future. It will provide much-needed rail capacity across the country and is integral to rail projects in the North and Midlands – helping rebalance the UK economy* ([Homepage - HS2](#)) as an example, an engineer might view the problem as a series of difficult and complicated tame problems (a tame construct), which have been achieved before and for which the knowledge is available. A social scientist, however, may see the problem as one of equity of opportunity

between people in London and the North (a wicked construct), and whilst a communications link will change the problem, it is the underlying culture and assumptions where the cause in inequality lies.

Taking this further, if we believe that the identification of a Wicked Problem is subject to the interpretation of leaders, taking a subjectivist ontological position that '*social phenomena are created through the perception and consequent actions of affected social actions*' (Saunders, Lewis and Thornhill, 2012. p20), we can further understand the label of wicked. In social constructivism (Creswell, 2007; Lincoln and Guba, 2000; Schwandt 2001) people develop subjective meanings of their experiences as is the case for interpretivism (Delemont, 2007; Mertens, 1998). The meanings assigned are formed through interaction with other people, objects and experiences and cultural and historical norms, or in Field Theory (Lewin, 1951; Parlett, 1991; Stevenson, 2018) they are influenced by aspects in the field. This encourages us to consider and discuss the importance of plurality and interaction between people when attempting to obtain a shared understanding of a problem, leading to agreed ways on engaging. When you add this to the view that complex problems are increasingly addressed in partnership or collaboration i.e., by individuals or groups that will have constructed them in different ways, plus the everchanging nature, then this helps to identify another particular challenge to a binary understanding of *Wicked Problems*. I have drawn from literature of framing and sense-giving to further understand this.

2.3.2. Wicked Problems as a social construct.

Framing is defined as the ability to shape the meaning of a subject, to judge its character and significance (Fairhurst, 2005). To hold the frame of a subject is to choose one particular meaning or set of meanings, over another. When we share our frames with others, we manage meaning because we assert that our interpretations should be taken as real over other possible interpretations (Entman, 1993; Fairhurst and Sarr, 1996; Pondy, 1978; Fairhurst (2005) suggests that framing helps us to; a) focus, especially on aspects of situations that are abstract b) classify and put things in categories c) remember and retrieve information and d) in the case of metaphoric language, understand one thing in terms of another's properties. However, I would add to this understanding by considering e) the role of sense-giving and framing to create shared understanding and subsequent agreement on how to

engage. In attempting to understand and make sense of a Wicked Problem an individual leader will frame a problem and then attempt to get others to see this frame.

It is both a cognitive process and a communicative activity defined by selection of particular aspects, emphasis, interpretation, and exclusion of other points (Fairhurst, 2005). Fairhurst (2005) also points out the role of framing in helping leaders and managers understand their role as managers of meaning and co-constructors of reality, especially in turbulent and changing environments, using framing to influence the context under which turbulence was seen. However, implicit in these arguments is a suggestion from this literature that framing is only *individually* based or that sense is made of the problem then *given* to others rather than describing the process as carried out *with* others. If carried out individually, the same problem situation can be framed from different reference points, leading to different representations that, in turn, can lead to different, and inconsistent, chosen behaviour (Maule *et al.*, 2007). Schein (1993) on the other hand, describes framing in its use for finding commonality and clarifying misunderstandings, which can prevent people from identifying and dealing with problems in a common way, indicating the shared sense-giving of a problem as key. This is about how a leader may use framing, either as a choice to try and convince others or as an opportunity to create a shared frame or at least understand how others have sense-made differently. Depending on this, the understanding of the problem will be different.

Framing a problem can pose some difficulties and questions. Framing relates to a present view, and yet Wicked Problems are in transition, therefore a static frame is soon outdated and possibly inaccurate. A leader may present a frame and understanding of a problem as objective, whereas in reality it is highly subjective. It may be assumed by others, that due to issues including positional power, personal power, plus how and where power is used to influence, a leader's rendition of a problem is correct. People may frame a Wicked Problem in relation to other personal issues, such as a tendency to over-differentiate or become confluent with the frame, sense made and sense given by others. The context or field within which the framing occurs is an influence and yet may not be taken into account. These nuances in the framing, sense making and process of sense giving, become important when we identify and engage with a Wicked Problem. They also become important when we look at the concept of sense-giving and influencing the frame of others.

2.3.3. Individual influences on defining a problem as wicked.

Some commenters have often assumed rational models of decision-making, where the power to make decisions is in the gift of an individual and based on empirical evidence and positivistic approaches, that are logical, fact based and rational (Langley, 1989; Simon, 1986). In fact, behavioural theories of decision-making (Cyert and March, 1963; March, 1988; Simon, 1960) invite us to consider bounded rationality, purporting that although leaders may be convinced of their rationality in decisions, other less rational influences are also happening. We know that by the very nature of a Wicked Problem (Rittel and Webber, 1973) the definition of a situation is likely to be incomplete and is in a state of flux. In this case there would be so many alternative action choices, that both the problem and the solution are fundamentally unknowable by one person, as are the consequences of each alternative. We also understand that decisions are influenced by personal and political factors (Buchanan and Huczynski, 2016).

We will observe part of a problem or issue, and through our previous experiences, assumptions, and beliefs, we see this issue as the whole problem, finding reinforcing evidence to confirm our belief (Gray, 2016). Others will experience the issue through their own unconscious experiences, assumptions, and beliefs, hence we each see the Wicked Problem differently, and act accordingly. While we each see a piece of the truth, it is not the whole. Using a Field Theory lens, what becomes figural and ground for one person, may be very different from what becomes figural for another (Parlett, 1991). This can work, either in a way in which clarity is gained from more information drawing from a wider diversity of opinions, or this can add further complexity and confusion. Norton (2012) names conflicting values and interests that lead individuals to view Wicked Problems very differently. Head (2018) names these plus the complexity of interrelatedness and the changing nature of a problem as part of the configuration that can lead to it being considered Wicked. Therefore, the emergence of a problem from initial indications to formation as a Wicked Problem is complicated, in transition, externally (to the problem) influenced, internally (to each individual) influenced and multi-faceted.

Decisions aimed at understanding and framing Wicked Problems are influenced by more than our logic. In recognising the role of the unconscious in decision-making, Caver and Scheier (2008) indicate that emotions can rearrange goal priorities among processes beyond awareness and even extend to making certain goals conscious that were not previously.

Simon (1997) indicates that understanding decision-making has to take account of both conscious and subconscious processes. He says *'some people, when confronted with a problem make major use of intuitive processes, while other people make relatively more use of analytical processes'* (Simon, 1997. pp131-132). Both Perls (1969) and Beach (1990) invite us to consider the view that when intuition conflicts with rational analysis, intuition can be expected to become prevalent. The process following this often involves post decision cognitive dissonance (Festinger, 1957, Tavis and Aronson, 2007) or justifying the decision using what Kahneman (2011) would consider to be more conscious and rational. Grey (2016) demonstrates how our thinking often starts with a conclusion, which we then work backwards to find supporting corroboration and evidence. So, the decision to frame a problem as Wicked may or may not be based on logical deduction and facts.

A central theme in Simon's (1997) thinking, is that rational decision-making is limited by a person's skills, habits and reflexes, the values and concepts that influence the decision, and the person's knowledge of the consequences or alternatives. All of these elements contribute to problem framing by the actor (Sitkin *et al.*, 1992), resulting in an initial view of the problem, its type and severity. Such decisions and actions are closely linked to personal need such as power, achievement, affiliation (McClelland, 1961), control, inclusion, affection (Shultz 1958).

When a decision regarding a problem sits with an individual, there are numbers of intrapersonal influences which shape a decision into a belief that a problem is wicked. The fact that we all have unconscious bias in itself is not an argument for removing a decision away from a single leader to a more collective decision. It can however be argued that deepened awareness of the above bias, when facing a problem, would allow decisions about its nature to be explored at a more informed level. It is in understanding our own processes, experiences, bias, self-affirming beliefs, that we can move past a habitual response of a 'Wicked/non-Wicked' initial label response, into a more aware nuanced and informed choice.

2.3.4. Identifying and understanding a Wicked Problem as group process.

The formation and interpretation of a problem goes through many and varied influences to form and be considered 'Wicked'. The understanding of a Wicked Problem is not independent of human factors (Grint, 2005). It is not just the unique social construct of a leader to be able to say *'we are in crisis mode now'* that influences how the problem is understood by others. The relationship and influence between a leader and decision-making group can lead to

different kinds of compliance, agreement or disagreement when galvanising opinion on a potential Wicked Problem (McGrath and Argote, 2001). Any group is subject to group dynamics that can override logical and information-based decisions about a problem. These all sit within a wider context in which, to galvanise action, a critical mass of opinion will be needed if interventions are to be sustained (Gladwell, 2000). Even though agreement on the 'correct' way to intervene may never be reached on a Wicked Problem, gaining a collective view of the problem is needed (King, 1993). It is therefore not only the individuals in the system that are important, but also the interrelatedness, power and influence dynamics, position, and the juxtaposition between these.

Drawing from literature regarding decision-making in groups (Gladwell 2000; Grint 2008; McGrath and Argote, 2001; Mills, Thurlow and Mills, 2010; Norton, 2012), we can understand that group systems tend to reflect complex interdependencies among many variables rather than simple, linear, directional ones. These complexities make it very likely that any given group will show complex dynamic processes (McGrath and Argote, 2001). Social psychologists such as Schultz (1999) and Nolan *et al.*, (2008) cite normative social influence (the influence of other people that leads us to conform in order to be liked and accepted by them) and informational social influence or social proof (when people follow other's behaviour in order to fit in/conform – Cialdini, 1986), as a determining factor in complying or acquiescing to an opinion of another, or in this case the nature and characteristics of a problem.

McGrath and Argote (2001) suggest that compliance in a group happens when there is coordination of interests, alignment of intentions (hence of underlying values), coordination of understandings, agreement about the meanings of information and events coordination of action of group members. Stasser (1981) and Godwin and Restle (1974), found that changes of opinion, movement to certainty from uncertainty were directly related to faction sizes. Whilst this is helpful, this does imply that compliance is the process in groups for decision-making, whereas we understand that jointly *agreeing* an understanding for Wicked Problems is more helpful (Grint, 2008). Therefore, if we believe that a senior group are influencers in the larger system and subsequently influence action/non-action in relation to a problem, then the group dynamics are important field conditions as to whether a problem is defined understood and acted upon as wicked or tame.

In engaging with Wicked Problems there needs to be a recognition for the need to move from a single expert solving a problem to the need to involve others (Rittel and Webber, 1973). Rittel and Webber (1973) further suggest that there is societal change away from an expectation that expert will resolve this, to wider groups in society being interested in commenting on some of the problems faced. In commenting about organisational cultures, Grint (2008) draws on the culture framework of Douglas (2003), pointing out how different organisations might see the problem differently, but that none of their solutions individually would address the problem successfully. However, together they are more likely to find a way to address a problem using collective intelligence not individual genius. This would indicate that anyone seeking to address a Wicked Problem would need a particular set of skills and abilities related to letting go of the view of *self as expert*, to one of skills relating to *collective understanding of the issue* (see section 5 below and Chapter 7).

Grint (2008) also points out that a diverse group addressing a problem, will need to take a stance that includes '*what do most of us agree on*' and an understanding that a Wicked Problem will not be addressed in one part of the system. Drawing on others' views will help to understand the different ways in which a problem can be seen (Grint, 2005; Meadows 2008; Mills, Thurlow and Mills, 2010; Norton, 2012), and arguably lead to understanding a wider choice of possible interventions. One individual or a single group/profession, can have a partial understanding of the problem, but not comprehensive. There is a need for such groups to come together and work on understanding the problem. A need to share and collaborate on the identification and understanding of the problem. This draws on leaders and people to have their own frame, but also respect, even welcome, difference at the same time (Cunliffe and Erikson, 2011; Groen and Uhl-Bien, 1995).

Groups themselves are dynamic and sit within a wider system that will influence its decisions (McGrath and Argote, 2001). Both local and global dynamics are affected by contextual dynamics, that is, the interaction of the group with its context. Groups are intricately embedded in organisational context. They gain process, norms, tasks, knowledge, and behavioural cues from the context. Members are affected by the training, socialisation, reward practices of an organisation as well as the broader social/political/economic context (McGrath, and Argote, 2001). Within the wider system, Gladwell (2000) and Shapiro (2003) explain how opinion and action around an issue happens when there is a critical mass or

epidemic of opinion that influences the mass view. Only when this critical mass is reached, will whole systems react in earnest and the field configuration moves substantially (Gladwell, 2000). This indicates that Wicked Problems cannot be understood fully, without consideration for the environment and context/field that it exists within (Danken *et al.*, 2016; Grint, 2005, 2008; Raisio *et al.*, 2019; Rittel and Webber, 1973).

2.3.5. Contextual influences on defining a problem as wicked.

As discussed above, despite much Wicked Problem literature focussing on defining a single understanding of Wicked Problems, when we draw from other literary fields, we understand that a problem understanding is more than a binary choice. A problem will have both wicked and tame characteristics, it will change and morph as time progresses, it is subject to social construction and interpretation, and it is subject to group influences. Group dynamics, context and content can induce representations that are very different from those predicted (Maule *et al.*, 2007). As Weick (1979) observed, organisations, despite their apparent preoccupation with facts, numbers, objectivity, concreteness, and accountability, are full of subjectivity, abstraction, guesses, making do, invention, and arbitrariness.

The emergent nature (Lewin, 1952) of problems in organisations means that, it is not unusual for people to hear from communication channels, both formal and informal, that priorities are changing, resources diverted etc. Some formal artifacts (i.e., mission statements, objectives, newsletters etc), alert people to the problem and its seriousness. The informal network can become rife, social media, water cooler conversations (Gladwell, 2000), corridor meetings. It can achieve a point of contagious commitment (Shapiro, 2004), where the view of a problem has reached a tipping point, where there is wider agreement about its nature, and the problem has 'emerged' as opposed to 'landed'.

Wicked Problems cannot be effectively understood without consideration for the environment and context that it exists within (Grint, 2005, 2008; Danken *et al.*, 2016; Raisio *et al.*, 2019; Rittel and Webber, 1973). The context of a Wicked Problem is not independent of human factors and therefore cannot be looked at in a purely rational form (Grint, 2015). Understanding and managing active or passive reactions to a frame, will not be done without influence from context and socio-historical experiences. Drawing from Field Theory literature, if the frame finds an understanding of the surrounding context/field, then risks are likely to

be more palatable, especially if the culture is one in which risks can be taken safely (Parlett, 2015).

Leaders may attempt to consciously influence the field within which the Wicked Problem sits in order to facilitate a certain understanding or frame. A leader, for example, may believe it is in their interests to label a particular set of circumstances as wicked (or not), this will lead them to behave in a certain way. Grint (2010) outlines in particular, how politicians may mis-diagnose, because the diagnosis supports an ongoing narrative. Leaders may consider that they need to be able to show that they have answers. A person engaging with a Wicked Problem might create a narrative (Boje, 2001) around an issue to support a desired direction, to react to power influences, to gain political kudos, to gain favour with a manager, to redirect attention away from another issue, or to fit in with a prevalent culture of 'problem-solving'. Chanlat (1997) discusses how organisation politics, influences a leader's decision-making and how a new senior leader wanting to impress or compete, might see a Wicked Problem as an opportunity to show their worth, especially when decisions are unstructured and complex, where there is no precedence in terms of this decision, where there is uncertainty or where there is competition within the organisation. They will be protecting what they see as prior gain (Kahneman and Taversky, 1979), especially if there is outcome uncertainty (Sitkin *et al.*, 1992). Both personal and organisational history and precedence will impact on the decision-making process. A leader who works in a risk averse culture, or who has previously taken a risk which has failed and has been reproached for it, can then lean towards the side of perceived caution, in the sense-giving of a problem as Wicked (Sitkin *et al.*, 1992).

Context and history, as part of the environment, are important when looking at a Wicked Problem. However, this is not enough alone, as leaders will construct the history and context in a way that legitimises a certain action (Grint, 2005). A leader's construction, when attempting to address a Wicked Problem, can lead them to find evidence to support a particular action that they favour i.e., with a solution in mind, rather than seek understanding in itself, without pre-judgement of a particular course of action. One way to consider this is to look at Rittel and Webber's (1973) characteristics of Wicked Problems, including their view that there is a choice about how to see the problem, and that there is not one single definitive form of a Wicked Problem. Different people will define the problem differently and their proposed solutions will reflect this, people's existing intentions and goals will therefore

moderate the framing effect. Rothman and Salovey (1997) argue that framing effects are more likely when the message is integrated into an individual's mental representation of the issue. The problem then with surface and simplistic generalisations about a Wicked problem, is that they do not really take account of external factors to the person or of the internal processing. People use their existing knowledge and experience when modelling the world (Thomas, 1999). To understand framing of a problem as wicked, we need to look not only at the outward reaction to framing, but also the different ways in which people internally represent problems (Maule *et al.*, 2007; Wagenaar, Keren, and Lichtenstein, 1988).

Leaders use words to frame an emerging problem using their own social construct aimed at shaping the subsequent reaction (Grint, 2005). Due to the unique experiences, environment and outlook of each person, universal reactions cannot be predicted so closely. There will be common responses even though the problem is experienced and seen differently by different people. The reaction will depend not only on the content, but also on context, background, history, and delivery (Clarkson and MacKewn, 1993; Maule *et al.*, 2007). This, and a belief in dialogic working (Cunliffe and Erikson, 2011; Groen and Uhl-Bien, 1995), suggests that seeking understanding through framing should be used as a dialogue initiating process that values the opinions of others and leads to a rich dialogue about the problem and possible actions. In relation to Wicked Problems, this would be an iterative, discursive, and dialogic process, following a divergent process before convergence. This however is prone with difficulties, not least of which is individual decision-making processes, which are strongly held as the (single) truth.

2.4. Defining the problem or knowing the characteristics of the problem?

Focussing on defining the nature of the problem's non-solvability alone may lead to a sense of hopelessness and subsequent inaction. The shifting nature of a Wicked Problem can render a definition at a point in time as outdated. However, understanding its nature can be helpful both in forming expectations and also informing how and where to intervene (Conklin, 2005; Norton, 2012; Xiang, 2013). In attempting to define the nature of the problem, it can uncover numbers of causal factors and effects, and as such can be enlightening and informing, even if a clear definition is not reached. It is in this way then, that framing a problem, at the very least, can give a *sense* of knowing, some kind of boundary which is helpful both psychologically, but also politically and in rousing energy, interest, and support from others.

To what extent do we *need* to label a Wicked Problem? The concept and certainly the phrase ‘wickedness’ in relation to problems is rarely used in organisations and may or may not be understood and valued. Rarely, if ever, is there an announcement - ‘*this is a Wicked Problem*’. We don’t necessarily need to understand the term in order to work effectively. However, we *do* need to understand the nature and characteristics of the problem in order to work out how best to intervene (Danken *et al.*, 2016; Grint, 2008; Xiang, 2013) and in order to work with others in the context of the organisation to gain a shared understanding. A shared understanding is more likely to lead to an action, and how leaders communicate will build common understanding and help people to address problems constructively (Farrell, 2019).

The intent of a leader can often be to reassure through a frame, both self and others, but this is not always helpful despite good intent. Wheeler (2005) highlights that, faced with the unknown, a frequent impulse is to retreat to what is most familiar, and most reassuringly ‘normal’. So, a frame, even with good intent, may be misleading or alternatively can challenge habit and assumptions. Often the frame for a problem will avoid or even move away from the complex actuality of a situation into the realm of abstraction. Kanner (2004) argues that a frame can be undermining a person’s confidence in their current representation of the problem, by changing their confidence about future events. Framing can therefore provide a confirmation or counter-narrative that exposes the negative message as inaccurate.

Grint (2005) gives the example of calling the NHS the NIS (National Illness Service) which changes the construct, and probably subsequent decisions, considerably. Framing the problem can define it, whereby the context in which the issue is encountered, and the subsequent sense made of this, can take a complex, tame, problem and define it as a wicked one. By their nature, Wicked Problems are complicated, ever changing and can be viewed from many perspectives. Because of this, defining the problem itself can set up a series of actions. The subsequent consequences and interplay would make it virtually impossible to see if a solution was successful (McCall and Burge, 2016). However, it may be that action only happens once people understand that ‘it’ is a problem. Some idea of what we are attempting to address is more likely to lead to an action, even if that is experimental, or clumsy.

Defining a problem intimates a solution. The use of language when describing Wicked Problems impacts on perception and subsequent actions. Even though a number of writers (Danken *et al.*, 2016; Grint 2005, 2008; Raisio *et al.*, 2019; Rittel and Webber 1973) and

researchers, point out that Wicked Problems are unresolvable, the language used often suggests a solution. For example, Grint, and Holt (2011) talk about clumsy solutions, Rittel and Webber (1973) say that solutions are not true or false, but good or bad. Wexlar (2009) in talking about some of the moral dilemmas relating to Wicked Problems, talks about the sellers of solutions and their responsibilities. As discussed earlier, *solution* can hold different meanings according to how the problem is framed. All of these above go on to explain that Wicked Problems are not ones that can be solved in the traditional meaning of the word. However, it serves to highlight the difficulty and assumptions that can accompany the use of language when referring to Wicked Problems. The assumption of *solved* as an aim, has been normative (Peters, 2017), and yet by their nature, Wicked Problems are unsolvable.

Defining and naming the problem in itself is an intervention, as such a definition intimates a solution, shapes the way that others frame the problem and in turn this encourages a view of the problem as more linear, single cause, single solution. Take the example of the Covid 19 pandemic where the government and press, defined the problem over time in a number of different ways from – *reducing contact to reduce transmission - lowering the impact on the NHS, - vaccination to prevent serious health consequences and reduce related deaths – ensuring businesses do not fail as a result of the pandemic*, etc. Each one of these is a problem definition that has an implicit solution. If the problem is defined as ‘*not enough people are vaccinated*’ then that is different from ‘*protecting the NHS*’. This does highlight a thorny issue about the relationship between tame and wicked definitions. Depending on how these problems are framed, they could be seen as a series of tame problem interventions but could also be seen as society responding to an ever-changing Wicked Problem, by adapting its interventions accordingly.

Wicked Problems are in transition, they are not static or fixed (Raisio, Puustinen, *et al.*, 2019). They are also unique and interrelated and as such, definitions vary. This is discussed more in Chapter 3 when considered through a Field Theory lens. Further, any attempt to define a problem as either wholly ‘tame’ or ‘wicked’ is fraught with contradictions. Any problem has tame *and* wicked elements, and these characteristics may become more or less challenging given the context and given the frame that the problem is seen through. It is a matter of the amount and severity of wickedness and the amount of tameness that will lead a problem to be considered as wicked. Rittel and Webber (1973) offered us a view on what these

characteristics are ([Appendix 2A](#)), and others such as Grint, (2005), Raisio *et al.*, (2019), Danken *et al.*, (2016), Conklin, (2005); Norton, (2012); Xiang, (2013), have offered views and refinements on these characteristics. For this study, one key area of interest is that given the assertion about the nature of Wicked Problems in this research, how do leaders engage effectively, and what Ways of Being do they need to draw from?

2.5. Ways of Being with Wicked Problems.

One area in which there are suggestions (Termeer *et al.*, 2015) and inference in the literature (Grint, 2005; Grint, 2008; Head, 2019) is concerning what skills, abilities and mindsets are needed to navigate engaging with a problem that has wicked characteristics. Although the current literature has a limited reference and indications for some of these, they are dispersed and also often *implied* from Wicked Problem literature and comment. Chapter 7 discusses what participants in this research reported what the implications for these are. In this chapter I seek to understand and discuss the current literature in relation to Ways of Being which is summarised on table 2ii below.

2.5.1. Implications for Ways of Being in relation to the problem itself and the context/field that it sits within.

If a different Way of Being is required to address Wicked Problems than those needed to address tame problems (Danken *et al.*, 2016; Grint, 2005; Norton, 2012; Spinelli, 1989; Termeer *et al.*, 2015), there would need to be an understanding of the different *types* of problems to inform any interventions. As discussed above, problems will incorporate aspects of wickedness and aspects of tameness and these are in flux, therefore the ability to address *both* tame and Wicked Problems will be needed, as well as the ability to identify when to use certain approaches, and the ability to move between these as needed (I have named this as *style flexibility*). Danken *et al.*, (2016) supports this view and highlights a cluster of abilities around the role of leadership and management, including the ability to differentiate between different types of problems. This then suggests that style flexibility would be called upon from the early stages of recognition of a problem existing. Furthermore, given that the field within which Wicked Problem exists is in flux (Parlett, 1997; Spinelli, 1989), and that Wicked Problems themselves are non-resolvable (Raisio *et al.*, 2019; Rittel and Webber, 1973), when engaging with Wicked Problems there will not be one single way of engaging/addressing it.

Grint (2008) states that there is an 'essence' to a leader or context. What counts as a problem and what counts as an appropriate way of engaging with that problem, are open to interpretation and are contestable, not issues that can be decided on objective criteria. Xiang (2013) calls for awareness of the problem, acceptance of what is and adaptation to the field conditions. There seems to be very few calls in the literature for being able to name a problem as 'Wicked'. Instead, there is a requirement to have an *understanding* of the nature and characteristics of the problem, which is then reflected in the engagement strategy. The literature then builds a picture of a leader who has a heightened sense of awareness of the field (Parlett, 2015), an ability to recognise characteristics of a problem (Danken *et al.*, 2016; Grint, 2008; Xiang, 2013), an understanding of interconnectedness (Grint, 2005; Mills, Thurlow and Mills, 2010) and an ability to navigate a range of different approaches. All of these are needed whilst understanding their own and other's ways of understanding and framing (Grint, 2005; Meadows, 2008; Mills, Thurlow and Mills, 2010; Norton, 2012). These lead us to conclude that understanding the nature and characteristics of a problem is key in deciding how to engage, as is style flexibility.

As we have seen above, we need to understand how different meanings are assigned to the same event. The process of understanding is never-ending and each change in understanding is triggered by uncertainty or ambiguity, which causes us to find meaning (Shrivastava, 1987; Mills, Thurlow and Mills, 2010). This has implications for the Ways of Being of a leader. A leader will make sense of a problem using their own constructs. On its own, a leader may attempt to sense-give by presenting a persuasive rendition of the problem which can legitimise a particular form of action that often relates to the decision-maker's preferred mode of engagement, rather than what 'the situation' apparently demands (Grint, 2005). This can lead to power struggles which emerge through different interpretations and feed into narratives that either already exist or are newly forming. If an individual leader's view of the Wicked Problem is taken up alone amongst contending and competing views, the newly constituted view then limits the alternatives available so that those involved begin to act differently (Grint, 2005). Norton (2012) and Meadows (2008) say that understanding how we make sense is key because people will jump to solutions to predict, control or impose their own view, without having paid any (enough) attention to what the system is doing and why it's doing it, or in Field Theory terms understanding key aspects of the field.

A leader, therefore, needs to understand that their own frame for a problem is one rendition and others will see it differently. As individuals project³ (Clarkson and Mackewn, 1993) their beliefs and experiences on a situation, they also make sense of them, often retrospectively (Grey, 2016). As a result, individuals within organisations will not make sense of the same event in the same way. To that end, a leader will need to understand that there is no one 'right' meaning attached to a given experience. A leader will need to understand that people sense-make in different ways and that their own rendition of a situation is only one view (Mills, Thurlow and Mills, 2010). They will need to understand that any view is a reflection of an individual's retrospective identity construction and their relationship of this to the field conditions. A leader therefore needs to be able to genuinely listen to others' views and be willing to accept these as different, and equally valid as their own.

Leaders need not only to understand these influences, but also to be able to suspend judgement on their own understanding in order to understand others' views, using a willingness and ability to re-frame how sense is made of a problem (Fairhurst, 2005), even though it may be counter-intuitive for many. In this case, leaders need to be willing (and able) to suspend judgement, or 'bracket' (Joyce and Sills, 2002) their own reading of a situation in order to genuinely hear and understand the constructs of others and in particular the current field conditions that are emergent. Spinelli (1989) describes bracketing as setting aside previous assumptions and biases so as to focus on immediate experience, allowing them to understand the field conditions in which gaining understanding happens (Mills, Thurlow and Mills, 2010). There can be a tension between carrying this out against habit, stakeholder expectations, politics, organisational culture and norms. All of this will need to be carried out in a political environment where expectations can be for the leader to be decisive and assertive with their view.

Whilst Weick (1979) suggests that making sense happens through interrelated experiences, Mills, Thurlow and Mills (2010) add that understanding happens within a social context and as an *ongoing* process, and it also occurs within a broader context of organisational power and social experience. These organisational, professional and personal boundaries, that impact on risk and appetite for risk (as discussed in Chapter 5), such as politics, power, and perceived threat to loss of status or position by the leader, draw on Ways of Being from a

³ Projection is the process of attributing a quality, feeling or assumption to others or institutions around me.

leader in which they can balance these and what they consider to be the right way forward. This is discussed in the literature regarding risk and experimentation (Brown and Harlow, 1990; Edmonson, 1999; MacDuffie, 1997). Perls, Hefferline and Goodman (1951/1973) use the phrase 'safe emergency', and Chidiac (2018) names it as an environment where a leader aims to control the risk. Having decided that they do not have a clear answer to a problem, leaders are led towards experimentation, within which there is a judgement being made about risk.

A leader needs to understand that a view gained of situation is in relationship to the contextual factors of power relations, structure and discourse, calling upon another layer of awareness. Grint (2005) suggests that this ability to understand and work with context is more important than individual traits, Fairhurst (2005) goes as far as to say that there is a question about how much leaders can exert influence over the forming view of a problem, due to all the contextual conditions and factors which shape them, including their interests and values. Heightened awareness of the context/field conditions which impact on the problem, is key when deciding how to intervene and engage with a Wicked Problem.

Wicked Problems are non-resolvable (Raisio *et al.*, 2019) and as such, the expectations of someone engaging with it need to hold to that premise. Further, any attempt to intervene will change the field, the problem, and may have unintended consequences (Xiang, 2013). Many of the processes that organisations hold, (such as project management, goal driven objectives, LEAN methodology, to name but a few) condition the thinking to believe that 'resolution' is the aim. In some cases, the problems are tame, and a resolution mindset is helpful, however, Wicked Problems are non-resolvable in the traditional sense of the word, in which case a different mindset and approach will need to be considered. Norton (2012) suggests that leaders may need to look at *satisfice*, accepting partial solutions and compromises based on our limited information. He suggests that the way forward is to accept that Wicked Problems have no comprehensive solution, instead to work backwards to discuss how we might be more systematic and effective in dealing with those aspects of a Wicked Problem that make them Wicked. Other writers (Danken *et al.*, 2016), suggest that understanding ambiguity is needed, which in turn will allow for the Wicked Problem to be viewed from different perspectives. The context of a mindset of non-resolvability is key. When power in the system is used to reinforce a surrounding culture of reward or punishment for

achievement or non-achievement, this will impact on risk appetite and subsequent behaviours (Head, 2018).

Some commenters (Lindblom, 1959) believe that incremental interventions are needed rather than a 'solving' intervention mindset, stating that a better way of making policy, for example, is to look at what we already have, what resources we have and then make small incremental changes from feedback at each stage, rather than to set a comprehensive long-term plan. Removing uncertainty will not happen, but the real skill is not removing the uncertainty but in managing to remain effective despite it (Grint, 2008). From a leader's point of view however, understanding and having a mindset of non-resolvability is not enough. The expectation from stakeholders, for example, may be that of resolution, led by the leader. That the leader should be in control and able to solve problems. A tension now exists, the mindset of non-resolution and of pluralistic working, but having to influence key stakeholders who have a different view and expectations. Influencing becomes paramount in navigating this tension.

2.5.2. Implications for Ways of Being in relation to *engaging with the Wicked Problem*.

The viewing of Wicked Problems from a position of ambiguity can result in a more experimental mindset when addressing the problem. This more adaptive way of thinking calls on the design of interventions to be experiments capable of reducing uncertainty in the process (Norton, 2012). A willingness to experiment, to try things out, to see what works, can be a powerful catalyst, and stimulant for effective change (Parlett, 2015), especially when balanced with the need for consistency. We do however need to consider the palatability of the term '*experiment*' or even '*trying things out*', within the organisational context. Whilst the literature uses these terms freely, in the organisational context of power, politics, culture, leaders need to find ways to make the actions of experimentation acceptable, especially to stakeholders (see Chapter 7 for further discussion). Parlett (2015) further encourages a willingness to experiment, to try things out, to see what works. Bricolage, meaning construction, creation or problem-solving from a diverse range of available things (Gabriel, 2002), emphasises this experimentation mindset. It emphasises the mindset of accepting that imperfection and 'making do' is the way forward (Grint, 2008), together with clumsy solutions. The leader who experiments, is adept at performing a large number of diverse tasks, using whatever is at hand, redefining tools and materials, whether or not it bears a

relation to the current problem (Grint, 2005), and redefining the task at hand (Gabriel, 2002). Further, Xiang (2013) emphasises the need to work on a problem through an open and heuristic process of collective learning, exploration and experimentation. Having a mindset of experimentation also suggests the willingness to experience, and even encourage, failure (Bhat, 2021). Each Wicked Problem is unique, so holding onto a previous success and attempting to use the same process to engage with a Wicked Problem can actually restrict thinking and awareness of the uniqueness of that problem (Rittel and Webber, 1973).

Given that someone engaging with Wicked Problem requires a leader to be willing to collaborate to create a shared understanding and recognition, there is a need for the ability to form coalitions or operate in a pluralistic context (Grint, 2005; Mills, Thurlow and Mills, 2010). Diverse constructs are more likely to catch potential problems than those with the same constructs, and people who possess different outlooks from each other, are better suited to spot each other's mistakes (Lindblom, 1959). If a coalition for decision-making works well, it can respond creatively and effectively to some aspects of the problem (Norton, 2012). Given that there will be more than one perspective on a problem, the leader's role with a Wicked Problem is not only to create an environment for collaboration and safety, but also to model respect, to ask the right questions and genuinely hear the views of others, rather than provide the right answers. The answers may not be self-evident and will require a collaborative process to make any kind of progress (Grint, 2005). Fairhurst (2005) discusses reflexive leadership practice, where the skill is to stand outside of the work process and determine how best to engage with it. Cross boundary collaboration can include involving multiple stakeholders, promoting dialogue and deliberation (Danken *et al.*, 2016), and will require the ability to involve different stakeholders, acquiring new skills, especially those related to collaborative governance. Xiang (2013) reports that addressing Wicked Problems requires a holistic and process-oriented approach which is adaptive, participatory and transdisciplinary.

However, given that Wicked Problems are not stationary and that the field is in a constant state of flux, then the person engaging a Wicked Problem will similarly need to engage with collaboration as a moving entity. There are many different types of collaborative relationships where power is diffuse, and objectives are divergent (Denis *et al.*, 2001). These constellations are not fixed, with coupling and uncoupling over time at different levels. With each movement

in the power dynamics, support for particular actions are questioned and often changed, so a leader engaging with a Wicked Problem will need not only to be aware of these constellation changes but also to be able to engage with these effectively. Hodgson *et al.*, (1965) invites us to consider that the effectiveness of constellations depends on the degree of complementarity between different members of the leadership team. As the degree of complexity and pluralism increases, the conditions necessary to protect interventions long enough for them to have a lasting impact, are more difficult to establish (Denis *et al.*, 2001).

With the ability to collaborate, work with and through others with different and opposing views, and the possible expectation from an organisation to 'resolve', there is a lot of pressure and potential difficulty on a leader. A capability of resilience is needed to adjust actions to uncertain changes (Termeer *et al.*, 2015). Resilience has long been seen as the ability to bounce back following adverse events and resume previously known functioning (Lengnick-Hall, Beck and Lengnick-Hall, 2011; Richardson, 2002). This view of resilience seems to draw on assumptions based upon notions of positively coping, and hardiness when exposed to adverse happenings (Waugh, Fredrickson and Taylor, 2008). Other views have described resilience as a way in which people, groups and organisations have used the situation to adapt, transform and identify opportunities and also to prepare for future adverse conditions (Lee, Vargo and Seville, 2013; Lengnick-Hall, Beck, and Lengnick-Hall, 2011). Kuntz *et al.*, (2016: 2017 p224) refer to a definition of resilience that is '*the behavioural capability to leverage work resources in order to ensure continual adaptation, well-being, and growth at work, supported by the organisation*'. Buzzanell (2010) further emphasises that resilience can be developed, rather than residing in an individual who either possesses it or not. Resilience can have a direct impact on wellbeing, mental health, happiness and consequently people's performance within an organisation. Given that engaging with Wicked Problems can involve challenging conventional wisdoms and ways of thinking and that as seen below, working with divergent ideas, frames and experiences are likely to occur, balancing tensions of politics and stakeholders, then being able to stay resilient in the midst of all this, is a key ability when engaging with Wicked Problems.

2.6. Chapter conclusions.

This chapter explores the literature in relation to Wicked Problems. Firstly, it discusses nuance for understanding and knowing the concept of Wicked Problems, and how this is developing.

It demonstrates that there has been a large focus on defining and understanding the term. The focus in the literature has not yet taken account of the importance of understanding that problems themselves are not either wicked *or* tame. Instead, I propose that problems have more or less wicked characteristics, that it is the amount and severity of the wickedness as the nature of each unique problem that needs to be understood. This is a challenge to much of the current thinking. The focus of a label – whatever that is, has aided understanding, but given this, there needs to be an understanding that throughout its life, a problem may move through many of these definitions, and more importantly, *parts* of the problem may fit with this understanding, but not all.

Many of the definitions of a Wicked Problem from the literature, seem to consider it a static phenomenon and as such define it at a point in time, whereas drawing from alternative ontologies and epistemologies it can be seen that nature of Wicked Problems is that they are ever re-shaping, morphing, and developing, and as such a Wicked Problem needs to be understood on an ongoing basis not as a static point in time. Wicked Problems do not operate in isolation but impact and are impacted by other items in a constellation. One key outcome from this labelling process is not only what the nature of the problem is, but also what the meaning of ‘solved’ means, which depends on how the problem is viewed and framed.

Understanding a Wicked Problem is also influenced by a number of other factors. Perception is individualistic when viewing a problem and this in itself impacts considerably on any label of wicked. The lens through which an individual frames a problem has major implications not only for the definition of such a problem, but also for how the problem is engaged with. Due to this emergent and moving nature of Wicked Problems, static diagrammatic representations of Wicked Problems can be helpful but ultimately do not carry the full meaning. In other words, *‘All models are wrong, but some are useful’* (Box, 1976). The key elements of individual perception, group process, organisation context, all influence individual perception.

Drawing from other ontologies can help us to explore the concept of framing in relation to Wicked Problems, afresh. Having this wider understanding of Wicked Problems, and how these become understood, allows the study of Ways of Being to be studied in this light, shedding new information on how leaders can best engage with them.

The nature of Wicked Problems involves an increased amount of complexity, volatility and interrelatedness compared to problems which are tame. These problems require a particular

set of Ways of Being, incorporating mindsets, approaches, abilities and awareness, when engaging with or addressing these problems. In responding to the Wicked Problem.

The Wicked Problem focussed literature when attempting to understand what abilities, skills and mindset is helpful when understanding how to engage well with a Wicked Problem. The current Wicked Problem literature is held in many different places and one aim of this research is to bring together the collective thinking and explore this further based on empirical data collected. These Ways of Being are summarised in Table 2ii below. The following Chapter 3 expands on this by using a Field Theory literature to explore further Ways of Being when engaging Wicked Problems. Finally, Chapters 7 and 8 draw the learning from this literature and the research findings together, to form a fuller understanding and to draw this into one place.

Table 2ii. Summary of Ways of Being for someone addressing a Wicked Problem (from literature on Wicked Problems and related topics).

Ability, Skill, Mindset or Frame	Where referenced in Wicked Problem literature.
Understanding how people come to frame and understand a Wicked Problem, and the context within which this happens for self and others.	Mills, Thurlow and Mills (2010) Weick (1979) Shrivastava, (1987)
Understand that there are multiple frames, not only their own and willingness to truly understand others frames even when there are polarities.	Grint, (2005) Mills, Thurlow and Mills (2010) Norton (2012) Meadows (2008)
Willingness to re-frame their own views	Fairhurst, (2005)
The need for coalitions. The ability to work with coupling and uncoupling coalitions.	Lindblom (1959) Norton (2015) Grint, (2005) Fairhurst (2005) Danken <i>et al.</i> , (2016) Xiang (2013) Denis <i>et al.</i> , (2001)
Understanding that rational analysis cannot be brought to bear on these problems.	Norton (2015)
Understanding that problems are context relevant. Having Field awareness and field sensitivity. View the problem and its context as a whole.	Mills, Thurlow and Mills (2010) Grint (2005)
Understanding that the field conditions are not fixed and that any attempted intervention is likely to change the problem without resolution.	Lewin (1952) Xiang 2013
Style Flexibility	
Understanding that causes and resolutions are outside of current awareness. They are multicausal and complex. That all aspects of the context have relevance.	Xiang (2013) Denis <i>et al.</i> , (2001) Spinelli (1989)
Understanding the nature of the problem and adjusting engagement accordingly.	Danken <i>et al.</i> , (2016) Grint (2008) Xiang (2013)
Awareness of Self, others, Interrelationships, Environment including resources	Turmeer <i>et al.</i> , (2015)

Mindset of non-resolvability	Raisio <i>et al.</i> , (2019) Norton (2012) Head (2018)
Mindset of experimentation. Encourage failing. Living with partial interventions	Norton (2012) Gabriel (2002) Grint (2008) Bhat (2021) Xiang (2013)
Mindset of 'making do' with resources available, redefining tools, redefining the problem.	Grint (2005) Gabriel (2002)
Dealing with uncertainty and living with ambiguity	Danken <i>et al.</i> , (2016) Norton (2012)
Capability to unblock stagnations (revitalization).	Turmeer <i>et al.</i> , (2015)
Resilience	Turmeer <i>et al.</i> , (2015)

Chapter 3. Literature review - Field Theory in relation to Wicked Problems.

3.1. Introduction.

This chapter discusses the published research on the principles of Field Theory (Lewin, 1942). It tracks the background of this approach, what it was intended to achieve and how this has changed over time. Outlining the relevant constructs of Field Theory, it demonstrates how the principles of Field Theory are not only relevant in today's organisational context but can be used to help us understand how people experience and engage with Wicked Problems. It goes on to explore the links and synchronicities between Field Theory and Wicked Problems, demonstrating why Field Theory is a helpful lens to explore and build further understanding of Wicked Problems. In doing so, it compares other possible lens and makes a case for why a Lewinian and a Gestalt psychology view of Field Theory is chosen. Building on the Chapter 1 section regarding *why Ways of Being for Wicked Problems needs researching*, this chapter makes the case that using a Field Theory lens will enable a more holistic view of Ways of Being when engaging with Wicked Problems. It discusses the Field Theory literature on Ways of Being and brings these together in order to understand how these can be applied to the leadership of Wicked Problems. Finally, it outlines how Field Theory will assist in meeting the gap in the research around Ways of Being with Wicked Problems, and hence why this research will contribute to the debate and body of knowledge.

3.1.1. The lineage of Field Theory.

Kurt Lewin (1890–1947) was the forefather of Field Theory. He was considered to be one of the leading psychologists of his generation (Burns, 2015; Marrow, 1969). His work provided the foundations of Organisation Development (OD) and is still considered by many as central to it (Boje *et al.*, 2011; Burnes, 2004, 2007; Burnes and Cooke, 2012; Cooke, 2007; Cummings and Worley, 2005). Lewin developed Field Theory over a 25-year period starting in the 1920s (Marrow, 1969). Drawing on Field Theory in physics, he argued that the order of coexisting facts in a psychological or social situation can be viewed as a 'life space' (Lewin and Lorsch, 1939). From this, Lewin originally developed Field Theory, which he also referred to as topological psychology (Burnes, 2019; Lewin, 1936), in order to understand individual behaviour, initially child behaviour, but later he used it mainly as a method for analysing and changing group behaviour (Burnes, 2007). Field Theory played a central part in all Lewin's

work by allowing him and his associates to understand the forces that sustained undesired behaviours, and to identify those forces that would need to be either strengthened or weakened in order to bring about desired behaviours (Lewin, 1998). His yardstick for relevance was that his approach to change should enable individuals and groups to understand and restructure their perceptions of the world around them (Burnes, 2007; Lewin, 1942).

Lewin considered his Field Theory as a metatheory, that is, a theory from which other theories and methods can be drawn (Burnes, 2019; Gold, 1992; Lewin, 1942; Overton and Müller, 2012). Applying such a metatheory in this study has the benefits of allowing this research to draw on a number of principles, rather than to stick closely to a more prescriptive technique or theory. It allows comparisons to be drawn with other epistemologies and hence a wider view of the data taken. It can be criticised though for being too *big picture*, woolly and open to differing interpretations, or oversimplification (Burnes and Cooke 2013; Endrejat and Burnes, 2022). This does impact on this research and as such forms an overarching view of the whole rather than a granular view of one aspect. Lewin was attracted by the parallels being drawn between the psychological concept of perceptual fields and the work that physicists were doing on Field Theory (Köhler, 1967). However, in the pursuit of scientific rigour, he sought to take this parallel further, by attempting to base his Field Theory on the same process of ‘mathematization’ as the physical sciences (Burnes, 2019; Lewin, 1949). Field Theory has since been used extensively in Gestalt psychology approaches for individuals, groups and organisations, but this has not generally included the use of mathematization or topology. Modern interpretations of Field Theory have moved away from attempting to prove its scientific validity from a positivistic viewpoint, to embracing the epistemology of interpretivism and phenomenology.

3.1.2. Field Theory and Organisational Development (OD).

Field Theory has continued to be used in Gestalt psychology but has experienced a resurgence in application to organisational research and working, especially Organisational Development (OD) over the last few years. Prior to this, even in leading OD literature, it was rarely explicitly mentioned (Danziger, 1992, 2000; Gold, 1992). In the 1990s, there was a resurgence of interest in Field Theory (Schein, 1996), even though this seemed to be concentrated in the Gestalt psychotherapeutic field rather than led by an OD interest. Whilst *explicit* use of Field

Theory is still not a common term in organisations, OD approaches, such as self as instrument (Cheung-Judge, 2012; Chidiac, 2018), forcefield analysis (Lewin, 1947, 1951), dialogic OD (Burnes and Cooke, 2013), three stage change model (Lewin, 1947) and group dynamics are related to or aligned to Field Theory principles (Endrejat and Burnes, 2022; Stevenson, 2018).

With the more recent organisational and societal interest in holism and the interconnectedness of seemingly disparate elements through events such as global warming, pandemics and holistic economics, Field Theory principles are attracting growing interest. More recent forms of Organisational Development, such as dialogic OD and dialogic leadership, have also been linked to Lewin's work (Burnes, 2004; Burnes and Cooke, 2013; Oswick, 2009; Van Nistelrooij and Sminia, 2010).

3.2. Why apply Lewin's Field Theory as a lens for this research?

Whilst there are other epistemologies through which Wicked Problems can be studied, such as those outlined below in section 3.5. and in Chapter 2, it is Lewin's Field Theory and Gestalt philosophy that aligns closely to both Rittel and Webber's (1973) description of Wicked Problems. In this sense, Field Theory offers a useful and unique perspective through which Wicked Problems can be viewed. As discussed in Chapter 1, there is a gap in the current research regarding Ways of Being when engaging with Wicked Problems (Danken *et al.*, 2016; Termeer *et al.*, 2015), which using a Field Theory lens will help to bridge, by understanding the wider constellation of influencing factors and forces. Field Theory is holistic. Everything has possible relevance (Parlett, 1991), therefore it encourages an open and genuine curiosity around the research findings, discouraging the dismissal of any data as irrelevant. Implications for this research are that the interviews and analysis can be approached with a mindset of *possible* relevance, withholding judgement as far as possible, and following the lead of the answers put forward by the participants. As part of this, Field Theory encourages inclusive thinking, with an assumption of '*I am part of the situation*' rather than a more projective process where for example, people will speak of "*the organisation*" and "*management*" in a way that implies that they are not themselves an intrinsic part of the forces impacting on a Wicked Problem (Parlett, 1997). In this sense, Field Theory is non-reductive as it encourages the whole configuration to be taken into account. Used well, it is discouraging of research having a solution in mind prior to the data collection taking place, or a single solution being an outcome that is looked for. This means that in the analysis, it enables this study to consider

non-linear cause and effects when understanding Wicked Problems. This lens encourages an understanding that a situation is a balance of internal processes of a person and external stimuli/environment from others, groups organisations and the wider context or field. It offers a lens or method for identifying this new reality (Burnes and Cooke, 2013). This is new in the study of Wicked Problems, and as such can confirm or refute current assertions *and* add new ideas to the debate.

There are some areas of Field Theory that may not be as useful in this research. Drawing *purely* from every aspect of Lewin's Field Theory would also bring with it some issues and difficulties. In the development of Lewin's Field Theory, there seems to have been a tension between rigour and useability/relevance (Burns and Cooke, 2013; Burns, 2015). Topology that Lewin introduced, in an attempt to introduce scientific methodology and rigour, has been criticised by both scientific mathematicians as an incorrect use of topology and by organisational psychologists as practically difficult to use (Burnes and Cook, 2013; Endrejat and Burnes, 2022). Whilst the word *rigour* holds attraction as it is associated with thoroughness and detail, it is *not* the ambition of this research to use *scientific rigour* to take a positivistic stance on Ways of Being. Whilst Lewin was attracted to joining the ranks of other academics and researchers (especially physicists), using positivism at this time, by 'proving' his theory, this research sees this at odds with constructs of the moving field, of messiness and of incomplete solutions. Instead, rigour for this research is in using data, theory, and discussion to uncover more and new aspects and discoveries relating to Ways of Being and Wicked Problems. This research will not be drawing on Topology at this stage. Instead, the aim is to draw on Field Theory principles (Parlett, 1991; Stevenson, 2018) (see table 3i below), to help understand the data coming from the interviews and to shed a new and different light on the participants experiences.

Attempting to view the whole picture that a Field Theory view calls for, can appear too complex, too vague, and having too many variables (Parlett, 1997). It could be argued that it would be too time-consuming and involve too many people for Lewin's Field Theory approach to be made to work comprehensively (Burnes and Cook, 2013). There is a limit to what can be known, especially as it is not fixed in time (Cilliers, 2005). In organisations particularly, the aim of knowing everything in the field and knowing how it is all changing, is probably unachievable, and organisations may not sustain the energy or interest to do this. However,

the goal of exploration, discovery and tracking changes in the field is an important part of understanding the Wicked Problem, and therefore intervening in the field in an informed way. In this study, Field Theory is an informing lens not an end in itself, the aim is not to change, but to understand the participants' experiences. This research is not a fully comprehensive understanding of *everything*, instead it is a phenomenological exploration at the time of data collection.

Some uses of Field Theory informed tools are over simplified. For example, it can be argued that the modern form of force field analysis sacrifices rigour in pursuit of usability/relevance (Burnes and Cook, 2013). As our understanding of organisations has developed, the trend has been to move from seeing them from the mechanical–behaviourist perspective of Scientific Management to understanding them as complex social systems (Burnes, 2009). The same would apply to Lewin's three stage change model (see figures 3B and 3C). In referring to these Field Theory approaches, the aim of this research is not to modify these, but to use the relevant Field Theory principles and epistemology to learn more about Wicked Problems and Ways of Being. It is then the original constructs, epistemology, and views of Field Theory that this research will seek to be informed by, although alternative lens have been considered.

3.3. Aligning Field Theory and Wicked Problems.

The choice to use Field Theory as a lens for Wicked Problems originated from this my reading around Wicked Problems and knowledge of Field Theory. Although from very different backgrounds, there is a good degree of alignment between these two areas of study.

Firstly, comparing the five Field Theory principles (Parlett, 1991) to literature regarding Wicked Problems, these highlights areas of commonality as summarised in table 3i. below:

Table 3i. A comparison and alignment of Field Theory principles and Wicked Problem principles.

Unified Field Theory principles	Relevant points to Wicked Problems
<p>The principle of organisation – everything is interconnected. The meaning of any singular aspect can only be derived from looking at the total. Lewin (1951) explains that behaviour is not dependent upon a single element, but on the constellation field as a whole.</p>	<p>Wicked Problems cannot be looked out without consideration for the environment that it exists in (Rittel and Webber, 1973; Grint, 2005; Grint, 2008; Danken <i>et al.</i>, 2016). Problem definition - the complexity and uncertainty related to trying to understand the problem. Wicked Problems are multi-faceted and ambiguous (Raisio <i>et al.</i>, 2019).</p>
<p>The principle of contemporaneity – it is the constellation of influences in the present field that ‘explains’ the current behaviour (Lewin, 1951). Field approach is concerned with field conditions at the present time not events of the past or future. The character of the situation may include the past as remembered in this present moment or the future as anticipated in this present moment, which will form part of the person’s in-the-moment experience of the field (Stevenson, 2018).</p>	<p>Non-resolvability - any attempt to resolve a wicked problem will change the problem and cause new (often unpredicted) consequences. (Raisio <i>et al.</i>, 2019). A Wicked Problem is in a constant state of change. It does not stop or wait for decision makers to formulate an answer (Rittel and Webber, 1973).</p>
<p>The principle of singularity – every person-situation is unique Lewin (1951). The individual will construct meaning and any generalisations are suspect (Parlett, 1991). Each construction of meaning is unique (Stevenson, 2018).</p>	<p>There is not one single definitive form of a Wicked Problem. Different people will define the problem differently and their proposed solutions will reflect this (Rittel and Webber, 1973). Multi actor environments – those people both involved in and impacted by a wicked problem have a wide range of views, backgrounds, and cultures. This results in many different and diverse proposed solutions and interventions for a Wicked Problem. (Raisio <i>et al.</i>, 2019) Every Wicked Problem is unique. This makes it difficult to learn from previous problems because they were different in significant ways. (Rittel and Webber, 1973) The context of a Wicked Problem is not independent of human factors and therefore cannot be looked at in a purely scientific form (Grint, 2005; Grint, 2008).</p>
<p>The principle of changing process – The field is in a constant state of flux, nothing is fixed Lewin (1951). Theories support understanding but cannot replicate reality perfectly (Stevenson, 2018).</p>	<p>Wicked Problems are ever changing and are divergent in nature, in itself resisting a static label in one point in time (King, 1993).</p>
<p>The principle of possible relevance – Every part of the field impacts on the field and therefore no part of the field can be excluded as irrelevant Lewin (1951). This requires paying attention to what is momentarily or persistently relevant or interesting in the moment (Parlett, 1991).</p>	<p>There is no test of whether a proposed solution will work or has worked. Due to the complex nature and interconnectedness the intervention will change the context in such a way that the problem is now different. (Rittel and Webber, 1973). Those seeking to end the problem are also causing it (Levin <i>et al.</i>, 2012).</p>

Although this comparison has never been made, table 3i demonstrates a high level of alignment between the constructs and ontology of Field Theory and Wicked Problems, despite them being drawn from separate sources. This then allows us to reconsider and add to the assertions of Wicked Problem literature by applying the concepts of Field Theory further to understand both Ways of Being for engaging with Wicked Problems *and* understanding Wicked Problems themselves.

Further to this table, giving consideration to Rittel and Webber's (1973) ten characteristics of Wicked Problems (see [Appendix 2A](#)), they state that different approaches to a problem will see it differently and for that reason, there is no definitive formulation of the problem. Field Theory seeks to explain this in that the meaning each individual assigns to their perceptual field, is unique to that individual (Clarkson and MacKewn, 1994; Perls, 1947, 1969) and as such no two people have exactly the same experiences, views, and frames. It can be that there is enough commonality between people to agree a way forward, but that an individual's view is unique, in the same way that Rittel and Webber (1973) state that every Wicked Problem is unique. This does pose questions about how to gain an agreed understanding about the role of finding enough commonality to facilitate action, without submitting to groupthink (Janis, 1972), where agreement becomes more important than the decision. In turn, this has implications for the Ways of Being of a person responsible for engaging with a Wicked Problem (see section 3.6 below). If this person believes that involving and working with others is key, can they facilitate decision-making which accounts for and validates these differences? In the same way Rittel and Webber (1973) state that there is no 'right' answer, stakeholders will consider any proposed intervention from their own perspective.

There is a parallel between Wicked Problem commentary and that of Field Theory surrounding the uniqueness of problems. Each Wicked Problem is unique (Rittel and Webber, 1973), as there has been no previous precedent set, and that any intervention changes the problem, which leads to a difficulty in defining a Wicked Problem. This means that any potential intervention will need to evolve alongside the developing Wicked Problem. In Field Theory this relates to the principle of singularity, which states that every person-situation is unique (Lewin, 1952), and that each construction of meaning is unique (Stevenson, 2018), therefore, any generalisations are suspect (Parlett, 1991). When applying the principle of changing process (Parlett, 1991), which states that the field is in a constant state of flux,

nothing is fixed and not only is the problem person specific but also time specific (Lewin, 1951). Theories support understanding but cannot replicate reality perfectly (Stevenson, 2018). In this study, participants recognized the uniqueness of problems even though the surrounding organisation and stakeholders may assume a more static characteristic of the problem.

Rittel and Webber (1973) state that Wicked Problems have a no-stopping rule and that there is no test of whether a solution has worked, as it will have changed the context so that it is now a different problem. They also state that every intervention is a 'one-shot' operation, as this will change the problem in an irreversible way. In relation to this, Field Theory and Gestalt psychology encourages the use of what they name as the creative or active experiment (Perls, 1976; Joyce and Sills, 2002), based on the understanding that the experiment is not a cure or will even have a predictable outcome (Clarkson and MacKewn, 1993), but will result in a changed awareness of the field and will therefore lead to a greater understanding. This could be counter cultural in organisations where risk is considered to be something to avoid and where 'failure', as they would put it, to resolve the problem, may have personal and political implications for the person addressing the problem. This research includes a focus on how participants engaged through experimenting, and how they worked with the real or perceived risk.

3.4. Key Field Theory constructs of relevance to this research.

Whilst many tools and models such as forcefield analysis, change equation, three step change model, action learning, and group dynamics have been derived from a Field Theory understanding, it is not the aim of this section to explore all of these in detail. Instead, it outlines the key principles of Field Theory with relevance to this study of Wicked Problems as well as those outlined in Table 3i above.

3.4.1. Changing epistemology.

Before discussing key constructs from Field Theory of relevance to this study, it is worth understanding a changing epistemology, and a 'new' direction which is aligned to Field Theory epistemology. The more dominant epistemology of the last two centuries seems to have arisen out of the scientific revolution (Capra, 1982). In this positivistic, scientific epistemology, subjective experience has been seen as non-provable especially as it cannot be repeated

(Parlett, 1991). Quantitative discoveries seem to have been given more weight than qualitative, where rational argument has been seen as more important than the 'wooliness' of personal experience (Capra, 1982; Parlett, 1991; Schon, 1983). This might explain Lewin's desire to make Field Theory more acceptable in the scientific world, especially in the West (Burns, 2015). Prior to this, understanding, holism, interdependencies and a more organic epistemology was widely accepted (Berman, 1981; Capra, 1982). So, it can be argued that it is a *re-emergence* or balancing of these two differing views of knowledge. Field Theory offers an epistemology in which there is a unified whole, where interrelatedness does not mean an either/or choice, where interpretivism is relevant and where shifting variables replace fixed formulaic constructs. The unified whole view has been drawn upon by many fields such as environmentalism, chaos theorists, holistic medicine, community architecture and epidemiologists, to name but a few. This epistemology, matched with Rittel and Webber's (1973) assertions, is how Field Theory adds to the body of thought using the following concepts and ideas:

3.4.2. The concept of *Field*.

Field is a description of a constellation of forces that shape thinking and behaviour. As Burnes and Cooke (2013) note, Lewin referred to the constellation of forces that shape the behaviour of a group or individual by a range of terms, including psychological environment, perceptual environment, psychological field, social field, and force field. However, the most commonly used term was 'life space' (Burnes, 2019). Today it is more commonly referred to as 'the field'. In this research on Wicked Problems, the term 'field' is an informing metaphor to capture all the complex interrelated influences that effect individuals, groups, and organisations (external forces and internal drives) (Chidiac, 2018). This encourages this research to approach Wicked Problems not in a linear cause-effect way, but rather in a holistic form, considering the question of what are the field contextual influences that shape our experience of Wicked Problems and the way in which we engage with them.

As the field consists of all the coexisting, mutually independent factors of a person and their environment, A person's behaviour can be understood in terms of their inter-dependence and relationship with their environment (Clarkson and MacKewn, 1994). So, taking this consideration of Wicked Problems further, not only *what* are the field conditions, but *how* does a person who is engaging with a Wicked Problem interact with the field of the Wicked

Problem and its unique properties, known as the field boundary. In other words, what are the characteristics of the field boundary between an individual and the Wicked Problem. Literature regarding Field Theory guides us to consider this 'person to field interaction' in Wicked Problems within three areas (Burnes, 2019; Lewin, 1942):

- The internal world of the person (how they are experiencing Wicked Problems).
- The external world/environment (the Wicked Problem itself and the contextual influences upon it).
- The ever-changing relationship between the above areas (the field boundaries).

This does throw up some interesting dilemmas for this research. Firstly, the complicated nature of this within Wicked Problems. To understand one person's experience with one Wicked Problem fully, would be a study on its own, if carried to the belief that all influences need to be understood. Secondly, the uniqueness of each person-field interaction means that one person's experience of a Wicked Problem could be completely different from another, therefore extrapolating one person's view as a general construct would be fraught with problems. Thirdly, that Field Theory sees Wicked Problems as ever changing, which aligns well with Rittel and Webber's (1973) beliefs about the nature of Wicked Problems, so taking one point in time as a general construct can also be questioned. What this study is doing is a phenomenological investigation of a number of changing and unique experiences and perspectives, looking for any similarities through the lens of Field Theory (see Chapter 4 – Methodology). In this sense, looking from a holistic Field Theory way at Wicked Problems with a number of participants is useful to understand what are the *commonly* found field conditions, influences and field boundary characteristics, when engaging with a Wicked Problem.

Using a Field Theory lens, a person is never independent or isolated from their field (although they may perceive themselves to be), but always in contact and connected with everything else (Chidiac, 2018; Joyce and Sills, 2002; Lewin, 1951; Parlett, 2015). This adds a direct challenge to some models of engagement of Wicked Problems, where the leader/project manager/consultant adopts of position and assumption of independence from the Wicked Problem. Instead, with a Field Theory lens, the assumptions become one of interdependence (Parlett, 1991; Stevenson, 2018) where the person engaging, sees the impact they are having on the problem and especially how it is seen, and how the Wicked Problem is impacting on

them. So, this research will pay particular attention to the phenomena of ownership and inclusion in the Wicked Problem, and how these impact on engagement with the problem.

Field Theory has a unitary view of seemingly independent factors (Chidiac, 2018; Lewin, 1951). People are used to thinking of the world in terms of contrasts, such as mind versus body, internal process versus external influences, work versus 'real life' (Parlett, 1997). Field Theory emphasises the need to view the field or indeed any situation with a '*unitary outlook that dissolves a dualistic approach*' (Perls, Hefferline, and Goodman, 1951, p. 14). This is key to understanding Wicked Problems and builds on the characteristics put forward by Rittel and Webber (1973). Do participants in this study, sense-make the Wicked Problem as a single cause/effect way or even an either/or way, or alternatively, are they understanding the Wicked Problem as a result of interacting, numerous and changing variables and influences?

The larger field or the context in which the Wicked Problem, and the participant, exists, may be in or out of awareness (Joyce and Sills, 2002). The Field Theory literature places a heavy emphasis on the relational and connectivity aspects of engagement, in this case with a Wicked problem. This is counter and challenging to so many assumptions and other theories applied currently within organisations, based on independence of factors and cause-effect assumptions. This also applies to the impact of this research in that in interviewing the participants, the field is being impacted. From a Field Theory perspective, the research interviews are impacting on participants' views of Wicked Problems they face. Put simply, this research asks questions which could lead them to consider elements of the problem which may have previously been out of awareness. In this way then, parts of the Wicked Problem may become more figural than before. This may alter the way in which participants intervene in the Wicked Problem subsequently, although many of the participants are talking about problems which they no longer are engaged with. The interviews needed to be participant led, with them primarily discussing their experiences from their perspective, then follow up probing questions to be based on items that participants have experienced, rather than just items that interest me.

3.4.3. Perception and organising of the experience.

Perls (1976) described how a human perception process is one in which people do not see items as unrelated aspects, but instead they organise them into meaningful wholes, and then sense-make. Early Gestalt psychologists (Ovsiankina, 1928; Zeigarnik, 1927) state that there

is an innate tendency to make sense of something from incomplete data, by forming parts into a whole (Clarkson and Mackewn, 1993). Perls was referring to an unaware process that we as human beings carry out, but this can also be carried out with choice as a way of framing, and sense-giving the problem to others. This literature offers an important insight, because how people perceive and make sense of a Wicked Problem and the surrounding field will ultimately be reflected in their frame, sense-giving, and the subsequent actions. In some ways, considering perception, is fundamental in understanding Wicked Problems. Therefore, in this research, attention has been paid to how the participants organise their experience and form their reality which is unique to them (Joyce and Sills, 2002), or in other words how they frame the Wicked Problem. Both inner process and outer context are used for this framing process (Stevenson, 2018).

Lewin (1947) saw human interaction as equally a function of the person (internal process) as much as a function of the situation (external influence). This point from the literature is important, as it shows the Field Theory perspective that the situation leads us to seeing the problem as wicked, as much as the person themselves seeing the problem as wicked (Burnes and Cooke, 2013; Parlett, 1991). There is a reciprocal influence relationship between the whole and the parts, and both need to be understood (Stevenson, 2018). How a person engages, is a function of all of these sets of forces relative to one another, and all interacting together. The field is a unifying concept, not eliminating such divisions, but denoting them as temporary and relative to each other, rather than being fixed or absolute (Parlett, 1997). So, when exploring how the participants in this study are framing a problem, attention has been paid to the influences from themselves, such as history, future expectations, assumptions, experiences, as well as how they are experiencing influences from the problem itself and the surrounding context. In turn, this means that with a Field Theory lens, the meaning that each individual assigns to their perceptual field is unique to that individual (Clarkson and MacKewn, 1994; Perls, 1947; 1969). A person is always actively organising the field as an ongoing process, so the research aims to seek out what meanings they make of the Wicked Problems, how they choose to make contact or engage with the Wicked Problems, and what lies in or out of awareness (Joyce and Sills, 2002), including bias, assumptions, and how that adds to the frame they choose to give a problem. Uniqueness is an interesting concept from this literature. Of course, every person-situation has unique elements, but what the literature has

less of a focus on, is that there will also be *common* elements to an experience. Both of these are true. Therefore, it can be said that each person-situation has unique qualities, but it also has commonality.

3.4.4. Figure and Ground.

Aspects of the field come into and out of focus as they are perceived to be more or less important (Chidiac, 2018). Within this ongoing organising of our field and choosing of our reality, some aspects become figural (foreground, in focus) and others ground (background, out of focus). In this sense then, people choose our own reality (Parlett, 1991). When this perception is disturbed by some need or outside stimulus, the person begins to differentiate aspects of the field into new figure and ground (Perls, 1947, 1969). The person's need or interest organises the field. Those aspects which can meet a person's need, become more figural while the others fade to background. People construct meaningful perception of objects through selective attention to certain stimuli over others (Clarkson and MacKewn, 1994; Spinelli, 1989). This is a moving process. Seemingly 'irrelevant' data may be brought to the foreground and change the understanding of the whole situation (Clarkson and MacKewn, 1994). Therefore, what participants omit to say in this research, is of interest as it can indicate what is figural for them in the way they are framing the problem at that time. This aspect of the literature is challenging for many. The ongoing assumption is not normally around *choice*, but that aspects present themselves to us. The understanding that people *choose* to notice or omit field influences suggests a conscious choice, whereas the Field Theory literature sees it as our choice which may be in or out of our own awareness, but that is controlled by ourselves, not from outside. The nature of these changing choices (be it in or out of awareness) indicates that in this study, not only are the participants' experiences unique to them, but also may change over time, even during the interviews with them. This further indicates why a phenomenological study focussing on the here and now current experience and following closely the participants' answers, is so important. Guiding them down a theme that I, as researcher, are interested in only, will not be truly following their experience, as it will have changed what is figural for the participants (see Chapter 5).

3.4.5. Influencing forces reach an equilibrium.

Lewin (1951) saw behaviour as the product of the environment and the way in which individuals interpret external stimuli. Therefore, change in how a Wicked Problem is seen and acted on, can be achieved by change in the individual – (important when considering how leaders see the problem as wicked) and a change in the environment the Wicked Problem sits within. In fact, Lewin argued that it is not sufficient to identify one or two of the forces that impinge on the individual or group, but that all the forces, and how they relate to and interact with each other, have to be taken into account (Cartwright, 1951; Lewin, 1939, 1944). Therefore, the field presents a holistic view of the individual and their situation (Burnes and Cooke, 2013). This links closely to Rittel and Webber's (1973) understanding that there is no definitive formulation of a Wicked Problem, that different approaches to the problem see it differently. This is a key reason why problems are seen as wicked, the challenge of definition and understanding.

The field is in a continuous state of movement both in Field Theory and in Wicked Problems (see section 6). The individual forces within the field are themselves subject to change and, as they are constantly interacting with each other, they create a field that is in a continuous state of dynamic equilibrium (Deutsch, 1968). As Lewin (1947, p. 199) put it: *'Change and constancy are relative concepts; individual and group life is never without change, merely differences in the amount and type of change exist'* (Burnes and Cooke, 2013). The fact that Lewin (1951) argued for a fuller 'all factors' understanding of a situation does cause some practical challenges in an organisational setting. Organisations, situations, and Wicked Problems are complicated and in transition, therefore attempting to understand all the forces may be an unachievable goal. However, eventually these forces in the field reach a balance, a temporary equilibrium (see figures 3B and 3C). There are driving and restraining forces. It is from this concept that the model of force field analysis is taken (Burnes and Cooke, 2013).

When considering the characteristics of a problem then, a force field lens can be used to understand what are the driving and restraining forces that lead people to experience a problem as wicked or tame, and what are the driving and restraining forces that form a particular way of engaging. It is in examining this dynamic equilibrium where understanding can be gained. Knowing that no situation described by participants in this study are fixed, but that there is at least a temporary balance in both what these forces are and how they

influence the situation. Understanding that with a Field Theory lens, change is happening and ongoing, but also that when people engage with a Wicked Problem, they are attempting to influence or even drive that change and upset that equilibrium. Understanding this form of dynamic equilibrium from the literature can seem challenging. On the one hand the field is in a constant state of movement, on the other hand the literature describes a state of balance or equilibrium as shown in figures 3A and 3B:

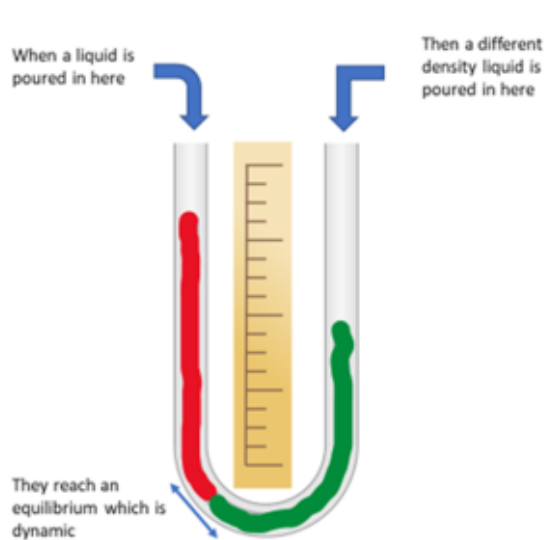


Figure 3A. A metaphorical representation of forces reaching a dynamic equilibrium.

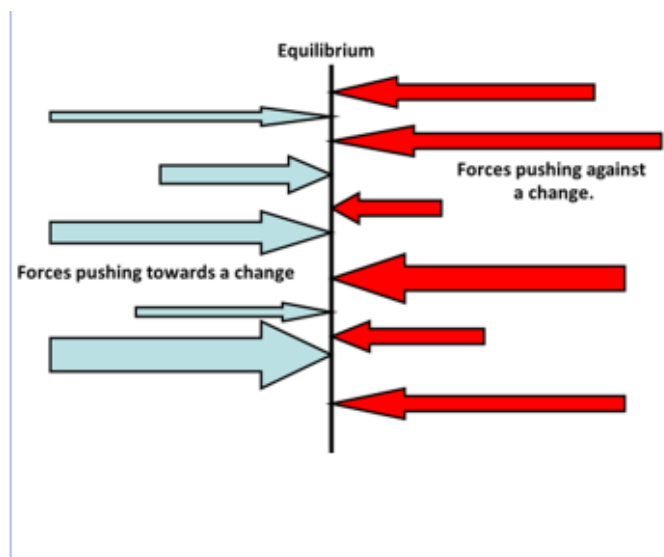


Figure 3B. A representation of forces reaching a dynamic equilibrium using Lewin's Forcefield analysis.

The way that this seemingly opposed position in the literature can be reconciled, is by understanding that the forces are in constant movement, but that the opposing forces are also in constant movement. Hence the equilibrium is *dynamic*.

3.4.6. Upsetting the equilibrium.

If key forces in a field around a Wicked Problem can be identified, it would be possible not only to understand why individuals, groups and even entire organisations act as they do towards Wicked Problems, but also what forces would need to be diminished or strengthened in order to bring about movement in the equilibrium (Burnes and Cooke, 2013). In reality, understanding *all* the forces would make this impractical, but this does give a clue about intervening and perhaps why force field analysis in a simplistic form, is often adopted by

organisations addressing a Wicked Problem. This is a question that this research is aiming to contribute to, an understanding of participants' field in relation to Wicked Problems, and what ways this leads them to engage with the field. If personal and situational are not divided, but seen together as one realm, then changes in one part of the field will automatically lead to changes in other parts of the field as well. Any new conditions added to the field foster developmental shifts and change.

Unique situations require the individual to experiment and extend the normal forms of intervention (Parlett, 1997). As with Rittel and Webber's (1973) *no stopping rule*, this is not experimentation in the sense of stopping, reviewing, and having controlled variables. Instead, the way a person engages, even by experiment, with their field, in this case Wicked Problems, in itself shapes the field and influences its organisation (Hodges, 1990). Uniqueness has implications for past learning or as some people put it 'learning from mistakes.' From a Field Theory perspective, the role of past events and prior knowledge influences our current perception and memory, it is part of the field. Therefore, when people remember something, they are reconstructing our perceptions of the event, which in turn influences how they see the present (Perls, Hefferline, and Goodman, 1951, 1994; Stevenson, 2018). The same applies to our anticipated future or outcome for the problem, meaning that both the past and the future is present in the moment, (Smuts, 1987; Stevenson, 2018). Taken to an extreme, someone could say '*I've seen all this before*' in relation to a Wicked Problem, or even an anticipated '*I cannot see this ever working*'. Given the above Field Theory view, this would suggest that they are omitting to notice the unique qualities of this Wicked Problem and its field conditions in the *present moment*, which the literature often refers to as the *here and now*. In turn then, basing decisions on historical or anticipated constructs, could lead to intervene in a way that is not attuned to the actual *here and now* conditions.

3.4.7. Constant movement.

Lewin's (1943a) work found that behavioural change tended to follow a sequence of unfreezing, moving, freezing (Burnes, 2018). Unfreezing or upsetting the forces, both people and field conditions, in the system including such items as hierarchy, structure, power, politics, process and systems, can also be interventions to change the field and hence how the Wicked Problem is viewed. This may include the context within which the Wicked Problem exists causing the field to adjust, under which conditions new ideas, thoughts, experiences

are encountered. This construct from the literature adds a new insight for how to engage or intervene in the Wicked Problem in that the usual focus of any intervention is on the problem itself, but taking the above aspect of the literature means that people can look much wider for where to intervene. Although in organisations this can seem chaotic, as time goes on, order can then re-emerge from the chaos (Bentley, 2001). In fact, change at one level of the system impacts on all other levels of the system (Nevis, 1987, 2001; Stevenson, 2018). The ability to intervene in a way that unfreezes or ‘upsets’ the forces that are maintaining the equilibrium (Burnes, 2019) seems then to be important. Together with this, removal of the forces maintaining the old equilibrium, there needs to be establishment of forces towards a new situation, and then steps to bring about the permanence of the new situation (Burns, 2019a).

This does pose a question about the linear nature of this model as it is often portrayed today. It does, on the surface, seem like a three-stage model and yet it is clear that both Lewin (1951) and also Rittel and Webber (1973) see these situations as in constant flow, as non-static and non-linear. It may be that as Burnes and Cook (2013, 2019a) state, many of Lewin’s approaches have been over-simplified in modern day application. The ‘freezing’ part of this three-stage model particularly suggests an amount of static-ness, and certainly a linear progression. Instead, what Lewin was attempting to portray was the ebb and flow of movement, suggesting a quickening and slowing of pace rather than a stopping and starting.

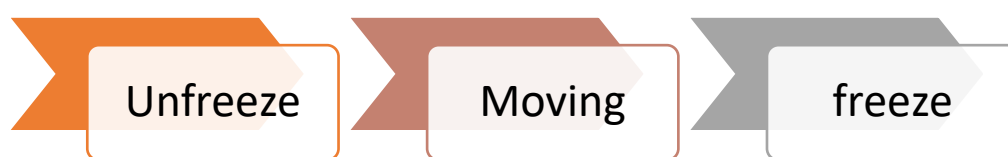


Figure 3C. How Lewin’s 3 stage model is commonly now portrayed as linear.

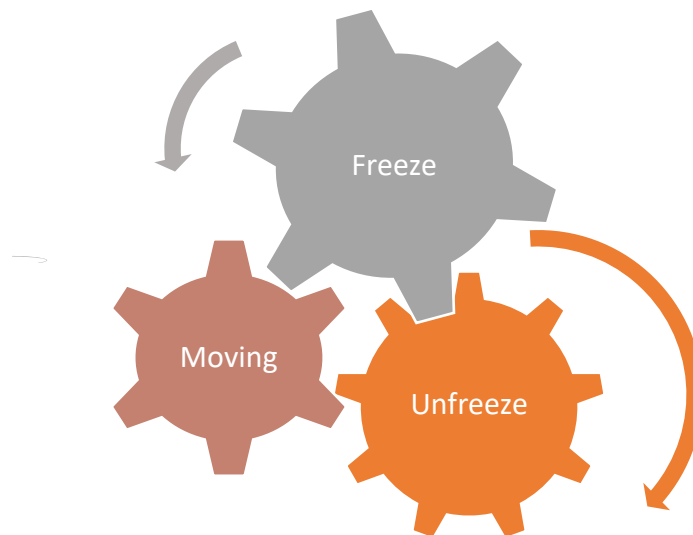


Figure 3D. How Lewin’s three stage model can be portrayed to align with his Field Theory view of constant movement.

This is an important distinction for this study of Wicked Problems. This research is taking a view of Wicked Problems based on the ongoing movement of the field. The implications are that the understanding and definition of a Wicked Problem are in transition and as such the engagement with the Wicked Problem needs to account for this. As interventions are made, the problem and the field are altered and changes in the field alter the nature amount and severity of Wickedness. This highlights a particular Way of Being for a leader to be attuned to the field on an *ongoing* basis, not just an initial identification of the Wicked Problem.

3.4.8. Experimentation.

Field Theory, especially when used in Gestalt Psychology practice, uses experimentation as a form of intervention, exploration and to gain greater understanding (Chidiac, 2018; Perls, 1976; Zinker, 1977). Wicked Problems, by definition, are unique and unsolvable. In the absence of an answer, experimentation from a Field Theory perspective (Lewin, 1926, 1935, 1951) offers the opportunity to *actively* engage with the Wicked Problem as a way of accelerating learning (Perls, 1976).

Field Theory and Gestalt psychology literature (Joyce and Sills, 2002; Lewin, 1951; Parlett, 2015; Perls, 1976) outlines two forms of experimentation which can apply to Wicked Problems. Firstly, *amplification and moderation*, where the experiment involves choosing one part of the field, which may have been ignored or under explored, and bring it into focus as the main figure (Joyce and Sills, 2002). This is then paid attention to closely in order to notice any changes, large or small, that this amplification has brought about. If, for example,

something seemingly unrelated to a Wicked Problem is taken, deliberately altered to see what happens to the problem, then this could constitute a field experiment.

Secondly, *Empty chair*, where assumptions, introjects⁴, polarities⁵ are surfaced and explored, bringing them into awareness. Whilst this, in a 1 to 1 situation sometimes literally involves an empty chair, translating this process to an organisational setting, it can involve examining and engaging with both the dynamics of the problem but also what assumptions have been taken for granted and not challenged, by stepping outside of the problem and looking at it as if you are not a part of it, or from someone else's perspective. For example, one assumption with a Wicked Problem is that stakeholders actually want it fully 'solved', whereas in reality they might be after clarification of what the problem is and its contributing causes. This links back to the earlier discussion (Chapter 2) regarding framing and sense-giving, in this case how the Wicked Problem is framed may determine whether stakeholders want it fully solved.

There are implications for the use of experimentation in an organisational or public policy setting. Psychological safety is needed in individuals, if they are to feel willing and capable to experiment (Edmondson, 1999; Schein and Bennis, 1965). In the field conditions for some, the threat is perceived as low and therefore experimentation and the associated risk is considered to be a worthwhile direction (Edmondson, 1999). Whilst this does differ between individuals, the field conditions in which the risk itself is taken, impacts on the size, type, and expansiveness of the experiment. The literature does not outline how the word *experiment* may bring with it negative connotations and a view of a scientific experiment. Perls, Hefferline and Goodman (1951/1973) did discuss the concept of a *safe emergency*, however, in translating the literature into modern day organisational contexts, care needs to be taken regarding the implications of the word *experiment* and how that may be perceived by stakeholders and the organisation.

Using a Field Theory lens invites the consideration of Wicked Problems using non-linear thinking. It recognises the unique nature of situations and people and each Wicked Problem as unique. Fields influencing the Wicked Problem, interconnect, overlap, co-influence one another in a constellation. It emphasises the 'here and now' experience of a Wicked Problem in a configuration which is in constant change. Above all it recognises that the field is

⁴ Introject – to unconsciously adopt the ideas and attitudes of others.

⁵ Polarities – having two opposite or contradictory opinions or aspects.

organised by factors both internal to a person and external by the situation (Parlett, 1997). Amongst other approaches, it advocates the use of experimentation, a concept that is directly applicable to engagement with a Wicked Problem. Although Rittel and Webber were not known to be field theorists formally, many assertions about Wicked Problems are aligned with Field Theory constructs. Next, by looking at alternative possible lens, it can be seen how applicable and useful a Field Theory lens can be.

3.5. Alternative lens for this research.

There are a number of complimentary epistemologies and approaches to Lewin's Field Theory that could be used for this research (Martin, 2003), as described in Chapter 2. Another closely related epistemology, is that portrayed by Bourdieu (1977, 1984, 1990). Bourdieu named 'field' as a main element of his epistemology (Bourdieu, 1977; Hilgers, and Mangez, 2015). There are conflicting accounts of where Bourdieu drew his thinking about field from. Hilgers and Mangez (2015) state that the theory of field developed in sociology by Bourdieu was constructed in a relatively autonomous fashion but shares a common epistemology with its use in physics, mathematics, and psychology. However, Passeron (2003) points out that Bourdieu drew on the concept of the field from the work of Kurt Lewin (Robbins, 2005). It is no surprise then that Bourdieu's view of field is aligned with Lewin's on many aspects, despite some differences in focus. Firstly, Bourdieu's work applying field to sociology, emphasises heavily the relational epistemology of field, seeing it as a '*system of relations independent of the populations defined by those relations*' (Bourdieu and Wacquant, 1992 p82). Field Theory in sociology has a number of features specific to the discipline but what characterises field theories, regardless of the discipline, is the rejected existence of an individual object or agent acting independently of a set of relations.

Secondly, in Bourdieu's work, the notion of the field not only emphasises a relational form of epistemology, but it also sees distinct sub-fields within the overall field, each field is a relational space of its own, dedicated to a specific type of activity. For Bourdieu, a field is a relatively autonomous domain of activity that responds to rules of functioning and institutions that are specific to it and which define the relations among the agents (Bourdieu, 1977; Hilgers and Mangez, 2015). Bourdieu goes on to comment about the dynamics of these autonomous sub-fields, saying that when a domain of activity has autonomy from social, political, and economic constraints, the functions and groups generates elites responsible for

the legitimate interpretation of practices and representations in specific areas of activity (Bourdieu, 1984, 1990), in other words, filtering the boundary with outside influences. As such, this is akin to a semi-autonomous field. Bourdieu (1990) applied this thinking to a range of sub-fields or specialised domains in society including: religion, education, science, symbolic goods, culture, the economy, haute couture, the state, law, politics, journalism and power. This is a development away from Lewin's (1951) and Parlett's (1997) thinking about fields, especially using the principle of possible relevance (Parlett, 1991), where *anything* could be relevant despite the field or 'domain' as Bourdieu (1977) puts it.

Whilst Bourdieu may see a Wicked Problem as a *distinct* domain, this research works with the belief of *possible relevance* (Parlett 1991), of a moving and morphing field, and with the idea that Wicked Problems are impacted, and impact across *many* fields, such as power, politics, finance, process and structure, which Bourdieu may consider as distinct domains. This aspect of Bourdieu's thinking is more akin to a closed system (although not exactly the same) whereas, as outlined in the methodology chapter, this research, using a phenomenological set of assumptions and approaches, wants to consider *anything* of possible relevance to the experience of participants engaging with Wicked Problems.

This research is also open to the ideas regarding the ten characteristics of Wicked Problems (Rittel and Webber, 1973), especially in this case, the 'no stopping rule' and the idea that things keep changing as decision makers are trying to formulate answers. So, while Bourdieu's (1977) view of field is very closely aligned to Lewin (1942), the focus is different, especially around self-contained sub-fields. Of course, even in the field of a Wicked Problem, at any singular point in time, there will be a particular *set* of field influences, however, with a Lewin Field Theory epistemology, these will change and morph, and this research is open to this possibility.

In theoretical terms, this is referring to the permeable boundaries for any field and is in fact a different view for how permeable the boundary is, with Bourdieu (1977) seeing, in some cases, a less than permeable boundary. Bourdieu describes how, in these cases, the autonomy of a domain or field transforms the relationships among the individuals who are linked to this. Increasingly, their practices and productions are evaluated according to criteria *internal* to the field. '*The creation of authorities and mechanisms for selection and consecration that are partly immune to external influences is an indicator of this autonomy*' (Hilgers and Mangez,

2015. p5) all relevant if you believe in a less than permeable boundary. This key difference is illustrated in Figure 3E below:

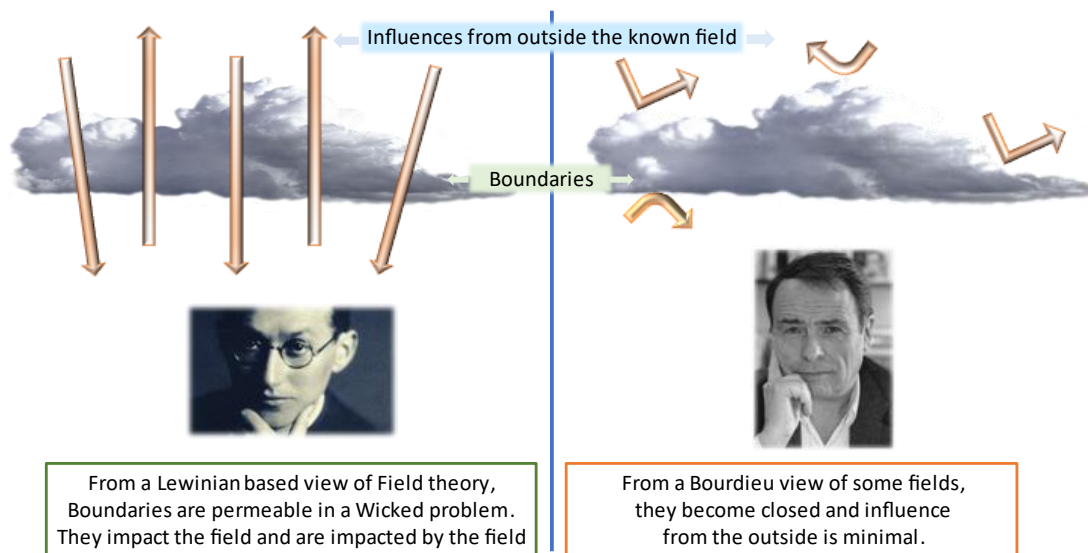


Figure 3E. Lewin and Bourdieu view of the permeability of field boundaries.

It is not the purpose here to evaluate whether these differing views of field autonomy are correct, but rather to understand that these different views exist and that this research is choosing to see the possibilities that field boundaries are permeable and ever changing. This understanding of permeability allows a much more holistic view of Wicked Problems. It allows us to consider the vast array of influences and to recognise that it is the relationship between all of these that is important. This aligns more closely both to the principle of possible relevance (Parlett, 1991) and to Rittel and Webber’s (1973) view of Wicked Problems. This assumption is much more complicated than an assumption of non-permeability, but if an assertion of non-permeability was taken, important influences in the understanding of Wicked Problems would be missed.

A second possible lens for this research would be Systems thinking (Ackoff, 1968; Midgeley, 2002; Senge, 1990). Systems thinking originated in the 1920s within several disciplines, notably biology and engineering, out of the observation that there were many aspects which scientific analysis could not explore. Systems thinking is not new, right back to Aristotle noting that the whole is greater than the sum of its parts. This epistemological view receded with the emergence of the Newtonian scientific approach, however, in the 1940s there were signs

of a re-emergence of systems thinking with the realisation that activity within a system is the result of the influence of one element on another, which systems thinkers today call *feedback* (Midgeley, 2002; Senge, 1990). There seems to be little evidence that systems thinking and Lewin's Field Theory have a similar lineage, yet there are similarities in the epistemologies. Systems thinkers defined two systems; hard systems and soft systems (Checkland, 1981; Senge, 1990). It is within these hard systems that there are marked differences with Field Theory. Namely it requires the *naming of the system and a defining of its objectives* (Checkland, 1981). This is in contradiction to the Field Theory assertion that fields are in a state of constant movement, that the moment you name a field, it is out of date. Similarly naming the objectives has a contradiction with Rittel and Webber's (1973) characteristics of Wicked Problems 'no stopping rule', where things keep changing and each intervention changes the problem in an irreversible way.

Soft systems, within a systems thinking approach, have more similarities to Field Theory. Soft Systems are those that are not independent of people, they are messy and as such difficult to quantify and can be seen in many different ways (Daellenbach, 1994). In the 1980s and 1990s systems thinking was popularised largely by Peter Senge (*The fifth discipline*. 1990). However, even with this close relation to Field Theory, there have been attempts to analyse systems using such terms as system archetypes, which attempt to highlight the same system dynamics in different systems. In contrast Field Theory emphasises the uniqueness of each field, both from a perspective of time and its ever-changing nature (Parlett, 1991; Stevenson, 2018), but also in relation to the belief that each person will experience the field uniquely. Rittel and Webber (1973) also state that each Wicked Problem is unique, that different approaches to the problem will see it differently and that there is a choice about how to see the problem (Raisio *et al.*, 2019. P5).

The development of Chaos theory (Lorenz, 1993) has demonstrated that the early systems thinkers may have been over ambitious in their belief that the dynamics of a system could be completely analysed. Chaos theory (Gleick, 1987; Lorenz, 1993), as with Field Theory, has shown how systems can be extremely sensitive to seemingly unrelated field conditions, and as such, is unlikely to be accurately analysed in this way. However, systems thinking does have some components aligned to Lewin's Field Theory:

- Whole systems or fields have properties that are unique to the whole, not of the parts alone. Therefore, the field around a Wicked Problem will have elements that the individual parts of the field do not have. To understand the field surrounding a Wicked Problem, we need to look at the influences *and* the resulting whole.
- Components of a field interact with each other in a symbiotic flow of influence. Understanding this flow and relationship is more important than understanding or mapping detail complexity. The relational nature of these influences mean that cause and effect are not linear or immediate, and that the results of any intervention may well be unexpected or unpredictable. It is because of this that a field or system may be too complex to fully understand.
- A field interacts with its environment, and the behaviour of a field can only be understood in the context of its environment. The boundary around a field is permeable.
- Tensions in the field or system reach an equilibrium and they require a source of energy if this equilibrium is to shift, which can come from outside the field or within it (see Figure 3A and 3B).

Key differences with Field Theory are that systems thinkers still focus on an analysis of a system or field using modelling and network diagrams, which, as stated above, are counter to key Field Theory principles of uniqueness through an ever-changing field and uniqueness through individual perception. Whilst systems thinking and Chaos Theory hold interesting and some complimentary epistemologies and ontologies to Wicked Problems, there are some key differences which would be difficult to reconcile in this research. Lewin's Field Theory however, has a large number of complementary views to Wicked Problems and as such enables a complimentary but new view of the phenomena, especially around the Ways of Being required when engaging.

Having discussed Field Theory constructs, epistemology and ontology from the literature, this chapter now turns its focus to a key research question for this work, that of Ways of Being when engaging with Wicked Problems from a Field Theory perspective. By analysing and discussing the relevant Field Theory literature, this will add to the findings in Chapter 2 regarding Wicked Problem literature for Ways of Being and will be developed further in the analysis chapters.

3.6. Ways of Being when working with Field Theory.

One of the aims of this research is to help to understand how people engage with Wicked Problems, and from this, what Ways of Being they use and find useful in doing so. Whilst there is some literature on doing this with Wicked Problems as outlined in Chapter 2 (Danken, Dribbisch and Lange, 2016; Ferlie *et al.*, 2010; Raisio *et al.*, 2019; Termeer *et al.*, 2013), there are few works published on the specific abilities of working with a Field Theory perspective in organisations. One can derive from other fields especially around Organisational Development, and around leadership abilities, however, these are often contextualised without reference to Field Theory or Wicked Problem principles. The growth of the use of Field Theory in Gestalt psychology is closely related. Historically the focus of work carried out in this, predominately appears to focus on individuals and groups, but less so on large systems/organisations. However, drawing from literature around how Gestalt psychology works with the field, I can explore and apply this to an organisational setting. This will bridge a gap in the literature on abilities. It may be that the research finds data that will confirm or refute some existing views on abilities of working with Wicked Problems, but equally it can add considerably to the thinking in this area.

Perls (1947) and Perls *et al.*, (1951/1981), outline that the quality of an individual's contact with the field, known as the field boundary, including the key component of awareness, can be 'interrupted' and that there are some common patterns of interruption which will impact on their Ways of Being. Any extreme of these polarities will result in a different frame for the problem and subsequently different ways on intervening. These have since been seen less as interruptions and negative, and now are seen more as the need for an individual to be able to make good choices in relation to the uniqueness of the Wicked Problem they are engaging with (Mackewn, 1997; Swanson, 1988; Wheeler, 1991). In this sense, they form a unique understanding of Ways of Being. Joyce and Sills (2002) maps them as *polarities*, indicating that the ability of an individual is to navigate these polarities to the best effect in any particular situation. Figure 3F outlines a number of these that are key to this research:

Too much	←————→	Too much
Introjection	↔	Rejection
Swallowing down whole, without consideration, the views, ideas, frames of others about the Wicked Problem.		Dismissing the views of others about the Wicked Problem, without any consideration.
Confluence	↔	Over-differentiation
Seeing no difference or even nuance between your own ideas, thoughts, frames, and those of others regarding the Wicked Problem.		Focussing on the differences only between your own experiences and that of others in relation to the Wicked Problem (sometimes referred to as withdrawal).
Deflection	↔	Reception
Ignoring data, information (internal and external) as not relevant and hence not engaging with the Wicked Problem with all the information required.		Openness to every bit of data information and paying attention to everything in detail which can result in being overwhelmed and as such not knowing where or how to engage with the Wicked Problem.
Projection	↔	Over-ownership
Not accepting self-reactions to the Wicked Problem, in particular ownership that you are influencing the problem.		Owning the Wicked Problem wholly, as if you are the only person responsible.
Retroflection	↔	Impulsiveness
Holding back from taking any action and just focussing on your own internal thoughts about the Wicked Problem.		Taking action without thought. Over-experimentation just to do 'something' to the Wicked Problem.

Figure 3F. Ways of Being polarities when engaging with a field (Joyce and Sills, 2002).

Considering this idea of polarities shown above (Joyce and Sills, 2002), this is about *balance* and finding the *unique appropriate* amount for each unique Wicked Problem. Anxiety, habit, excitement, and pressure from others may draw us, without thought, to an extreme end of a polarity. For example, anxiety could lead someone to introject the views of a stakeholder or get drawn into confluence, even though it may be one at odds with their own views. Alternatively, the excitement and energy to engage may lead to over differentiation from others' views. Uncontrolled anxiety could lead to an over-keenness to get everything right and hence to be too receptive. The key ability that this literature offers Ways of Being, is to be able to navigate these polarities effectively and with awareness (Chidiac, 2008; Joyce and Sills, 2002). This is an important assertion for understanding Ways of Being, as it is suggesting that there is not one set of abilities that are needed, but the ability to navigate and change

with the unique requirements of the Wicked Problem. In themselves, the language of these may be considered unusual in an organisational setting, but the sense of actively navigating these polarities with awareness, provides a good insight which is different from the common assertion that stipulates a list of competencies for leaders.

From the current literature about abilities in using a Field Theory perspective, becoming more field sensitive or attuned to the whole field, drawing on a wider range of forces instead of focusing on one part of the field exclusively, is a key ability (Chidiac, 2018; Parlett, 1997). In turn, this warrants a willingness and ability to discover and explore forces in the field that were not originally considered. Indeed, exploring those aspects of a person or situation that were previously in 'ground' but out of awareness, is important. These factors may initially have been dismissed as irrelevant, but on further exploration, may be found to be a key influencing force. Working with what is not said, or what is not paid attention to, is relevant (Stevenson, 2018). Understanding the overlooked assumptions, working with Field Theory means making figural the structures and linkages that prevail in a situation such as a Wicked Problem (Parlett, 1997; Philippson, 1991; Wheeler, 1991, 2005). Taking a Field Theory perspective means understanding and paying attention to interconnectedness and co-influence (Parlett 1991, 1997). Using Field Theory thinking to engage with Wicked Problems involves understanding the whole rather than one or a few elements. It is the exploration of the shape, pattern and wholeness of the situation that can lead to integration of disparate, perceived parts (Kohler 1969), and new perceptions and insights (Stevenson, 2018). This enables us to explore the ability to see holistically as well as convergently on an aspect of the Wicked Problem. What the literature is less clear on is how to move from the whole to an individual aspect and back, whilst not losing focus on either. The literature implies that this ability to move between these two ways of focussing is key.

Gestalt literature draws heavily on phenomenology as a way of working (Perls, Hefferline, and Goodman, (1951, 1989). These abilities of working with the field are closely related to the phenomenological methods as proposed by Husserl (1931). In particular, *Bracketing*, which is the ability to see the Wicked Problem as far as possible without assumptions and judgements, seeing the problem with childlike curiosity. The second of these phenomenological abilities, *Description*, is the ability to describe the Wicked Problem in terms of the '*what is immediately obvious to the senses*' (Joyce and Sills, 2002. P17), in other words the here and now

experience. Thirdly, *Horizontalization*, where all aspects of the Wicked Problem field are given the potential of equal importance. By using these approaches or attitudes as Joyce and Sills (2002) call them, it allows tracking of the field conditions of a Wicked Problem with curiosity, rather than pre-held judgements. In turn leading to interventions which are more closely related to the here and now formation of the Wicked Problem and as such are more likely be accurately designed.

Lewin (1947) demonstrated that intervening in a situation is an iterative process of fact-finding, action and further fact finding. Furthermore, he pointed out that in groups and organisations there is never a time without change, it is a relative concept as there are actually just differences in the amount and type of change (Burnes and Cooke, 2013; Burnes, 2019; Lewin, 1947). All actions, including experimenting, are key abilities intending to bring about a change in the field of a Wicked Problem (Nevis, 1987, 2001; Stevenson, 2018). Joyce and Sills (2002), suggest that the abilities in relation to experimentation are to identify an emerging figure in the field which appears stuck, problematic, or repetitive (Termeer *et al.*, 2015). Secondly, to suggest the experiment in a way that is acceptable to stakeholders, taking into account perceived risk and challenge. Thirdly, to design the experiment or intervention and carry it out. Finally, to review the impact, draw out and assimilate the learning.

Both Wicked Problem literature and that on Field Theory, state that a focus on relational and collaborative governance is an important ability (Chidiac, 2018). In Wicked Problems, networks (Ferlie *et al.*, 2010; Roberts, 2000) are considered essential. In Field Theory, contact, exchange and voluntary interaction helps systemic change in the field (Lewin, 1946; Marrow, 1969). Lewin considered abilities relating to facilitating group dynamics were important (Bargal *et al.*, 1992; Kippenberger, 1998). He developed an understanding that facilitating voluntary participation involving democratic decision-making is effective to facilitate change (Coghlan and Jacobs, 2005; Lewin, 1947). Stevenson (2018) discusses how, engagement involves setting up interactions and contact between different parts of the system and across many different spaces or across boundaries. Of course, involvement of others is seen as a key part of engaging with Wicked Problems (Danken, Dribbisch and Lange, 2016), but there is a practical and logistical limit to who and how many are involved. Parlett (2015) highlights this as one of five key abilities for working with the field (see below)

Throughout all the above abilities, there seems to be a golden thread of *Awareness*. Awareness of self, others, interactions, the field, the field boundaries, and the Wicked Problem itself, and including awareness that individuals have helped to construct our own experiences, choices and actions (Yalom, 1980). In fact, some would argue (Stevenson, 2018) that a central aspect of Gestalt and Field Theory approaches is that change cannot occur without interrupting existing perceptions and Ways of Being (Stevenson, 2018). Awareness is the precursor to effective action; awareness leads to *choice* (Nevis, 1987, 2001). Growth occurs at the contact boundary, between what is known and what is unknown (Nevis, 1987, 2001; Stevenson, 2018), therefore exploration and learning from new ideas, new thinking, and experimentation with a Wicked Problem, is key.

Parlett (2015) brings together these abilities into a broader set of categories. He names these abilities as including: practical understanding, sensitivity to present conditions, a capacity to discern the dynamics of complex situations, ability to make informed choices, a clear sense of what a group can and cannot do, a recognition of other people's humanity and potential. These are categorised as:

Responding. Key abilities include: 1. To stand back and regard the situation as complex and organised whole. 2. To use our situation reading to discern the type of action. 3. Flexible and versatile responding is needed. No situation is ever the same, therefore experienced gained outweighs 'technical' development. A key skill is redefining the situation and taking a wider, longer-term view of all the forces at work.

Interrelating. Being able to understand and work with the complexities of relationships, by engaging constructively and having an appreciation of the different frames and layers of experience that occur in relating to others and the context we find ourselves. Understanding that in relating to others we largely invent and co-create our reality.

Embodying. If we are able to access the vast data available to us as alive functioning bodies, and can integrate our bodily reactivity to the world, inevitably our engagement with the world around us will be enriched.

Self-recognising. Reflecting on self objectively and being able to make changes accordingly. When engaging with Wicked Problems, registering what is evoked for me and then how is this relevant and impacting on the situation?

Experimenting. Willingness to experiment, to try things out, to see what works, is a powerful catalyst, and stimulant for effective change. Balancing this with the need for consistency. This therefore is about our engagement with what is often depicted as ‘the change process’, in which experimenting invariably plays a part.

Taking the assertions from Field Theory Literature and the categories discussed above, the following table 3ii summarises the Field Theory literature on Ways of Being. Once considered together with the similar table from Chapter 2, it starts to build a picture of Ways of Being which can be analysed together with the data arising from the research interviews (see Chapter 7).

Table 3ii. Summary of Ways of Being for someone addressing a Wicked Problem (from literature on Field Theory).

Ways of Being - Ability, Skill, Mindset or Frame	References from Field Theory and Gestalt literature.
Ability to work with multiple frames, not only their own. Willingness to truly understand others frames even when there are polarities and differences.	Clarkson and Mackewn, (1993). Joyce and Sills, (2002).
Seeing problems as context relevant. Having Field awareness and field sensitivity on an ongoing basis. View the problem and its context as a whole.	Lewin, (1952). Perls, (1976). Parlett, (2015).
Able to read the unique field and discern the appropriate type of action. Able to be flexible and versatile in their engagement of a Wicked Problem.	Parlett, (2015).
Understanding that the field conditions are not fixed and that any attempted intervention is likely to change the problem without resolution. Seeing all aspects as interconnected and of possible relevance.	Perls, Hefferline, and Goodman. (1951). Lewin, (1952). Parlett, (1991). Burnes and Cooke, (2013).
Understanding that causes and resolutions are outside of current awareness. They are multicausal and complex. That all aspects of the context have relevance. A key skill is redefining the situation and taking a wider, longer-term view of all the forces at work.	Kohler (1947, 1992) Parlett, (1991, 2015). Stevenson, (2018).
The uniqueness and contemporary nature of a Wicked problem. Understanding that the Wicked Problem is in a state of movement that people need to pay attention to. This needs to be a 'here and now' manifestation of the Wicked Problem, not a historical one.	Perls, (1947, 1969). Lewin, (1951). Parlett, (1991, 1997). Clarkson and MacKewn, (1994). Stevenson, (2018).
Understand that leaders are part of the Wicked Problem field, not separate from it.	Joyce and Sills, (2002)
Awareness and the ability to adjust actions accordingly for: Self, others, relationships and environment, including resources.	Nevis, (1987, 2001). Joyce and Sills, (2001). Parlett, (2015).
Being able to understand and work with the complexities of relationships, by engaging constructively and having an appreciation of the different frames and layers of experience that occur in relating to others and the context. Understanding that in relating to other's, people largely invent and co-create their reality.	Parlett, (1997, 2015).
Embodiment and 'self as instrument'.	Cheung-Judge, (2012). Parlett, (2015). Chidiac, (2018).
Mindset of experimentation. Willingness to live with partial interventions, messiness and non-resolution.	Perls, (1976). Zinker, (1977). Joyce and Sills, (2002). Parlett, (1997, 2015). Chidiac, (2018).

3.7. Chapter conclusions.

Key learning from the literature states that the rationale for Field Theory is Lewin's belief that all behaviour arises from the forces in a field (Cartwright, 1952). Therefore, in order to understand, predict and begin to intervene in a Wicked Problem, it is necessary to not only look at what is directly apparent but also to the surrounding influences as well.

3.7.1. The Gaps in the research on Wicked Problems.

Contact with the surrounding field shapes our understanding and subsequent actions. Some commentators (Nevis, 1987, 2001; Stevenson, 2018) believe that change comes from within and spreads throughout the system. However, Lewin (1947) was keen to point out that *both* internal and external forces are important. Field Theory literature advocates a holistic view of Wicked Problems which in turn allows for new ways of engaging with Wicked Problems. In particular, it allows a view to be taken where the interrelatedness of forces result in an equilibrium or dynamic balance. It is this in which understanding is gained regarding the forces or field conditions that are leading to a problem being seen as wicked. This is new to the literature on Wicked Problems. It also then leads us to consider how this equilibrium can be impacted in order to facilitate ways to engage with a Wicked Problem. Included in this view is an understanding that the protagonist is part of this balance both in how they frame the problem but also how they interact with the problem, other people, and the field conditions. Unlike a number of other epistemologies and most Wicked Problem literature, Lewin's Field Theory literature offers a view in which the Field is in a state of constant movement. Any static or historical view of the Wicked Problem is likely to be inaccurate. It is a normal human function to take data and make sense from it, but it is in being able to carry this out in an ongoing way and having field sensitivity where Field Theory offers us an important nuance. It is during this process that different aspects come into focus or become figural, while others fade into the background. When intervening in the equilibrium of the Wicked Problem, Field Theory literature advocates experimenting and trying things out, not just to the Wicked Problem itself, but also in the surrounding field.

There is a gap in the Wicked Problem literature on Ways of Being. The assumptions that Field Theory offers, also brings views on Ways of Being from which learning can be drawn in relation to Wicked Problems. Recognising and responding to the uniqueness of a situation,

interrelating to others effectively by understanding different frames and thoughts, having a high degree of awareness of self, willingness to experiment and live with ambiguity, are all important Ways of Being that Field Theory and Gestalt psychology offer when attempting to understand Wicked Problems.

Field Theory literature outlines a view which has a good alignment with Rittel and Webber's view of Wicked Problems, especially the ten characteristics outlined by them in their original research. At the same time, it offers insights ideas and frames where there is a gap in Wicked Problem literature. As such, looking at Wicked Problems through a lens of Field Theory principles allows new insights whilst still staying faithful to the original concepts of Wicked Problems. Drawing on the phenomenological approaches widely used in Field Theory and Gestalt psychology, it will enable this research to follow the experiences of participants who have and are engaging with such problems, with a view of possible relevance and a fresh view.

Applying a Field Theory lens will add considerably to our understanding of Wicked Problems in two ways. Firstly, much of the Wicked Problem literature attempts to describe Wicked Problems as a binary wicked/non-wicked definition which is not portraying the phenomena in its truest form. Instead, Field Theory allows us to consider that the nature of Wicked Problems are ever re-shaping, morphing, and developing. Current Wicked Problem literature also often has a focus on the problem itself only. This chapter discusses how considering the impact of the moving context (or *field* as it is named) within which a problem exists, shapes the definition of the problem itself. Field Theory shows how there are many more influences on the understanding of a Wicked Problem than the current literature would suggest, including individual, relational and context influence.

What does become apparent from the Field Theory literature about Ways of Being for a leader is that it is multi-faceted, complicated, and as such, difficult. It requires a high level of awareness, not only of self, but of others, the nature of the problem itself and the surrounding field on an *ongoing* basis. This is whilst working with the problem, the stakeholders, groups, and while attempting to influence and engage with the wicked characteristics of the problem. Given the realities of everyday organisational operation, these Ways of Being, need to be considered aspirational rather than as a standard requirement. In this sense, this will help those responsible for developing leaders in readiness for an increasing difficult set of Wicked Problems.

Whilst Field Theory is transitioning to be more explicitly used in organisations, empirical data-based application of Field Theory in organisations is sparse. This research aims to help fill that space and encourage others to use a Field Theory lens in further research. This chapter also outlines some of the key publications in relation to Ways of Being, abilities, skills and mindsets when working from a Field Theory perspective. However, this is a particularly under researched area in organisations, which this research aims to meet by identifying not only how people experience Wicked Problems, but the subsequent actions that this leads them to take. Taking the above epistemologies, the research aims to add to the body of knowledge which addresses this topic of Ways of Being.

CHAPTER 4. Research Methodology and Methods.

4.1. Introduction.

This chapter introduces the research methodology and method employed in this study, and its underlying philosophy. It moves through the philosophical underpinning of the research design, including the influences on the selection of research methodology and research approaches. It then examines the implications of these approaches on the choice of method utilised. This is followed by a discussion regarding how, what, why and with whom data was collected based on the requirements of achieving the research objectives and a Field Theory approach (see Chapter 2), which informs both the research design, data collection and analysis. The chapter then progresses to outline the coding, and analysis process adopted with this data, demonstrating how this was carried out and why. Finally, the chapter discusses how this research ensures quality of research design.

4.2. Research Methodology choices for this project.

Qualitative research can be associated with, but not restricted to, an interpretive philosophy (Denzin & Lincoln, 2018). Qualitative paradigms offer the researcher the opportunity to develop understanding of participants as having unique experience, and what the experience in a particular situation (in this case with a Wicked Problem) means to them, within their social reality (Bryman, 2008).

4.2.1. Using Interpretivism for this research.

In this research, an interpretive philosophy meets the desire to make sense of subjective data and socially constructed meaning. In a qualitative research study, the research approach needs to encapsulate the essence of what the research is trying to uncover - the ontological, epistemological and methodological stance of the research study (Trede and Higgs, 2009). It is the questions below that this research draws upon to determine methodology and method (Guba and Lincoln, 1994). These are, the epistemological question, concerned with determining *what is regarded as acceptable knowledge* (Bryman, 2016). The ontological question, concerned with *what is the form and nature of reality ... and what can be known about it?* (Punch, 2009) and the methodological question, concerned with *how the inquirer can go about finding what he or she believes can be known* (Guba and Lincoln, 1994). Others,

such as Saunders *et al.*, (2019) and Creswell (2007), would also add the consideration of Axiology – *the role of values and ethics in the research process*. This is also an important consideration, as all of these are studying how people experience and have beliefs about the nature of the world, which may, or may not, be different from each other.

Using an interpretivist research strategy helps this research to study *Ways of Being when engaging with Wicked Problems*⁶ from the participants' first-hand perspective. In this research, understanding this perspective is central to discovering how participants construct their meaning, followed by how this meaning leads to subsequent actions.

This research uses participants' own subjective experiences and descriptive or hermeneutic approaches to examine the quality and essences of a phenomenon (Van Manen, 1990). Understanding the lived experience of a person's world is through consciousness as experienced from their first-hand perspective (Husserl, 1967). The approach in this research, incorporates participants narrative descriptions and discussion of events, allowing personal reflection to lead to a detailed and deeper analysis (Finlay, 2009). '*Lived experience names the ordinary and the extraordinary,...the routine and the surprising, the dull and the ecstatic moments and aspects of experience as we live through them in our human existence*' (Van Manen, 2014, p. 39). Therefore, the methods as outlined in section 4.5, utilise semi-structured individual interviews, using a narrative approach to capture and subsequently analyse participants' first-hand experiences.

Socially constructed meanings are rich, complex, and personal. Further, there are multiple meanings, interpretations, and realities between people, demonstrated through language (Bakhtin, 1986) and other forms (Myers, 1958), even when participants have the same experience. So, participants may use different language to describe the same phenomenon such as a Wicked Problem, even when they have experienced it in a similar way (O'Donoghue, 2007). It is therefore essential that each interview carried out is analysed and viewed in its own context, hence the use of IPA (Interpretive Phenomenological Analysis) (see section 4.6). Interpretivist epistemology is concerned with subjectivity, understanding, complexity, uncertainty, and contradictions (Denscombe, 2007), so during this research, knowledge was gained from the interpretation that individuals make of their own subjective experiences

⁶ Referring to the overall title of this research

(O'Donoghue, 2007), it also seeks to understand whether there are any shared themes across different participants, especially in the choices made regarding Ways of Being. A phenomenological study (see section 4.2.3.) describes the meaning for common themes across *several* individuals as their lived experiences of a phenomenon (Creswell, 2007), as different from a narrative inquiry study which has a focus on a single individual (Daiute and Lightfoot, 2004). Therefore, although using narrative methods in the interview process, this study aims to also discover what participants *share* in their experience of a phenomenon such as Wicked Problems. This has supported the need for the methods in this research to be such that they can gather data from individual responses, via interview, *and* can allow for collective themes to be considered. The chosen participants have common experience in that many of them work in healthcare for the same organisation but are also separated by function, job role, background, and the type of Wicked Problems that they engage with.

Causal explanation leading to theories and concepts are often too simplistic to explain the richness and complexity of human experience (Crotty, 1998; Lincoln and Guba, 2000; Neuman, 2000; Schwandt, 2001). Given the topic of Wicked Problems researched here, which are complex, ever-changing, and difficult to define (Rittel & Webber, 1973), this adds a further level of complexity which cannot currently be explained by a single theory using a wholly deductive approach. This research, using an Interpretivist assumption, therefore has a knowledge focus on narratives, perceptions, and interpretations, rather than a wholly deductive approach using an existing theoretical proposition which would be too much of a reduction for the studies aims.

4.2.2. Field Theory and interpretivism.

Drawing from the Field Theory principle of singularity (Parlett, 1997), where every person-situation is unique, the individual will construct meaning and any generalisations are suspect, the aim of this research is to understand, at a deeper, more detailed, individual and rich way, the interpretations that people make in their decision-making environment and the subsequent choices when engaging with the hard, complex and challenging problems that they face. This includes whether the participants interpret a problem as wicked or tame or on a range/spectrum between these (see Chapter 2) (Raisio *et al.*, 2019). In employing an interpretivist construct for this research where the epistemological belief emphasises that humans create meanings (Crotty, 1998), it is the study of these meanings and their formation,

that is of interest. This enabled the research to take account that different histories, cultures, circumstances, work goals and different experiences, which lead to individuals creating different meanings, considering knowledge to be subjectively understandable or interpreted in subjective terms (Myers, 1958; Weber, 1922).

The Field Theory principle of possible relevance (Parlett, 2019), where every part of the field impacts on the field and therefore no part of the field can be excluded as irrelevant, is used in this research with the assumption that all parts, including the researcher, are relevant to the data collected. Interpretivism accepts that researchers are part of the social reality being researched (Grix, 2010). Interest in human beings and their experiences and choices are not that of abstract generality. The interest in people is directly determined by their relevance to the values of the researcher (Creswell and Poth, 2017; Parsons, 1949; Saunders *et al.*, 2019). Values are tied into the research and the researcher's values are part of this, therefore reflexive practice, and awareness is needed by me as the researcher. The assumption here is that the value systems of the inquirer, the paradigm used, and the social norms of both the participants and I, plus the responses of the participants, are relevant to the research (Creswell, 2007; Guba & Lincoln, 1988).

Should a more positivistic approach for this research be adopted, this would cause a difficulty based on the positivistic epistemology that there are 'law-like' generalisations (Saunders, 2019). Field Theory clearly asserts that an individual's relationship with the field is unique (Rummel, 1975). A research assumption that believes there is one truth (Phillips and Burbules, 2000), could easily lead to missing some key data which does not fit with this one-truth. This research may eventually lead to common themes, or it may have led to as many different themes as there are participants. Prior to the data being collected and analysed, this was not known, but in order to fully understand the granularity and complexity of the data, this research was open to non law-like conclusions.

Field Theory (and Gestalt approaches in which it is incorporated) advocates, believe that Understanding is heavily influenced by social construction and that human interpretation of meaning is part of their reality (Perls, 1976). This is at odds with the epistemology of a positivist view (Phillips and Burbules, 2000) about having 'pure' data uninfluenced by human bias. The interpretation process in Field Theory is an internal process and may not be directly observable using positivistic methods, therefore human bias is an accepted part of this study.

In summary, this study uses a phenomenological approach to the research, using Field Theory as a lens to facilitate a new and different perspective. Firstly, the lens of Field Theory has a clear phenomenologist view (Chidiac, 2018; Clarkson and Mackewn, 1993; Joyce and Sills, 2001; Robine, 2003; Snygg and Combs, 1949; Wollants, 2007), where meanings attached to experiences are individualistic, socially constructed and are in flux, that is, they move and change as time, other experiences, attitudes, and memory emerge (Joyce and Sills, 2001). Both phenomenology and Field Theory consider a first-hand view of knowledge as important (Zahavi, 2018). This research sought to understand how participants sense-make their experiences of Wicked Problems and subsequently effect how they choose to engage with the Wicked Problem. Secondly, the field being researched is complex and changing. It involves understanding socially constructed understanding processes, which are personal and unique to the individual. By using an interpretivist approach, appropriate methods can be used to collect, code, and analyse the data which supports this position (see section 4.5). There may be some disadvantages to using an interpretivist approach (Tuffour, 2017). The individual nature of the data may elicit no common ground between subjects, they may have no commonality in Ways of Being when engaging with Wicked Problems. This, however, can still be useful data to understand what people say about the application of their decision-making. In the 'political' environment of the organisations where the subjects work, it may be culturally unusual (the organisations chosen are culturally influenced by a scientific way of working) and hence difficult for people to describe their experiences and interpretations. Overall, this research is informed by phenomenological assumptions, beliefs and approaches outlined below.

4.2.3. Interpretivism and Phenomenology.

Qualitative methods tell us about how meaning is made and used, how people describe it in their own words. Unlike quantitative methodology, they encourage understanding about how people construct meaning. Creswell and Poth (2017) express the lineage and rising popularity of interpretivism coming from ethnography but recognises that other approaches such as grounded theory and phenomenology have welcomed the growth of this approach. Others (Pizam and Mansfeld, 2009) see interpretivism as an approach which groups together diverse approaches, including social constructivism, phenomenology, and hermeneutics.

At the inception of this research, ethnography, grounded theory, and phenomenology were considered as possible research methodologies. Whilst it may have been possible to conduct this research based on any of these three methodologies, the practical applications of ethnography meant that the availability to carry out observations of people's daily lives (Hammersly & Atkinson, 1983), plus access to other supporting data, was not available to me as researcher for this study. Turning to look at the other considered options, Grounded Theory and Phenomenology have a number of similarities. Both methods look at real life situations, using interpretivism which seeks to understand real life situations. They both rely on interaction between researcher and participants, often in interviews. Both approaches look to understand from the participant's perspective and experiences in the context of the participant, without bias from researcher preconceptions.

Initially I found it difficult to see the differences between Grounded Theory and Phenomenology, until considering the philosophical and theoretical bases of the two methodologies and especially their aims. Grounded theory (Glaser and Strauss, 1967) is a qualitative approach in which the aim is to generate a *grounded theory* of the phenomenon under study. Unlike phenomenologists, grounded theorists seek to include all data sources that might contribute to theory development. Interviews are commonly used but they might also include observations, diaries, images, past literature, and research. It uses *constant comparison* to test the emerging theory (Holloway and Todres, 2010). In contrast Phenomenology (Heidegger, 1972; Husserl, 1967) seeks to describe and explore experiences, by collecting data from individuals who have lived through those experiences known as *lived experience*. Hence phenomenologists often gather data from interviews, while findings are reported as a rich description of the experience drawing on characteristics identified during data analysis (Parahoo, 2006; Todres and Holloway, 2010).

Where Grounded Theory aims to discover emerging patterns in data and develop a theory that explains the phenomena, Phenomenology aims to understand lived experiences of individuals without imposing any preconceived notions or theories, seeking to discover a detailed description of human experiences and meanings. So, for this study the difference is subtle, but is in the aim. Phenomenology can result in a theory, but that is not its primary stated aim. Phenomenology seeks to capture, preserve, and understand the subjective, lived experiences and perspectives of participants, while grounded theory seeks the construction

of theory. This research sees phenomenology as a subset of interpretivism. This fits the goals and approaches of this study. Field Theory advocates the use of Phenomenology and as the aim of this study was not to develop a grounded theory, but rather to explore lived experiences, the study has been led by phenomenological principles.

4.2.4. Strengths of using Phenomenology in this study.

The phenomenological approach provides a rich description of human experiences and meanings and as such the resulting analysis is rich and varied (see Chapters 5, 6, 7). The findings are not forced, they have been allowed to emerge from the participants rather than from my own preconceptions or bias. The conclusions drawn are all traceable and closely faithful to the experiential raw data. In each step care has been taken not to delete from, add to, change, or distort anything originally presented in the interviews. As far as possible, I was able to bracket my presuppositions and biases to hold them in consciousness through all phases of the research and minimise their influence on the findings. However, it would be wrong to claim that *all* the data has been included in final analysis. There was so much wide-ranging data that not all of it could be included. The data chosen were those of most interest to the participants but also to me and of relevance to the research questions.

Phenomenology studies the *structure* of appearing – the *how* of appearing (Moran and Mooney, 2002), in this research, '*how*' do Wicked Problems appear to participants and what actions does this lead them to when engaging, is a key area of interest based on the phenomenological view that participants will experience and structure their own view of the Wicked Problem and then act in line with this view (Creswell, 2007). This study elicited the nature of the problem that participants are experiencing, how they make sense of it and then how they choose to engage with it. In doing so, the research elicits, what makes a problem wicked for them from how they experience and frame it. The assumption being that what is experienced and how it is framed is reflective of a Way of Being when engaging with the problem, or indeed choosing not to engage. Via semi structured interviews led largely by the participant, using a phenomenological and Field Theory lens for this research enabled the participants to describe and explain a particular kind of experience, evidenced in the participants' description, and highlighted in the IPA analysis of the narrative. This can be different from any pre-held ideas or bias that I, as researcher, have. It is unlikely that a positivistic method of data collection would capture the richness and nuance of this individual

experience, especially if the epistemological assumption is for observable and measurable facts (Saunders, 2019).

The common guiding principle for this study is to find a method that can help us understand and articulate the lived/embodied aspect of the participants' everyday experiences. Phenomenology is concerned with the detailed examination of human lived experience and aims to conduct this in a way which enables that experience to be expressed in the participants' own terms, rather than according to predefined language and terminology (Smith *et al.*, 2009).

The naming of a problem as 'wicked', is less important here than the experience of the phenomenon and how participants choose to engage with it. The research is not looking to see whether participants are educated or well-read in the subject of 'Wicked Problems'. Rather it is interested in the experience of how they engage with Wicked Problems - whatever they choose to call them. How the participants add their own classification and how this might lead to certain ways of engaging with a problem. This has led to the structure of the interviews, to start with a narrative approach, unbiased (as far as possible) from any principles or boundaries assumed by me. Pre-engagement with the participants did not use the term 'wicked' or setting up any expectation that they have a level of knowledge about the subject, but instead encouraging them to simply talk about their experiences using their own choice of language.

In this study of *Ways of Being when engaging with Wicked Problems*, there is no current comprehensive theory to be tested. There are arguments made by current writers about some individual abilities in relation to this research (see Table 2ii in Chapter 2.) and it would be possible to be guided by the five principles of Field Theory (see table 4v in Appendices) (Parlett, 1991). However, these are more likely to be drawn upon in the analysis stage of the research project (see section 4.6). If a positivist view was taken for this research, it would draw on an ontology that there is one true reality or existing theory to develop (Saunders, 2019). Overall, there seems to be an incompatibility of assumptions and beliefs between positivistic philosophy and that of the lens for this research - Field Theory, and the epistemological views that I hold.

An additional element related to how phenomena are experienced in different ways by different individuals, is known as modes of appearing (Zahavi, 2018). A phenomenon can be

experienced in many ways from different perspectives, by one person or by many people (Bevan, 2014). In attempting to understand this as part of the influencing factors which shape the participants' understanding, the method for this research allows us to look past the initial presenting issues to gain an understanding of other items which normally may be in 'ground' (Clarkson & McKewn, 1993) and to see more of the whole. When we perceive an object, we always experience more than what is initially presented. The 'front' of what we see, alludes to other sides of the object that are momentarily absent, but which can be revealed by further exploration (Zahavi, 2018). "*The beating heart of phenomenology as a living philosophy ... lies in the attempt consistently to rid us of the idea that a view of the phenomena from sideways on makes sense.*" (Glendinning, 2007. p19). More generally speaking, what we see is never given in isolation, but is surrounded by and situated in a horizon that affects the meaning of what we see, described in the Field Theory view of the principle of organisation (Parlett, 1991), that everything is interconnected, and the meaning of any singular aspect can only be derived from looking at the total. It also highlights the principle of possible relevance (Parlett, 1991) which states that every part of the field impacts on the field and therefore no part of the field can be excluded as irrelevant (Parlett, 1991). To achieve this, the questions and the analysis in this study included questions and sought information about the context, the field conditions for the situations the participants were describing in the narrative. Further, aspects were probed and discussed to explore the relationship between the figure (the answer given to any single question) and the context or ground that it exists in.

4.2.5. Phenomenological concepts that this research draws from.

In exploring the social construction that participants put around a problem, concepts from phenomenology were drawn upon such as lifeworld, bracketing, intentionality, and perception (Moustakas, 1994).

This research is interested in studying the phenomena in a naturalistic environment, outside the lab, examining how participants experience, interpret and then act/react in their settings. This is based on a belief that paying attention to the environment is more likely to get closer to the real lived experience as perceived by individuals, compared to a constructed environment in which participants will react differently (Smith *et al.*, 2009). In a positivistic epistemology approach to research, reality consists of those entities or objects which can be measured often using a deductive assumption based on validity of data and highly structured

data collection methods which may or may not capture important elements of the real-world experience (Creswell, 2007). In contrast to this view, this research is taking a phenomenologists focus on the world we live in, the world we take for granted in daily life, referred to as the lifeworld (Lewin, 1942; Zahavi, 2018), the practical world of everyday experience. This research therefore is interested in the world that participants inhabit as they move through the different social, physical, and cultural environments that shape their experience of the world (Giorgi, 1997; Husserl, 1967). Further, the research paid attention to Habitus (Lizardo, 2004) which represents the way group culture and personal history shape the experience and in turn the actions of an individual. This means that context is important, the same object can have different meanings depending on context, or as I will refer to it – the 'Field'.

Even interviews, although discussing real situations in real contexts, can lose information due to recollection 'degrade', memory, individuals encoding bias, conditions for the interviews and researcher's bias (Potter *et al.*, 2012). A change in the context of the interviews is a change in the field conditions. In order to get as close as possible to the lifeworld experience of the participants, the methods used seek to truly understand the lived experiences and constructs of others, unveiling the previously hidden, while understanding that these are different from and equally valid as other participants' experiences – including mine as the researcher. Despite this, even the best formed questions are unlikely to reveal all (Potter *et al.*, 2012). The aim of the methods employed and the questions asked are to get as close as possible to real life and the 'how' of experience, whilst accepting that a person's reality (including perception, imagination, and recall) is not always observable by others (Buber, 1958; Chidiac, 2018). This is reflected in the methods by using a narrative interview process (Potter and Hepburn, 2012; Perls, 1969), drawn from the experience of the participants, accepted, and recorded by me, as the participants unique valid experience, whether or not it fits into my understanding and experience or indeed of any other research in the field. Two people may see or experience the same phenomenon but perceive it in very different ways (Rock and Palmer, 1990; Rummel, 1975). As the interview questions started by asking the participants to enter into a narrative description, it allowed this research to focus on the way in which the experience of a Wicked Problem shows itself, that is, how it appears, rather than focusing on the composition or the characteristics of the Wicked Problem itself.

One area of importance is what the participants pay attention to, what they choose to omit and context from which the subject derives meaning, referred to as *contextualisation* (Husserl 1970) the *reduction* (Husserl, 1967), *intentionality* (Moustakas, 1994), and in Field Theory, *figure*⁷ & *ground*⁸ (Clarkson & McKewn, 1993; Perls, 1976). This is an especially important aspect for this research project because the research sought to understand what participants are noticing in relation to Wicked Problems, and what they pay less attention to or omit from their understanding process. In some cases, follow-up questions were asked to elicit data on these areas, but still noticing that on initial discussion, it was not commented on by the participant. These were not only recorded as data, but the relationship between them is relevant. For example, do the participants stay focussed on what is figural for them, or as the problem morphs and changes, do the participants go the 'ground' to look at context before something else becomes figural? Context descriptions were developed by asking the participant to describe their account of places or events, actions, and activities (Spradley, 1979). In the research design and method, asking context questions allows examination of a phenomenon as it stands out against context, but is also part of it and informs its meaning. Asking participants to use narrative, shed a light on the pattern of oscillation between figure and ground. In the analysis of the transcripts, attention has been paid to the patterns of movement between figure and ground that participants follow.

4.3. The role of the researcher.

The focus for the researcher in a phenomenological study is to explore the phenomena and enhance our understanding of what happened: *'The aim is an openness whereby the phenomenon is offered a supportive space in which it can present itself in a way whereby it is what it is, most accurately and comprehensively.'* (Seamon, 2019. p41).

In phenomenological and relational approaches such as in this case, meanings emerge out of the dialogue between the researcher and the participant who are both key parts of the dialogue (Finlay, 2011). Researcher reflexivity and researcher-participant dialogue is part of the healthy research process (Tuffour, 2017). Building a sense of joint discovery rather than the participants feeling that they are a 'subject' under a microscope has led to the dialogic

⁷ Figure is regarded as what, as part of the whole, is 'in focus' or their predominant interests or needs.

⁸ Ground' is the 'out of focus' part of the prevailing conditions or field, that the person may not be wholly aware of, but is still of relevance

methods described in section 4.5.1. The interviews had an informal sense, dialog was two-way. Follow up questions were phrased to give a sense of joint exploration and genuine curiosity. It was important for me to put myself in the shoes of the participants (Alase, 2017; Burrell and Morgan, 1979; Guba, 1990). There is almost a dual role for me here. In one way, I was like a participant, drawing on everyday experiences in order to make sense of the world. In another way, I am not the participant, I only had access to the participant's experience through what the participant says (Alase, 2017; Smith *et al.*, 2009).

Seamon (2019) challenges the research by considering how can we encounter the phenomenon so that it *'freely has the space to be what it is, rather than what we might suppose, imagine, claim, or dictate it to be?'* (Seamon, 2019). Getting close understanding of the participants' experiences involved me suspending or bracketing any preconceptions and prejudices about reality, known as Epoché (Husserl, 1970; Moustakas, 1994;). In this case I set aside (as far as possible) prejudgments, biases, and preconceived ideas about things I am trying to understand (Moustakas, 1994). This is different from the objectivist view (Saunders, 2019) that the researcher should try to remain neutral and detached from the data and should have no influence on the area being studied. However, excluding your own values as researcher would seem impossible by some (Spinelli, 2005) and certainly undesirable from a Field Theory perspective (Chidiac, 2018; Joyce & Sills, 2002; Perls, 1969).

Even choosing a research philosophy is value laden. To deny a researcher's own values and perceptions is to deny a key component in the field data (Buchanan *et al.*, 2012). Instead, this research, acknowledged my values and bias, working with these in awareness of how they are impacting on the research either beneficially or detrimentally.

Many (Bakhtin, 1986; Buber, 1958; Chidiac, 2018; Perls, 1969), would argue that an objectivist approach of researcher 'independence', is not wholly possible when attempting to understand social environments because some internal processes are not 'observable' by an external body. Instead, the phenomenologist 'brackets', while still acknowledging their own bias assumptions and beliefs (Moustakas, 1994). Field Theory and Gestalt practitioners see this differently from both an objectivist view and even slightly different from some phenomenologist's views, seeing their own experiences, assumptions, reactions, and beliefs, as *part* of the field being studied, therefore welcoming it as useful source of data, to use this as part of the dialog in a dialogic approach (Chidiac, 2018; Joyce & Sills, 2002; Perls, 1969).

The field theorist may use the concept of 'self as instrument' (Cheung-Judge, 2012; Chidiac, 2018; Nevis, 1998), that their own observations, reactions, feelings and embodiment are not only part of the field but may be highlighting an aspect of the field previously hidden or not discussed by other participants therefore not to include this data would be seen as omitting a potentially important piece of data from the field (Buber, 1958; Chidiac, 2018; Joyce & Sills, 2002; Perls, 1969). I utilised this approach during interviews. For example, an answer would come from a participant and I would notice that I felt uneasy, that something felt incomplete, that I felt more curious. I took these cues to probe further on that point, check understanding and possibly ask a follow up question.

This research is informed by a Gestalt perspective using a Field Theory lens (Parlett, 1991), especially in the formulating of follow up questions during the interview, using 'self as instrument' (Cheung-Judge, 2012) as one view, alongside others' views, which can be explored further in order to get as close as possible to the experiences of participants and the field conditions in which they experience Wicked Problems.

This, using a Field Theory lens, is much more likely to get a fuller and richer amount and quality of data which reflects the reality of the lifeworld (Merleau-Ponty, 2012). In this sense then a phenomenological approach to this research challenges any pre-held assumptions and bias that I have, and allows exploration of difference, it enables a wider exploration of the whole field. Often the researchers' reactions may enable the participant to explore an aspect that they may not have chosen to discuss, if it had not been brought up by me in the interview. It is very important though, that I did not take my own reactions and thoughts as *the truth* for all (Chidiac, 2018; Perls, 1969). It is just one view amongst many which can be explored further. Therefore, my willingness to accept that my views, assumptions experiences and beliefs were not true for others, was essential.

In order to elicit data as unbiased as possible by me as the researcher, the interviews were held with *deliberate naiveté* (Kvale and Brinkmann, 2009). However, as stated earlier, a Field Theory perspective would challenge that absolute bracketing is possible or even desirable, as it is omitting a part of the field conditions (Spinelli, 2005). The consideration in the implementation of the design is how can I enable the participant to give free and true responses without being constrained by my interpretations and bias, and yet how can I be true to the field conditions by introducing my own curiosity and experiences? In this case, the

format of the interviews used open questions and narrative, initially allowing emergent themes from the participants but then with follow up questions based on these or drawn from my own noticing and wonderings of the subject. Thus, interview schedules started with broad, general questions that allow the participant to set the parameters of the topic, not the other way around (Hefferson *et al.*, 2011). This is so that I did not impose my understanding of the phenomenon on the participant's narrative (Smith *et al.*, 2009).

Merleau-Ponty (2012) argues that our bodies are open and responsive to a meaningful environment, there is a particular form of bodily understanding of objects and environment. Similarly Seamon (2019) draws on the work of others (Finlay, 2009; Seamon, 2013; Toombs, 2001) regarding bodily responses: *'In considering the relationship between the lived body and place, one can speak of environmental embodiment—in other words, the various lived ways, sensorily and motility-wise, that the body in its pre-reflective perceptual presence encounters and reciprocates with the world at hand, especially its environmental and place dimensions'*. Similarly, the Field Theory concept of embodiment (Joyce & Sills, 2002; Parlett, 2015) highlights using 'self as instrument' (Cheung-Judge, 2012) when gathering data. This is a difficult area to capture. Embodiment is 'of the moment' and is particularly difficult to recall with accuracy or granularity (Kepner, 1999). Participants may be unused to describing bodily sensations other than broad generalisations such as *'I was stressed'* or *'I couldn't sleep'*. However, this data alone can indicate how aware participants were of their own embodiment and how much attention was paid to it as significant in engaging with Wicked Problems. The scope of this research, however, is not to carry out a full embodiment study, but included any comments from participants that may throw light on their experiences of Wicked Problems.

4.3.1. Myself as researcher in the field.

It is important then that I, as the researcher, stay aware of my own responses, bias and frames, part of which is my 'history' that I bring with me into this research. My interest in Wicked Problems was sparked by working with Keith Grint when I was running a senior leadership programme for the NHS. What he explained rang many bells for my experience of working in OD. I arrive steeped in Gestalt philosophy, the work of Fritz Perls and Kurt Lewin, having spent over six years training in this and teaching its application to organisational systems, followed by thirty years of applying this in my work as an Organisation Development consultant and leader. I am aware that the beliefs and assumptions of a Gestalt approach are

well ingrained in my thinking and usually now out of awareness. I am also aware that even when using these approaches consciously, I fully believe in them and now find it difficult to see where this approach is lacking. I needed therefore to notice when this was impacting on my interventions in interviews and during the coding and analysis. I am also aware that I have worked for part of the NHS as Head of Organisation Development for six years ending in 2019. I had my own thoughts ideas and observations about some of the Wicked Problems that the participants face. Whilst I attempted to 'bracket' these (Husserl, 1967), especially in terms of the direction of the interviews, I also paid attention to what these are, as part of the field and using self as instrument (Cheung-Judge, 2012) as the belief that I am working to is that my own 'noticing' and experiences are part of the field and, along with participants' experiences, form part of the whole picture. Where I was informed by my own responses is in any follow-up or probing questions about an element that a participant has brought up in our discussions and especially attracted my curiosity and attention.

4.4. Implications, tensions, and polarities in these research choices.

There is a possible tension or polarity, a Field Theory construct (Joyce & Sills, 2002), in the research as proposed. On the one hand the Field Theory lens clearly is led from a phenomenologist perspective where understanding participants' framing process, without pre-judgement, is important. However, this research also already has data, opinions, and information from a number of writers on this subject (see Chapter 2, table 2ii). The challenge for me here was to balance these and manage the transition between them smoothly. As stated, the research is informed by an interpretive philosophy and a phenomenological approach, which in turn lends itself to methodology of an *inductive* approach to theory development, that is, forming a general conclusion based on what is known or observed. However, the research also aims to validate findings from previous research which lends itself to a more *deductive* approach, to test an existing theory by using research methods specifically designed for the purpose of testing a concept or theory (Saunders *et al.*, 2019). On the one hand the emic approach (Headland *et al.*, 1990) draws from and is reported from the views of the participants, and then later on draws in an etic (Headland *et al.*, 1990) manner from the views of writers and researchers on Wicked Problem literature and Field Theory literature (Fetterman, 1998). The tension and the work of this research is to bring these polarities together and draw summaries and conclusions from them. This is captured in the

IPA methodology, where there were three cycles of coding and analysis on the data, one from the participants' responses and another drawing from the academic writing and publications (see table 2ii in Chapter 2 and table 3ii in Chapter 3).

Figure 4A graphically displays the process by which this happened. Firstly, an inductive and emic process, using open questions, letting the participant lead the direction, narrative, and dialogue, then secondly, using statement cards, probing and summaries, a more deductive and etic process. This later element of the interviews had two purposes. It gave the participants an opportunity to validate, confirm or add to answers that they had discussed in the earlier part of the interviews. It also had a substantial benefit of drawing from lifeworld experience and interpretations from participants *and* use published ideas and thoughts, so that each of these can inform the other, be compared, validated, and developed to achieve the goals of this study.

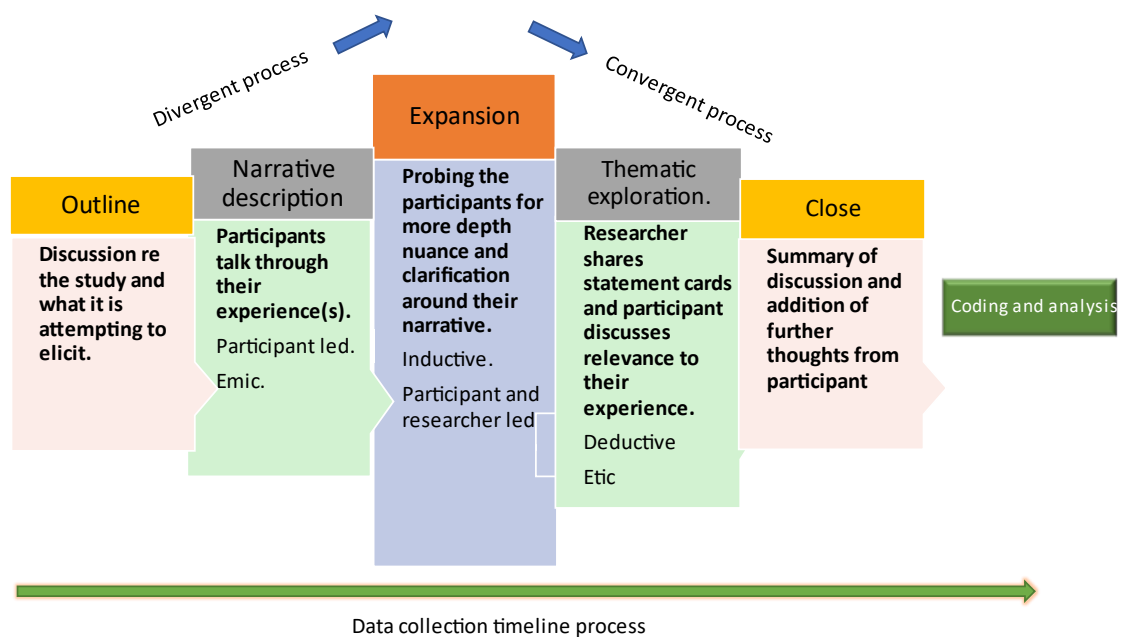


Figure 4A. The process and flow for this research.

As the data collection concluded and moved towards the coding and analysis stage, then the research method became more convergent around themes. Being cognitive of these approaches, firstly, allows more informed decision about the research design, methodology, questions asked, coding and analysis methods (Easterby-Smith *et al.*, 2012). Secondly, while an approach to reasoning draws from a philosophical stand and from practical constraints, it

also reflected my own preferences and ideas (Hakim, 2000). The interests and needs of the researcher are central to the fieldwork (Buchanan *et al.*, 2012). Thirdly, understanding these approaches allowed me to adapt and cater for constraints that may, for example, be practical, such as the non-availability of an existing theory or limited access to data. This then is reflected in the methods employed as outlined in section 4.5.

4.5. Data collection methods.

The data collection process is designed to elicit views and experiences that enabled the research to understand the research questions/objectives explained in Chapter 1 section 1.5.

4.5.1. The data collection interviews.

The data collection element of this research utilised Semi-structured interviews, using phenomenological interviewing, and an inductive assumption. The first part of these interviews was divergent in nature and the second part of the interview used a convergent process. This focussed on the themes from past research (see table 2ii Chapter 2) and from Field Theory principles (see table 3ii Chapter 3).

Recruitment of the participants.

The participant group was drawn from three main sources, the exact identities of these are not made explicit due to confidentiality. However, they are:

- An ALB (Arm's Length Body) of the NHS, carrying out a national and unique medical functions. Approximately 5000 employees.
- NHS Organisational Development professionals.
- A large national care and care home provider with approximately 4800 employees.

These were chosen to reflect two essential elements in the recruitment of participants:

Firstly, that a phenomenological research study such as this, needs to select participants from a homogeneous sample (Alasa, 2017). Whilst individual responses are elicited, the research is intending to find area of commonality in these experiences. The participants all work in healthcare and care, in some form of leadership when engaging with Wicked Problems and each person holds some organisational responsibility for addressing such problems. Secondly, it is essential that participants have experienced the phenomenon (Creswell, 2014).

Both of these groups comprise people who are currently engaging with Wicked Problems as part of their work. They represent a wide range of professions, operational duties and responsibilities and hence have different perspectives on the problems being addressed. They do not work together on a daily basis. As they do not all work in the same team, they are likely to be handling what they know/don't know in a variety of ways. They all have different backgrounds and length of service. Many, but not all, have worked in healthcare environments prior to their current position. There are a number of diverse functions, with different histories, objectives, and financial structures. They had, therefore, have different experiences, views, and Wicked Problems to engage with. Norton (2012) names conflicting values and interests that lead individuals to view Wicked Problems very differently. Head (2019) names these plus the complexity of interrelatedness and the changing nature of a problem as part of the configuration that may lead to it being considered wicked. It is the width of these experiences that enable the research to understand and record a wide diversity of experience.

The OD specialists engage with complex ongoing and often unresolvable problems as a large part of their work. For example, 'Culture Change' could be one such Wicked Problem that they regularly work with. Often this is unresolvable, complicated, difficult to define, ever-changing and without an end point, many of the elements associated with Wicked Problems (Rittel & Webber, 1973). There may be an added richness to this, which may add depth to the data, as the OD specialists also help *others* to address Wicked Problems. The OD specialists are likely to have broader experience across a wide range of Wicked Problems which provided an interesting balance with the 'operational experience' of the leaders.

Participant number (in no particular order)	Job type	Background
1	CEO	Nursing and Nursing management
2	Head of function	Commercial leadership
3	Director	Nursing and Nursing management
4	Head of function	Nursing and Nursing management
5	Head of function	Commercial management
6	Head of function	Commercial management
7	Head of function	Public sector OD
8	Head of function	Commercial OD
9	OD specialist	Commercial OD
10	Director	Public sector leadership
11	Project specialist	Nursing and Nursing management
12	Head of function	Nursing and Nursing management
13	Director	Commercial leadership
14	Team leader	Nursing and Nursing management
15	Team leader	Nursing and Nursing management
16	OD specialist	Commercial OD

Table 4i. Participants in the study, their position and background.

4.5.2. Sample size.

There are various accounts and opinions of interview numbers when the research utilises a phenomenological approach. Smith *et al.*, (2009) state that a phenomenological research study can conduct semi-structured and unstructured interviews with as many as twenty five participants, but as few as two. Creswell (2007) states that he has seen sample size of 1 (Dukes, 1984) to 325 (Polkinhorne, 1989). Reiman (1986) recommends ten participants. There does seem to be general agreement that a small sample is needed when understanding the lived experiences, giving more opportunity to focus energy, time, and commitment on depth and graduality. According to Creswell (2014), in a phenomenological research study, the important point is to describe and analyse the meaning of the phenomenon for a small number of individuals who have experienced it. – in this case engaging with Wicked Problems. Importantly, utilising a phenomenological research approach, the essence is to get ‘rich’ descriptions of the lived experiences of the research participants (Geertz, 1973). The issue is quality and depth rather than quantity and given the complexity of Wicked Problems and experiencing these from a human perspective, phenomenological studies benefit from a

concentrated focus on a small number of cases (Smith *et al.*, 2009). So, the key consideration with this study, is to produce a detailed account of individual experience.

For this research, the numbers of participants were sixteen. This is a balance which:

- Gave a sample of the population that enabled good representative data.
- Allowed time for a group of busy and geographically diverse people to be interviewed in the timescales.
- Allowed the time for the transcripts to be properly coded and analysed.
- Allowed for other field/environment data to be considered as part of the study.

4.5.3. Permissions.

Agreement was given to proceed from the CEO of the NHS ALB. Verbal agreement was given by the Director and also Head of Organisation Development in NHS ALB. Verbal agreement was received from Director of the care and care home organisation. Individuals were all given the opportunity to participate or not, without having to provide reasons. All the above wanted to be included, however, there were three others that due to illness, timescales and availability could not take part. The research has been passed through the NHS HRA (Health Research Authority) tools, which assess the proposed research. They have fed back that this research:

1. Does constitute 'research' ([Appendix 4F](#)).
2. Does not need NHS REC review to proceed ([Appendix 4F](#)).

Permissions to proceed were all gained via the University of Suffolk ethics committee ([Appendix 4E](#)). Permissions to proceed were gained from all individuals utilising an approved form ([Appendix 4D](#)).

4.5.4. The interview Schedule.

Interviews (approx. 1hr 20mins average).

The interviews were carried out following an interpretative philosophy as shown [in Appendix 4B](#). A good phenomenological research interview can be described as 'a conversation with a purpose' (Smith *et al.*, 2009). The interviews needed to be long enough to elicit the data required, but also needs to consider the availability and time of the participants. The interview duration was approximately sixty to ninety minutes in duration per interview session (Smith

et al., 2009). The meetings were mainly face to face, with a back-up option of on-line. The location for the interviews (including the date, time, and place) was led by participant choice.

The interviews followed the following format:

Step 1. [Set up \(5 mins\)](#).

Participants were given the background to the research, what is being researched (in broad terms). They were shown and discussed the issues around confidentiality, plus the steps they can take if they have any concerns (this reiterated the formal invitation and 'participant information' already send to them).

A key element here was to establish rapport (Smith *et al.*, 2009), and a conversational type of culture for the interview.

Step 2. – [Narrative discussion – \(40 mins\)](#).

Participants were asked to think of a time when they have had to engage with a seemingly unresolvable/ongoing problem in their work. They were asked to talk through that experience, including how they engaged with it and (if relevant), how they overcame it.

The aim of this narrative part of the interview was to understand how the participant experienced Wicked Problems in relation to principle of possible relevance and the principle of organisation (Parlett, 2007) within the field as they see it, whilst allowing the participant to lead the direction of the discussion in the free flow phenomenology of a narrative. It allowed a thematic analysis to follow. Whilst this research does use narrative to elicit experience, it is not using story telling (Thanh and Filipi, 2020) as an explicit method of sensemaking (Mandelbaum, 2012; Stokoe and Edwards, 2006).

Only one or two central questions were asked at this stage, open questions, without reference to the literature or theory (Creswell, 2014), encouraging the participant to talk, describe, explain. These were interjected with a number of probing questions which elicited more detail on an aspect of the narrative discussed by the participant (Creswell, 2014).

In order to obtain descriptions of aspects of experience of people in the lifeworld, research questions and interview structure are designed to elicit both descriptive and evaluative (Giorgi, 1997) information. With a phenomenological approach, the identity of an experience can be perceived in many ways (Sokolowski, 2000). A single question may be not enough to

present the many aspects of an experience, and therefore I was prepared to ask more probing questions (Bevan, 2014). Through the responses, it can be seen how the participant interprets their experiences through descriptions of events and activities. It is through hearing a participant describe their experiences and interpretations of this reflected experience that insight was gained into the Wicked Problem experienced (Bevan, 2014). Narrative descriptions can also have this effect, and so the interviews for this research initially used narrative analysis to investigate these interpretations plus descriptive questions (Spradley, 1979).

Saunders *et al.*, (2019) describe narrative as a story. '*A personal account which interprets an event or sequence of events.*' This research collected this data as a whole description from participants via the first set of questions, rather than individual pieces of data from specific questions (Chase, 2011). This added sequence to the structure of the analysis, which show moving 'Ways of Being' through the timeline of engagement of a Wicked Problem. When the subjects described the same experience as others, then it allowed the analysis of the data to compare and contrast the construction of the events through different subjects. These descriptions enabled a potential discussion exploring their framing process in more depth. As a phenomenological and individual approach, this allowed multiple participants who experience similar events to tell their stories without any distortions or influences from others.

[Step 3. Thematic prompting questions/statement cards – \(30 mins\).](#)

The interviews now moved more towards a deductive phase. This was a deliberate change of approach. Participants were asked to pick a prompting statement card (see table 4ii below) at random. The prompting statements on each card represented one or more of the theoretical constructs for Wicked Problems and/or Field Theory. Table 4vii in appendices 4C demonstrates how theoretical constructs, from Field Theory and from Wicked Problem literature, were utilised to form statement/question cards.

<u>Prompt card statements.</u>
Prompt card 1 - <i>'Ultimately all problems are 'solvable'.</i>
Prompt card 2 - <i>'Unless I/we have the right tools and materials to resolve an issue, then it's not worth attempting to address it.'</i>
Prompt card 3 - <i>'Involving others tends to make addressing an issue more difficult.'</i>
Prompt card 4 - <i>'Any problem tends to have a single root cause'.</i>
Prompt card 5 - <i>'Once we have identified the problem, the solution becomes clear'.</i>
Prompt card 6 - <i>'My own thoughts/feelings/responses to the problem are not important in its resolution.'</i>
Prompt card 7 - <i>'Once I've engaged with this issue once it would be easy next time'.</i>
Prompt card 8 - <i>'When engaging with difficult issues, it is important to get others different views.'</i>
Prompt card - 9 <i>'Experimentation and failure to resolve are important pieces of learning.'</i>

Table 4ii – Prompt card statements.

Participants were asked to comment on the statements and then elaborate with examples from their own experience if possible.

This was a new direction in method, and some could say a move away from pure phenomenology. However, with each participant, an hour had already been spent following a purely phenomenological methodology and method. In part the prompt cards were an experiment, seeing if, by prompting more assertively, I could elicit even more understanding of their experiences. This was low risk, in that the phenomenological aspect of the interviews had already collected data. This, at worst, would collect nothing new, but could add significantly to data already collected. Seeing whether there might be more data that they had not yet had the opportunity to share and finally to confirm or refute what they had already said, which in itself, once highlighted, could further elicit more depth of understanding. See Chapter 8, section 8.5.1. for further reflections on the use of prompt cards.

Step 4 – Close – 5 mins.

The closing part was aimed at offering the participants the opportunity to say anything else that had arisen for them during the interview or anything else that they wanted to say:

- Ask – is there anything else that comes to mind that you think might be relevant?
- Explanation of what will happen next to the information.
- Re-iteration of their rights.
- Offer to share the results with them once the thesis is complete.

The interview schedule was merely the basis for a conversation, it was not intended to be prescriptive and certainly not limiting in the sense of overriding the expressed interests of the participant. It was important that the participant took the lead during the conversation. Often the resulting interview data was very different from what the I might have anticipated (Biggerstaff and Thompson, 2008).

4.6. Coding and Analysis.

4.6.1. What does coding aim to achieve?

Coding for a qualitative study seeks to investigate complexities of social interactions. It is inductive and explores ‘what’ ‘why’ and ‘how’ questions, as opposed to ‘how much’ and ‘how many’ preferred by quantitative studies (Tuffour 2017). Any qualitative research needs have a strong link between findings, the experiences of participants in relation to the phenomena being explored, and conclusions (Shenton, 2004). Coding aims to provide this link. The aim for this part of the research was to organise the data into easily understandable and searchable parts which can be utilised for actionable insights. This involves creating a system of codes/labels to assign to segments of the data, based on themes, concepts and ideas emerging from the data. This then allowed for more in-depth analysis.

Coding is the process of labelling data using a code that symbolises or summarises the meaning for that data (Saunders *et al.*, 2019). Whilst there are a variety of methods for coding – axial coding, categorising, data codes, focussed coding, open coding or selective coding etc (Saunders *et al.*, 2019), this study draws from IPA in its coding approach. This research is trying to understand how the participants’ experience the phenomena of Wicked Problems. In order to achieve this, it is utilising a phenomenological approach (Creswell, 2014) based on themes arising from the interviews.

Linneberg and Korsgaard (2019) outline six reasons why it is important to code:

Acquiring thorough insights into the data. By looking carefully at each sentence, it requires the researcher to gain a deeper understanding than just skim reading it, where nuances and more hidden data may be missed.

Making the data easily accessible and retrievable. Allowing for repeated examination at different times and with a different lens.

Sorting and structuring data. Allowing certain parts of the data to be highlighted, moved, and grouped.

Ensuring transparency (Bochner, 2018; Sinkovics et al., 2008). Allowing the researcher to show that the data is credible and trustworthy.

Ensuring validity. Maintaining a coherent link between the conclusions, the data, and the research objectives (Charmaz, 2014).

Giving a voice to the research participants (Charmaz, 2014). Allowing the participants to choose their own response in their own way.

Of importance here is understanding *what* is to be achieved. There are a number of elements that coding aims to achieve in this research. Noticing and observing patterns in the data and recording these, has been an iterative process where themes have emerged and even receded as the data is studied. Huberman and Miles (1994) have a focus on the process of coding especially that of noticing relationships and patterns amongst the themes, so one such purpose of this approach to coding in this study, is to note not only the themes but the constellation, co-dependency, and interconnectedness between them. Madison (2005) emphasises that coding needs to lead to a point of view or theoretical standpoint. This seems to be making the point that coding is carried out in order to enable analysis and some form of conclusions. From a Field Theory perspective, the coding needs not only to be identifying connectedness in the constellation of data, but also to offer the opportunity to view with *curiosity* rather than approaching the data to confirm a fixed held view, to see the data from a number of different perspectives (Huberman and Miles, 1994) and notice contrasts and comparisons. Corbin and Straus (2015) highlight the use of comparative analysis. In this study the experiences of the participants were one such comparison against both Wicked Problem literature and Field Theory principles. Finally, the aim of coding here is to find a way of representing the data in a way that is understandable to the reader (Creswell, 2007).

4.6.2. The approach utilised.

There are various strategies for developing a coding and analysis system, such as creating a priori codes based on literature or in vivo codes that emerge directly from the data itself. There are also various coding techniques, such as open coding, thematic coding, or discourse-based coding. Creswell and Roth (2017) summarise five approaches to data analysis and representation: Narrative, Phenomenology, Grounded Theory, Ethnography, Case study. He states that all of these have several common features, but also some distinctiveness. They all follow a process of:

- Data collection
- Data organising
- Reading and memorising
- Describing, classifying, interpreting
- Representing

The distinctiveness lies in *how* this is carried out. Literature from Phenomenology (Moustakas, 1994; Reiman 1986) and Grounded Theory (Straus and Corbin 1990, 1998) approaches have a more detailed and clarified process, with Ethnography and Narrative having the least structured procedures research (Ollernshaw and Creswell, 2014). There are also differences in language utilised. Creswell (2017) highlights that *open coding* in grounded theory is similar to *significant statements* in phenomenology and to *categorical aggregation* in case study research.

The approach chosen in the analysis and coding process in this study was based on an interpretive phenomenological analysis (IPA). This provided an organised, detailed, and plausible account of the meaning of the data. These codes were formed to identify any patterns in the data and eventually to draw these together into a structure. The structure was then transformed into a narrative account in the analysis in order to ascertain:

- What experiences are being described by the participant?
- Key features of these experiences?
- What do these mean to the participants and what sense are they making of them?
- How do these experiences support, refute or add to the literature around this topic?
- What are the implications and learning with regard to the research questions?

4.6.3. Why was IPA right for this study?

The approach used was IPA, sometimes referred to as *Phenomenological data analysis* (Moustakes, 1994, Polkinhorne, 1989). The aim of IPA is to uncover what a lived experience means to the individual through in-depth reflective inquiry (Smith *et al.*, 2009) and how participants make sense of this experience. IPA draws on phenomenological thinking, with the purpose to return 'to the things themselves' (Husserl, 2001. p168). However, IPA also acknowledges that we are each influenced by the worlds in which we live in and the experiences we encounter. Therefore, IPA is an interpretative process between the researcher and researched, allowing for an approach in this research which is in alignment with a Field Theory and Gestalt philosophy (Perls, 1969). IPA aims to explore a personal account rather than an objective record. In linking back to the aims of this research, it therefore enabled this research is to understand, at a deeper, more detailed, individual, and rich way, the interpretations that people make in their decision-making environment and the subsequent choices when engaging with the hard, complex and challenging problems that they face (see section 3.2). IPA offers this study the opportunity to go below surface-level description of findings to offer insightful interpretative accounts of the lived experiences of participants as it has an interest not only in what the participant says but also how they say it.

It has an emphasis on convergence and divergence of experiences (Tuffour, 2017), which allow for nuances in experience to be explored. In this sense then, IPA is particularly useful, in this research, for understanding phenomena which could, given other approaches, be missed (Peat *et al.*, 2019). Unlike other phenomenological research approaches, it offers this study, direction on how (see section 3.6.3) to approach a phenomenon of interest with guidance for sampling, data collection and analysis (Peat *et al.*, 2019), although as already stated there is some differences of opinion in the literature (see section 3.3.).

IPA allows for, (rather than discounts or dismisses), the researcher's experiences. Whilst Heidegger (1972) acknowledges bracketing from the researcher, he encourages the researcher to notice and acknowledge how their views, beliefs, perceptions and experiences, consistently reveal themselves throughout the process. In this way they can be used to enrich their interpretations rather than them being seen as a barrier (Peat *et al.*, 2019). It supports the approach of this study as it is very much in line with a Field Theory and Gestalt perspective

(Parlett 1991) as outlined earlier in section 4.2.2. Commonalities and disparities between the participants and researcher may reveal themselves as the experiential account is explored and subsequently enlighten the direction of enquiry (Gadamer, 1960).

In this research analysis, IPA enables the study to offer an interpretative analysis that is supported by a transparent evidence trail that maintains a clear connection between the data and interpretation (Smith *et al.*, 2009). This is evidenced in the notes and coding (see Figures 4C and 4D below).

IPA allows for analysis to be carried out at an individual level and validates the understanding of an individual's unique experience. However, it allows the data in this research to also be presented in a manner that highlights shared perceptions of experiences, thus shared themes, but also 'outliers' (Gladwell, 2008) can be understood, and their experiences analysed. *'The approach is suitable when a detailed in-depth view of a phenomenon is needed to explore a complex process and to illuminate the multifaceted nature of human experience'* (Tuffour, 2017 p2). It also, however, allows for multiple participants who experience similar phenomena, to tell their experiences and how sense is made of these (Alase, 2017).

4.6.4. Criticisms and considerations for using IPA.

IPA is a research methodology that has the potential in understanding and interpreting the experiences of people (Shinebourne *et al.*, 2009, 2010), because it offers practical and accessible guidelines in conducting phenomenological research (Smith *et al.*, 2003; 2009). However, it has methodological limitations and need to be considered.

IPA has been criticised for being too descriptive and not interpretative enough (Brocki *et al.*, 2006; Heffron *et al.*, 2011; Larkin *et al.*, 2006), however, increasingly it seems that the methodology does encourage a high level of interpretation (Smith *et al.*, 2009) even if in some studies, this is not strictly adhered to.

A question can be aimed at this methodology, as to whether it captures the real experiences of an individual or, due to time elapsed, their memories of it. It relies on the recall of individuals which may or may not be accurate. The participant may or may not have the language and communication skills to accurately reflect the actual experience (Tuffour, 2017). Understanding pure experience as advocated by Husserl (2001) is elusive because experience is usually witnessed after the event has already happened. In order to address this, this

research needed to pay particular attention to collect rich and detailed data even when this meant getting different ways to elicit the same data from a participant, through probing questions, re-phrased questions, metaphors, and reflecting back answers.

IPA, with a focus on perceptions, can be criticised for not having a large enough focus on *why* the experiences occur (Tuffour, 2017), such as socio-cultural or historic events (Willig, 2008). This is important given that the research asserts that field conditions are relevant, however, by using hermeneutic and idiographic focus, it elicited some field and cultural aspects that are of relevance. This research is not meant to achieve a full field condition study of an individual, so whilst the question '*why are they experiencing it this way?*' is important to help understand context, it is not within the main remit of this research.

IPA has been criticised for being ambiguous, as well as lacking standardization (Giorgi, 2010), and there does not still seem to be universal agreement about how to undertake phenomenological research (Tuffour, 2017). For example, whilst Husserl's (1967) approach to phenomenology requires the researcher to bracket or put aside past knowledge or presuppositions, approaches adopted by others, such as Gadamer (1960), reject the idea of suspending personal opinions in favour of interpretation of experiences (Smith *et al.*, 2009; Finlay, 2011). The notion that the human experience can be examined by setting aside pre-conceived knowledge, opinions, and observations, has been dismissed as simplistic and unattainable (Spinelli, 2005). From a Field Theory perspective, total bracketing is neither achievable nor desirable. Instead, it is better to work with awareness of your own views and understand that bias that you, as researcher could bring. Then to realise that whilst this is an important part of the field, it may not be the same view as others have. So, the researcher, however clear they are regarding how they will use IPA, will still draw disagreement over method from others. The way forward is to choose a method that the I believe is right in this case and to have a clear practical and theoretical justification for this approach. In this case, IPA with a Field Theory influence is such an approach.

4.6.5. How was IPA applied in this research?

There are eight stages that I took the analysis through, using IPA, once the recorded interviews were transcribed (adapted from Peat *et al.*, 2019):

1. Reading and rereading: the data or transcript of a *single* interview. (See *stage 1 analysis* below)

2. Initial noting: as I read and listened to the interview, observations were noted. These included any observations about language or expression, any ‘wonderings’, reactions, questions, or thoughts from me as well as any observations regarding statements of particular interest. The analysis revolved around the close listening, reading, and re-reading of the text (Smith *et al.*, 1999).

3. Developing emergent themes: I then divided data into broad themes relating to the observational ‘notes’ of the interview. Interview themes that were identified did not all match those on the pre-interview notes or the prompt cards. The transcripts from the interviews were re-read and analysed several times to highlight ‘significant statements’ (Creswell, 2007), or quotes which helped me understand how the participants experienced the Wicked Problem, with a mindset of *Horizontalisation* (Mousakas, 1994), or equal significance.

4. Searching for connections across emergent themes: I clustered the ‘chunks of data’ and ‘notes’ together and considered how they related to each other. Next these were formed into *Clusters of Meaning* (Creswell, 2007) as this was done, new themes or definitions of themes became figural.

5. Moving to the next interview: the themes derived from the previous interview were ‘bracketed’ as the new case was considered with ‘open and fresh eyes’ (as far as possible) again becoming immersed in the new interview. Steps 1–4 were undertaken for each interview, before progressing to the next stages of the analysis.

6. Seeking patterns across cases: I analysed if there were any themes/qualities identifiable across interviews. These were highlighted making a note of any differences or variations on a theme. It was at this stage that the first version of Figure 4B (below) was formulated.

7. Moving the interpretation to a deeper level, reviewing the themes across the data set and by using both Atlas.ti, the initial visual representation and notes from interviews, further refinement and depth was obtained from the data.

8. Refer to existing concepts. In the final stage of analysis, I drew from existing literature, concepts, and theory to further explore the data (see Table 2ii Chapter 2 and Table 3ii Chapter 3). The conclusions and findings have traceable links as sampled in Figures 4C and 4D below.

Coding is used to categorise data with similar meanings and was used after each stage of the data collection process. The purpose of coding is to help find patterns in the evidence supplied by the participants in order to produce theory. Coding for this research was used to record developing and emergent themes in an iterative manner. It was, however, dynamic and changed as the data collection progresses. As this research is using an interpretivist approach, a visual record was kept in line with the quality criteria of dependability (Lincoln & Guba, 1985) to keep a record of emerging themes.

4.6.6. The process adopted in this research was assisted by utilising Atlas.ti.

The coding and analysis process used was supported by utilising Atlas.ti. The coding itself was still carried out by myself, and as such, I identified a piece of text, then assigned a code label and then matched this to other pieces of text that have the same assigned meaning. A coding software will not do this for you. What it does do, is provide a means for organising and storing data in an easily accessible place. This then allowed access in a multitude of ways to group and access data. For example, by phrase or word, by individual's transcript or by thematic groups across all transcripts. This has enabled me to read each transcript in detail rather than skimming the data, as well as being able to take a more holistic view. Although time consuming, the easy access to data probably sped up the process rather than having to trawl through recordings or transcripts to find any supporting data in the analysis.

On the downside of using Atlas.ti as a coding and analysing tool, its analysis tools are difficult to utilise as a relative beginner to the program. They are not intuitively presented and as such once the data was organised and coded, it was easier to consider the ramifications and analysis without the use of the program. The tools provided for analysis, encourage a more quantitative analysis, using tools such as word repetition count, and frequency charts. So, from an interpretivist and a Field Theory philosophy, they were less helpful tools.

Phases of Thematic content analysis	Steps in ATLAS.ti
First phase: Pre-analysis.	<ul style="list-style-type: none"> • Creating the project. • Adding documents. • Grouping documents into document groups. • Writing first memos on the overall project aim including research questions.
Second phase: Material exploration.	<ul style="list-style-type: none"> • Reading the data, selecting data segments, and creating quotations. Creating and applying codes. • Writing memos and comments. • Grouping codes and memos.
Third phase: Interpretation.	<ul style="list-style-type: none"> • Exploring the coded data using various analysis tools. • Linking quotations, codes, and memos on the conceptual level.

Table 4iii. Applying the various stages of content analysis in Atlas.ti (from Friese, 2019).

Using transcription software and by hand, recorded interviews were transferred into text documents and then placed into Atlas.ti. As a first stage, each transcript was then listened to for any points of interest arising without any preconceptions about what these might be. These were then noted in Atlas.ti as possible codes. As this was carried out, a number of these were repeatedly mentioned by participants, and as such, were considered as themes. The aim of this first round of coding was to develop a code list describing the themes (Friese, 2019), which is those codes that were mentioned more frequently. A stage two review of the transcripts was then carried out to ascertain whether any themes related to Wicked Problem and Field Theory principles. The aim of a stage two analysis was to look at the data and codes from a different angle (Friese, 2019). Stage one and two produced 146 possible codes. 146 was too many codes and so it was at this stage 2 coding that they were formed into the sixteen code families, by grouping the individual codes. This, as Friese (2019) mentions, was a recursive process, but rather than developing sub-themes, the process undertaken here was more convergent into large segments and groupings of code. Using a whiteboard as an ongoing method of examining and re-examining the codings, I developed the attached coding visual:

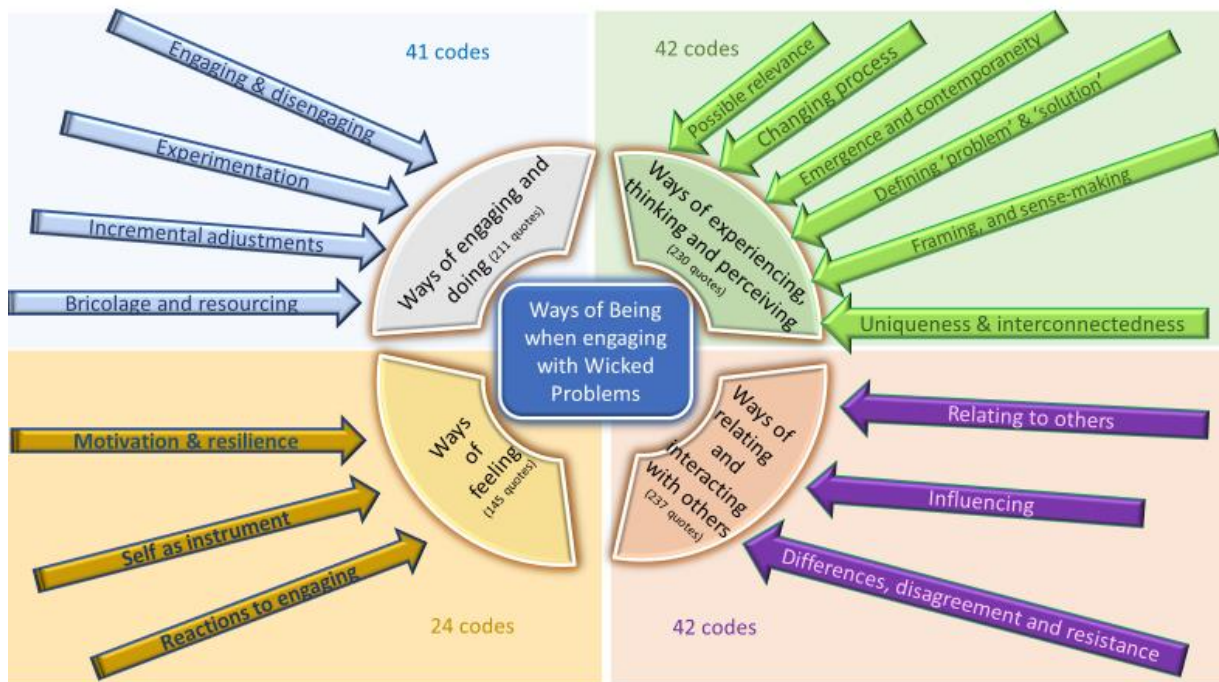


Figure 4B. The development of code groupings (work in progress carried out during the coding and analysis phase of the research).

On a third iteration of coding, where my focus was on the holistic view, the themes seemed to fall into the four broad quartiles shown above, which went on to form the ‘Ways of Being’ definition in Chapter 1:

- Ways of perceiving Wicked Problems – constructs, frames, preconceptions and assumptions. (42 themes from the coding, 6 code families)
- Ways of engaging with Wicked Problems – How engagement and interventions happen and are chosen. (41 themes from coding, 4 code families)
- Ways of feeling when engaged with Wicked Problems – Emotions reactions, awareness and understanding self. (24 themes from the coding, 3 code families)
- Ways of relating to others and Wicked Problems – Abilities, Skills, mindsets, relationships and contact with others. (42 themes arising from the coding, 3 code families)

The code themes were further grouped into sixteen code ‘families’, using Atlas.ti. This three ways of coding is shown on the screenshot (figure 4C) below, the left-hand column (red dots) demonstrating the four groups, the middle column showing the sixteen code families, and the right-hand column showing a sample of code themes:

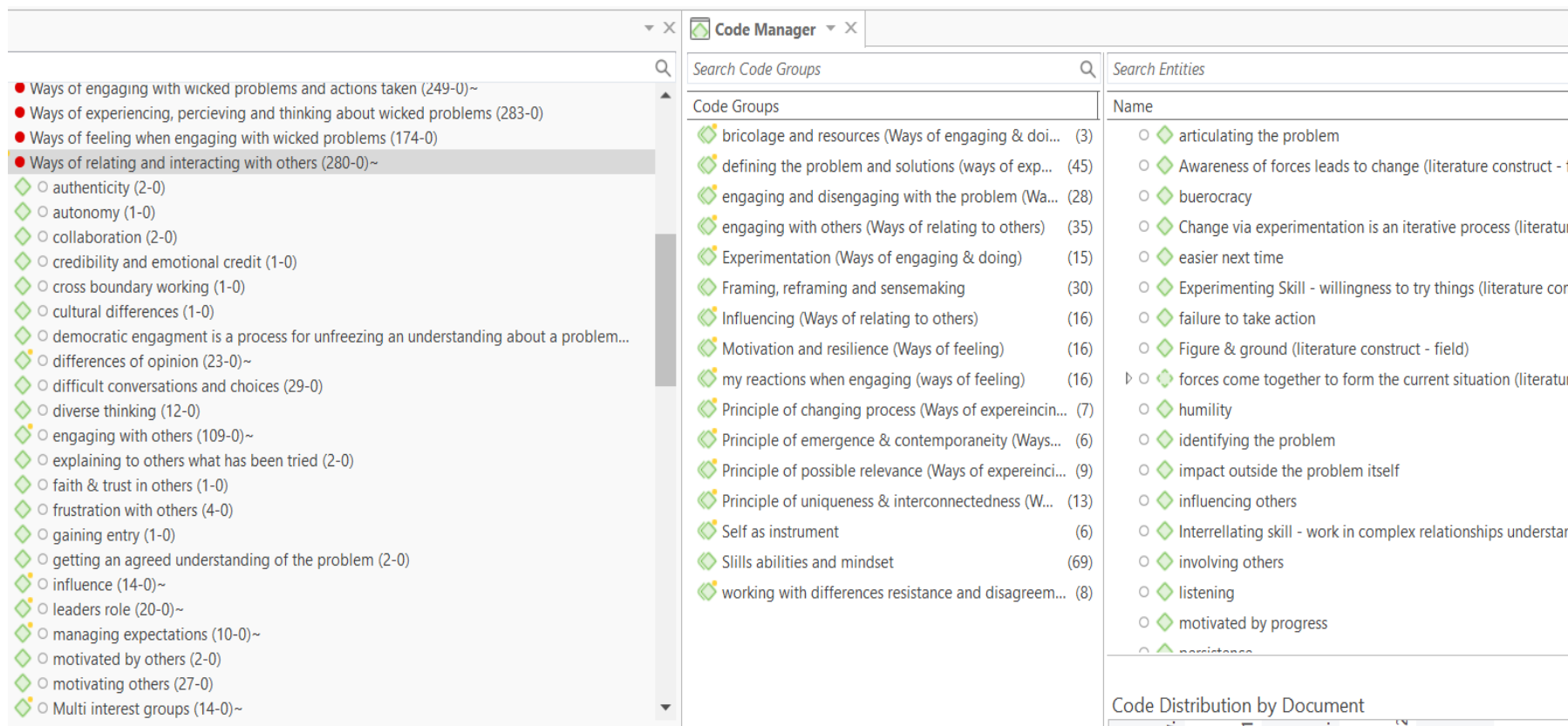


Figure 4C – A screenshot from Atlas.ti showing the three code groupings.

Although Atlas.ti makes the coding process appear organised, linear, and neat. In reality the codes overlap, are co-dependant, and messy! The groupings are loose bondings of interest that allow for analysis and further thought to be applied. Each time the transcripts were read, the coding and analysis developed and changed incrementally. Each transcript can now be read to ascertain the codes that a passage relates to (as shown below in figure 4D below). Alternatively, a code can be viewed to elicit the relative statements, which assists with the analysis.

<p>11:20 11 85 in (interview 020322</p> <p>I suppose the honest answer is that if you don't want to change or don't move with teh times, you'll be left behind. Because actually, they'll always be somebody something someone, some new bright, shiny thing, piece of equipment. Actually will change things. And I think, you know, let's be honest, you know, the NHS feels like we're on a merry go round, even in its management structure. We change things and we change again, and we change again until we're back full circle. And if you think oh, here we go again. So there is an element of fatigue change in the NHS, but you've got to go with it. Because actually, you'll still be left behind if you don't go with it. you know, just that</p>	<p>2 Codings</p> <ul style="list-style-type: none"> ◇ bigger picture ◇ constant change
<p>13:1 11 37 in . . . interview 150322</p> <p>And we can change the law, we can throw infrastructure, we can diversify the specialist nurse role. So we got concentrated specialist requesters. There have been many, many things that have come in to try and improve, improve it. We you know, whether it's using digital tools to support donation conversations, whether it's engaging with clinicians, all of these things, it's still not giving us any significant progress. Its definitely wicked because let's face it, it's probably got lots of causes. It probably hasn't got one solution. Yeah, you know, it's not something that we're not in control of either. This is kind of like a we can do the best we can from an NHS side, but it also involves significant societal change of behaviour. And support towards it.</p>	<p>3 Codings</p> <ul style="list-style-type: none"> ◇ bigger picture ◇ multi solution focus ◇ understanding the nature of the problem
<p>15:1 11 43 in 060422 interview</p> <p>I guess one of the things I've got better at is starting to do to take that step back. looking for patterns, both in terms of what's there and what's not there. And I find that that's helpful in terms of my sense making of what's, what's going on.</p>	<p>5 Codings</p> <ul style="list-style-type: none"> ◇ bigger picture ◇ patterns ◇ seeing the gaps ◇ sense making

Figure 4D – Screenshot showing the link between a sample of text and codes.

Themes from Field Theory concepts were also used (as represented in Table 3iii Chapter 3), however, in using a Field Theory lens, which in turn draws largely from phenomenology and is interested in the *whole* field (Parlett, 1997), the methods utilised to gather data needs to be able to elicit this information and hence, using the IPA method, the analysis of the transcripts in stage 2 of coding initially also focussed on three areas (Stevenson, 2018):

Intrapersonal influences – The mindset, assumptions, social constructs, needs, view of self, characteristics, and frames of an individual who engages with Wicked Problems.

Interpersonal influences – The approach, abilities, skills, style, assumptions, influence approach, relational style of an individual who engages with Wicked Problems.

Environment/small or large system influence - Given a whole system view of this (in keeping with a Field Theory lens) the research modelled the assumption that all elements of the field are relevant, predominantly looked at the individual's relationship to these elements and the dynamics of their attention towards these when engaging with Wicked Problems.

These three levels are the focus of Field Theory (Stevenson, 2018) and the interplay and interrelatedness between them enlightens the configuration of the field (Stevenson, 2018). In the field, all these are present and therefore the interviews allowed data on each of these to emerge through narrative, questions, and probing. While attempting to understand how an individual constructs their reality, these are useful indicators to the parts of the field that become figural or ground for an individual. This further allowed the probing within the interviews to focus on more in-depth exploration within each of these. The interplay between aspects of these three were also of interest, for example if one or more of these areas dominated the views of participants in relation to the problems that they face. Whilst these three areas were initially used to guide the questions in the interviews, in the analysis any other themes or patterns arising also led to further understanding.

Coding and analysis are inextricably linked. But analysis would be difficult to carry out without the coding (Friese, 2019). The aim of a thematic analysis is to create a systematic and full record of the codings from interviews and observations (Galanis, 2018) leading to an explanation of the data. As discussed above, axial coding (breaking down of core themes during qualitative data analysis) and selective coding (selecting one central category that connects all the codes from your analysis and captures the essence of your research) were

both used in this phase of the study. The analysis in this study sought to answer several questions including:

- What are the concepts that these codes intimate?
- What are recurring themes?
- What seems to be important to the subjects or throughout the theory?
- What patterns or trends are there?
- How are different sets of codes seemingly related?
- What is the essence of a theme?
- Is there a hierarchy of themes?
- What are the outliers?

Following the Field Theory principle of possible relevance, not only did this analysis look at the ‘what’ of the narrative, but there was also valuable data in ‘how’ it is said. Each narrative was analysed individually first before a cross narrative analysis was carried out. The analysis was carried out initially using the four quartiles of the Ways of Being. Once an analysis for each of these quartiles was completed, themes and codes were reviewed for cross-quartile dependencies and links. Each time this was carried out the analysis was refined and eventually led to the conclusions in Chapters 5, 6, and 7. Noting here that due to restrictions of word count, time, and resource, not every theme was analysed and written into this thesis. There is opportunity in this data to carry out further analysis on different themes.

4.7. Ensuring quality of research design.

Drawing on Yardley’s (2000, 2008) four principles of validity in qualitative research (sensitivity to context; commitment and rigour; transparency and coherence; and impact and importance), the data in this case is going through three ‘loops’ of validity. First, the initial data collection is Emic – that is led by the subjects internal constructed views with little ‘outside’ directiveness given by me. Second, the 2nd part of the interview allowed the subjects to validate or not the themes collected. Third, the data was compared with that found out by other researchers and writers on Wicked Problems (see Appendices 2C) and Field Theory (see Appendices 3C), where the learning from the research is validated from others’ research (Buchanan *et al.*, 2012).

This research followed an alternative way of ensuring quality in the research design, using Lincoln & Guba (1985) concept of *dependability* (in place of reliability) and *credibility* (in place of internal validity). Lincoln *et al.*, (2011) have introduced the concept of ‘*authentic criteria*’ as a constructivist alternative to validity. This research also used triangulation as part of validation to add depth, breadth, complexity, and richness to the results (Denzin, 2012; Denzin and Lincoln, 2018). Table 4iv. below (adapted from Saunders *et al.*, 2019. p217) shows how these were used in this research.

Table 4iv. Quality criteria for this qualitative research.

<u>Criteria</u>	<u>Method</u>
Dependability	Recording all the changes made during the data collection process to produce a reliable account of the emerging focus. Used as an interpretivist equivalent to reliability. Analysis and conclusions can be directly linked to participants’ views from the interviews.
Credibility	Ensuring the representations of the socially constructed realities match what the subjects intended. Achieved by involvement of the subjects and checking interpretations with the subjects, as part of active listening during interviews and as part of the match between 1 st and 2 nd sections of each interview.
Transferability	Providing a full description of the research questions, design, findings and interpretations, enabling the reader to determine the transferability of the study to other settings.
Triangulation	Using two or more independent sources of data in order to help ensure validity/credibility/authenticity. This was achieved here by using subjects across different teams/departments/levels of hierarchy.

Finally, the overall aim in quality was to produce findings that are credible and trustworthy (Chiovitti and Piran, 2003). This study has focussed on consistency across multiple participants and by using an open question format to allow the participant to voice other and different views gathering a rounded view of the phenomena being studied (Shih, 1998).

4.8. Chapter summary.

This chapter has outlined the research methods, methodology employed and its underlying philosophy. It discusses the philosophical underpinning of the research design, including the influences on the selection of phenomenology as a research methodology and approaches. It shows how Field Theory has informed not only the content of the interviews discussed in Chapters 5, 6, 7, but also how it has influenced the methodology and method chosen. The chapter then examines the implications of these approaches on the choice of method utilised. This is followed by an outline regarding research data collection methods via a two-part interview using phenomenological exploration and moving to the use of prompting statements based on Wicked Problem and Field Theory (see Chapters 1 and 2). Finally, the chapter progresses to discuss the coding and analysis process utilising Atlas.ti in part.

This chapter provides the reader with an understanding for how the data was collected, coded, analysed in order to provide a greater understanding of the answers to the research questions which are concluded in the following analysis chapters.

Chapter 5. Analysis - The use of framing and re-framing to understand a Wicked Problem.

5.1. Introduction.

From the interviews and the way in which participants began to describe the Wicked Problems they were addressing, a theme emerged regarding their motivation. What kept leaders engaged and motivated to work with something in which there would never be an *end*, at least in the conventional understanding of a complete ‘full stop’ to the problem? What kept leaders engaged when there were many parties with vested interests and strongly held opinions, which often led to dissent and difficult conversations and often where the assumption from others was that it was a tame problem that can be fully resolved? As well as this dissent, participants described the situation where they got very little recognition and praise. In short, viewed a certain way, these problems could appear very unattractive to work with, a career ‘risk’, especially in terms of organisational politics and in terms of it being seen as a failure to resolve, and this was *if* the participant had a choice about working with the problem. This in turn then led to further investigation and probing around the questions ‘*what was it that attracted you to engaging with this problem and what keeps you motivated to address this problem?*’ What became clear was that both *why* engage with a Wicked Problem and given the circumstances, *how* people framed the problem, are key considerations in answer, to this question. This does, however, suggest that *why?* is a conscious choice, which was not always the case. What emerged from these questions were insights into the framing of a Wicked Problem.

As outlined in Chapter 1, Termeer *et al.* (2015) ask three questions which this research seeks to take forward. It is these that led to research question 2, which this chapter explores:

RQ 2. - How do leaders view Wicked Problems and how is this reflected in their Ways of Being?

This chapter firstly explores the concept of framing when applied to Wicked Problem thinking. It then explores three functions that the research participants described regarding how and why they used framing to sense make. It uses a Field Theory lens to analyse and explore this, identifying the field factors that impact on how leaders choose to frame a Wicked Problem.

Throughout, it highlights Ways of Being for framing, which is further explored in Chapter 7. This chapter is placed prior to Chapter 7 which has a focus on the main research question of Ways of Being. This is because the findings and analysis of both this chapter and Chapter 6, build and add to the analysis and findings on Ways of Being discussed in Chapter 7.

5.2. What is framing?

Framing is defined as both the ability to describe and to shape the attributed meaning of a subject, to judge its character and significance. To hold the frame of a subject is to choose one particular meaning (or set of meanings) over another. When we share our frames with others, we manage meaning because we assert that our interpretations should be taken as real over other possible interpretations. (Entman, 1993; Fairhurst and Sarr, 1996; Pondy, 1978;). This can reflect one form of power in a collaborative setting as the ability to influence the collaborative frame or the frame of others. Framing allows the ‘framer’, in this case a person engaging with a Wicked Problem, to shape the meaning of a subject and to judge its character and significance (Fairhurst, 2005). The same problem situation can be framed from different reference points, leading to different representations that, in turn, can lead to different and inconsistent behaviour (Maule *et al.*, 2007). Language is important. From the power of the words we choose, but also how we interpret and act according to this interpretation. It is both a cognitive process and a communicative activity defined by selection of particular aspects, emphasis, interpretation, and exclusion of other points (Fairhurst, 2005). Language is one way in which we have the ability to try and influence the relationships that we have and in the case of a leader how they present a frame of a problem. This is tempered by the willingness of the listener to be open to the message and therefore the leader’s interpretation of the frame.

Framing is a process that everyone carries out as part of their sensemaking. However, leaders can also use this framing to influence others. Further, framing is more than just a leadership ability. Apart from its effectiveness, it brings to question a number of other considerations. Bringing people together in a collaborative framing attempt, brings a tension of respecting and encouraging diversity of thought and at the same time attempting to get a shared and agreed understanding. This tension also opens up the possibility of inadvertent or deliberate misunderstanding which, through the infectious nature of ‘sticky messages’ (Gladwell, 2000), spreads throughout an organisation. Entman (1993) points out the moral

considerations of such a process and defines framing as '*particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation*', a point that becomes very relevant once we see the responses into why people gain and maintain motivation. Fairhurst (2005) points out the role of framing in helping leaders and managers understand their role as managers of meaning and co-constructors of reality, especially in turbulent and changing environments, using framing to influence the context under which turbulence was seen. Schein (1993) describes framing in its use for finding commonality and clarifying misunderstandings which can prevent employees from identifying and dealing with problems in a common way.

From the research data and analysis at this point, a number of themes and questions started to emerge. Firstly, as stated above, there was clearly a link between the potentially difficult position of leading a Wicked Problem, and personal motivation. Secondly, there was an emerging theme around the link between framing and the leader attempting to influence the field conditions surrounding the Wicked Problem. So framing was both an unconscious process but also a conscious choice in order to influence support engagement with the Wicked Problem. The following discusses the findings from the data in terms of both *how* and *why* leaders framed a Wicked Problem. In Wicked Problem literature there is little on framing as a process. This chapter takes a theoretical basis from framing literature and then draws substantially from Field Theory and Gestalt principles to make sense of the data in terms of Wicked Problems.

Figure 5A below outlines the main themes emerging from the analysis data:

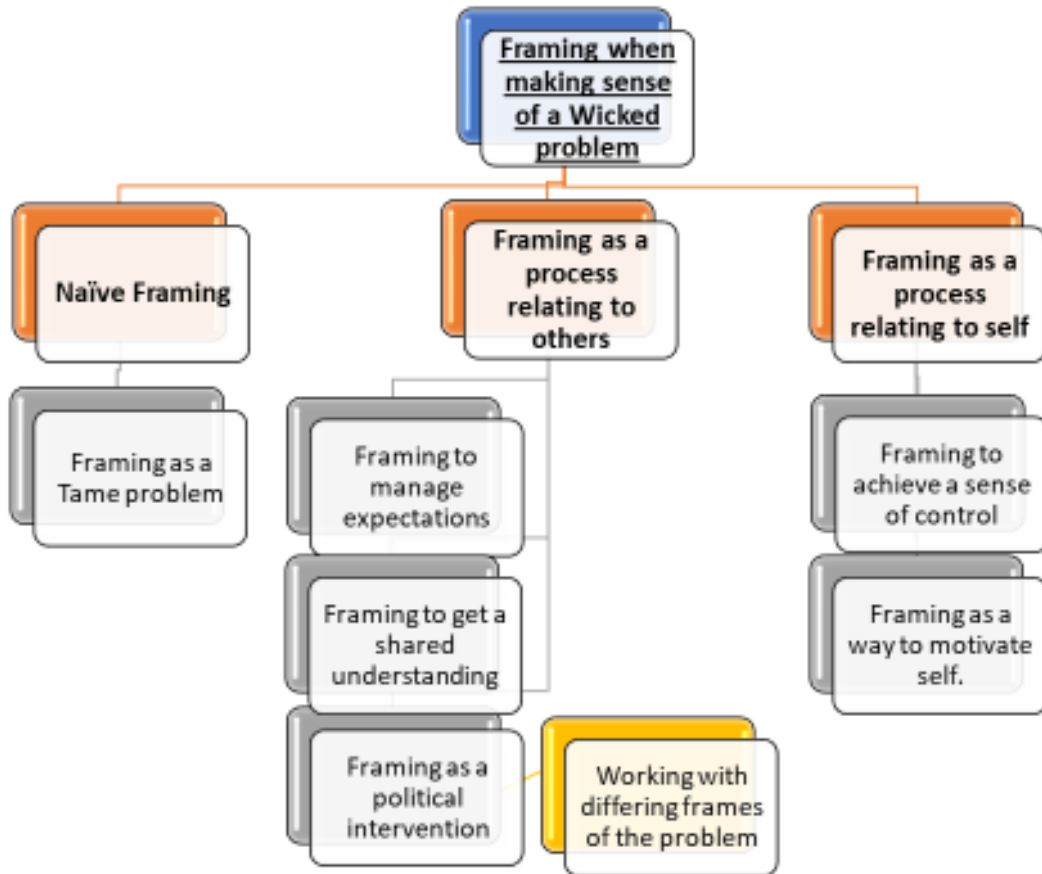


Figure 5A. Themes regarding framing of Wicked Problems.

5.3. How and why frame a problem?

Participants gave a variety of points in relation to both how and why they framed the Wicked Problem as they did. They fall into three categories:

1. How - Naïve⁹ Framing.

Why: Framing the problem as tame from habit or naivety – thinking all problems are tame; Introjection¹⁰ (Clarkson and MacKewn 1994) - Taking the frame that others had given to the problem as the complete and only truth.

2. How - Framing as a process relating to others.

⁹ I am using the word **naïve** to denote ‘without consideration’ rather than a judgemental meaning about the quality of their framing.

¹⁰ Introjection - To swallow down whole the views, ideas and opinions of others without consideration.

Why: Framing to foster helpful relationships; framing as a way of defining the type and size of problem to get shared understanding with others; framing as a political intervention/necessity; framing to manage expectations of others, especially stakeholders.

3. How - Framing as a process relating to the self.

Why: Framing to match a personal value or motivation; framing it as tame in order to feel more in control of the issue and feel better about addressing it; framing the problem as a challenge/ learning opportunity rather than a negative problem.

5.4. Naïve Framing.

5.4.1. Framing it as a tame problem ('nailing the jelly to the wall').

Participants described how a Wicked Problem is often framed and treated as a tame problem, named by one participant as 'nailing the jelly to the wall'. They described how sometimes this was carried out as habit and without conscious choice and other times it was chosen as a frame in the absence of a more substantive answer. In turn this raised the question to consider why this happens or what purpose this serves:

Participant 8.

I think the challenge is sometimes the thinking that everything is a problem that can be solved. That's when you go to that new portfolio, and we've done that. We've done the restructure, but it hasn't addressed the culture so let's do the restructure again. Or it's a people issue, so we've got the wrong roles or the wrong people. That is the prevalent doctrine.

Using a prevalent doctrine, habitus or cultural norms is one reason for treating the problem as tame. This is a *fixed gestalt* (Perls, 1969), where solutions to problems have become habitual and unaware. Rather than being attuned to the ever-changing form of the field, a point in time is taken and not reviewed. In this case, the contact between decision makers and the field is weak or even broken, hence as new field conditions emerge and develop, the decision makers do not pay attention to these and make decisions based on a historical awareness or data set. This emphasises that the field is in a constant state of transition and that the preference for many with a fixed gestalt is that they prefer ideas that accord with their current world view. Raisio *et al.* (2019) in describing Rittel and Webber's (1973) ten characteristics of Wicked Problems, include the fact that '*Many stakeholders focus on*

whether the proposed solutions are ones that they like from their point of view.' (Page 4). The problem being that their point of view may not be attuned to the *current* field conditions. In this case if the leader has the power to shape the frame that others use, then this can result in a growing view about the Wicked Problem as tame and fixed.

The above extract from participant 8, serves to highlight a cultural norm in the participant's organisation, that all problems are solvable. Framing a problem as tame is attractive. It can make it easier to influence others, to offer more attractive short-term interventions in order to gain kudos, support, reward, and to avoid the negative consequences of non-resolution. It is also easier to collude with the view that everything is a problem that can, or should be, solved.

For the person taking some ownership for addressing an issue, even though the Wicked Problem itself may carry on for many years, you may know that you are going to be working with this problem for a set period of time in which case your frame may not be solving, but indeed may be 'managing' or even 'surviving'. A number of participants in this study saw their role as transitional, either as a set period secondment or that they knew that they tended not to stay in the same job for more than a few years, or that the problem was not resolvable in their period of tenure:

Participant 14.

It's cyclical and it just doesn't change. And I've tried different things during my time as other people have previously, and others will in the future.

Participant 1.

I'm not sure there is an end point with this. I'm not sure there will ever be.

Participant 13.

But we will either, as I said earlier, confirm that it's such a Wicked Problem, we won't be able to resolve it in our lifetime.

This adds pressure politically for people seen as responsible for engaging with a Wicked Problem to find interventions or seemingly solutions that are acceptable to political stakeholders, even when the person knows that the problem is ongoing and morphing. Leaders then need to be able to evidence successes in order to meet the political expectations of others or risk reputational and career damage. This causes a dilemma then of either helping

key stakeholders to establish a frame of the problem as wicked and hence not expect a full resolution, or to find incremental successes when engaging with the problem. In either case, managing the relational aspects of organisational life become paramount; sharing and helping set expectations; getting a shared understanding of 'resolution' and the nature of the problem; being clear that the role of engaging with this problem is akin to a relay where the baton will be taken from and passed onto others, and as such, you are more accepting of the complex and wicked nature of the problem. This understanding requires a change in attitude, and approach away from the cultural paradigm that all problems are solvable. In answer to the question 'are all problems solvable?' in the interviews with participants' who were experienced at engaging with Wicked Problems, most said 'no', with some others saying, 'no but they can be advanced'.

Participant 3.

There's no solution. What I suppose my job is to try and do is understand what's impacting at any given time. That could be from within my workforce or, you know, societal factors or promotional campaigns or, you know, changes in legislation.....it won't ever go away and there won't be a single answer.

Participant 7.

Things are never finished are they. Everyday is a school day, I think it is your attitude, you've gotta have a different attitude to it.

Participants reported how management often do not see themselves as part of the field surrounding the Wicked Problem. Instead, it is as if management are believing that they are looking at the problem from a distance, without realising they are part of the cause and of the solution.

Participant 8.

We often see this and I do wonder if there's something around you know, what drives management thinking?

This projective process¹¹ (Clarkson and MacKewn, 1994) in Field Theory, highlights the boundaries between a person and the problem itself. In relation to the field surrounding the problem, it raises the question of *where* does the problem I am addressing end, and *how*

¹¹ Projection – The process of attributing a quality, feeling or behaviour to others when it belongs to me. (drawn from Field Theory and Gestalt psychology)

much responsibility do I take for impacting factors in the field? In this case, does the participant, in trying to engage with the problem, make an attempt to change 'management thinking' which they have identified as an important field condition? Even as the person engaging with the problem, when considering yourself as *part* of the field within which the problem sits, will give further insights. It is important that a leader considers how much, for example, they are colluding with a misdiagnosis, or withholding information, views, opinions in order to reduce risk, hence adding to the problem as part of the field conditions. This means that leaders need to acknowledge that working on Wicked Problems requires that they also have to manage and influence upwards. It also means that stakeholders need to be open to rethinking their position and expectations of what is possible by those working on Wicked Problems.

When faced with Wicked Problems, the instinct is to move towards the known and the controllable, in this case below, a re-structure, rather than do nothing or wait for the emergent field to become clearer. This can help bring a feeling of control and understanding rather than the risk, or fear, of understanding the problem at greater depth and in turn drawing attention to deeper problems:

Participant 8.

I've seen in our organisation, and not just our organisation, that we've got an issue to fix. And what we do is what we already know, which is a re-structure, and it doesn't get anywhere near those issues, but we all feel better about it. Then we move on to something else. So, for me that that's why I believe culture is a Wicked Problem. Because the other part that is you get people to stop and talk to people about what you want. Again, they struggle with this, because they haven't really got a deeper understanding of what it is. When they try to think about and then try and verbalise what it could be, it is a real struggle, so that for me that's the sort of 'nailing the jelly to the wall'.

This is a coping mechanism for organisational members. Lack of time, insecurities, political dynamics, performance pressures can mean that the desire to 'open up a can of worms' is low. However, in Field Theory terms, awareness is an imperative precursor to effective action. Awareness allows us to become closer to what is needed and then organise to achieve this (Chidiac, 2018). It is another tension in the field boundary. That of holding onto what we know

so that we can cope, versus raising awareness so that we can engage with the Wicked Problem effectively.

There is a drive of wanting to feel better, in control and that engaging an intervention that is tame, meets this need. As humans we have a compulsion to drive towards '*completion*' to resolve (Perls, Hefferline and Goodman, 1973) an incomplete problem. This can drive us towards finding an action, such as a re-structure, that meets the need for us to be doing *something* about the Wicked Problem. Secondly, how far we understand the nature of the problem that we are engaging with. Wicked Problems may be difficult to define, difficult to verbalise, or the decision maker may not understand the nature of the problem. Taking an action as if the problem were tame, allows for a definition, a language which people understand and is familiar. Either way, the draw is towards solidifying an amorphous element, naming the field at a fixed point in time, in turn simplifying and adding language that encourages acting as if it were tame. To engage with a Wicked Problem well, this shorter term expediency and political conformity is understandable but ultimately less helpful than an approach which is open, assumes change, understands and explores others frames of the same situation, and believes in multi interventions. In Field Theory terms, exploring the whole ground rather than just the presenting initial and fixed figure.

5.5. Framing in relation to others.

5.5.1. Framing as a political intervention.

The political dynamic is a powerful shaping force in many organisational decisions. It can explain behaviours and decisions which can seem illogical and ethically questionable, and yet is often an unspoken shaping force where decisions are made for personal self-interest and protection, real or imagined, instead of for the advocated reasons. The political expectations of solvability from within an organisation may pose questions to a person, which, apart from assuming a tame problem, can also put them under some pressure to answer as if it were tame. The participant below clearly advocates trying to find answers about starting the process and finding 'artefacts' that may go partially towards the organisation's need for indicators of success. Therefore, finding the fine line between recognising the problem as wicked and yet partially meeting the expectations of others in the organisation, is key:

Participant 3.

I wouldn't want is to find myself in a situation where they're going, 'what are you going to do about X', and I have to then come up with a 'silver bullet' action that's going to get them off my back and let me get on with it. I think your executive have to understand the problem as well.

Participant 8.

There's a trap here. That in bringing that to rigour, we're actually translating a Wicked Problem into a management problem so that it's going to be linear. You know, there's a process that follows that will fix it. So, something we need to hold on to is that it is still a Wicked Problem. And that we're not looking to solve it using management techniques.

The intent of a leader can often be to reassure through a frame, both to self and others, but this is not always helpful despite good intent. Wheeler (2005) highlights that, faced with the 'unknown', a frequent impulse is to retreat to what is most familiar, and most reassuringly 'normal'. So a frame, even with good intent, may be misleading. Often the frame for a problem may avoid or even move away from the complex actuality of a situation into the realm of abstraction. Whilst this can aid clarity and understanding, it has its losses as well as its gains. Frames are not free from bias and a social construct is firmly held as 'the truth'. A key ability when engaging a Wicked Problem is to be able to genuinely step outside our own construct. Organisational norms, hierarchy and cultures may not allow this. For some, the offer to be collusive with a tame diagnosis is strong, especially if it originates from a politically powerful source. People in organisations are encouraged, some would say conditioned, through the organisational education system, rewards processes and organisational systems, to view and frame problems as linear. Others might choose to be politically conformant. Some might introject¹² the frame for the problem, whilst others immediately become aware of the frame that has been assumed:

Participant 15.

But it's very frustrating to come into a job and then almost immediately be asked, 'oh is it sorted out yet? And I think this problem has been ongoing for 10 years actually. I've been in post 10 weeks.

¹² Introject - To swallow down whole without consideration.

The situation mentioned above outlines how this dynamic can be frustrating and at the same time the expectation implied can bring an apprehension. Asking a person to step outside the assumed frame, is a step asking them to become vulnerable, to be counter cultural, to take personal risk, perceived or real. The resulting choice can be to either comply with a tame diagnosis or to attempt to effectively change the frame of others:

Participant 13.

It's grown by X, which is really impressive growth. They (peers and senior) weren't interested. They weren't listening to that. So I was trying to get over all those messages. If I'm really honest. It always felt like I was making excuses. People were seeing it that way.

The framing of a Wicked Problem can be given across as tame to the person charged with engaging with it, or in some cases, solving it. It is not therefore always this person that is the actor in defining the problem but can be the recipient of a misdiagnosis (or at least a different one). Even when the wickedness of a problem is explained, others may choose not to hear this as their view of the problem is fixed.

5.5.2. Working with differing views of the problem.

Field Theory sees perception as being fundamental to a way of conceiving the world and in this case Wicked Problems (Perls, Hefferline and Goodman, 1973). Early Gestalt psychologists showed that an individual organises their perception into a meaningful whole (Ovsiankina, 1928; Zeigarnik, 1927). There is an innate tendency to make sense of something from incomplete data, by guessing at the missing parts of a partial form to conceive wholeness. Due to this, people will perceive the same Wicked Problem in different ways (Clarkson and Mackewn, 1993) as demonstrated with these well-known drawings (picture 1 the young lady facing away or the elderly lady facing downwards. Picture 2 the candlestick or two face profiles):

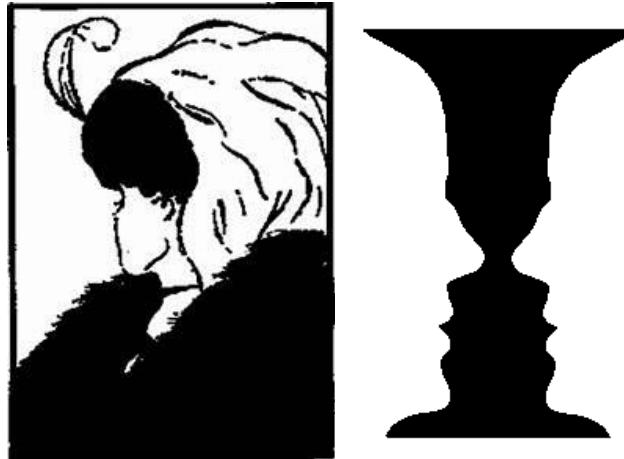


Figure 5B. Images to examine perception.

The left hand image is 'My Wife and my Mother-in-Law' (Hill, 1915). The right hand image is Rubin's Vase (Rubin, 1915).

The problem with these drawings above, is that they suggest an 'either/or/both' answer. Wicked Problems are not this binary. The participants in this study, didn't experience Wicked Problems in such a binary construct. Instead, it was more like a tangle of different coloured threads, where movement in one thread delivered a change in another (see Appendix 5A for a visual representation).

Participant 15

For me, in bringing it back to my Wicked Problem, the solution is multifaceted.

Participant 4

Every time every time we try and do something, something else happens or something else kind of goes wrong, not goes wrong, but somebody else highlights something else. Well, you've made this change here, but actually down the track had this implication.

There is a tension that leaders of Wicked Problems face. On the one hand they will have stakeholders and colleagues who perceive the issue as tame. On the other hand, the leader understands that the problem has predominantly wicked characteristics. In the political environment, housed within propensity to take risk together with the power dynamics being played out, there is a pressure to acquiesce. In Field Theory, confluence (Chidiac, 2018) is where two parts of the field flow together without any sense of differentiation. These power dynamics give rise to confluence (Clarkson and MacKewn, 1994), highlighting the power of

influence of the field and how hard it is to work against these field forces. The power dynamics between people offering a view of the frame will impact on the response from another. There is a temptation for confluence with a tame diagnosis or even an introjection of the diagnosis. Pressures, either assumed, imagined or real, from a senior stakeholder, can be very powerful and with career or potential criticism in mind, the participant in this position can be confluent. This can be done in awareness as a choice or can be done without realising. A person may introject (Clarkson and MacKewn, 1994), this is where they accept and 'swallow down' whole the views of another without consideration. Framing this way can lead to an assumed solution which is often over simplified and can be misleading. In this study, participants talked about the pressure to be confluent.

At the other end of the polarity from confluence, is over differentiation, where the person *only* notices difference between the frame of another and their own. As demonstrated below, this in itself can lead to difficulties when gaining an agreed understanding of the problem:

Participant 13.

What I also found was that everybody (peers) got really defensive in their own directorates. So I'd probably driven a bit of this behaviour, in that one of the best forms of defence is attack. I've got this group of people together, we're looking across the entire supply chain. But what that was identifying, was that there were a whole load of errors happening in other people's world.... When I was really feeling under fire from the exec, and although I'd gone round and tried to explain the situation. What I did also find was that people were delighted somebody else was getting a load of grief because it meant they weren't. And they weren't quick to jump into support. For me, that was a sign of an executive that wasn't working well as an executive. People were just looking after themselves..... those kinds of politics just didn't help the situation.

In trying to reframe the problem to that person or group, difficulties arise. The originating person/group may have a fixed idea of the type of problem, and participants outlined how difficult this can be to change, leading to (or exacerbating) other problems, in this case group dynamic issues. The word re-framing suggests an action at a point in time, whereas in line with the nature of both the Wicked Problem and the field conditions, reframing is a process, it is *emergent*. As each intervention changes the nature of the problem (Rittel and Webber, 1973) so does the frame change. In this case a mindset of emergent framing, plus ongoing

discussions about the nature of the problem, would be more useful, and allow for the tracking of the nature of the Wicked Problem.

In Field Theory, drawing from a Gestalt principle this is described as a *fixed gestalt* (Clarkson and Mackewn, 1993). Fixed gestalts are the equivalent of fixed perceptions where new or different frames are not considered because they stand outside of a currently fixed held view. This fixed Gestalt is also held in order to avoid the fear of what may emerge in its place, usually it serves the purpose of masking a known, but difficult, issue. The fixed idea of a problem is also at odds with a Wicked Problem construct, regarding both the viewing of a problem from different perspectives and the fact that there is no definitive formulation of a Wicked Problem (Raisio *et al.*, 2019; Rittel and Webber, 1973). This may also highlight the parochial nature of organisations which can be a powerful force for not untangling the Wicked Problem and muddling through (Lindblom, 1955).

If the nature of the field boundary has an element of 'groupthink' in it (Janis, 1972), it means that the nature of the Wicked Problem is unclear and not shared. The overriding need for group consensus and avoidance of conflict will mean that this is figural over and above the need for diversity of ideas and thinking. A group, as such, may jump to a solution or frame for the problem regardless of its suitability to address the problem. In this case the participant describes the group, as if they are a cohesive organism with a single view and approach, highlighting the tension in the field boundary between diversity of ideas and yet achieving a shared frame for the problem.

The above quote also demonstrates the interrelation between field factors, how they are not isolated. One field condition impacts and effects another. It highlights especially the emergent nature of field influences. This research particularly emphasises how a Wicked Problem impacts and contributes to the emergence of *another* problem (which may already exist but not be figural). Wicked Problems impact on other Wicked Problems. This is not necessarily negative. In one sense the emergence of a linked problem, in this case a dysfunctional executive group, at least allows a growing awareness of it as a problem and subsequently an opportunity to address it. Increased field awareness enables the person engaging with a Wicked Problem to identify a different way on intervening:

Participant 13.

So I realised I needed to do something different. But I wasn't sure what to do. So in the end, what I decided I needed to do was to pick off individual members of the exec (peers) and then individual board member trustees to help them understand the situation. I recognised that when that number comes up, and it's a negative, I've really got about two sentences to explain why. If the first one sounds like an excuse, they don't listen to the second one. So it was just looking like it was getting worse. And you know, the CEO was the kind of person who didn't want to hear excuses, they just wanted to know that you're going to fix it. And I wasn't prepared to lie and say, 'I'll fix this. I've got a solution, just bear with me' because I knew that wasn't true. Or at least I strongly suspected it wasn't true. So I spent a lot of time with people individually, giving them the context, helping them to understand why the demand had suddenly jumped forward, to showing a graph of what has happened with demand, and how we weren't part of that conversation.

In this case above, this was a senior person describing how they worked with peers. Effectively, they are describing the process of attempting to gain an agreed and shared understanding of the Wicked Problem. They understood why the diversity of thinking and the political imperative was important in getting this shared understanding. The above however, describes the *how* of this process. In the absence of getting a group agreement, this participant was left with the assumption (rightly or wrongly), that they owned the problem. There was an absence of shared owned responsibility in this case, due to some dysfunctional dynamics in the group. So this participant now 'owned' the problem, was being held accountable for solving it, had no shared agreement regarding the nature of the problem and no overt support. Given these field conditions, the participant moved from gaining a group shared understanding to attempting to obtain a number of individual shared understandings. The response above shows an adaptation to the field. Having tried a collective group approach, which could be seen as a lack of awareness about the nature of the field, they implemented an adjustment to their interventions, demonstrating a greater awareness of field conditions by engaging with individuals. This was an attempt to influence the field around the Wicked Problem. At this point the nature or quality of the field boundary between the peer group and the Wicked Problem was such that the peer group were denying any

influence, ownership or responsibility for the problem and as such were happy for the participant to own and take responsibility for the problem. The interventions above represent the participant attempting to influence the nature of the field dynamic, even though at this point they were not addressing the problem itself directly.

N.B. Note in the above quote, the reference to a value-based decision '*I wasn't prepared to lie...*' linked to values based framing discussed in section 5.6.2. - 'Framing in relation to self'.

Reframing for a group that has a fixed construct of the problem as tame, can be at best difficult, but reframing the problem with individuals, in this case, was easier, leading to a critical mass of opinion (Gladwell, 2000). There are many other variables around this, but it serves to highlight that not only *how* you frame is important, but the *field conditions* in which you frame will shape meaning. In this case the dynamics of a dysfunctional group shape the frame given to a problem, which is different from the frame accepted on a one-to-one basis with the same people:

Participant 13.

Picking them off individually really helped me to feel that I didn't need to be explaining it too much. It was more about saying, 'We all understand the challenge that we've got here. And it's really disappointing. The gap is widening. But we understand why, and we understand what we are doing about it'. I wish I could land that, but I realised it was just not possible in the whole group meeting. They had lost patience and energy to listen to me long before that. So I've got the exec to a position, then I realised I needed to do the same with the trustees.

Agreeing a collective frame highlights the tension of finding an agreed understanding, but also respecting and valuing difference and the richness it brings. As we have seen above, in a politically charged environment, some form of agreement is very helpful and yet non-agreement can be caused by the political dynamics over and above any logical argument. So how important is agreement and in what *form*? Kaner *et al.* (2007) outlines various gradients of agreement from wholehearted endorsement through to serious disagreement and veto. As highlighted by the Field Theory principle of singularity (Parlett, 1991), where every person-situation is unique (Lewin, 1952), and each construction of meaning is unique (Stevenson, 2018), there will never be two situations that are exactly the same, and generalities around this brings problems. However, aiming for exploration of difference and accepting the

diversity of thinking is helpful. It cannot be said that in every situation full agreement must be reached. In the situation outlined by the participant above, they understood that shared ownership and action was needed if the Wicked Problem was to be engaged effectively, due to the problem impacting and being impacted by all the work of the individuals in the group. Yet in other Wicked Problems, this was not the case, and full agreement was not needed, especially if the actions of the group member is not imperative to engagement. It is reasonable to say that diversity of thought and understanding different frames can always be useful. So, allowing disagreement, but finding the understanding of different frames helpful, can be acceptable.

5.5.3. Framing to manage expectations.

Framing serves a useful function in organisations by helping to manage expectations. Engaging with a Wicked Problem well, means understanding your own motivations, understanding the motivations and expectations of others and understanding that these are transient and as such keeping a good ongoing awareness is key. Participants referred to setting expectations and hence shaping the frame of others – seniors, stakeholders, influencers and others involved in engaging with the problem. This appears to be holding a tension between delivery expectations and actual delivery against the Wicked Problem. This forms part of the field, which is dynamic. Expectations are not static, they move as frames are stated, reconsidered, tested and re-evaluated.

Participant 2.

I think the way I'm working with this one at the moment, is all I can do is just be very clear. Set out my plans, what I'm doing, be very clear on expectations, on what I'm going to deliver, because I need to be very careful that I don't mislead or over promise.

Having clear expectations was reported as personally important for many of the participants engaging with Wicked Problems. Not everyone is able to set expectations. Some will be required to accept the expectations that others give to them, at least temporarily. However, participants discussed the desire not to over promise, or suddenly meet an unexpected change to expectations:

Participant 11.

One of the things that I find most challenging is the sudden changes to your expectations. Particularly, sudden changes to expectations are a real driver for anxiety.

By influencing the expectations of others, the leader is pre-empting potentially difficult field conditions around how solvable the problem is. If we consider expectancy theory (Vroom, 1964) a person will behave or act in a certain way because of their expectations over what the result of that behaviour will be. The leader is therefore trying to structure these expectations away from a singular solution, thus encouraging behaviours more conducive to the nature of a Wicked Problem.

Participant 11.

The Wicked Problem, by definition, is going to continue to be there. So setting the expectations that you're not going to solve this at all, or even anytime soon, is a likely outcome.

From a Field Theory perspective, there is a need to influence the field conditions within which the problem sits, in this case expectations, not just the problem itself. There is a need to not only notice the field influences, but also to engage with these. In this case it is a desire to pre-empt and prevent any sudden changes in expectations. This understanding is aligned with Rittel and Webber's (1973) belief that a Wicked Problem can be symptomatic of other problems and that we need to address the underlying problems. A leader of Wicked Problems needs, not only to have good field awareness, but be willing to have difficult conversations to raise awareness of such underlying problems. Without this, the subsequent interventions into the Wicked Problem, will be treating symptoms rather than causes.

This awareness is a key concept in Field Theory (Perls, Hefferline and Goodman, 1974). Not having a close awareness of field conditions brings with it a raft of potential problems. Awareness is the conduit through which we experience the world (Chidiac, 2018). It can be viewed as a continuum (Joyce and Sills, 2014). In a Gestalt and Field Theory view, heightened awareness of the surrounding field enables us to organise to meet a need. When achieved, it allows us to bring to foreground items that have previously been background. Without good awareness there are number of outcomes when engaging with Wicked Problems. Firstly, we will bring all our own assumptions, bias and frames and treat them as the *only* frame, this is the inner zone of awareness (Chidiac, 2018). Secondly, we may not be aware of the nature of

the problem as wicked. Thirdly, we may not be aware of the field conditions that are impacting on the problem, the outer zone of awareness (Chidiac, 2018). Any of these three can lead to engaging with the Wicked Problem in a way which can totally miss the most effective way and place to intervene. Awareness of the wider field is a key '*Way of Being*' for a leader:

Participant 5.

There's no solution. But I suppose my job is to try and understand what's impacting at any given time, and that could be from within my workforce or, you know, societal factors or promotional campaigns or, you know, changes in legislation.

Further, raising and staying with awareness draws on a number of abilities. Firstly, relinquishing an 'expert' view of self and instead adopting what Schein (2013) names 'humble inquiry', which I prefer to call 'childlike curiosity' due to the innocent wonder of discovering something new, without bias as much as possible. Secondly, drawing on Phenomenology put forward by Husserl (1931) and further developed by Spinelli (1989) the concepts of; Bracketing – attempting to suspend judgements in order to focus on the phenomena without judgements; Description – describing what is happening in the *here and now* and tracking that as it develops and Horizontalization – consideration that anything could be relevant (see Chapter 3 on methodology).

The frame that participants are aiming to influence is a desire to change others' expectations of a 'cure', and to take others with you on a journey of changing expectations as time progresses and the nature of the problem morphs. As with Wicked Problems, accurate frames are not static, they morph and change along with the field. There is a strong desire, and subsequent expectation, for completion which can lead to stakeholders forming a simplistic expectation based on a singular solution. Attempting to sell complexity, and no single solution, is difficult when the recipient has a frame of a tame issue with a single solution:

Participant 3

So I can drop these bits in periodically, and they got to kind of join up into a story about its complexity. And so, then when we're in a room for two hours doing our quarterly performance review with the CEO, you know, that story is there already, they understand that. So you know, that's the other thing I think with these kinds of Wicked Problems is taking people with you, so that they understand the complexity.

Within Field Theory and Gestalt psychology, as described previously in this chapter, early Gestalt psychologists (Ovsiankina, 1928; Zeigarnik, 1927) postulated that there is an innate tendency to make sense of something from incomplete data, by forming parts into a whole (Clarkson and Mackewn, 1993). Figure 5C demonstrates how we may take data and organise it into something that makes sense to us, in this case a square that in actuality does not really exist.



Figure 5C. Demonstrates how people take data and organise it into a meaning.

We can argue that organisational processes, systems, rewards, and training encourage this process, however, Field theorists point out that we have the tendency to take a lot of disparate changing field conditions and frame it as *the* (singular and unchanging) problem. Such is the case with Wicked Problems.

In the process of influencing expectations, participants expressed a preference for incremental influence rather than a single time related problem statement. Framing itself is emergent, it's not a one-off piece of influence. It's more akin to a pixilated film which gradually reveals itself as more information becomes available. Despite the participants stating this as a preference however, when explored in the research interviews, participants themselves did not seem to redefine the problem as an ongoing process in relation to field conditions. Their focus on its 'wickedness' was based on its perceived non-solvability in their eyes, rather than on its changing nature. So, on the one hand participants expressed a preference for an emergent ongoing framing process, but in reality, once framed participants did not carry out this re assessment of the situation. Changes sometimes became figural through externally imposed situations – for example Covid 19, but participants seemed more passive in this, once they helped shape expectations that the problem was wicked rather than tame. Even though in many cases they recognised the changing nature of the problem, they seemed content once expectations were agreed with peers, stakeholders and influencers initially that this was an ever-changing problem. The time constraints of engaging with the Wicked Problem and the influencing of stakeholders about the problem, took precedence

over what participants knew to be true – that the initial framing was becoming outdated. In short -they became more passive.

When asked about ‘solving’ a problem, participants showed that defining ‘solved’ was also not a given. In the main, they did not know what ‘solved’ looked like or what success looks like. For some it was a final cure to the problem, for some it was incremental interventions that moved the problem on, for some it was a redefinition of the problem, for others it was a partial successful intervention. There might be some words put around an end goal, but even getting close to that would be enough for many:

Participant 2.

But if I am 80% there, then that might be good enough. It might not be that I'm ever going to get 100%. If 80% of the stakeholders I am working with are on the board, that's OK. What I haven't figured out yet, is where is that? because I think there's so many factors.

Participant 3.

Looking at it differently or thinking well, if the gold standard looks like this, what does the silver-plated version of that look like?

Participants recognised that success may not be 100% and this again set up a political tension which needed to be influenced or at least engaged with. Influencing the original expectations of others can involve directly refuting the given frame of expectations to redefine the problem:

Participant 7.

X has gone back to CEO who said, 'so we will see concerns going down there now she's in post' Instead X's response was 'I hope not, I want to see them going up'.

If a Wicked Problem is to be truly understood by more than one party, then part of the shared understanding is that not everything will be solved in the ‘completed’ sense of the word. A key part of setting expectations is understanding that some problems are intractable, and that defining ‘success’ will be different from a definition of ‘complete’. Understanding that structuring expectations is often a pre-requisite to behaviours leading to certain actions and needs to be carried out early in the process. Participants were focussed on structuring the expectations early in the process. The negotiation and influence of expectations is important

but difficult. Power, position and risk all play a part in this process. This is about influencing the frame of others, although expressed here as managing expectations:

Participant 8.

If we get to January, and we then just start talking about it, I think we'd have missed an opportunity, there's an opportunity now to start managing expectations.

This could be the nature of engaging with Wicked Problems. Resisting the desire to constantly re-frame the problem past a frame that understands it as wicked and ever changing. However, if we use the concept of working with the field conditions in the *here and now*, then this would suggest that helping to structure expectations on an ongoing basis is likely to represent a more current and accurate representation of the problem. Not doing this could lead to outdated/historical frames, based on one point in time. As many of the problems in this study were considered long term issues, once the problem is identified and there is a shared understanding of it as wicked, it would be good practice to see the frame and understanding as an ongoing one.

Figure 5D below, represents this process from a Field Theory and Gestalt Psychology perspective, where we become aware, frame a problem and move to action. It demonstrates how, especially at the awareness phase, if we don't pay attention to the wider field, we can end up with a misdiagnosis of a problem, possibly as tame. This is a repeated cycle, so the further time progresses, without paying attention to the field conditions, the less likely the actions will engage the problem well.

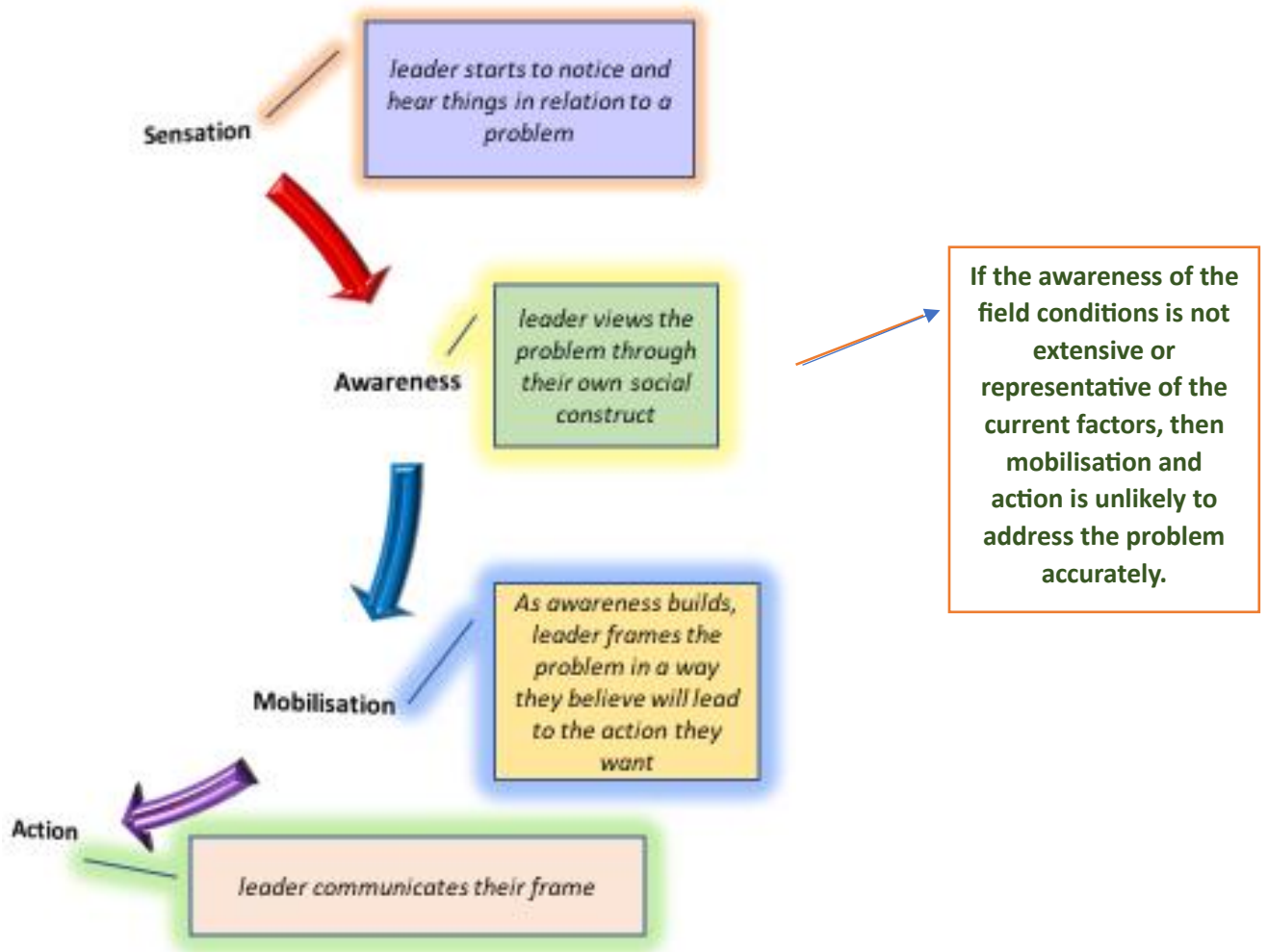


Figure 5D. Part 1 of the Gestalt cycle (Perls, Hefferline and Goodman, 1973) used to represent how a leader may become aware of Wicked Problem characteristics.

5.5.4. Framing the problem in order to gain a shared understanding.

One way in which this process can gain a fuller view of the Wicked Problem and its surrounding field is by working with others. Participants recognised the need for involvement with others in order to engage effectively with the problem and achieve shared understanding.

Participant 8.

So the problem identification has to be wider than one. If it's a problem that affects multiple people, then I would suggest that it's essential that the key people involved in that problem have a shared identification of what it is. So, there's something around we agree that this is what it is. And therefore, and I think that's often our work which is around helping people to agree on what the thing is.

The function of framing in this instance, is deliberately attempting to bring a point that is in ground¹³, to becoming figural¹⁴. The leader is choosing to bring something figural to the foreground in order to help people understand or to motivate self and others – that is the role of framing in relation to others. The fine line between the problem being framed as wicked through to the problem being seen as tame, is a key intervention in gaining the interest and motivation of others:

Participant 1.

It really takes somebody that can articulate the problem, not in a way that people just think, 'Oh, we're never going to achieve that. It's never going to happen'.

Participants demonstrated that articulating the problem is important to engage others. Further, they recognised that their own views, opinions and ideas were not enough and engaging effectively needs the involvement of a wide variety of people and a diversity of thinking:

Participant 8.

If you haven't got a shared understanding of what we are actually here to do, to try and identify solution is almost impossible. So, I think the other qualification again in there is that, again, the solution can become clearer. Just the identification and the shared identification doesn't necessarily mean that there's clarity. I think the opportunity it creates is if you've got diversity of thinking in the group involved, then you can start to identify some solutions. And then you can have some exploration around it and actually go back to the experimentation piece, - where might we experiment first with this?... the other way, you know, then I sort of almost go backwards on that is that if you haven't agreed what it is, the solution is really hard to get to.

The aim with engaging others is not just to try and gain agreement about what the problem is. It is also about getting diversity in the thinking and engaging and motivating others, highlighting exploration around the Wicked Problem as desirable, as opposed to a fixed singular decision. Articulating the problem, benefits from the involvement of others, in fact the suggestion is that it cannot be carried out without the involvement of others. However,

¹³ Ground – in the background or out of focus

¹⁴ Figure - In the foreground or in focus

the implicit problem here, is to be collaborating towards only a single and fixed problem definition. Doing this can suggest a single solution and moves discussion and debate towards tame thinking. The participants found that it is in the diversity of thinking where richness emerges in how to engage with the Wicked Problems. It's a tension, a balance of involvement, diversity of thinking, agreement on a frame but without falling into groupthink, or confluence, and without getting so many diverse opinions in which agreement and focus is too difficult (over-differentiation).

There is a dilemma here. Wicked Problems are undefinable by nature, at least completely and definitively, and yet with or without others, implicit in the participants statements is a drive to define the problem. The tension here is how much ambiguity over problem definition can individuals, groups stakeholders and organisations tolerate? Finding a balance between diversity of thinking and ambiguity versus moving forward with a decision is a tension:

Participant 16.

Where it seems to be difficult is the ability to come together and work that through.

The focus can also involve a process of helping others frame the problem rather than just agreeing a definition. This can involve helping them understand the leader's point or view and helping them work through their own framing so that they can articulate it better, followed by the group making use of this diverse/plural viewpoint. Framing and articulating the problem is about asking the right questions of others rather than stating the answer, both as a way of gathering ideas and as a way of influencing engagement:

Participant 12.

So asking the right questions to get to the root cause. What's really going on here? That type of question. And then having the courage to do that, really, because sometimes having the time and the courage to hear the answers, you might not want to hear, but it's the truth.

This brings to question the role of the person 'leading' engagement with the Wicked Problem. As with other aspects of the problem, different people may see the role as different from the person leading. There may be a more formal description, or it may not have been discussed. With most of the participants in this study, the role was not formally discussed other than it being an implicit assumption that their role was to resolve the problem. Only in the proceeding influence process around the nature of the problem was the role discussed

sometimes as to achieve an intervention around the problem or to facilitate the sharing of diverse frames and then to make a decision about the way forward. In very few cases was the *changing* role of the leader discussed, although the role of the leader as a final decision maker was mentioned:

Participant 2.

I think you've got a better chance of resolving the more people you get involved, the more viewpoints. There's a balance to be had though, in that you just keep talking, talking, talking. Someone's got to take leadership and make a decision, if there's 10 different opinions at some point, to try something.

Seeing the role of a leader as 'to resolve' is very different from seeing the role of a leader as either a facilitator of others to address a problem, or as a conduit between the presenting issue and the wider context or field conditions that are causing it. Doing so would be demonstrating awareness of the field and the need to have clear awareness with the wider factors. The principle of possible relevance (Lewin, 1952; Parlett, 1991; Stevenson, 2018) says that every part of the field impacts on the field and therefore no part of the field can be excluded as irrelevant. This requires paying attention to what is momentarily or persistently relevant or interesting in the moment (Parlett, 1991). At the same time, leaders will need to influence the field by moving towards a decision, which can often be in the form of an experimentation (see Chapter 6 on experimentation).

This research shows what influences a leader when framing a particular problem. The nine main influences outlined by participants are represented in Figure 5E below. Each body of influence is represented in the text within a cloud. Each of these influences become figural or recede to the background as time goes on, but they all are present in the 'field'. Finally, it demonstrates how a leader will view the Wicked Problem through their own lens, showing that these influences on how a problem is framed, are both *external* to the leader and from *within the leader*. These self-influences are discussed in the following section.

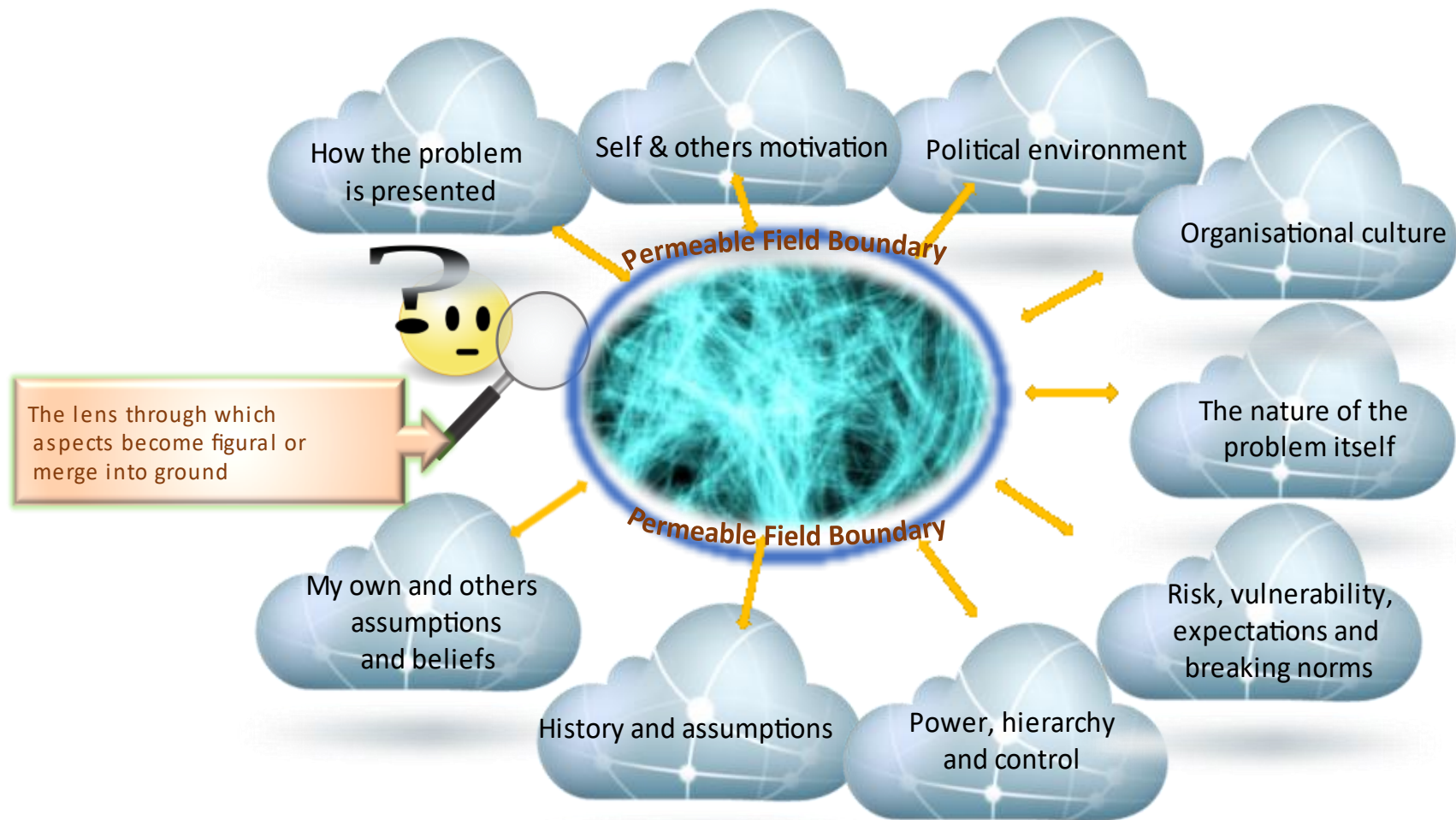


Figure 5E. The nature of field conditions, the field boundary, and its impact on framing a Wicked Problem, understanding that clouds move, morph shape, appear and disappear over time.

5.6. Framing as a process relating to the self.

5.6.1. Framing to allow a sense of 'feeling better' or more in control about the wickedness.

Past experience, current and expected future shapes what we listen for and then interpret. One reason for reframing the problem as tame, is to make people feel in control and feel 'better' about the problem, especially as they are finding it difficult to verbalise the problem as wicked. But what, in this case, does feeling better mean? Earlier participants suggest that feeling 'better' may relate to the use of processes and methods that people are more accustomed to following, and it certainly related to feeling like they could influence the outcome of the problem and include a semblance of felt control. Holding the space of uncertainty can be counter-intuitive for people, sometimes referred to as *unfinished business* (Clarkson and MacKewn, 1994). Uncertainty risks turning into inaction, and at least following a habitual path of action offers a sense of doing *something*. The well-trodden routes that they are used to, may be framed in positive organisational language, such as using the word 'rigour' or 'project plan' translating this need into a tangible intervention:

Participant 8.

There's a seductive nature of almost trying to pull that (Wicked Problem) down into a manageable problem. So the organisation, needs rigour, it needs a project plan, it needs, you know, measurables and outcomes. And I think that's going to be a tension that we are going to need to manage, particularly when we move out of the 'we've done the analysis, this is what we found', 'Here's what we're suggesting we do'. I think there will be many in the organisation that want to pull us into, right you need a project plan. So, what will you deliver? what are your success measures? What are your KPIs? So I think that that's going to be a challenge we're going to need to work on, and hold that space. We're going to start this process, and we've got an approach that will move us on and it will emerge. We've got some, if you want some artefacts, that say, 'what might be the measures we need to pay attention to?' I'm anticipating that's some of the dialogue we will need to be having. And the shift I think, is, in our organisation, it's not just our organisation, we sometimes talk about return on investment. So, if I spend x amount of pounds or time on this, what am I going to get back? And I think there's a time and place for that. This work is not the time and place for that. So, I just think that's, that's one of the tensions.

There is a recognition that artefacts and a certain language may be needed in relation to the problem to meet organisational needs of perceived control, but at the same time recognising that the problem is wicked and none of these interventions or language will actually lead to a resolution. So breaking habit, cultural norms and conventional ways of engaging with a problem may need to be challenged and changed. The move towards the tangible, the familiar, the known, is perpetuating a move forward to further tame interventions, paying attention to one part of the field only and focussing further and further into convergent thinking. In the absence of not knowing what to do and the attraction of familiarity, it leads the decision maker away from seeing the bigger picture to focussing on the minutia of the known. The difference between framing the problem as tame and focussing on managing the problem, is expectation. Tame assumptions assume an ending, a final intervention, whereas trying to improve a problem using a Wicked Problem and Field Theory assumption is that this is *an* intervention, not *the* intervention. Having meaningful dialogue that allows interventions to be made, altered, adapted as the field conditions move, emerge and adapt, is needed. Habit, focussing on expertise, focussing on the known, paying attention in one area or one part of the field, following an interest only, will lead to the omission of other elements in the field which may be (or become) relevant. This highlights a major need for a change in framing for how to address those problems which are not tame.

Common familiar, convergent systems and processes in many organisations are encouraging tame thinking. Processes and systems like fixed targets, LEAN, KPI's analysis, project methodology, meet a need in the organisation, but at the same time they encourage an *'analyse – intervention – review – solve/complete'* mindset:

Participant 16.

So I think that's the tame side of, you know, we need to get our data. we need to do webinars, we need to do training. And we need to have a product. Well, it'd be good if we did that strategy. We don't have a Dandl (sic) strategy. but lots of that, you know, get our recruitment right, you know, what are our targets around representation and all the rest of it?_There's a lot of conversation around that. But I think day to day, is it making any difference? I'm really not sure.

This participant outlines some of the processes that they have to work with, that will serve some purpose. This may be habit or a need for control, to feel better, or as way of meeting

the requirements of regulators such as CQC, audit etc. Similarly, they can be seen as meeting a need that assists to engage and cope with Wicked Problems. When facing a problem that is constantly changing without hope of complete resolution, this at least is an intervention to engage with it. Using the principle of singularity (Parlett, 1991), that is that every person-situation is unique (Lewin, 1951; Stevenson, 2018). it makes it difficult to copy from previous problems, because they were different in significant ways (Rittel and Webber, 1973). As such. if intervening is viewed as a field 'experiment' (Nevis, 1987; Stevenson, 2018) and as a way of unfreezing a fixed problem (Lewin, 1943) then it is helpful. If however, if it is viewed as a 'one-shot' cure, with it being an expected end to the problem, then disappointment will follow. This also highlights that Wicked Problems will have some tame elements, for example securing a good CQC inspection, further emphasising the view discussed in Chapter 2, that Wicked Problem definition is not a binary choice, instead it is about the degree of wicked characteristics associated with a particular problem.

For the person engaging with the Wicked Problem, how is the 'tension' between organisational systems and expectations of binary solvability, and the reality of a Wicked Problem which is emergent, morphing and non-resolvable, navigated? The following section explores *self* in relation to framing a Wicked Problem.

5.6.2. Framing as a way to motivate self.

During the participant interviews, many described the experience of engaging with a Wicked Problem in terms of its difficulty. In responding to this they were asked about their reasons for engaging or maintaining their engagement as a 'leader' in addressing the problem. There were many motivations, as outlined below, but one repeated element was how they framed the problem to stay motivated. Using values-based framing was a common way for participants to get and stay motivated:

Participant 12.

But I think the biggest driver for me came from like an emotive one. And our vision is to save and improve lives. And if we get the chance to do that. I could see the bigger picture and how it might have looked, but you could also see at that point that this problem isn't going to be over anytime soon. So, if we delay it, we're just delaying the inevitable to roll it out at another time.

Participant 8.

So, this is I guess, feels like higher purpose. This is like my role in our organisation and what I can bring. It's about what do I bring and that's in terms of how I influence, and also how do I use what is at my disposal, so bring to bear that the resources and talents to make that happen.

Participant 12.

I was looking for a way that I could see it had to happen and then I could see that we could save and improve more lives doing it that way.

Framing the problem to meet a values-based motivation was clear here. Why are these value-based frames important? Having a meaning or purpose in life is named by several theorists in relation to motivation, such as Viktor Frankl. In *'Man's Search for Meaning'* (1969) he outlined how living out our values fulfils the need for life purpose. Values indicate the preferences that individuals have for various working practices, goals and environments (Ravlin and Meglino, 1987a). Rokeach (1972) shows how values have an inherent motivational component, and even described them as 'supergoals' (p.14). When translating motivation into goals, Locke and Henne (1986) describe goals as 'the mechanism by which values are translated into action' (p. 3). Similarly, Lewin (1952) describes values as guiding behaviour by inducing goals. Values elicit goals, which drive action (Parks and Guay, 2009).

It is not necessarily the Wicked Problem itself that motivates, but instead a values based bigger picture within which engaging the Wicked Problem would help achieve this bigger picture. The values-based framing and motivation certainly links to the participant seeking to understand the question '*why are we doing this?*' and '*Why am I doing this?*'

Adding a clear meaning to an issue could cause a problem in that defining a Wicked Problem already can suggest a solution. However, in this case, *save and improve lives* for example, is an outcome rather than a solution or definition of the problem. It is also very broad, which then does not lead to a suggestion of *how*. It is broad enough for many different values to be attributed to its resolution. It is interesting that in this case, the individual is working towards a values-based outcome that is set by the organisation (not by themselves). It may of course be that these values are the reason that they work for this organisation in the first place, and although not a given, you could assume an amount of alignment with their own personal values. Participants explained further a need for a link to personal values:

Participant 16.

You've got to be interested in the topic. You've got to be, you've got to be thinking this is something that matters. To explore. Because that needs to come across. Like, whoever you're working with that you're bothered, you know, not just because you need to do a job, but because this is something important.

Participant 12.

So there's something about leaders really believing that they're doing the right thing. In this case, doing some good, even if that's in the much longer future.

Framing the problem in a way that the individual can see the results and impact of addressing the problem is important. Linking the Wicked Problem, and its improvement, to the values based motivating issue in relation to the bigger picture and noticing or at least believing that it is making a difference:

Participant 1.

So you're helping hundreds of thousands of individuals on the process. And so that's really motivating. Yeah, but actually, it's about society.

When we act in line with our values we act authentically and in alignment with our deepest motivations and aspirations. Hence a frame for a Wicked Problem in terms of values, is to enable people to accept and work with difficulties that arise, it allows for a greater sense of resilience. It assists with resilience and that framing is another way in which resilience is maintained.

Participant 11.

Yeah, the resilience is a key feature there, isn't it.

Certainly, it has a strong link to becoming motivated, it also plays a role in a willingness to work with difficult situations:

Participant 2.

If it's for the greater good, and it's moving in the right direction, and it's the right thing to do from a service provision for the patients, I'm okay with it. Like everything, if the ethics are right, and it's fair, it gives you a reason to keep doing it.

From a Field Theory and Gestalt perspective, when people see the impact of their efforts and it meets a value-based frame, this is a point of 'contact'. Contact is when the action leads to the need being met, as shown in figure 5F:

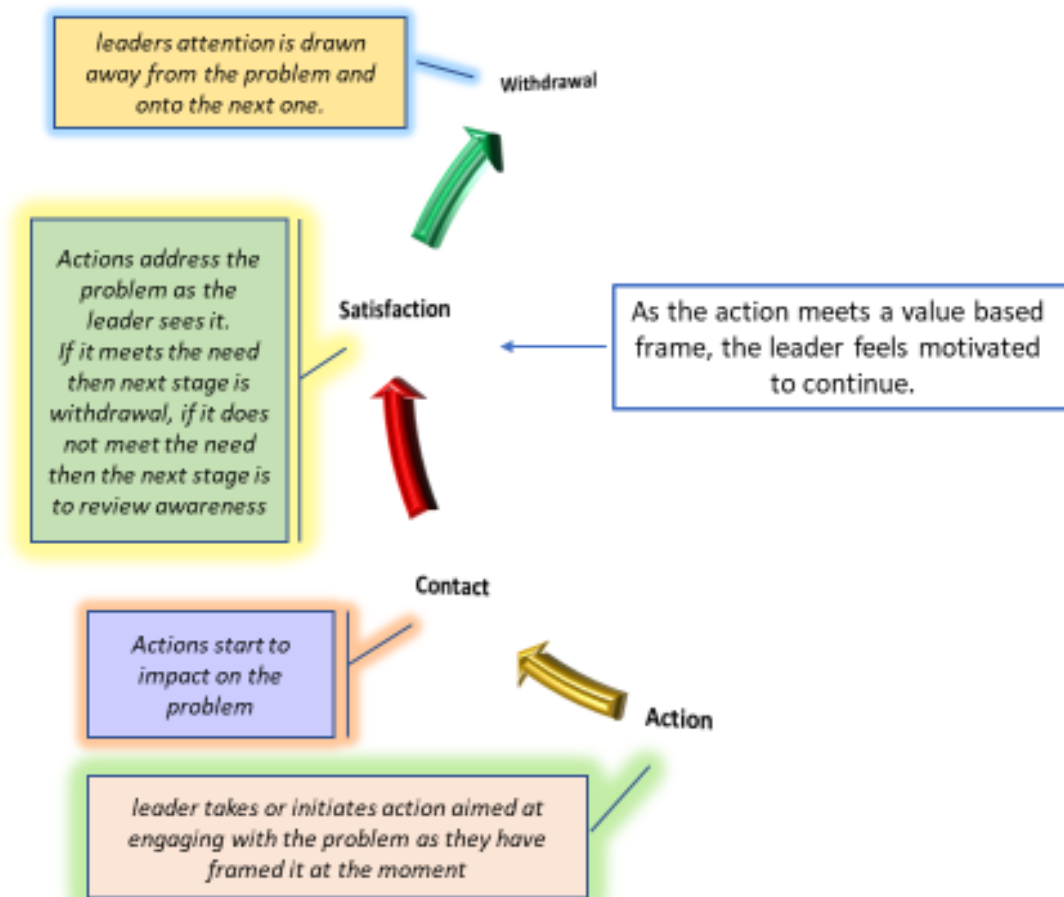


Figure 5F. 2nd Part of the Gestalt cycle (Perls, Hefferline and Goodman, 1973) related to leader motivation.

Contact leads to satisfaction and a need met. Perls (1976) described this experience as happening at the contact boundary, where a person experiences thoughts, actions and behaviours which in turn impact on motivation. Applied to this study, the question arises regarding what is the impact when continual contact and satisfaction is not met? When contact is not met, motivation declines leading to either withdrawal from engagement or to a rethinking of the intervention or experiment. Carried out with awareness and a mindset of experimentation, when contact is not met it allows the individual to return to 'action' to try a different intervention. This further supports the reasoning that effective engagement with a Wicked Problem necessitates a mindset of non 'cure', of setting realistic expectations and an

intervention style based on experimentation. For some of course, they do not feel that they have much choice but to carry on engaging with the problem as it is considered a core part of their role, so not to engage with it could be seen as non-fulfilment of role. In this case they may feel that the only line of action is to leave the role, and in a number of cases the participants in this study had done so. Another alternative is to re-negotiate expectations with key stakeholders to one of experimentation to improve, manage or cope with the problem without fully resolving it. For some they were in roles in which they were seconded for a set period of time, and as such knew that they would be going back to their substantive role eventually. All of these reasons go some way to explaining why, like a baton in a relay race, Wicked Problems can be seen to have a history of different people who have lead engagement. Could this be a way of designing engagement and leadership with a Wicked Problem? That rather than it be viewed as a 400m race from A to B, instead it is viewed as a relay, where people engage with the problem to address one aspect, to control, hold, improve, stop the problem getting worse, and then the baton is handed onto someone else to bring a fresh and motivated form of engagement?

5.7. Chapter summary and conclusions.

Framing meets a multi-purpose need. It is certainly an internal drive for the individual when gaining and maintaining energy whilst involved with the problem. Participants reported it as a motivational influence and simply as a way of putting some structure and felt control around the Wicked Problem itself. It helped meet a basic human need for completion, showing that there is a compulsion in some to move towards the known where habitus and familiarity are welcomed, solidifying an amorphous element and in turn, naming the field at a fixed point in time. This can go some way to explain why organisations can often attempt to diagnose a Wicked Problem as being tame. Given this, *why* frame and *how* to frame are important if we are to understand this process.

This tendency for some organisations to fit a tame frame around a Wicked Problem leads to some key pressures and dynamics for the leader. Pressure to acquiesce, collude or introject a stakeholder's frame, can face the leader with a dilemma, considering whether it is politically prudent to challenge the held frame or whether to embark into a process of influencing and sense-giving to stakeholders. The political dynamic is a powerful shaping force in many organisational decisions. Leaders spend time and effort engaging with a Wicked Problem to find interventions or interventions that are acceptable to political stakeholders even when the leader knows that the problem is ongoing and morphing, which will require new and different interventions further on. Therefore, finding the fine line between recognising the problem as wicked and yet partially meeting the expectations of others in the organisation is important. Asking a person to step outside the assumed frame, is a step asking them to become vulnerable, to be counter cultural, to take personal risk, perceived or real.

Framing itself is emergent, structuring expectations on an ongoing basis is likely to represent a more current and accurate representation of the problem. Participants expressed a preference for an emergent ongoing framing process. However, in this study, the effort by participants, was focussed on the initial framing of the problem and attempting to get a shared understanding of this. This is reminiscent of a more project management way of approaching problems where a goal, aim, target is agreed and kept near the front of engagement. This approach provides forms of control, which carries a perceived lower risk and as such more felt safety. Habit, existing training and existing organisational process plus expectations and power dynamics from key stakeholders are all contributing factors. The

empirical data for greater success, points to an *ongoing* framing of the Wicked Problem. This dynamic is played out when the leader is trying to reach an agreed understanding about the nature of the problem. It highlights not only issues around power, but also involvement of others and about influence.

How people choose to engage was varied, from people taking a temporary leadership role in order to engage with the problem and others for whom this was part of their daily substantive role, yet they chose to actively engage with it rather than become passive. Engaging with a Wicked Problem benefits from being clear not only what the nature of the problem is, but also understanding why to engage with it, not only from the perspective of resolution (however that is interpreted) but also in terms of what personal need, engaging with the problem, meets in self and others.

Awareness of self, others but also the surrounding field and context is key. The boundaries between the problem and the surrounding factors in the field that influence and are influenced by the Wicked Problem, are important. They are amorphous, open to varying interpretations, and changing. Understanding the quality of the contact boundary and relationship between the Wicked Problem and the surrounding field elements is essential in order to work effectively with the problem.

Participants recognised that involvement of others was also essential to engage effectively with the problem and achieve shared understanding. Agreeing a collective frame highlights the tension of finding an agreed understanding but also respecting and valuing difference, diversity and the richness it brings. The aim with engaging others is not just to try and gain agreement about what the problem is. It is also about getting diversity in the thinking and engaging and motivating others.

Wicked Problems are not independent from one another. Engaging with one Wicked Problem can lead to another Wicked Problem emerging to become figural and in focus. It is like a ripple in a pond, the waves stretch further than the immediate figure. The leader then needs to decide how far out to go in looking at the field and around the implications for all the ripples. It is a choice which brings the tension of understanding the constellation of factors influencing the Wicked Problem, against the time it takes for this ongoing exploration.

Engaging with the Wicked Problem brings with it many choices. I have chosen to call these *tensions*. These tensions have polarities where these two polarities eventually form an equilibrium or balance. This is indicated when I draw on Lewin’s forcefield analysis to represent a summarised version of these choices and tensions highlighted from this research when considering framing:

Forcefield Analysis – Influences and tensions on how a Wicked Problem is framed.

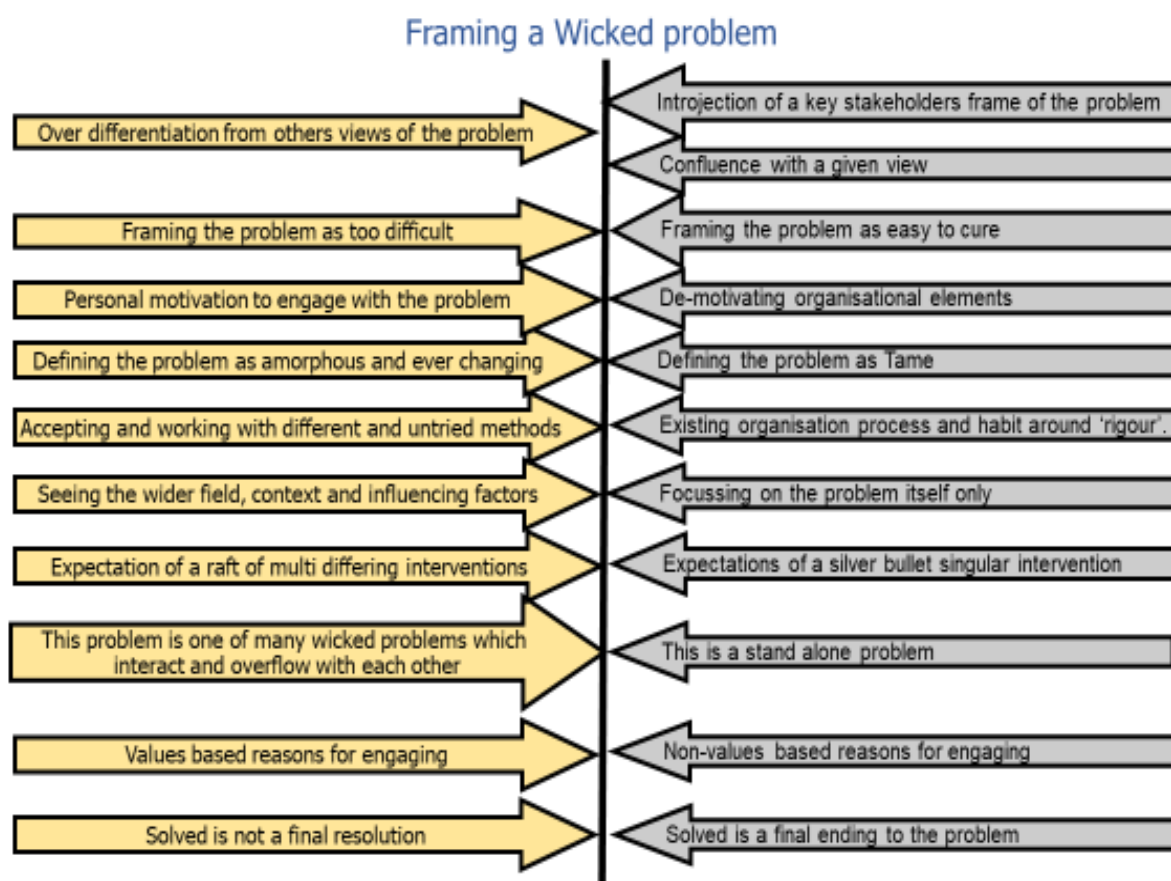


Figure 5G. The influences and tensions from framing of a Wicked Problem.

This is also summarised in [Appendix 5A](#) Figure 5Gi. In terms of implications for this on the person engaging with Wicked Problems, this part of the research suggests that this person should:

- Pay attention to their own frame of the problem and know that this is only one view or frame
- Ensure that the frames of others for the problem are engaged with and discussed as their reality, even when they are different

- Consider the problem to be dynamic, changing, and inextricably linked to the surrounding field
- Pay attention on an ongoing basis to the boundary and the surrounding environment, what is changing and what are the implications for the problem?
- Work with stakeholders to understand the nature of the problem and influence expectations on progress and outcomes
- Consider the stakeholders reactions and the power dynamics being played out. Attempting to find the right point which is not introjected or over-differentiated
- Frame the problem as something that cannot be 'cured', but can be addressed.
- Accept that no single intervention will be enough
- Realise that that this Wicked Problem will impact on and be impacted by other Wicked Problems
- Consider their motivations for engaging. Try and find a values based motivation to engage with the problem.
- Consider their own position as part of the problem and field conditions surrounding the problem. These are not separate.
- Consider influencing the factors in the surrounding field conditions, not just the problem itself.

Chapter 6. Analysis – Using experimentation to engage with Wicked Problems.

6.1. Introduction.

As outlined in Chapter 2, Termeer *et al.* (2015) ask three questions which this research seeks to take forward. It is these that led to research question 3, which this chapter explores:

RQ 3. How do leaders intervene with a Wicked Problem and what are the implications for Ways of Being?

As discussed in the previous chapter, how people engage with a Wicked Problem with wicked characteristics, is largely dependent on how they understand the characteristics of the problem itself. This chapter takes its focus on how people address the problem once they understand the wicked characteristics in its nature. The act of naming a Wicked Problem is a problem in itself, due to the individual nature of framing and its ever-changing nature. Giving a problem a name such as 'Wicked' or 'Tame' encourages a binary labelling process. Instead, problems have characteristics that are wicked and may *also* have some characteristics that are tame within that. This chapter then focuses on how people engage with a Wicked Problem that they have identified has wicked characteristics. Although there are various strategies engaged in doing this, the particular focus in this chapter is that given the lack of an 'answer' to a Wicked Problem, participants try out interventions without knowing the outcome and without having all the desired resources within their control, which this research is naming as *experimentation*. From the research, how do they navigate this way of intervening?

Participant 6.

I can see how we'll prioritise this, but I can't see how to overcome it.

From the interviews and the way in which participants began to describe the Wicked Problems they were addressing, it became clearer how political, power and personal constraints surrounded a Wicked Problem (See Chapter 5) and raised the question regarding how leaders chose to engage with the problem in these circumstances. The findings from Chapter 5 explain how people *frame* the problem influences how they choose to *engage* and how actively they choose to engage. This choice is helped by being clear not only what the

nature of the problem is, but also understanding why to engage with it, both from the perspective of resolution (however that is interpreted) but also in terms of what personal need engaging with the problem, meets in self and others. This chapter builds on this understanding, demonstrating how the framing of the problem also influenced the ambition to try things out or experiment, despite all the perceived risks this that accompanies this.

Participants described, in various ways, how they worked within the formal expectations of processes and systems used by the organisation such as project management methodology, and yet also described how they employed *informal* intentional strategies and used interventions that were less readily recognised (or approved) by the organisation. These repeatedly were described as *trying things out* or *experimenting* and *borrowing* methods from other disciplines. They described how they applied a mix of these methods in order to muddle through and navigate the engagement of a Wicked Problem. Whilst there is some literature on 'muddling through' (Grint, 2008; Lindblom, 1959; Norton, 2012), this area is largely unexplored in Wicked Problem literature, and hence an exploration of ways in which leaders engage with a Wicked Problem, using both formal and informal strategies, will add to the body of knowledge. There is no exploration in any depth on the use of experiments in Wicked Problem engagement. Field Theory and Gestalt literature, on the other hand, discusses experimentation as a key theme and so can be very helpful here when applied to Wicked Problem research.

Rittel and Webber (1973) made the point that there is a no stopping rule, unlike a scientific experiment where you can test and see. They are making the point that any intervention into a Wicked Problem changes the nature of the problem in an irreversible way. They also state that there is no gradual learning by trial and error in this sense. This has parallels with Field Theory in that principle within Field Theory which states that the field is in a constant state of movement (Parlett, 1991) as are Wicked Problems. The word 'experiment' may conjure up views of a scientific approach using such items as test samples and control groups, but in this case, an experimentation is an intervention in itself, just without the expectation of finding a full and final solution. As Perls (1976) pointed out, an experiment in Gestalt psychology speeds up the process of awareness, leading to greater understanding and acuity of the field.

From the research, it became clear that trying things out or experimentation, was in the shadows, hidden from the formal and surface processes that organisations employ. By

researching this area further, I can learn in more depth how this happens, the implications for leaders when carrying out experiments, and eventually bring this way of engaging into the mainstream when looking at Ways of Being whilst engaging with Wicked Problems.

This chapter firstly explores how participants described the purpose of experimenting and what they hoped to achieve. This is then followed by the application of Gestalt and Field Theory in experimentation and its relevance to Wicked Problems. It then examines the form of experimentation by participants when engaging with Wicked Problems and the implications, especially how leaders work with risk, safety and, by implication, politics and power. Throughout, it highlights Ways of Being for using this engagement strategy and these Ways of Being are further explored in Chapter 7.

6.2. What purpose do experiments serve when engaging with Wicked Problems?

This research uses an understanding of experimentation drawn from Field Theory and Gestalt psychology. Although widely used in coaching and therapeutic interventions, it is more recently a phrase starting to be used within organisations and a method employed in Organisation Development. Perls (1976) introduced the idea of active experimentation, giving it a wider meaning than that of a scientific experiment (Clarkson and MacKewn, 1993). Originally, Perls used it as a way to get a person to try out something new to see what happens without being able to predict the outcome. This approach was also stated by participants in this study:

Participant 11.

Sometimes we do need to, just kind of be, a bit of a rebel and just throw some chaos in there and do something very, very different. So there's times of enthusiasm where I'm like 'we can, I've seen an opportunity, let's go and do this', and let's go headfirst into that.

The aim of participants is focussed on being able to experience the outcome, rather than think or talk about it only, and to find a balance of exploring the field whilst managing risk. Perls, Hefferline and Goodman (1951/1973) used the phrase 'safe emergency', in relation to carrying out an experiment where the usual solutions or habitual solutions are not resolving the problem. Participants described how they had tried interventions out to see what

happened, with a vague hope that it might help resolve or improve, but generally not knowing what was going to happen. There is a question here about the sorts of issues in which experimentation is acceptable and where a safe, predictable (and imperfect) course of action is either politically, ethically or practically necessary. Participants certainly discussed *risk* in relation to experimentation (see section 6.6. below) but also related it to organisational culture and the relationship they had with their line manager. Ariely (2010) commented that businesses do not experiment much, as they typically value answers over questions, because answers allow them to take action whilst questions mean staying longer with uncertainty. However, this research found that experimentation was very commonplace amongst those addressing a Wicked Problem. It is often in the shadows, away from formal processes and reviews, where uncertainty is considered a normal component of experimentation. With this 'hiding' of experiments, when a leader is within an environment, where they may or may not be supported to try something different, what, for them, is the purpose of an experiment? Why not continue with more organisationally accepted processes?

6.2.1. Why participants choose to experiment.

In the absence of an 'answer', those engaging with Wicked Problems have choices – but these can seem limited, therefore participants saw experimentation as *essential* to move forward:

Participant 8.

What I would hope we get, is then actually some parts that don't quite work for us, but what parts do? So that's the stuff we're hanging on to. There's some bits that either don't work or are missing. Well, okay. So, we've learned from that. Let's, let's now look at how do we build those gaps? So for me that's Essential. Essential.

With the pressures from stakeholders and organisations to address the problem, leaders engaging with a Wicked Problem are led to other alternative actions. One of the key options taken is to try 'something' or to experiment. These experiments differed in risk by person and by field conditions. As Grint (2008) points out: '*Put another way, to get some purchase on Wicked Problems we need to start by accepting that imperfection and making do with what is available is not just the best way forward but the only way forward*' (Grint, 2008 p15). Although there are other options, such as not engaging, all participants in this study advocated the use of *trying things out* or experimentation in this scenario. Far from an unusual approach, participants saw experimentation as a normal occurrence at work:

Participant 14.

Actually, things don't always work. Because that's life, things don't always work. And the main thing I would stress is, you know, within that as long as no one or nothing comes up to harm, we can mitigate against that. And yeah, I think trying new things is really important. It encourages innovation.

Participants indicated that trying things out is commonplace in their work, and by implication that they carry this out frequently as a normal part of 'life'. The word experiment was not used by all participants, but it was often housed as innovation, or trying things out as a way of raising awareness and learning. There is a recognition amongst participants that Wicked Problems evolve and change over time. This is followed by the understanding that any possible intervention would also need to evolve if it is to stay viable:

Participant 2.

The allocation system in a year's time won't be the same as it is now, because as the problem evolves, the current solutions won't fit. It's understanding that this will happen. I think that just making sure that, you know that the Wicked Problem will evolve. So the solution needs to evolve.

Whilst participants recognised the uniqueness of the problem, they also found that addressing it can be useful to learn from, when a similar or next iteration of the problem is encountered:

Participant 8.

Once I've engaged with a difficult problem once, it might provide me some insights that I would find helpful if I encounter something similar in the future, but it's not the same. It's very unlikely, I think, to be the same.

Learning was a key driver for participants. Not only did they feel they had limited options when addressing a Wicked Problem, but they were willing to *increase* the risk but *reduce* the level of possible success if they thought that they could draw learning from the experiment. In Field Theory terms they were drawing on aspects that were in the background, but not immediately obvious. Perls, Hefferline and Goodman (1951/1973) saw that the purpose of an experiment is to bring our attention to aspects of the field which have been in ground, away from our attention or unattended to. They label the purpose of this as highlighting aspects of the field which we have not paid attention to or avoided. This is a first indicator of what the

participants in this research are carrying out when they refer to their experiments. *'Trying things out'*, *'innovation'* or even *'trying the wackiest way'* refer to aspects that are not the norm, they are not in everyone's focus. Participants are looking past the norm to draw from aspects previously ignored. There may be a reason why leaders have avoided these aspects, maybe they are too difficult, maybe they do not fit in with current assumptions or the current frame of the Wicked Problem or maybe political tensions and pressures are prevalent.

Raising these issues to the foreground through experimentation can bring resistance (Clarkson and Mackewn, 1993). If, by carrying out an experiment, there is no or little resistance or conflict, then it is likely that the experiment is just repeating work as normal, it's not paying attention to anything new. Resistance to an action or decision is an integral part of the field, and, in itself, worthy of attention. In this way, an experiment with a Wicked Problem will raise energy, uncertainty, different views, resistance and possibly conflict. Paying attention to the resistance can often bring our focus to *why* the problem is not being addressed effectively and for the leader of a Wicked Problem this can be welcomed as a key piece of learning. Of course, amidst all the other pressures of leading and organisational operations, it can also be considered very unwelcome, but the data in this research indicates that Ways of Being for a leader of Wicked Problems, would, at least, mean paying attention to the resistance as information. In some ways, the experiment here is a *provocateur*, designed to elicit a response, to reconfigure the field conditions surrounding a Wicked Problem. It turns the attention to, and even emphasizes, important parts of the field which are ignored through habit, fear, assumptions. In doing so, it encourages these parts to be owned as part of the problem, rather than irrelevant. The participants in this study did not voice their reasons this way, but certainly emphasized the outcome of experimentation as 'learning'.

What experimentation achieves, is to *accelerate* the learning process, if, as in a Gestalt view, you believe that awareness leads to learning (see Figure 6A). Awareness can be a slow process which is sped up by experimentation (Perls, 1976). An experiment, whilst not having a predictable outcome, is a concerted effort in a certain direction. It is purposeful (Zinker, 1977 p128), and emphasises the aspects of experimentation that pay attention to co-creation and support. Without experimentation, learning will happen, but it will be in a less purposeful way, often by mistake. A Field Theory experiment into a Wicked Problem is a purposeful

intervention to speed up the learning, but without knowing what this learning or outcome might be.

Further, in both devising the experiment and learning from it, the process is greatly enhanced when viewed as a pluralistic intervention. The involvement of others brings with it diversity of thinking and awareness:

Participant 8.

If you haven't got a shared understanding of all of these, what we're actually here to do, then to try and identify 'solution' is almost impossible. Just the identification and the shared identification doesn't necessarily mean that there's clarity. I think the opportunity it creates is if you've got diversity of thinking in the group involved, then you can start to identify some solutions. And then you can have some exploration around it, then go back to the experimentation piece. Where might we experiment first with this?

Here, experimentation was named not only in terms of moving the problem forward, but as an intervention within the field. In this case to gather a stronger pluralistic approach via a shared understanding. From a Gestalt and Field Theory perspective, experimentation is holistic, engaging cognitive knowing, but also paying attention to responses and impacts it has on other parts of the field (Chidiac, 2018).

Experimentation encourages people who are engaging with Wicked Problems to move away from the relatively safe practice of simply *talking* about what could be done. It is based on the belief that when experimenting, the leader learns more by experiencing than only talking or cognizing (Chidiac, 2018). Perls (1976) saw creative and active experimentation as important, which engage the 'whole' not just an isolated part of the system or person. Experimentation can bring both an examination, and challenge of current practice by exploring and learning from new practices and actions (Chidiac, 2018). It raises awareness which in turn opens up further choice from the usual practice (Chidiac, 2018; Perls, 1976) and can therefore lead to different decisions as described in Figure 6A below:

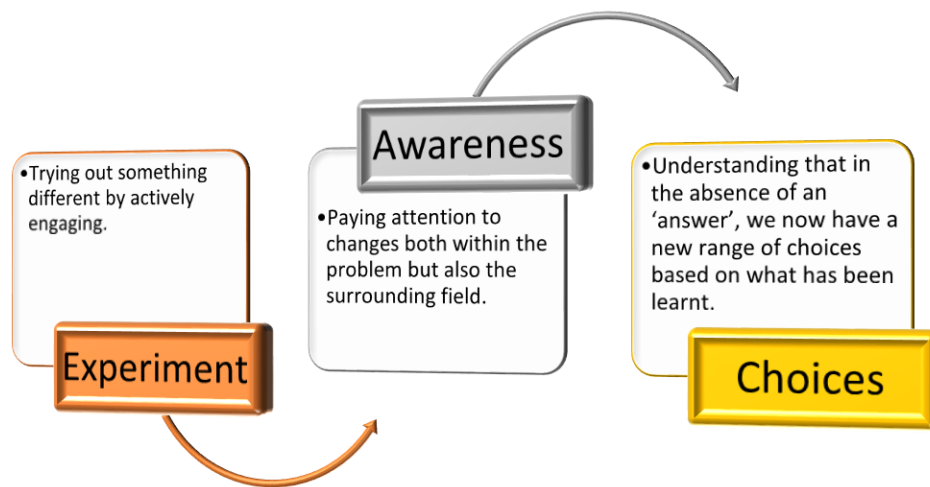


Figure 6A. How experimentation leads to learning and choices.

6.2.2. Experimentation due to concept or resource scarcity.

One form of experimentation is the intervention of 'Bricolage'. *Bricolage* is a French word, derived from other languages, that means the process of improvisation (Baldick, 2008). Social Psychology uses it to describe the mental processes through which an individual develops novel solutions to problems by making use of previously unrelated knowledge or ideas they already possess. As with experimentation in Field Theory, this idea of Bricolage challenges more rational/logical views of problem-solving (Duymedjian and Ruling, 2010) and recognises more creative and experimenting approaches (Stinchfield, Nelson, and Wood, 2013). Participants discussed the need for this approach when addressing Wicked Problems:

Participant 1.

You have to be more creative if you've got fewer resources.

Participant 2.

You're never going to always have the right tools, materials. So, you have to work with what you've got. And you know, you need to sort of try things, experiment.

Great if you've got the materials - it makes it easier I suppose. Saying it's not worth attempting to address it is a bit defeatist, I think you need to try.

However, the participants in this study linked experimentation to more than resource-scarcity. The data showed how they linked experimentation to *solution-scarcity*. Since every

Wicked Problem is different, and since we cannot know the 'answer' initially (otherwise it would be a tame problem), there is no guaranteed intervention to use. The skill of the experimental bricoleur (Gabriel, 2002), is in trying new things out, setting loose experiments to see what works and what doesn't. The leader who adopts an approach of a bricoleur, joins and links whatever they can to achieve a practical outcome or to learn more. This leader understands that they do not have the answer themselves (Grint, 2007). It is not linear, nor is it perfect or gold standard. Using experiments also impacts on the energy and interest of the leader:

Participant 11.

It is fun and stimulating as well. If I'm just get it and I do the same approach four times, I'm going to be on autopilot, and I'm not fulfilled or stretched. So not to say that I'm doing it just to amuse myself and stimulate myself, but I think there's genuine value in trying different things. But if I did the same old shit (sic), we're gonna get the same old results.

So the use of Bricolage is not always resource-scarcity driven or even just solution scarcity. It can be used to refresh and renew previous decisions. This is one way of refreshing the understanding of the surrounding field. Instead of working with just an initial understanding of the field, participants showed how, by experimentation, this understanding of the field is refreshed and updated:

Participant 4.

There's always new ways of doing things or do things differently or, and I'm not saying cut corners but if you've always done something, the one way actually isn't the right way. Can you minimise some steps? Can you look at shortening lengthening one area? Can you look at different ways of doing things? Just because you've always done it that way does not make it the right way.

Grint (2008) outlines how Lindlom (1959 /1983) says that decision-making mechanisms are little more than 'muddling through'. Taking an experimental bricoleur approach is actually engaging with the problem, not resigning to inaction or defeat due to lack of resource or lack of solution. *Muddling through* is a form of trial and error and therefore experimentation. In the organisational boundaries of resource scarcity, solution scarcity, organisational politics and expectations, muddling through is reported by participants as the only way they can see

to take it forward. When experimenting, the bricoleur starts from where they are with what they have got (Grint, 2008). Taking a more positive way of looking at experimentation, some participants saw other benefits from experimentation and Bricolage, including the freedom that experimentation allows, and as a way of not getting constrained by bureaucracy:

Participant 1.

I think having too much resource can actually constrain creativity a bit more. Because when they've got lots of money, they will get lots of project management and put lots of governance around it. Then you know, it's almost slows it down.

6.3. Benefits and drawbacks.

Nearly all the participants interviewed reported the benefits of taking an experimental approach, even when resource-scarcity was not the driving force. In the literature, a large amount of the literature continues to advocate it as an approach (Senyard, J. M., T. Baker, P. R. Steffens, and P. Davidsson, 2014), but in its earlier reporting, the literature also outlined the possible negative impact and limitations (Baker and Nelson, 2005). Lanzara (1999) suggests that outcomes from experimental Bricolage are often second best, incomplete and only transient. Experimental Bricolage can be seen as wasting time and resources under difficult circumstances (Powell, 2011), If, for example, stakeholders are only focussed on results, then their patience for experimentation may soon wane. Compounding this problem, when solutions resulting from experiments do not 'work' (in the organisations view), but people continue to rely on it, half-finished interventions may consume time with repeated and ineffective experimentation (Levi-Strauss, 1967). After a prolonged stretch of experimental Bricolage, it may lead to a belief that the organisation will be able to *make do* with this as a permanent way of working and could lead to repetitive, inefficient, and ineffective attempts to make a go of ideas that simply cannot be accomplished (Uzzell, 1990). For example, taking the current NHS situation with GP appointments, A and E/urgent care admission times, availability of beds, ability of social care to look after people who have been discharged from hospital. These health and care services have been attempting to adapt, utilise resources and be creative, they are experimenting, but there is only so far that this can go as a temporary intervention, and is bounded by what the current assumptions, resources, structures that the NHS provides, then the problem remains Wicked. By continuing with high levels of experimentation, organisations may create too many temporary solutions that

require constant attention and too strong a reliance on improvisation (Senyard, Baker, Steffens and Davidsson, 2014), in other words, where experiments and temporary interventions become the accepted norm, rather than a method of learning.

These potential criticisms of experimental Bricolage need to be taken in the context in which they were written. These points are largely driven from organisational entrepreneurship literature and are based on the assumption that the aim of experimental Bricolage is to find a 'solution'. The language used in these points are often made as if it is a tame problem. Taking that Wicked Problems are, by their nature, unsolvable, then the role of experimental Bricolage is not to cure or solve, but is to learn from, to develop, to alter and refresh how the problem is framed, possibly to alter the form of the problem itself, to understand the nature of the problem and to try something and 'see what happens', without pre-conceived ideas about the outcome, to provide a stimulus for further action, then many of these criticisms fall away.

6.4. Pre-conditions for experimental Bricolage.

Three pre-conditions for using experimental Bricolage are identified by Baker and Nelson, (2005). As stated earlier, experiment suggests a bias toward active engagement with a Wicked Problem, rather than resigning to failure or even lingering over questions of whether it is possible given the current resources and ideas available. Firstly, participants displayed tenacity over not giving in to resource limitations or solution scarcity, leading to a willingness to experiment and persist to try to find ways to accomplish goals without worrying too much about whether they have the right tools, resources, skills or solutions at hand:

Participant 14

Yeah, it might be that you are making presumptions about what the tools or materials you need to resolve the issue are, so it's always worth exploring something looking for alternative ways that might actually then open up new ideas and better ways of working to address an issue. So in some ways, that challenge might create opportunity.

There is a clear link between the bricoleur who experiments, and creativity, especially the creative use of resources. Secondly then, experimental Bricolage draws on both resources from elsewhere and attempts to adapt them to a new purpose, but also finding value in ideas

and approaches from other disciplines and other organisations where the transferability of these alternative approaches may not be immediately obvious. They draw from the wider field with the principle of possible relevance (Parlett, 1991). They are willing to consider resources and ideas that others might see as unrelated or worthless (Garud and Karnoe, 2003):

Participant 1.

When you approach an organ donor family, for example, it's about that, obviously, all that communication, but actually what we've stolen, is the communication from sales techniques, okay, so actually, what they do is they sell the concept of organ donation.

Participant 5.

The whole intention is really just to try to find depth and look at other areas of healthcare industry, what ways they've tried to tackle things and just see whether you could adopt them and use them be creative here and how you might implement them to try and achieve that.

Participant 1.

It might not have anything to do with project delivery or anything like that. But it will just spark some kind of interest. So you know, I can take things from architecture and think, actually, that could be quite interesting to use that.

Participant 13.

So you might think, oh God in order to resolve that I'm going to need to get a load of people and we're going to need project managers. We're going to need all these people. We're going to need to spend a load of money. Actually, if you start thinking about in a slightly different way, you might be able to just talk to another company and see how they've dealt with it and then then the answer is, you might get the answer much quicker than you think. You're going to be spending a lot less money by just thinking about it in a different way.

Thirdly, experimental Bricolage involves combining old resources for new purpose. It promotes innovativeness by the recombination of existing resources or ideas toward purposes for which they were not originally intended, which leads to more innovative solutions (Senyard, Baker, Steffens, and Davidsson, 2014).

Participant 10.

You're going to have to be as creative as possible, because you might just find a solution that knocks you further forward.

6.5. Ways of Being for experimentation.

Given then, the purposes of experiment and of experimental Bricolage outlined above, together with the forms of experimentation discussed above and in Chapter 3, it raises the question for this research, what are the *Ways of Being* required, from a leader, to work well using interventions of experimentation and Bricolage? This is discussed further in Chapter 7, but Gabriel (2002) describes the experimental bricoleur leader as opportunistic, ad hoc, devious, creative and original. Steffens, Senyard, and Baker (2009) consider key ways of working that people who adopt experimental Bricolage as an approach:

- They are confident of their ability to find workable interventions to new challenges by using existing resources.
- They engage with a broader range of challenges than others.
- They use any existing (including those seemingly unrelated) ideas and resource that seems useful to responding to a new problem or opportunity.
- They combine existing resources and ideas, with an aim to adapt, improvise and hopefully overcome.

Again, the focus of these points above is on resource utilisation, as if resources are fixed and not negotiable as part of the moving field. It focusses on 'solution' and does not indicate movement outside of current accepted boundaries. However, if we consider the origins of the bricoleur, not only did they consider *what* resources were used and combined, they also challenged *how* resources were used, not confined by the assumptions of the past, others or culture. So essentially it seems that people who engage in experimental Bricolage do not assume restrictions that may be placed on them, either by the organisation or by assumption. This is a kind of positive deviance, rather than negative acquiescence (Grint, 2008), in which people deviate from mainstream assumptions to try out and test different assumptions. This warrants either viewing the boundaries differently, as something to question or at least test out:

Participant 2.

It's breaking down what we have got, and then just making some, I don't know, almost bending the rules of play it a little bit with, with what you can do. So I'm quite good, at sort of, taking from here and put it in there, moving things around. And I think, you know, you need to be able to call in favours, open doors and do all these things and make people want to help you.

Using experimental Bricolage has implications for risk and perceived risk. The clumsy, messy and unpredictable outcomes are often part of experimentation even when it works well (Ciborra, 1996). If we seek to employ elegant or neat type interventions or seek to frame the problem as tame, then they are unlikely to address the chaotic nature of wickedness (Grint, 2008). Instead, the leader needs to adopt a philosophy of experiment, accepting imperfection and making interventions with what they have in their control. Intervening consists of creative and flexible interventions which combine different ways of organising, framing and rationalising (Verweij, *et al.*, 2006). Experimental Bricolage involves the leader combining ideas and resources into new ways of intervening. Shapiro (1988) uses the term 'clumsy institution' as an opposite view to the assumption that when we are faced with contradictory definitions of problem and solution, we must choose one and reject the rest (Shapiro, 1988). In each unique situation, a leader needs to apply an appropriate and flexible combination of alternative perspectives (Verweij, *et al.*, 2006). As Verweij *et al.* (2006, pp28) states in relation to climate as a Wicked Problem:

'Less Messianic ardour, more enlightened scepticism, more toleration of idiosyncrasies, more frequent ad hoc measures... What is required is a less mechanical, less fanatical application of general principles, however rational or righteous, a more cautious and less arrogantly self-confident application of accepted, scientifically tested, general solutions to unexamined individual cases.'

A leader who works with clumsy or messy solutions shows understanding that problems do not exist in isolation (Raisio *et al.*, 2019) and that they are clustered in a web of interaction (King, 1993) or constellation of factors. These messes therefore require the leader to understand or at least consider the wider field, to attempt to at least reduce the uncertainty of a messy or clumsy intervention (Raisio *et al.*, 2019). The leader who experiments,

necessitates an understanding that the outcome or resolution may not be 'gold plated'. In fact, it may not achieve any progress towards a solution at all:

Participant 5.

Oh, no. I mean, you can start. I think sometimes we can get into 'this is the gold plating'. And I know again, this is something that you sometimes have to manage with some of my colleagues, particularly clinical ones, you know, You do not need 10 years of retrospective data always. Sometimes you can just take a punt.

This also indicates the main difficulty with advocating experimentation, and that is its understanding and expectation of quantifiable outcomes. As a leader trying to get agreement from an organisation to experiment with the possibility of nil return, is a tall order and as such takes a very skilled influential leader to achieve. The expectation of an experimenting leader of Wicked Problems is to learn, to be able to intervene more effectively next time and possibly, without expectation of certainty, to have a positive impact on the problem itself. This, in itself, must lead to considerations of the expectations of others. Given issues of politics and power relationships, how does a leader facilitate the pathway between realistic outcomes and those called for or assumed by stakeholders? Chapter 5 discusses a number of issues in relation to this, but the leader also needs to be comfortable with uncertainty, which Grint (2008) refers to as negative capability, and also be able to influence the expectations and negative capability of others in the field. Wicked Problems are ambiguous and as Grint (2008) puts it, the uncertainty cannot be removed so the aim is to remain effective despite this. Further, this research highlighted that it is not only carrying this out with senior stakeholders that is important, but that being able to achieve and encourage this mindset with others as well:

Participant 2.

So you know, they come in and say they need this piece of equipment, we haven't got it. We will have a conversation about how it might be that you loan or could borrow one. and what can we do differently? And so it's just the motivated people that tend to do that without coming back to you. So just try to keep that level up to. We need this, we haven't got it, but if we could pull this person in or this person in and then we do a little bit of this, it won't give us that but it will give us something close to that, which might be okay. Just trying to look at what resources you have

got and what expertise you've got. I think if you can keep people motivated, they'll think of things themselves as well.

6.6. Risk, safety and experimentation.

As discussed, experimentation often entails pushing or working outside of the norms of an organisation's ways of working. This brings with it a dilemma for the leader regarding how to carry this out and still work with the politics, expectations and stakeholders effectively. This raises the question *How do participants work with the risk associated with an experiment?*

Perls (1976) highlights what he calls the 'impasse'. This is where the habits and resisting forces reach an equilibrium with the drive for resolution or wanting to move forward (see Chapter 3). It is a position of being stuck. The introduction of an experiment in the field is an aim to disrupt this equilibrium either towards making a change that will alter the perception of the Wicked Problem or will result in a decision that the risk moving forward is too great and so effectively this is a decision to live with the status quo. This is a question of perceived risk and so how do participants view and manage risk associated with the Wicked Problem that they are addressing?

6.6.1. Having a safe field context.

Experimentation has an aim of raising awareness, learning and choice in an environment in which risk is managed (Chidiac, 2018) (see figure 6A). Experimentation is not about trying *anything*, but instead it considers boundaries, in this case of items such as patient safety, the law, ethics. There are organisational, professional and personal boundaries that impact on risk and appetite for risk (as discussed in Chapter 5), such as politics, power, and perceived threat to loss of status or position by the leader.

Having decided that they do not have a clear answer to a problem, leaders are led towards experimentation, within which there is an informal judgement being made about risk. Although Perls, Hefferline and Goodman (1951/1973) used the phrase 'safe emergency', and Chidiac (2018) names it as an environment where risk is controlled, participants repeatedly discussed this issue and showed that in the absence of any type of formal risk boundary, they employed various approaches to this issue. In a Lewinian (1952) view of field, boundaries are permeable (see Chapter 2), and as such this brings up an approach in which the leader attempts to influence the boundaries, rather than accept them as given. Boundaries are often

thought of as fixed, as something within which people must work, but clearly from the participants, in the absence of *explicitly* set boundaries around risk, worked within *implicitly* set boundaries:

Participant 10.

Unless you're gonna break the law, which you don't want to do, anything else is possible. So, I've always had a mindset that I will not be constrained by circumstance, and I will push boundaries constantly.

There are of course explicitly set boundaries such as patient care, formal decision-making processes, legal boundaries, but many of the boundaries are not explicit. In this case participants either tested the boundaries or in some cases worked differently from recognised formal procedures, to experiment. The research highlighted that one of the most commonly held boundary was self-imposed, based around how safe they felt personally to experiment:

Participant 16.

You need the confidence to do it. Under the pressure of the organisation to deliver this, the drive to make sure it's good, if it's not okay to fail, It's not okay to experiment.

Risk involves psychological safety. Psychological safety is needed in individuals if they are to feel willing and capable to experiment (Schein and Bennis, 1965). Whilst this does differ between individuals, the field conditions in which the risk itself is taken, impacts on the size, type and expansiveness of the experiment. Levitt and March (1988) outline how organisations tend to have biases that favour existing methods over experiment. The drive for organisational success (however the organisation interprets this), brings a tendency is to look towards tried and tested ways of working based on the assumption that as they have worked in the past, they will work now, hence the prevalence of processes such as project management. This favouring of existing methodology can result in field conditions within which individuals operate, being perceived as non-supportive and to have a heightened risk if a different approach is chosen.

There is a tension or polarity (Joyce and Sills, 2002) between learning and risk. Learning can emerge from experimentation, especially if the experiment is reviewed and discussed, talking about impacts on the problem, in the field and from different viewpoints (Edmonson, 1999). However, those carrying out an experimentation, may perceive a personal cost to doing so,

such as how they are thought of, their standing and reputation, and impact on promotions (Brown, 1990), and therefore due to this politicised conformance, the leader may be less willing to experiment (MacDuffie, 1997). In this case, the expansiveness of the experiment is directly impacted by the perceived risk associated with it. The more expansive the experimentation, the greater the scope for learning but it brings a possible greater perceived risk.

In the field conditions for some, the threat is perceived as low and therefore experimentation and the associated risk is considered to be a worthwhile direction (Edmonson, 1999). There seems then to be a judgement made by individuals about risk to themselves versus the learning that will be gained from experimentation and the fact that in the absence of an 'answer' and yet pressure of expectations from stakeholders, they can often see restricted choices. For some this is related to the environment or culture that they work within:

Participant 2.

It's the culture. I think for me its recognition that in the culture it's okay to actually push boundaries and try things different.

6.7. Influences on the choice to experiment.

As in Field Theory, the decision to experiment and take the associated risk is not a binary decision (Joyce and Sills, 2002). It is a continuum of risk. As with the principles of Field Theory, these permeable boundaries are not static, they move and change (Parlett, 1991). Participants had a variety of ways of viewing the risk. What was figural for some, was ground for others. In this case figural was testing the boundaries for learning:

Participant 11.

I like to innovate in those areas and just don't make people uncomfortable, but just open their eyes up a little bit. Yes. So there's nothing too risky when it comes to innovation, but it's just pushing the confines.

As the field consists of all the coexisting, mutually independent leaders of a person and their environment (Parlett, 1991), a person's behaviour can be understood in terms of their interdependence with the field conditions (Clarkson and MacKewn, 1994). So in relation to risk taken through an experiment, of importance is not only what are the field conditions, but how does a person who is engaging with a Wicked Problem *interact* with the field of the

Wicked Problem and its unique properties? In other words what is the quality of the field boundary between an individual and the Wicked Problem. Literature regarding Field Theory guides us to consider this *person to field* interaction in Wicked Problems within three areas. (Lewin, 1952; Burnes, 2019). These three are:

- The internal world of the person (how are they experiencing risk and their approach to employing it when addressing problems).
- The external world/environment (the Wicked Problem itself and the contextual, cultural implicit and explicit messages about risk and failure).
- The ever-changing relationship between the above areas (the field boundaries).

There is a temporal element to this. For some, this relationship between self and field led to timescales becoming figural where, for them, they felt more pressure (real or assumed) to solve a problem and take less risk through experimentation if they were under pressure for a short term solution:

Participant 1.

You know, if you've got a problem that's got an end point and you need the end point within a year's time, then you can't try something and it fail, because you don't got time to get it completed. But this problem isn't certainly going to be resolved in my life. So it allows me to do that.

Noting here that the frame they are putting on the problem as short/long term coupled with their perception of the field conditions led them to a conclusion that experimentation is not okay with 'short-term' problems. However, this indicates that they conclude that there is an option available with shorter-term problems, to intervene without failure. Perhaps they are indicating that Wicked Problems do not tend to be short term?

Boundaries surrounding a Wicked Problem impact on the amount of risk taken with an experiment. The boundary, however, is not always formal. From the data and participants, we see that the boundaries were assumed by leaders, seemingly from what they thought stakeholders' reaction would be. The relationship to stakeholder was discussed a number of times in relation to taking a risk in the experiment:

Participant 3.

I think all the people I've worked for have given me the autonomy and I've not been micromanaged, somebody suggested to me, that's because they trust you. So you

instill a lot of trust in them. So they then allow/give me the freedom to do it, which is good. Even when I was quite junior, I would be able to pitch an idea and do it in a passionate way that really engaged people. And that's probably what allowed me to do it.

This is a good example of leaders engaging with the field in order to enable themselves to take more risk safely. In this case influencing stakeholders by building trust into the relationship. They indicate that trust in this case is a way of expressing confidence that someone understands and can assess risk 'properly' and will operate within agreed boundaries with respect to that assessment. Participants reported two main sources for how safe they felt to experiment. As mentioned above, it is trust from the stakeholder, but also participants implied it was trust of the stakeholder from the leader and that their stakeholder or line manager, would support them in the event of a perceived failure:

Participant 1.

You won't press, you won't go to the edge if your back's not covered. So you have to know that your back is covered. And that's really important otherwise people just work in a safe space.

Participant 10.

People being fearful that if they get it wrong, they that the people, someone else will come down on them like a ton of bricks. Yeah. And they don't want the grief. And that leads very sadly, in my experience, to a form of learned helplessness.

Participant 11.

I think because I know the area and the consequences of where I can fail safely. So I also trust the people at the higher level that are saying it. I feel like I can manage upwards and hold them to account.

People are more inclined to experiment if they have psychological safety (Edmonson, 1999). Psychological safety is impacted by the leader themselves, their history, their experience in the field. It is impacted by the organisational field/context and culture. Finally, as discussed above, it is impacted by the relationship between leader and stakeholder. All these are field conditions which are unique to each situation, are in transition and are interdependent.

Participant 3.

You have to be able to ask questions about that in a safe environment to understand what went wrong. And that's applicable to loads of other problems that we could define as wicked. ...I need that nurse to feel safe enough to be able to tell us what went wrong. Yes. Even if it was something that they perceive as blame. It's important, people have to be able to fail safely.

All the leaders interviewed advocated support for experimentation, but there was repeated mistrust about whether, in reality, a failure would be accepted as learning once the consequences were known. Organisational narrative may not meet personal narrative or experience:

Participant 6.

My experience is that executives say that's great, but they are very unwilling to deal with the consequences of that.

This can leave leaders in a compromised position, knowing they haven't got the answer, knowing that the way forward is to try something different and yet not trusting that in failure, they will get the support of their key stakeholders. In this way anxiety is raised. Experiments raise anxiety and energy. Perls (1976) said that anxiety in an experiment was a central ingredient not an unfortunate by-product. With anxiety comes energy, and energy is what will drive the experiment. It is managing this risk and staying engaged despite anxiety that is the balance. Tolerating and managing anxiety is key. The ability to tolerate anxiety but to ensure it does not become excessive and lead to panic or action without consideration or denied anxiety leading to low energy, inaction, and desensitisation, will lead to different understandings of the problem and furthermore different actions (Grint, 2008).

The drive to find a solution then is not only habitual in some, nor is it only driven by organisational and stakeholder pressures but is sometimes driven by the leader themselves as a mechanism for displacing the anxiety of ambiguity that is a condition of Wicked Problems (Grint, 2008). Managing this balance of anxiety and energy, plus abilities such as courage, curiosity and confidence, are mentioned as important by participants:

Participant 10.

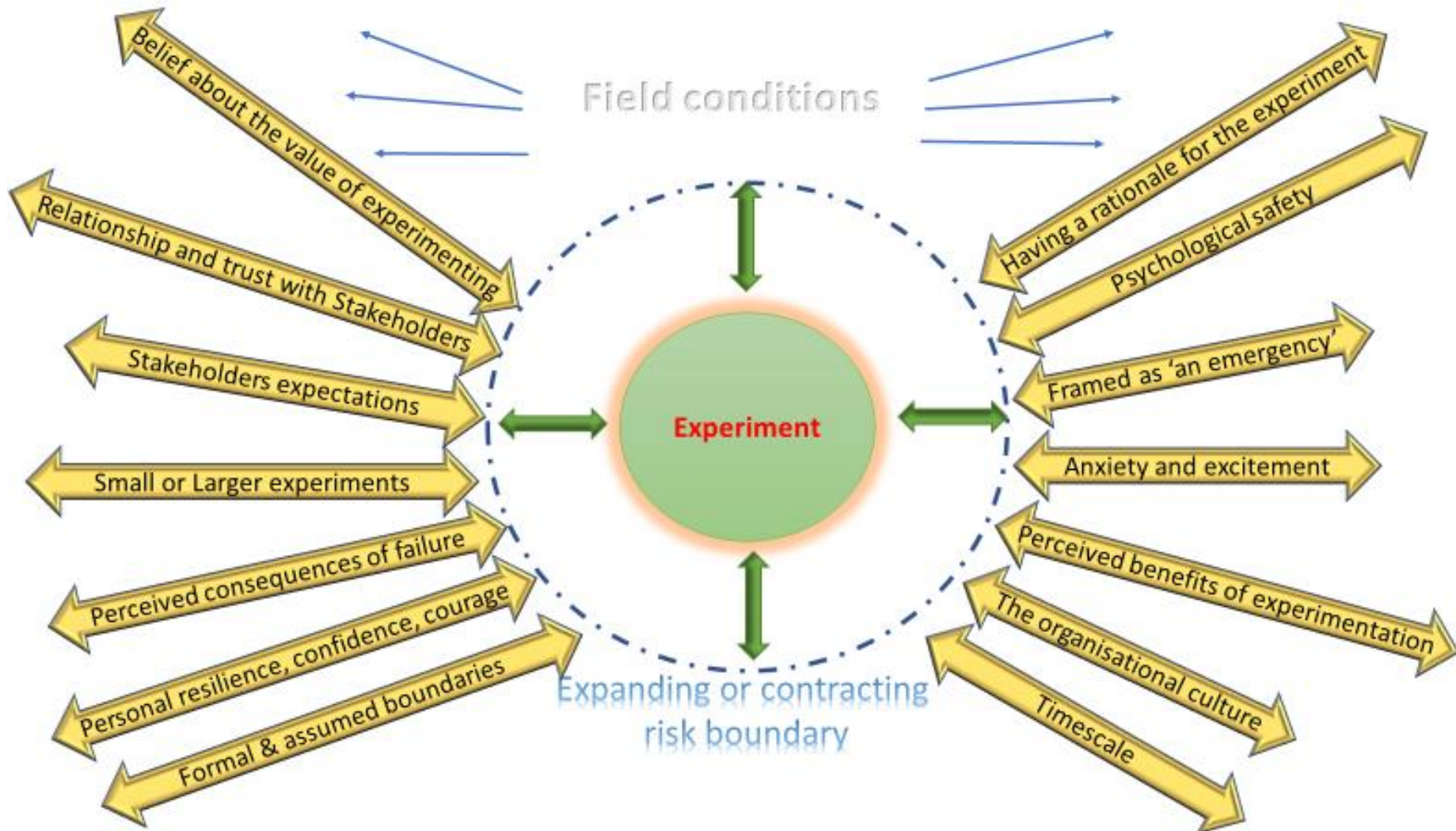
We always kept coming back what's the next right thing, what do we do next now we've got these insights, what's the next right thing? Okay it's hugely brave, you need so much courage to be able to do that.

Participant 10.

Curiosity made all the difference in the world.

Figure 6B below, shows what participants described as some of the main field conditions that impacted on their decision to experiment and on how much of an expansive experiment, they would employ. This is also summarized with participants quotes in [Appendix 6A](#):

Figure 6B. How participants described what field influences impact on their choice of how expansive an experiment to do, balanced against perceived risk.



6.7.1. Which part of the field are these influences aimed at?

Taking these field influences, they each relate to one part of the field, self, others or context:

- The internal world of the person (how are they experiencing risk and their approach to employing it when addressing problems) – **Self**.
- The external world/environment (the Wicked Problem itself and the contextual, cultural implicit and explicit messages about risk and failure) – **Others**.
- The ever-changing relationship between the above areas (the field boundaries) – **Context**.

Element within the field	Self	Others	Context
Belief about the value of experimenting	✓	✓	
Personal resilience, confidence, courage	✓		
Anxiety and excitement	✓		
Psychological safety	✓		
Having a rationale for the experiment	✓	✓	
Perceived consequences of failure	✓	✓	
Relationship and trust with stakeholders	✓	✓	
Stakeholders' expectations		✓	
Size of experiment		✓	✓
Formal boundaries		✓	✓
Assumed boundaries	✓	✓	
Framing of the problem	✓	✓	✓
Perceived benefits of experimentation	✓	✓	
Organisational culture			✓
Timescale of the problem		✓	✓

Table 6i. Parts of the field participants reported as being influenced and needing to influence, when experimenting and managing the risk.

Although participants said that expansiveness of the risk was largely as a result of managing the boundary with stakeholders and the organisation. Table 6i demonstrates that a significant number of influences were in relation to *self* as part of the field. It seems then that management of self and the boundary between self, others and the organisational context is

important in Ways of Being. Chapter 5 described how leaders using framing for this purpose, and another way in which participants achieved this was by finding mitigation strategies for their experiments.

6.8. Mitigation of the risk in the experiment.

Field conditions, boundary and the relationship with an individual, are coexisting, mutually independent factors of a person and their environment (Parlett, 1991). A person's behaviour can be understood in terms of their inter-dependence with their environment (Clarkson and MacKewn, 1994). Using a Field Theory lens, a person is never independent or isolated from their field, but always in contact and connected with everything else (Joyce and Sills, 2002). In working with risk in experimentation, participants demonstrated an awareness of field conditions and brought different aspects of the field from ground to figure, in order to mitigate, reframe or influence risk. In turn this seemed to be experienced almost like a permission giving process, where, by framing aspects of the field and of the experiment, they felt themselves having more psychological safety than they previously had, leading to more willingness to experiment.

Experimentation and risk varies and changes according to the field conditions. What is easy for one person and their field conditions may be difficult for another. The ability is to find an experiment with a level of risk that will create a 'safe emergency' (Perls, Hefferline and Goodman, 1951/1973), from which learning can be gained, but within which the leader can still feel competent and having some control (Joyce and Sills, 2002). Too much risk and the leader can feel out of control and over anxious. Too little risk and learning or change is not achieved. Even throughout the experiment, grading can occur, stopping to review, ramping the experiment up or down, finding additional support and framing. These are examples, which remind the leader that they have some form of action which is within their control (Joyce and Sills, 2002).

Permission to experiment is a leadership decision, that includes giving permission to self and others. From this research, the findings demonstrated how participants mitigate risk in an experiment and influence the risk boundary in self and others within the field. There are four main mitigation strategies:

Mitigation 1. – This a way of learning.

A focus on learning drawn from an experiment for many made the associated risk worth it. There was little expectation that the experiment would lead directly to a resolution, but at the same time there was high expectation that it would lead to learning. Errors can provide a source of information by revealing that something did not work as planned, the ability to discuss them has links to performance (Michael, 1976; Schein, 1993; Sitkin, 1992). Drawing learning from an experiment was a factor in mitigating what could be seen as a failure:

Participant 1.

I used to think that if you don't, if you don't get failures, you're not quite experimental enough.

Participant 2.

What I don't like is when you don't learn. No problem at all with people failing at something. Providing they take the learning from it. Don't keep doing the same thing, that's when it gets frustrating. But the experimentation phase, it's absolutely fine as long as you're learning.

Participant 10.

I don't care if I fail. I've never ever been bothered by failure, because it's another learning opportunity.

Mitigation 2. – We will get clear on the boundaries and work within these.

Leaders find many other ways to mitigate or reduce the risk and hence the anxiety. One such way is by carrying out bounded or more controlled experiments. Experimenting requires a safe environment for individuals to step into and creatively explore new Ways of Being (Chidiac, 2018). The role of real or perceived boundaries adds safety, both in carrying out the experiment and in drawing learning from the experience. In the absence of formal or even overt boundaries surrounding risk in the experiment, participants added graduated boundaries to their experiment in relation to the level of risk they considered the experiment to have:

Participant 12.

The boundaries were the regulation and the law we were working within. As long as we stuck within them, we can move out towards the edges.

Participant 1.

And the idea is that when you've got your problem, you've got to work right to the edge. So you've got to push the boundaries. So there's no point of working in the middle because you're never going to achieve. So we've got to work back to the edge of our legislation right to the edge of our professional registration, ethics. You know, the law, everything you've got, you know, right to the edge to be able to push the boundaries.

Bringing a boundary into focus and making it figural adds certainty to the experimenter. It provides a focus and something to push against and test. Participants recognised that, in this space, pushed up against the boundary, is where the creative new insights will arrive, even though many in an organisation will feel uncomfortable at this learning edge.

Mitigation 3. - We will go in incremental steps to test boundaries and regulate risk by seeing what happens at each step.

For others, incremental experimentation is the way to engage with risk when experimenting. It is a way of mitigating risk by carrying out small (and safer) experiments with less perceived risk rather than full expansive experiments associated with more risk:

Participant 14.

So, it will be a case of experimentation and failure. And I think that with the Wicked Problem, this has to happen. It's about trying to make incremental changes, rather than seeking a total resolution to the problem.

The assumption here is that smaller experiments will have smaller impact but allow a sense of control and damage limitation. However, Gladwell (2000) in his studies on societal and organisational change outlines how *little things can make a big difference* rather than assuming that a big problem requires a big change intervention. In his studies on societal change, whilst he does not name them as such, he describes problems which have wicked characteristics. In demonstrating changes on these societal Wicked Problems, his research outlines 3 key elements in the field that are needed for these incremental changes, or in this case, experiments, to get purchase. These are:

- The people who transmit infectious agents (The Law of the Few). Purporting that in order to gain support for an experiment, there are a few key people from whom support is needed, but that it certainly needs the involvement of other people. In this case then, this concerns understanding the key stakeholders and influencers in the field and then actively engaging them in order to foster support.
- The infectious agent itself (The Stickiness Factor). Indicating that the experiment must be meaningful enough to gain interest and make a difference and must be portrayed in a way that gains interest. In terms of Wicked Problems, this suggests that the leader carrying out an experiment, needs to frame the experiment in a way that others can see the rationale and potential benefits.
- The environment in which the agent is functioning (The Power of Context). Meaning that the field conditions into which the experiment is introduced, must at least allow, if not support, that experiment.

It is this belief in these incremental small percentage wins that drives leaders to experiment in this way. Noting here the involvement of others (the law of the few), having a shared analysis/understanding the field and incremental change:

Participant 13.

So what I wanted to do essentially was get people together from across the spectrum of where these challenges were, to look at potential solutions to resolve that and spend a day just asking the questions doing, agreeing what analysis we needed to do and then effectively sending everyone off with some individual tasks about how they could improve their bits. So almost taking the sky kind of Sky cycling team ethos of everyone changes their little, bit by a small percentage overall leads to a bigger difference. So that's how we tried to tackle it knowing that there was not a silver bullet answer to this.

This indicates that for an experiment to be considered safe by the leader, involving key others is needed, giving shared ownership of incremental interventions, engaging with a subject that these parties are invested in or have a part to play, where risk is spread, and in an environment where collective responsibility is encouraged. Furthermore, subdividing the problem into a number of smaller problems allows for the risk to be mitigated:

Participant 1.

One of the ways of doing it is to create little pockets of areas that you can be creative in. Instead of doing it in a big way. You can do lots of small creative things, that if one of those doesn't actually you know, doesn't go well, then it's fine. It's not a big deal.

Mitigation 4 – We will frame the experiment in a way that structures expectations.

As shown in Chapter 5, how a Wicked Problem is framed impacts not only on whether it is viewed as wicked but also impacts on how it is engaged and what kinds of interventions are made. What has become evident from the participants in this study, is the way in which participants mitigate risk by influencing the field conditions around the stakeholders. Participants discussed a number of strategies that they employ to influence field conditions with respect to stakeholders allowing them to mitigate risks associated with experimentation. Helping the stakeholders understand the field conditions and the characteristics of a problem is an attempt to influence the field conditions in a way that allows for psychological safety and hence more likelihood of an experiment. This framing of a Wicked Problem for mitigation, is done in a variety of ways as outlined in Figure 6C below:



Figure 6C. Framing for mitigation of risk.

Participants discussed how they used framing an experiment in a way that almost forced a binary yes/no decision. With an aim of getting a 'yes' from stakeholders, organisations and of convincing self, they achieved this in two ways. Firstly, by offering the experiment as the **singular option** if a change in the Wicked Problem was desired. This forces a decision regarding how important addressing the Wicked Problem is, and offers a singular way forward via experiment. Secondly, by bringing to foreground in the field, the consequences of the Wicked Problem continuing, in other words **highlighting its urgency as an emergency**. Both of these are very likely to, at least, gain engagement from others.

Participants also described how they also attempted to play the experiment risk down by framing it **as a trial**. The use of the word 'trial' is less emotive than that of experiment although fundamentally it is the same. Seemingly by use of the word 'trial', the assumption is that risk is contained. Finally, participants described how they used more of a **logical** way of framing the experiment to mitigate risk. Having a clear and logical rationale which can be explained and understood by others. In this case it suggests a level of thought has been given to why experiment and take this risk, presumably balanced against the amount of perceived risk itself.

6.9. The form of experiment used when engaging with Wicked Problems.

The research here demonstrated how a Gestalt and Field Theory form of experimentation is utilised in a Wicked problem setting. Clarkson and MacKewn (1993) summarised how an experiment may be carried out in the field, with a precondition that a leader must be willing to actively attend to that element part of the problem. Given that they are referring to a one-to-one situation and the use of experimentation, this research has resulted in a greater understanding of how experimentation can be applied with Wicked Problems as outlined in table 6ii below. Column 1 is the form of an experiment from a Gestalt and Field Theory perspective. Column 2 derived from this research, shows how this is translated into an organisational setting for engagement with a Wicked Problem:

<p>The format of a Field Theory experiment Clarkson and MacKewn (1993) pp 98.</p>	<p>The organisational form of a Field Theory experiment with a Wicked Problem, derived from this research data.</p>
<p>Stage 1. - The theme of the experiment must be something of interest to the person so that they do not need to deliberately attend to it but are naturally drawn to it. It needs to be something that they are vaguely but not fully aware of.</p>	<p>A realisation that the problem addressed has Wicked characteristics and that a solution is not readily available. An understanding that this situation is new and that previous interventions have not worked or will not work.</p>
<p>Stage 2. - The person (with others) designs or suggests an experiment and learns through the actual doing of it (not just talking about it) and leads to greater awareness despite the experimentation's success.</p>	<p>The experiment involves actively trying out something rather than talking about the possibilities or options only. The leader realising that they themselves need to draw upon the ideas of others as they do not have the answers themselves. The leader understanding that the experiment may result in a form of success or failure, but that either way, there will be learning.</p>
<p>Stage 3. - The person is invited to exaggerate and amplify the present behaviour or inhibit/subdue.</p>	<p>Actions are taken, the impact of these actions are focussed upon/made figural, with an openness to where and how they may impact.</p>
<p>Stage 4. - As contact with the desired behaviour gets stronger, the client's anxiety/excitement is aroused or mobilised. The experiment will be experienced as some sort of emergency or crisis and may therefore be stuck between excitement and fear. (called an impasse).</p>	<p>The focus turns to the activity within the experiment, bringing it from background to foreground in focus. This raises both anxiety and excitement with the impact of the experiment. There is a sense of urgency and importance. There may be resistance within self or from others.</p>
<p>Stage 5. - In the safe emergency, the repressed or unaware feeling, attitude or memory can come fully into awareness and thus change the persons experience of self</p>	<p>From the experiment, there is realisation and learning about the problem itself and about the experimental activity. The frame of the problem may alter and be seen differently.</p>
<p>Stage 6. - The client accepts the repressed part of themselves as her own now feeling that it is I who am feeling, thinking, doing this.</p>	<p>The realisation of the co-dependency of many different aspects which are influenced by the Wicked Problem. A greater understanding leads towards a further, more refined decision or further experimentation.</p>
<p>Assimilation. A leader and organisation can learn from how easy or hard the experiment felt, but they will also learn from the impact of the experiment. Assimilation can happen in an 'aha' moment, but generally will need time to emerge.</p>	

Table 6ii. Using a Gestalt Field experiment in an organisational setting with a problem that has wicked characteristics.

6.10. Chapter summary and conclusions.

When engaging with Wicked Problems, there is no 'answer', at least in the traditional sense of the word. Participants interviewed seemed to understand this characteristic of the problem they are engaged with. They may not have heard or be familiar with 'Wicked Problems' as a concept, but they understand that in the absence of a clear answer they need to do something else. In the absence of a 'solution', but still having the expectations and pressures from stakeholders and organisations to address the problem, leaders engaging with a Wicked Problem are led to other alternative actions. One of the key options taken is to try 'something' or to experiment. These experiments differed in risk by person and by field conditions.

There is often pressure either from self, from the organisation or from stakeholder expectations (in this case I am including line supervision as a stakeholder) to resolve the problem or at least make it go away as an issue that is causing pain. It can be presented by stakeholders and organisations as if it were a problem with mainly tame characteristics. Participants described, in various ways, how they worked within the formal expectations of processes and systems used by the organisation such as project management methodology, and yet described how they also employed informal intentional strategies and used interventions that were less readily recognised (or approved). They applied a mix of these methods in order to muddle through and navigate the engagement of a Wicked Problem.

Leaders know that they need to do something, they felt that in this circumstance that they are between a rock and a hard place. In the absence of an 'answer', those engaging with Wicked Problems have choices – but these can seem limited. In most cases this led to a form of engaging which utilised experimentation or trying things out. This experimentation often included drawing resources and ideas from seemingly unrelated quarters. This is akin to the practice of experimental Bricolage, often referred to in relation to scarcity of resource, but here also referred to as idea and/or solution scarcity.

Drawing from a Gestalt and Field Theory perspective, participants experienced the field involving three influences on if, how and when they experiment:

- The internal world of the person (how are they experiencing their own reaction to experimentation).

- The external world/environment (the Wicked Problem itself and the contextual, cultural implicit and explicit messages about experimentation, risk and failure).
- The ever-changing relationship between the above areas (the field boundaries).

The experiment was an attempt by leaders to influence at least one of the above in order to facilitate some kind of movement in the field. This movement was not necessarily a resolution, but included influencing the field by learning more, by shaping the perception of the problem, by testing and pushing boundaries and by framing the problem in a way that altered the view of how to intervene. Although not explicitly named as such, this is the person shaping the field actively, rather than accepting the field passively as a given fact. Experimentation encourages people engaging with Wicked Problems to move away from the relatively safe practice of simply *talking* about what could be done.

Experimentation in the field is a wider view of where to intervene than perhaps originally thought. Instead of just intervening in the problem itself or the tame elements of the problem, what is more effective via a wider level of awareness, is intervening anywhere in the field by understanding the principle of interconnectedness and that a seemingly unrelated intervention may impact on the problem itself. Raising awareness, in turn, opens up further choice from the usual practices and can therefore lead to different decisions. What experimentation achieves, is to accelerate the learning process.

An experimentation brings risk with it, either real or perceived. Experimentation is not about trying *anything*, but instead it considers boundaries. There are personal risk boundary influences such as politics, power, and perceived threat to loss of position by the leader which in turn can raise resistance. The resistance to an action or decision is an integral part of the field and in itself worthy of attention. In this way, an experiment with a Wicked Problem will raise energy, uncertainty, different views, resistance and possibly conflict.

Participants recognised the uniqueness of Wicked Problems and the benefits of experimentation apart from addressing the Wicked Problem itself, such as the learning drawn from an experiment. This took some key qualities from the leader, including acceptance that you, even when leading the engagement with the Wicked Problem, do not have the answer and that the involvement of others brings with it diversity of thinking and awareness.

These experiments differed in risk by person and by field conditions. Leaders demonstrated an awareness of field conditions and brought different aspects of the field from ground to figure in order to mitigate, reframe or influence risk. There is a tension or polarity between learning and risk. This risk taken is a result of factors including; the individuals' view of risk, self-relationship with risk such as courage and psychological safety, relationship with stakeholder, especially trust, and the organisational culture and context within which the risk was taken. All of these together form the unique field for that person with that particular experiment. This also led leaders to employ a number of possible strategies aimed at mitigating risk including:

1. Not taking the problem on, although in this case participants rarely felt that this was a viable option without perceived damage to their own careers.
2. Frame the problem as wicked and the intervention as a 'trial' – allowing for mitigation in the event of a perceived failure. In this sense they are framing the problem and the intervention in a way that is preparing the stakeholders for a wide range of possible outcomes.
3. Working to improve the relationship with the stakeholders, especially attempting to build up trust, both from and to the stakeholders. Without this trust relationship, participants found it difficult to admit to not having an answer.
4. With this trust, participants were much more engaged with the approach of experimentation and Bricolage, often without a clear view of what the outcome might be, but instead the goal was framed as 'learning'.
5. In this case participants were seemingly much more able to and willing to take a risk without concerning themselves too much about it achieving a success. In fact, success seemed to be reframed as 'learning'.
6. In most cases participants were able to add a gradient to the risk by managing the boundaries around how far the experiment would go and where and how it would impact.
7. This gradient was sometimes assessing informally the impact that could happen if the experiment was a failure and sometimes by carrying out incremental experiments rather than a larger whole experiment.

8. There were differences between participants regarding the attitude to risk, with some much more willing to take the risk, almost regardless of consequences, than others.
9. In the absence of an answer, participants turned to two different sources. Firstly, drawing from others' views to get a diversity of opinions and ideas. Secondly, to draw from seemingly unrelated sources, for example, health professionals drawing from sales methodology.

Although participants said that expansiveness of the risk was largely as a result of managing the boundary with stakeholders and the organisation, the research demonstrates that a significant number of influences were in relation to *self* as part of the field. A key ability is to find an experiment with a level of risk that will create a 'safe emergency' from which learning can be gained, but within which the leader can still feel competent and having some control (Joyce and Sills, 2002).

Finally, we need to understand that in the field of Wicked Problems, there is no such thing as an experiment in the traditional sense of the scientific word. A bold statement perhaps, but any attempted experiment impacts on the field which in turn changes the field, so put more pedantically, every experiment is an intervention. The word *experiment*, however, does somehow allow for a frame in which failure is not unusual (and perhaps more palatable?), whereas '*intervention*' suggests that success is the only aim.

The findings in this chapter have implications for the mindset, awareness, skills and abilities for people engaging with Wicked Problems. They are all 'Ways of Being' which are needed when recognising and influencing field conditions as well as addressing the Wicked Problem itself. The following chapter explores what these are, and how, as someone engaging with Wicked Problems, they can be applied.

Chapter 7. Analysis – Ways of Being. The skills, abilities and mindset utilised when working with Wicked Problems.

7.1. Introduction.

There has been a call for more research on the abilities to engage with Wicked Problems (Head, 2019; Norton, 2012; Raisio, Puustinen, *et al.*, 2019:). Norton (2012) highlights that there is no comprehensive science or theory for addressing Wicked Problems and that rational analysis, however sophisticated, cannot be brought to bear upon these situations, stating '*With respect to Wicked Problems, we face an analytical void*' (p 451).

One area in which there are suggestions (Termeer *et al.*, 2015) and inference in the literature (Grint 2005; Grint 2008; Head, 2019) is concerning what skills, abilities and mindsets are needed to navigate engaging with a problem that has wicked characteristics. There are certainly a number of these implied from the research conclusions in previous chapters as there are in literature concerning Wicked Problems.

This chapter then has two main aims:

- Firstly, to elicit the implications for *Ways of Being* - skills, abilities and mindsets when leading engagement with Wicked Problems, from participants explicit and implicit answers to the questions asked.
- Secondly, to elicit the implications from information discussed in previous chapters, including that from a Wicked Problem literature, Field Theory literature and the previous analysis chapters on Ways of Being when engaging with Wicked Problems.

It concerns one of the main research questions (outlined in Chapter 4):

RQ1. What qualities, abilities, mindsets and skills do leaders use when they engage with Wicked Problems?

In this research, participants were asked directly about the skills, abilities, qualities and mindsets that they had found most important and useful when engaging with Wicked Problems. They were also asked if they were to recruit someone specifically to work with Wicked Problems, what qualities would they look for in that person. The outcomes from those questions were used to write this chapter. These conclusions will allow a greater and more focussed developmental path for leaders, developers of leaders and organisations, to become

more effective in engaging with the growing amount, type and diversity of Wicked Problems faced. What this analysis does *not* want to become, is just another competency framework, which is static, unadaptive and applied to all, regardless of the field conditions. What is clear from this research is that suggestion of a 'silver bullet', one size fits all, solution to abilities, skills and mindsets will not be effective. Just as field conditions move and adapt and Wicked Problems morph and change, so the abilities, mindsets and skills of those engaging with Wicked Problems need to react to the *unique* field conditions *in that moment*. This research will, however, allow leaders, people developers and organisations to re-think their learning opportunities and move away from a one-size fits all offering into an adaptive and emergent set of assumptions and offerings.

The research findings and the literature reviews have shaped the form of this chapter into three main sections concerning the skills, abilities and mindsets of engaging with a Wicked Problem:

1. **Ways of Being to: Understand and work effectively with the field and context within which the Wicked Problem sits** and the implications for skills, abilities and mindset.
2. **Ways of Being to: Understand the nature of the problem and making appropriate interventions accordingly.** Not only how participants engaged with the Wicked Problem, but also how participants gained an understanding of the nature of the problem and the implications for skills, abilities and mindset.
3. **Ways of Being to: Understand self and people in order to work effectively with and through others.** Running throughout all of the above is an implicit and explicit awareness of self as part of the field, plus an understanding of pluralistic and relational working. What are the implications for skills, abilities and mindset?

From the participants responses, these fall within a logical order, firstly, before intervening in the Wicked Problem, understand the surrounding influences and interdependencies on the Wicked Problem and *from* the Wicked Problem. Secondly, understanding the nature of the problem itself and its wickedness including how to intervene. Thirdly, working relationally with and through others whilst understanding your own bias, preferences, habit and responses and how these can impact.

7.2. The Ways of Being when working with the whole context, environment and surrounding field of Wicked Problems.

Wicked Problems do not operate in isolation. There is a constellation of factors that they influence and are influenced by. These are not always obvious or even visible. They may be in focus, also known as 'figural', or they may be out of our focus also known as in 'ground', but we know that these influences are complex, interrelated and unpredictable (Raisio *et al.*, 2019; Rittel and Webber, 1973) as highlighted in the Field Theory principle of interrelatedness (Parlett, 1991), and reported by participants:

Participant 4.

Every time we try and do something, something else happens or something else kind of goes wrong, not goes wrong, but somebody else highlights something else. Well, you've made this change here, but actually down the track had this implication.

This calls on the ability of a leader to firstly, acknowledge that these interdependencies exist and secondly to understand and map out these constellations. The whole collective of all these influences is referred to as the 'field' (Lewin, 1946; Parlett, 1991; Stevenson, 2018). Once these constellations are understood, then the question arises about how to engage with the constellation. Intervening in any constellation warrants a consideration about how, in this unique situation, to engage well. For someone engaging with a Wicked Problem, the *quality* of the contact, the understanding and the interventions with the field are important:

Participant 8.

I guess one of the things I've got better at, is starting to take that step back, looking for patterns, both in terms of what's there and what's not there. And I find that that's helpful in terms of my sensemaking of what's, what's going on.

This highlights the leader taking a whole field view of the Wicked Problem which will increase the quality of understanding and awareness. Perls (1947) and Perls *et al.* (1951/1994) outline that the quality of an individual's contact with the field, known as the *field boundary*, including the key component of awareness, can be 'interrupted' and that there are some common patterns of interruption (see Chapter3). These have since been seen less as interruptions and negative, and now are seen more as the need for a leader to be able to make good choices in relation to the Wicked Problem they are engaging with (Mackewn, 1997; Swanson, 1988;

Wheeler, 1991). Joyce and Sills (2002) maps them as polarities, indicating that the ability of a leader to navigate these polarities to the best effect in any particular situation. (See figure 3F Chapter 3 for a visual representation of these polarities)

In order to carry this out, a leader needs to become more field sensitive or attuned to the whole field, drawing on a wider range of forces, instead of focusing on one part of the field exclusively, together with a willingness and ability to discover and explore forces in the field that were not originally considered. Indeed, exploring those aspects of a situation that were previously in 'ground' but out of awareness, is important. Put simply, a leader needs to look at what may have been missed or ignored. These factors may initially have been dismissed as irrelevant, but on further exploration, may be found to be a key force. Understanding the overlooked assumptions, working with Field Theory means making figural the structures and linkages that prevail in a situation such as a Wicked Problem (Parlett, 1997; Philippson, 1991; Wheeler, 1991). Participants were learning these connections through experimentation:

Participant 4.

Every time we've tried to shorten different things or do different things, it's like you know, the ripple effect, you do something here related down the road, you know it appears again. So, it's been an issue that actually we haven't nailed, we haven't bottomed it out. It's probably got worse.

The data is demonstrating that when leading engagement with a Wicked Problem, it requires understanding and paying attention to interconnectedness and co-influence (Parlett, 1991), understanding the whole rather than one or a few elements. It is the exploration of the shape, pattern and wholeness of the situation that can lead to integration of disparate, perceived parts (Kohler, 1969), and new perceptions and insights (Stevenson, 2018), so the ability to see holistically is an important ability when engaging with Wicked Problems.

Working with awareness of the field boundary is closely related to the phenomenological methods as proposed by Husserl (1931/1967) and outlined in Chapter 4 of this research of *Bracketing, Description, and Horizontalization*. By using these approaches, or attitudes as Joyce and Sills (2002) call them, it calls for a tracking of the field conditions with curiosity and respectful uncertainty rather than pre-held judgements. This encourages the leader to question and reflect on the uniqueness of the Wicked Problem and in turn leads to interventions which are more closely related to the 'here and now' formation of the Wicked

Problem, and as such are more likely to be accurately designed. These field abilities are directly related to the methodology used in this research which takes a phenomenological view of discovering the experiences of participants (see Chapter 4 – Methodology). This tracking process calls on flexibility and versatility and hence a key skill for leaders is redefining the situation and taking a wider, longer-term view of all the forces at work, as outlined by participants:

Participant 4.

So sometimes it's trying to help people to understand and see each other's roles in the whole thing as well. Because we're great in the NHS at working in silos. We just keep our own focus and our specialism in the NHS. I think this has increased in terms of you've got specialist nurses and every kind of a more specialty that you can shake a stick at. We've become more specialised and more focused. Sometimes it's hard, it gets harder for people to think of the bigger picture.

This is showing that this wider view of the Wicked Problem field can be individually focussed or whole system focussed. In both cases, the principle still holds and also alludes to the fact that different people will make different sense of the same field. Mills, Thurlow and Mills (2010) add that making sense happens within a social context and as an ongoing process, and it also occurs within a broader context of organisational power and social experience. In relation to skills, Grint (2005) suggests that this single ability and mindset of reflection, field awareness and self-awareness is more important than individual traits, which participants noted:

Participant 13.

That's what kind of was a learning point for me. In talking about it, is that I probably tackle problems without standing back enough and really thinking through it.

A question that arises from this is why this does not already occur? Leaders themselves are housed within a field or context, they are not separate from it and as such rising above these field influences may sound straightforward, but can involve the braking of habit, and normal (for them) ways of operating with political, social, interpersonal, intrapersonal, power pressures and influences. Fairhurst (2005) goes as far as to say that there is a question about how much leaders can exert influence over the forming view of a problem, due to all the field conditions and factors which shape them, including their own interests and values. One way

to start this process is utilising the ability to reframe a problem in a way that may stimulate different thinking or help to unblock a 'fixed gestalt'¹⁵ (Clarkson and Mackewn, 1993) or mindset, as discussed in Chapter 5.

However, observing the field conditions and re-framing, is not enough to manage a Wicked Problem. In understanding and framing a particular problem, leaders need not only to be able to suspend judgement on their own process in order to understand others views, not only willing and able to re-frame how sense is made of a problem (Fairhurst, 2005), but *also* to manage a change in the field conditions:

Participant 16.

I've got my own personal view and it's part of the wider society context as well. We are impacted by the wider culture. I think that's a fact, so that's part of it. And also going on my own personal journey with my development, because it's kind of awakening me to how I feel about these things and pushing me to grow in my awareness, I feel like there's multi angles on it, and it doesn't seem to be fixable.

A leader needs to understand that Wicked Problems are context relevant. There is a temporal element which in turn means that the Wicked Problem is not static. The process of understanding is an ongoing one, as the field is in a state of flux (Lewin, 1952). The relationship to the field is unique for each individual. This call on the leader to pay particular attention to the field on an ongoing basis and to be sensitive to nuances and changes, which is named here as *field sensitivity*.

7.2.1. Field sensitivity.

Field sensitivity is the leader's ability not only to understand the constellation of influencing factors, but also on an ongoing basis to notice changes in the field and respond to these changes. Applied to the engagement with Wicked Problems, then this can be seen as working incrementally within an overall structure of a shared goal or vision. That each intervention when engaging with the Wicked Problem needs to be in response not only to an overall vision, but also to *changing* field conditions. Participants discussed how this approach also could be used to influence stakeholders:

Participant 6.

¹⁵ A fixed Gestalt represents repeated attempts to meet a need that is never resolved by the actions taken.

It's very valuable, setting out the multi-year vision, what your costs and benefits will be. Yeah, it's that the incremental approach is much more attractive to boards.

This draws on a leader to be able to focus on the problem but at the same time to look outwards at the surrounding field, a kind of awareness of both figure and ground *simultaneously*. Field sensitivity also allows the leader to not get drawn into a mindset of singularity – over focusing on one aspect, cause or potential intervention. Part of this is the understanding that the leader themselves is part of the field constellation. Understanding of self and paying close attention to self as part of the field, can prevent further issues arising. This leads onto a key ability for leaders, that of paying attention to, having awareness of and acting on knowledge of 'Self' as part of the field:

Participant 16.

I think you can lose perspective very quickly and become part of the problem.

Participants highlighted the need to understand the field, to see the problem through a new lens and reframe it whilst rising away from our normal habits and ways of operating and then to actively engage and influence the field and context. Field sensitivity (Parlett, 1991) is the ability to pay attention to the field, your own understanding of the field, others sensemaking and the changing nature of this over time and after attempted interventions, including the ability to draw away from your role in the problem, to view as if from a distant observer, to see how you as a leader are contributing to the problem. This also draws on the ability of a leader to appreciate the different frames and layering of experience that occur in relating to a problem, the ability is to stand back and regard the situation as a complex and organised whole (Parlett, 2015). In an ideal world, all this can be carried out prior to intervening in the problem itself. However, the expectations of stakeholders and organisations for 'action' and decisions, in reality, may necessitate a more ongoing, inductive understanding of the field, alongside gaining an understanding of the nature of the problem itself.

7.3. The Ways of Being drawn upon to understand the nature and nuance of the Wicked Problem and intervene accordingly.

If a different way of being is required to address Wicked Problems than those needed to address tame problems (Danken *et al.*, 2016; Grint, 2005; Norton, 2012; Spinelli, 1989; Termeer *et al.*, 2005), a leader needs to have an understanding of the different nature of

problems to inform any interventions. Problems may incorporate aspects of wickedness *and* aspects of tameness. They are in flux, therefore a leader requires the ability to address both tame and wicked characteristics, as well as the ability to identify when to use certain approaches, and the ability to move between these as needed, which I am naming *Style flexibility*. Danken *et al.* (2016) highlights a cluster of abilities around the role of leadership and management, including the ability to differentiate between different types of problems. This then suggests that recognition of characteristics of a problem and subsequently style flexibility would be called upon from the early stages of engagement. Furthermore, given that the field in which a Wicked Problem sits in is in flux, and that Wicked Problems themselves are non-resolvable (Raisio *et al.*, 2019; Rittel and Webber, 1973), when engaging with Wicked Problems there will not be one single way of engaging/addressing it. What counts as a problem and what counts as an appropriate way of engaging with that problem, are open to interpretation, not issues that can be decided on objective criteria. Xiang (2013) calls for a leader to have awareness of the problem, acceptance of what is and adaptation to the field conditions. There seems to be very few calls for being able to name a problem as ‘Wicked’, but rather to have an understanding of the nature of the problem which is then reflected in the engagement strategy.

7.3.2. Ways of Being for framing a Wicked Problem.

As discussed in Chapter 5, whether a problem is viewed, recognised and subsequently acted on as wicked, can depend on how the presenting factors are made sense of and portrayed to others. Leaders need to understand that different meanings are assigned to the same event (Weick, 1979, 1995). This is a never-ending process. Individuals engage in this not only in order to decide what to do next, but also to deal with anxiety and fear that may accompany the experience via not only framing the problem, but also sense-giving to others. This ability has been mentioned by participants in this research as important. Whilst it may not be phrased by participants in terms such as ‘wicked’, there was a clear understanding that a leader needs to understand the problem itself:

Participant 1.

Part of the solution might start with understanding the right problem.

A leader will make sense of a problem using their own constructs and will facilitate actions that address the problem based on this. A persuasive rendition of the problem can legitimise

a particular form of action that often relates to the decision-maker's preferred mode of engagement, rather than what the situation apparently demands (Grint, 2005). As individuals project¹⁶ (Clarkson and Mackewn, 1993) their beliefs and experiences on a situation, they also make sense of them. As a result, individuals within organisations may not make sense of the same event in the same way. To that end, there is no single *correct* meaning attached to a given experience (Mills, Thurlow and Mills, 2010). So firstly, a leader will need to understand that people sense-make in different ways and that their own view, is only one view, that is biased. Secondly, a leader needs to understand that their own views, if taken alone, may restrict understanding and subsequent action. Participants in this study recognised the need for diversity of thinking and ideas, and a desire to work with these:

Participant 2.

I don't want someone to do exactly the same as me. Because that's not gonna benefit the group. I want someone who actually when I look at them, I think 'I hadn't thought of that', that's different. That's a different way of doing it or because I need to have a team that have got a really good skill mix. Very diverse. And so it's not a question of build the team of 10 of me.

This, however, can place leaders in a dilemma of understanding the need for diverse frames of a problem and at the same time needing to get a form of agreement as to the nature, form and causes of the problem, plus the way forward when engaging with it. In many cases, leaders will try to persuade others that their view is correct, but a key skill highlighted by participants, is for a leader to enable a diverse set of conclusions to be reached, realising that the Wicked Problem is multi-faceted and that a simple frame is unlikely to capture the essence of its wickedness:

Participant 3.

Appreciating that because of the nature of the problem, it is difficult to understand. And there will be multiple facets to it.....I think the key thing is accepting that it's a Wicked Problem.

This means that if a leader's view of the context is successfully taken by others amongst contending and competing views, the newly constituted view then limits the alternatives

¹⁶ Projection is the process of attributing my quality, feeling or assumption to others or institutions around me.

available, so that those involved begin to act differently (Grint, 2005). Norton (2012) and Meadows (2008) state that understanding sense-giving is key because people will jump to solutions to predict, control or impose their own view, without having paid any (enough) attention to what the system is doing and why it's doing it. Leaders need to be *willing* (and able) to suspend judgement on their own reading of a situation, in order to genuinely hear the constructs of others and in particular the current field conditions that are emergent. This involves the leader acknowledging differences and polarities (Joyce and Sills, 2002) of opinion and of framing. This is difficult. Leaders are likely to have been rewarded for decisiveness, clarity of opinion, assertion, and yet Wicked Problems call upon a very different Way of Being. Acknowledging and accepting this diversity is important, but also leaves the leader with a dilemma and a tension between clarity and depth. Organisations are likely to expect a view and are likely to want the leader to present a persuasive rendition of this in order to get wider agreement about the Wicked Problem. Participants stated that the leader not only has to understand this, but also to have the ability to articulate the problem/sense-giving, considering the field conditions, the disparate views and frames, plus the changing nature of the problem:

Participant 1.

It's really somebody that can articulate the problem, not in a way that people just think, 'oh, we're never going to achieve that, it's never going to happen'.

However, this is not just about naming a problem, but also being able to communicate the essence of the problem in a way that brings understanding for stakeholders, with more than just a title:

Participant 7.

You have to break it down, you know, what are the elements of the problem.

This brings with it implications for power structures and who may have access to, and the ear of, key decision makers and stakeholders. It may not always be the most eloquent communicator who is the most influential.

7.3.3. Seeing the whole and interconnectedness.

This is an indicator of field awareness and working with the principles of holism and interconnectedness (see Chapter 3). A leader's sense of a problem is influenced in the

interactions with others. An organisation's rules, routines, symbols, and language will all have an impact on an individual's understanding, activities and will provide influential routines, norms¹⁷ or scripts for appropriate action. Participants emphasised the importance of a leader understanding this multi-causal nature of Wicked Problems:

Participant 2.

Most things don't have a single, single root cause. I'm gonna also talk about the situation that we don't have enough xxx's to meet demand. What's a wider debate of consent? So why aren't we getting consent? There are probably multiple reasons as to why we're not getting enough consent. There's not a single root cause. I think, certainly with my problem at the moment, that makes it a challenge. Because if it had a single cause - you might fix it....., there's a lot of root causes... to say any problem tends to have single cause is wrong.

For leaders, being able to hold the view of multi causal factors and hence multi-faceted interventions, whilst resisting pressure and temptation to find a single solving intervention, is a key ability when addressing Wicked Problems. Added to this is the complication that Wicked Problems are emergent and as such are particularly ambiguous compared to problems with more tame characteristics. This calls on a leader to understand the *changing* nature of the problem, resisting the desire to form an early and final definition:

Participant 8.

I think there's something about being very comfortable with emergence. And ambiguity. It's not an either/or. So somebody coming in looking for a truth, or an answer, I don't think will be suited to this work. Understanding that everybody has a truth, It is multi-dimensional.

7.3.4. Working effectively with ambiguity, emergence and uncertainty.

Leaders therefore need to understand that Wicked Problems are, by their nature, ambiguous, emergent and in a state of change. This becomes particularly challenging for people steeped in more traditional forms of linear problem-solving that draw on a defined start and end point, using more binary decision-making processes and methodology. This draws on the need for leaders firstly, to understand the ambiguous nature of a Wicked Problem and secondly, it

¹⁷ Norms are used to describe something that is usual, typical, standard or accepted as 'normal'.

draws on an ability to work with, and maybe flourish in its ambiguity, a point that participants recognised when asked about qualities they would look for in someone to lead on a Wicked Problem:

Participant 1.

I'd look for somebody that's very comfortable with ambiguity.

Participant 8.

This work is emerging and ambiguous.

Danken *et al.*, (2016), suggest that understanding ambiguity is needed by a leader, which in turn will allow for the Wicked Problem to be viewed from different perspectives. The viewing of Wicked Problems from a position of ambiguity can result in a more experimental and adaptive mindset when addressing the problem. Applying this more adaptive way of thinking, encourages design of interventions as experiments which are aimed and capable of reducing uncertainty in the process (Norton, 2012). It draws on the willingness and ability of a leader to engage with a Wicked Problem not knowing or fully understanding the problem itself:

Participant 3.

So. I guess you don't always know what you might need to know and it comes back to the unknown unknowns I suppose.

This demonstrates the real need for a leader to be engaging with a mindset of exploration, creating experiences in which learning can be drawn, rather than a fixed idea of the nature, form and solutions for the Wicked Problem. If the Wicked Problem is changing, multi causal and ambiguous, then any fixed view of the problem and its solutions are unlikely to be accurate as time progresses, akin to taking a photograph of a garden in Spring and then treating it as if it stays like this throughout the year. Participants saw this as the leader needing to be willing and able to re-evaluate their current understanding on an ongoing basis:

Participant 10.

You're going to discover things along the way that will mean we'll just have to step back and check in with each other and course correct because we don't know when we're going to need to do that then we are going to have to be super comfortable living with ambiguity.

Whilst on paper this looks straightforward, in reality other pressures based around power, expectations and a fixed understanding of the problem make this much more difficult. Senior leaders employed to achieve a fixed goal for the organisation, may well find that upon entering the organisation, this fixed construct is not correct. This ambiguity and need for re-evaluation of the problem also facilitates a rethinking of ownership of the problem. The tendency to own the problem, and all that comes with it, is challenged to a mindset where the leader realises that they are themselves *part* of the narrative around the ongoing Wicked Problem. As such, they are a *temporary* leader rather than a leader who will resolve the problem fully. The problem existed before them and in some shape or form will exist after them:

Participant 15.

If other people have been doing this for 10 years, and they've not resolved it....So to hear that made me feel better, Because that made me realise that it wasn't necessarily the reaction to me being in post. This was just endemic.

This realisation of the temporary nature of their role in addressing the Wicked Problem may bring with it other unforeseen issues. Motivation, ownership, may bring a response of '*that will do...*' or being satisfied with incomplete interventions or indeed any type of intervention such as a re-structure. However, it can also bring a greater realization of the nature of the problem particularly that a short-term solution is unfeasible:

Participant 13.

Ultimately, we came to the conclusion that we could build that B negative over time and as you change the culture of donation that would help. But it was going to be many many years away because this was a cultural shift.

7.3.5. A mindset of non-resolvability.

Wicked Problems are non-resolvable (Raisio *et al.*, 2019) and as such, the expectations of a leader engaging with them, needs to hold to that premise. Further, any attempt to intervene will change the field, the problem, and may have unintended consequences (Xiang, 2013). In organisations, many processes, methods and developments are based on a premise of 'problem-solving'. Take for example the project manager whose toolkit has end objectives, milestones, progress measurement or the organisational performance review system where individuals are tasked with achieving a goal within a set period, encouraged by reward

systems, or the organisational development expert who is tasked with 'changing the culture', and even the CEO who is recruited to 'resolve' an identified problem. All of these assumptions condition the thinking to believe that 'resolution' is the aim. In some cases, the problems are tame and a resolution mindset is helpful, however, many problems with wicked characteristics are non-resolvable, in the traditional sense of the word, in which case an acceptance of non-resolvability or a different approach needs to be taken by a leader:

Participant 15.

But maybe I'll never resolve it.

So carrying an understanding of non-resolvability, participants found that, for the leader, this necessitates a mindset and acceptance of incremental and messy interventions. Instead accepting interventions that, whilst not completely resolving the problem, move it forward, shape it or draw learning and a possible new frame of understanding. Participants demonstrated an acceptance and mindset of imperfect or messy solutions as being necessary, although it seems that participants were happy with a partial solution or some movement toward the problem being resolved. Norton (2012) suggests that we may need to look at 'satisfice', accepting partial solutions and compromises based on our limited information and accepting Wicked Problems have no comprehensive solution. Instead, he suggests working backwards, to discuss how we might be more systematic and effective in dealing with those aspects of a Wicked Problem that make them wicked:

Participant 13

So it's not the best solution. but it is a solution. So that ultimately, they accepted the problem in our generation wasn't going to be resolved. They would keep making improvements..., but it wouldn't be quickly resolved. And so they have to go back to a solution that wasn't perfect

Whilst the mindset of non-resolvability may present challenges when dealing with stakeholder and organisational expectations of a 'cure', they can also bring some relief once the leader has recognised that they cannot solve the problem. It can serve to change the mindset of a leader from 'I must find a resolution' to 'How can we improve this situation?':

Participant 15.

But when I consider Wicked Problems, it makes me think that actually I need to take some pressure off myself. Actually, I'm never going to change that problem.

Regarding the expectations of stakeholders and organisations, when power in the system is used to reinforce a surrounding culture of reward or punishment for achievement, or non-achievement, this will impact on risk appetite and subsequent behaviours (Head, 2018), as discussed in Chapter 6. Participants reported utilising a number of abilities in dealing with the issue of risk. Some commenters (Lindblom, 1959) believe that incremental interventions are needed rather than a 'solving' intervention mindset, stating that a better way of making policy, for example, is to look at what we already have, what resources we have and then make small incremental changes from feedback at each stage, rather than to set a comprehensive long-term plan. Participants demonstrated how the real skill is not removing the uncertainty but in managing to remain effective despite it (Grint, 2008), drawing again on the ability to live in uncertain and ambiguous circumstance and by leaders having a mindset of learning and viewing ambiguity as an opportunity to learn:

Participant 13.

Best way of learning is by making a mistake. So yeah, I give something a go and see if it works and if it doesn't, then I move on to the next potential solution.

Individual mindset alone is not a panacea to working well with a Wicked Problem. Issues around politics, collaboration and organisational expectations are all important elements in this (see Chapter 5).

7.3.6. Experimentation as a Way of Being.

Based on the understanding described in Chapter 6 that they cannot *solve* the problem, a leader needs to have a willingness and ability to experiment, to try things out, to see what works. This can be a powerful catalyst, and stimulant for effective change (Parlett, 2015), especially when balanced with the need for consistency. The underlying value of experimenting is 'play', allowing a balance between novelty and familiarity.

Lewin (1946) demonstrated that intervening in a situation is an iterative process of fact-finding, action and further fact finding. All actions including experimenting are key abilities to bring about a change in the field of a Wicked Problem (Nevis, 1987; Stevenson, 2018). This is explored further in Chapter 6, but Joyce and Sills (2002) suggest that the abilities in relation to experimentation are to:

- Identify an emerging figure in the field which appears stuck, problematic, or repetitive.

- Suggest the experiment in a way that is acceptable to stakeholders, taking into account perceived risk and challenge.
- Design the experiment or intervention and carry it out.
- Review the impact, draw out and assimilate the learning.

Knowing that experimentation is not a last resort, that it is integral to working with a Wicked Problem, is a key mindset for a leader:

Participant 8.

Experimentation and failure to resolve difficult areas is Okay. And I'd almost go further and say it's essential. Because, again, it's the, for me, it's the nature of the work that we do. Is that it's messy. it's emergent. It's subjective. There is no right answer. here there might be a better answer. And then it might be the question of some saying it's better, but not all. So for me, this is essential for the work that we're doing.... And this idea that we're we need to try some stuff out. Test it. In the trying it out, and the testing it, is one of the ways we raise awareness.

So this experimentation mindset brings with it an acceptance of experiments not working, and therefore setting out to try something different out with a genuine willingness to fail. Xiang (2013) emphasises the need to work on a problem through an open and heuristic process of collective learning, exploration and experimentation. The ability to experiment emphasises the mindset of accepting that imperfection and 'making do' is the way forward (Grint, 2008), together with clumsy solutions. The ability to experiment calls on the leader to be able to redefine tools and materials whether or not it bears a relation to the current problem (Grint, 2005) and redefine or reframe the task (Gabriel, 2002). Having a mindset of experimentation also suggests the willingness to experience failure. True experimentation is carried out without knowing the outcome and as such failure is equally as likely as success. Bhat (2021 p2) illustrates that the leader needs to encourage failure; '*Encourage failing. The decision-maker has every right to be wrong and make mistakes. Thomas Watson of IBM had said that the key to success is a massive failure. We need to learn how to fail. We have to learn with the experience of failure*'. Participants agreed, saying that the leader needs to have an acceptance of possible failure of an experimentation:

Participant 2.

You can fail. That's fine. As long as you don't, you know, break the law or kill someone, It's okay. Because you won't do it again. you need to be able to act fast, fail, sorted. So you're trying something and it's not working? You say it's not working and move on.

This, plus the point that each Wicked Problem is unique, shows that holding onto a previous success and attempting to use the same process to engage with a Wicked Problem can actually restrict thinking and awareness of the unique field configuration. Given this and the possible pressure/encouragement from an organisation to 'resolve', a capability of experimentation is needed to adjust actions to uncertain changes (Termeer *et al.*, 2015). Experimentation is not designed around achieving success, instead, the leader has a mindset of learning. In this capacity then, failure of an experiment to achieve a full and final change is not considered negatively:

Participant 2.

And so I think it's, it's not being afraid to change your mind, not being afraid to approach it differently, to do things. It's okay to change.

Participant 6.

I think that one thing I've since done, is realised that I was wrong on some of those things.

Further this emphasises the leader's ability to admit failure, to have willingness to change, to let go of held views, to re-frame, to redirect effort and energy. In organisational environments though, there may be a skill in doing this. The leader that constantly says to stakeholders that they were wrong, may well soon find that faith in their ability is waning, this may be mitigated somewhat by influence with the stakeholders, but again a balance needs to be reached.

This also brings with it the wider issues (discussed in Chapter 5), considering stakeholder expectations. The issue of experimentation and failure to solve, can bring with it organisational, political and career risk. The key ability seems to be based on not only the ability to influence stakeholders effectively, but also to be patient and hold your nerve in the face of organisational and stakeholder expectations plus existing organisational processes:

Participant 9.

If we had just waited it would either go away or we would be in a better position to solve it. You have to be comfortable waiting, but at the same time explain your rationale for waiting.

Participant 14.

I think there's a danger in jumping to a solution too quickly, as well I have learned in trying to apply a solution.

7.3.7. Willingness to operate outside of the rules and outside of their own comfort zone.

In the absence of the habitual and current organisational processes being effective in engaging with a Wicked Problem, leaders can turn to trying less orthodox methods and interventions, which in turn may mean operating outside of the organisational rules and norms. Participants discussed the need for the leader to be willing to operate outside of the rules and outside of their own comfort zone:

Participant 10.

We created what we call the coalition of the willing which was a group of colleagues who were willing to go below the radar.

Participant 6.

I think someone who's able to cross boundaries, I think the most positive way is someone who can who's willing to operate outside of their comfort zone in those areas.

This necessitates an understanding of their own and the organisational norms, plus a willingness not to be totally bound by these. Stepping outside of these norms can mean taking, or at least perceiving that you are taking risks, which implies that the leader needs a mindset of *risk willingness*, plus the ability to manage the risk boundary with the organisation. Understanding the nature, nuance and properties of a problem and then intervening appropriately, draws on many abilities and ways of being from a leader. Also implicit, in all of the above, is that working with a Wicked Problem draws on the need to work with others effectively and to understand your own views, lens, bias, and habits, all of which participants in this study commented on and is discussed in the next section:

Participant 7.

So sometimes, if it's a really risky thing. If it feels like this is high risk, I want to share the responsibility. It might be that I know it's outside of my expertise and then I'd want to bring other people in.

7.4. The Ways of Being when working effectively with self and others.

7.4.1. Reflexivity, awareness of self, and self as instrument.

Throughout all the Ways of Beings, there is a golden thread of 'awareness'. Awareness of self, others, interactions, the field, the field boundaries and the Wicked Problem itself, including awareness that we, as individuals, have helped to construct our own experiences, choices and actions (Yalom, 1980). In fact, some would argue (Stevenson, 2018) that a central aspect of Gestalt and Field Theory approaches, is that change cannot occur without interrupting existing perceptions and Ways of Being (Stevenson, 2018). Awareness is the precursor to effective action, awareness leads to choice (Nevis, 1987). Growth occurs at the contact boundary, between what is known and what is unknown (Nevis, 1987; Stevenson, 2018). Awareness also enables aspects such as bracketing (Joyce and Sills, 2002). The leader in a Wicked Problem needs to understand that their own views, if taken alone, may restrict understanding and subsequent action:

Participant 13.

That's what kind of was a learning for me in talking about it, is that I probably tackle problems without standing back enough and really thinking through it.

Taking this further, Joyce and Sills (2001) highlight three areas of awareness to engage effectively, Firstly, Self - your own sensemaking process and bias. Secondly, the environment or field conditions and thirdly, the connection between these or how you relate to the problem. This research has also highlighted the element of relational awareness, where we understand the different frames and layering of experience that occur in relating to others and how we relate in the context we find ourselves. We are both interconnected and interdependent (Parlett, 2015) and each meeting is an ongoing changing process. Aspects of the problem will come in and out of focus as the prevailing field conditions change. However, this becomes more complicated, due to the different perceptions for each person. The emergent changes over time, highlights the need for field awareness, but also not assuming a hierarchy of importance, from our own bias, in the field conditions (Spinelli, 1989). A key

ability for a leader of a Wicked Problem is an appreciation of the different frames and layers of experience that occur in relating to others and the context we find ourselves in. Participants recognised that given that we are engaged with and are a part of the Wicked Problem, we need to pay attention and own our own responsibility as a co-creating party:

Participant 8.

It's relational work. It's not you and I, it's the space between you and I. The rapport that we build what we notice about what goes on in that space, what doesn't? That's how we pay attention to that. So this concept of use of self. Self as an intervention.

7.4.2. Recognising the need to work with and through others.

Both Wicked Problem literature (Ferlie *et al.*, 2010; Grint, 2005; Roberts, 2000) and that on Field Theory (Chidiac, 2018) state that a focus on relational and collaborative governance is an important ability. In Field Theory, contact, exchange and voluntary interaction helps systemic change in the field (Lewin, 1946; Marrow, 1969). This is supported by the participants views in this study. Given that someone engaging with Wicked Problem requires understanding of different views, it leads to a leader needing to be willing and able to form coalitions and operate in a pluralistic context:

Participant 1.

I think to tackle some of the Wicked Problems, you really do need to get people together.

Participant 6.

But when I feel like it is really kind of like a problem that is mine, and I'm really ready to be stressed about it, involving other people is almost always the only way to unlock and move forwards.

Given that one aspect that is required from a leader engaging with Wicked Problem is an understanding of different views, and that there is a need for the ability to form coalitions or operate in a pluralistic context, bracketing itself may not be enough. Responses would suggest that the leader needs *to welcome and encourage* diversity of thinking and views. It also calls on the leader to enable scope to create a shared understanding with recognition and respect of difference. Diverse constructs are more likely to catch potential problems than those with

the same constructs and people who possess different outlooks from each other are better suited to spot each other's mistakes (Lindblom, 1959). If a coalition for decision-making works well, it can respond creatively and effectively to some aspects of the problem (Norton, 2012). Given that there will be more than one perspective on a problem, leaders need to ensure that the environment for collaboration is one that is conducive to the process itself, such as respect, hearing the views of others, safety/security. In short, shaping a suitable holding environment, of which part of the leader's role is to ask the right questions rather than simply provide the right answers, because the answers may not be self-evident and will require a collaborative process to make any kind of progress (Grint, 2005). Participants highlighted this desire for diversity thinking:

Participant 4.

Somebody that actually will value the diverse of diversity of opinions and thought that are in the room and won't just dismiss the weird and wonderful wacky ideas.

Diversity of thinking can feed directly into the ability to experiment as an intervention. Having the willingness and ability to work with diverse thinking not only benefits an understanding of the Wicked Problem, but also can act as a sense-check for the leader, in turn highlighting the need for a leader to let go of, sometimes long held, opinions and frames. Participants outlined that the mindset of a leader needs to be one of accepting that that their own view may not be correct:

Participant 2.

I need to be very careful that I don't get into the mindset that I'm always right. So, there are times where I just go 'Can you just sense check it with me? Can you play devil's advocate? Can you challenge me on it?' Because I need to know that actually, I'm not blinkered.

Bringing people together to collaborate from disparate backgrounds, work specialisms, experiences, has implications for communication and especially by the ability to listen and understand from another's view and interpretation, whilst attempting not to let your own bias filter the communication. Whilst this starts with a willingness to listen, it can also draw upon a need to understand your own bias and preferences. The ability to bracket your own views opinions, frames, at least temporarily, in order to truly listen to and understand others views and frames around the Wicked Problem:

Participant 10.

What we keep coming back to is how can we work together to solve this problem, what can we do? Let's deeply listen to each other. So we didn't make much progress for the first few months, yeah because everybody needs to get comfortable with listening.

Whilst participants did not expand significantly on who were the 'right people', as it may be different for each field constellation, a majority of participants did mention the need for diversity of ideas, opinions and views, but *all* mentioned in various forms, the need for a leader of Wicked Problems to be able to influence. This does, however, suggest that leaders have a choice to decide who is involved, but with the organisational contexts, processes and norms, these choices in reality can be severely restricted with regards to the people themselves, and many choices can be driven by position, expertise, politics and understanding the constellation of people who can influence the Wicked Problem itself.

7.4.3. Influencing others.

Participants reported that once a leader understands the people who are involved in the field surrounding a Wicked Problem, then there is a process of influencing that needs to occur. When participants were asked what qualities they would look for in someone to engage effectively with Wicked Problems, 'influencing' was repeatedly mentioned:

Participant 4.

I would want somebody that comes with a good proven leadership ability, to be able to lead and influence people.

The form of influencing that participants described seemed to centre around involving people, understanding their needs, listening to them as a way of relationship building. They described the ability of a leader to gain voluntary agreement rather than using coercive power:

Participant 8.

The principles of – 'start with where people are, understand what's going on for them, get alongside them, and start to work on the issues that matter to them', you know, potentially as an entry point.

Lewin considered abilities relating to facilitating group dynamics as important (Bargal *et al.*, 1992; Kippenberger, 1998). I think it's worth noting here that he was not necessarily referring to only intact groups that were physically together, but also to physically dispersed groups. He developed an understanding that facilitating *voluntary* participation, involving democratic decision-making, is effective to facilitate change (Coghlan and Jacobs, 2005; Lewin, 1946). This ability to facilitate group dynamics, referred to by Parlett (2015) as Interrelating, is being able to understand and work with the complexities of relationships, by engaging constructively and having an appreciation of the complexity of different frames and layers of experience that occur in relating to others, and the context we find ourselves. Understanding that in relating to others we largely invent and co-create our reality:

Participant 7.

I long ago accepted the human beings are such complex creatures and that is always going to be the case and that complexity means that we are always gonna be all of this. a mixture of the best and the worst and the crap and the amazing stuff, so it's not a problem to be solved as you can't solve humanity, you have to just accept it.

This not only implies a preference to understand that relationships are highly complex, but to work with this, rather than try to change or alter this. It draws on two ways of being. Firstly, a genuine belief in having a diversity of ideas, frames and observations, and a desire to work with pluralistic constructs. Secondly, a willingness to consider these different views as equally valid as your own.

7.4.4. Gaining agreement and shared understanding.

The term 'Influence' is a broad descriptive phrase, which can elicit many interpretations. As seen above, one such meaning intimated is the influence to involve others and elicit their views and experiences. In fact, some participants considered the effective involvement of others to *be* the work itself. In this research, participants used the phrase *influence* in relation to the leader's ability to gain a shared and agreed understanding of the nature of the Wicked Problem:

Participant 8.

The identification has to be wider than one. So there's something around 'we agree that this is what it is'. And therefore, and I think that that's often our work, it's around helping people to agree on what the thing is.

This suggests that finding common ground and possibly from this, a shared ambition, is important. Cialdini (2001) outlines how highlighting similarity can lead to collaboration. This takes it from a belief that, working with and through others, is important to being able to use communication and influence skills to gain a shared identification and ambition, which leads to further collaboration:

Participant 10.

And it was a lot of me having bilaterals and talking to them saying, 'what, what would you really need to get out of this'? And finding that shared ambition and then having a joint session where we actually wrote the shared ambition together.

These influential interventions by leaders are aimed at working alongside others, by gaining shared identification, whilst balancing that with trying to accept and understand that each person's experience of the same Wicked Problem, is unique. So, in short, the ability to recognise and acknowledging difference, whilst at the same time, finding commonality, especially in relation to a shared goal.

Wicked Problems are multi-causal and multi-faceted (Rittel and Webber, 1973). If we look at the process described above, of understanding the different frames and impacts that individuals have, we can see how the leader is aiming to recognise and map the constellation of the Wicked Problem itself. Constellation mapping is a key ability for a leader who engages with Wicked Problems well. A constellation can be described as a mapping of the field, what is impacting on the Wicked Problem, where it impacts, how it impacts. Constellations may include the present, but also the history and timeline. The aim of which is gaining a fuller and more accurate shared understanding, leading to, amongst other things, a more unified and coherent group of people, helping to engage with the Wicked Problem:

Participant 4.

And what I have done is say to people, right, okay, tell me what you think the issue is. And tell me what you think the greatest issue is and help me try and understand the impact this has for you. So let them tell me what the impact on them is. And then sometimes by just telling them the simple stuff, the more complex stuff, and the

interventions that we've tried and tested, that haven't worked. So sometimes helping people understand what we have done, does make it easier, because people are coming from a knowledge base of 'it's awful for them'. They're not seeing the bigger picture.

7.4.5. Facilitating conflicting ideas and views.

With this diverse set of strongly held opinions, frames, and ideas, inevitably this can lead to disagreement and conflict, drawing on the ability of the leader to facilitate difference to a point where a wider, but shared understanding, can be reached:

Participant 2.

People have competing priorities and different workloads, and their own scores, and their own... to work across directorates can be a challenge, because what's important to me isn't necessarily important to them.

This potential conflict draws on a number of qualities from the leader. Not only an ability to facilitate these disagreements, not only to retain resilience in difficult times, but also to pay attention to the changing and competing priorities in the field amongst interested and involved parties.

7.4.6. Ability to work with constellation movement and changing coupling and uncoupling of groups.

This constellation of stakeholders, and influencers in relation to any single Wicked Problem is complex and ever changing. Cross boundary collaboration can include involving multiple stakeholders, promoting dialogue and deliberation (Danken *et al.*, 2016), and may require the ability to involve different stakeholders, acquiring new skills, especially those related to collaborative governance. Xiang (2013) reports that addressing Wicked Problems requires a holistic and process-oriented approach which is adaptive, participatory and transdisciplinary. Fairhurst (2005) discusses reflexive leadership practice, where the skill is to stand outside of the work process and determine how best to engage with it. Given that Wicked Problems are not stationary and that the field is in a constant state of flux, then the leader engaging with a Wicked Problem, will need to understand and engage with collaboration as a moving entity:

Participant 3.

Then having the right team of thinkers around you to come up with solutions to address the problem at that particular point in time.

So, the aforementioned field awareness also extends to constantly monitoring the field, matching this against the needs associated with the Wicked Problem and paying attention to collaboration as an ongoing changing part of the field. With each movement in the field and change in power dynamics, support for particular actions are questioned and often changed. So a leader engaging with a Wicked Problem will need not only to be aware of these constellation changes but also to be able to engage with these effectively. This balance between providing direction and yet operating effectively with collaborative relationships, may warrant a willingness to release (some) control.

7.4.7. Role of the leader.

The understanding of the need for a more pluralistic approach and of understanding that you do not have the resolution yourself, draws on the leader being willing to forgo more traditional views of leaders as the custodians of power and of holding onto control:

Participant 10.

What we did is having kind of worked out what the problem statement was we then said right who is willing to give up control and give up power.....There was a willingness by institutions to stop being parent/child and become more adult adults.

So again, it seems here that there is a balance of abilities needed for the leader. On the one hand holding and facilitating the space in which influencing and interested parties can genuinely converge, diverge, where some control is held by the leader to facilitate this process, balanced against the willingness to relinquish some control and power over to others:

Participant 14.

So if you, you know, if you're demonstrated a close mindset towards something, and you know, that will then filter through to the team around you, that will impact on the ability to reach a resolution whereas if you're demonstrating a growth mindset and being open to ideas and different ways of working, that could positively impact on a resolution being met sooner.

This 'letting go' of an assumption of leader as controller, towards leader as facilitator, draws on a recognition that not only as a leader 'I do not have the answer', but also recognizing that others may be more knowledgeable, more experienced or simply better at this. A humility in a leader's view of their own expertise:

Participant 3.

I can honestly say there's something that they can do much better than I can do, or something that they're more driven to do than I might be, That you can say, I'm not the best person to do that piece of work. You'll be much better at that than me, or I think that those things are really important.

This builds a picture of a leader without a 'solution', but with a belief in a pluralistic method where power and control is not held by a leader alone, where diversity of understanding and ideas is welcomed, and can lead to disagreement, where groups and teams couple and uncouple as part of the constellation but where a binding attribute will be needed to move the Wicked Problem forward.

7.4.8. Resilience, persistence and tenacity.

With an expectation from stakeholders, organisations and self to 'resolve' a Wicked Problem, a dissonance may be created when experiencing contact with a Wicked Problem. In this sense a capability of resilience is needed to adjust actions to uncertain changes (Termeer *et al.*, 2015). Given that engaging with Wicked Problems can involve challenging conventional wisdoms and ways of thinking, and that working with divergent ideas, frames and experiences are likely to occur, participants found that being able to stay resilient and tenacious in the midst of all this, is a key ability when engaging with Wicked Problems:

Participant 9.

You need to be prepared to go in tomorrow just to do same battle with this problem that you did yesterday and actually see it as a part of your role..... I'll still keep going back with a masochistic tendency towards saying 'this isn't going to beat me' – a certain amount of tenacity.

Participant 16.

I think that's a sort of tenacity - to be able to not be fazed by it.

Participants recorded that a factor in their resilience is the relationship with the problem. In particular how much they believed in or even cared about the problem itself. They relayed that engaging with the Wicked Problem needed to be seen as more than simply 'a piece of work', but instead that the leader felt like the work they were doing mattered and was important:

Participant 16.

Because that needs to come across. Like, whoever you're working with, that you're bothered. You know, not just because you need to do a job, but because this is something important, your confidence in that, then you have some credibility....., and that you're committed to making it useful to the best of your ability.

There is a paradox in relation to achievability. As we have seen earlier, Wicked Problems are non-resolvable in a traditional understanding of 'solved', and a key ability is to recognise the nature of the problem as such and yet participants reported that having a belief that you can address the issue is important. These can seem in contradiction to each other. It is the person's definition of 'resolved' where the answer lies. The belief that '*I can resolve this*' provides motivation to the individual plus political and organisational kudos. Resolution, however, may be set to mean the implementation that will not *solve* the problem, but can move, alter or progress the issue. It is directly related then to the framing ability of a leader that contributes to their resilience in the face of difficulty. For example, the implementation of a vaccine program for Covid could be considered a success by many and yet it did not 'solve' the pandemic itself. It seems that this is a balance in the mindset of understanding the nature of the problem but retaining a focus on positive action to engage with it:

Participant 7.

I will bring in other people if I need to, but I would always start with 'I can do this'.

Given that this engagement and belief in tackling the Wicked Problem also leads to an approach that can be seen as different from more traditional ways of tackling problems, instead of looking for an *answer*, there was a sense of curiosity. Almost being *intrigued* about the problem. Simply, at least initially, being *curious* rather than working with or even searching for an 'answer'. This curiosity displays as trying to understand what gave rise to the situation, how people have and are making sense of it, how '*this*' fits with '*that*' and what that means in the overall field (Joyce and Sills, 2002). This is akin to a phenomenological enquiry

as opposed to an inquiry, and draws on open questions, especially those which enquire ‘What’ and ‘How’. This curiosity is focussed on how the Wicked Problem is manifesting itself now – as opposed to in the past:

Participant 10.

We need to be endlessly curious, in what we are setting out to do, because there is no answer..... and curiosity, makes all the difference in the world.

7.5. Chapter summary and conclusions.

The nature of Wicked Problems involves an increased amount of complexity, volatility and interrelatedness compared to problems which have mostly tame characteristics. These problems require a particular set of Ways of Being, incorporating skills, mindsets, approaches, abilities and awareness, when engaging with or addressing these problems.

How problems are viewed is important. The mindset of problem ‘*solving*’, which I believe is prevalent in organisations and the development of leaders, can lead to engagement strategies which are doomed to failure. However, a mindset of problem ‘*addressing*’, ‘*shaping*’, ‘*coping*’ or even ‘*taming*’ is likely to lead to more effective strategies without the expectation of resolution. This will involve the willingness to experiment when intervening, the abilities to construct and co-construct interventions, and the resilience to allow failure, as well as managing the expectations of stakeholders and organisations involved. The ability to live with uncertainty is needed, where rational analysis does not account for elements out of awareness. Non-linear causal relationships and multi-approach strategies are needed to address Wicked Problems. Having field awareness and understanding contextual influences both to and from the Wicked Problem, is key. Seeing the whole field and understanding the interrelatedness and its changing nature, allows strategies which can move and adapt according to what is figural (in focus) and ground (present, but out of focus), leading to knowing that each problem is context and time relevant. There is some difference of opinion as to whether being able to identify a problem as ‘Wicked’ is needed, however, it is clear that understanding the *nature* of the problem contributes to more clarity when intervening, whatever label it is given. Of more importance is the ability to recognise wicked *characteristics*.

As part of this, understanding the framing process is helpful, allowing a leader to draw from the constructs of others in a pluralistic coalition to address problems. To allow this to happen

a leader would need to genuinely believe that there are different constructs that are as equally as valid as their own. Awareness of interrelating and the complexities of relationships helps this process - how we can engage constructively with others and have an appreciation of the different frames and layers of experience that occur in relating to others and the polarities that can be part of that experience. Awareness of others and the interrelatedness between self, others, the organisation, and the problem itself, can provide a rich tapestry on which to base decisions. This will enable more informed intervention strategies.

Given all of these considerations, key abilities for a leader engaging with a Wicked Problem include good interrelating and influencing, responsiveness and style flexibility, resilience coupled with a high level of self-awareness and reflexiveness including embodiment. Having high abilities in responding including experiencing their power, taking responsibility, exercising leadership and setting new actions in motion, seem key. If we are to develop people to engage with Wicked Problems, we need to encourage ways of being that enable people to handle volatility, complexity, and interrelatedness.

Finally, learning about oneself and reflecting, is helpful to recognise what is evoked, what biases we each have and how these might influence a reaction. Field Theory practitioners also refer to 'embodiment' or 'self as instrument', based on the premise that we have the capacity to experience others and the world about us, through awareness of our body sensations, sensory information and our feelings.

The table in [Appendix 8B](#) lists the key themes which have been highlighted in this part of the research, in relation to the Ways of Being when addressing Wicked Problems through a lens of Field Theory.

Chapter 8 – Discussion and conclusions.

8.1. The aims of the research.

This chapter is a review and discussion of the research findings. It discusses findings outlined in previous chapters based on the research questions, how this relates to the literature informing this research, the new insights that this research is adding to the thinking regarding Wicked Problems and Ways of Being for leaders, how well the methodology and method worked and reflections on the use of Field Theory as a lens.

This research was designed to elicit views and experiences that will enable a greater understanding of the following research questions:

RQ 1. – To understand what are the ‘Ways of Being’ utilised by leaders¹⁸ when engaging with Wicked Problems.

Sub-research objectives/questions:

RQ 2. – To understand how leaders view Wicked Problems and how is this reflected in their Ways of Being.

RQ 3. – To explore how leaders intervene with a Wicked Problem and what are the implications for Ways of Being.

RQ 4. - To meet a gap in the literature regarding the abilities of leaders to engage with Wicked Problems, by bringing together the Ways of Being discovered in this research together with those outlined in literature into one place and to validate these in an organisational setting.

RQ 5. – To provide a new and unique insight into Wicked Problems by applying principles of Field Theory to the concept of Wicked Problems and to leaders that engage with Wicked Problems.

The first suggestion underlying these research questions is that there are specific Ways of Being that are required to engage well with Wicked Problems. In this case I am asserting that

¹⁸ The term ‘leader’ in this research refers to any person who is leading the engagement of a Wicked Problem. It does not denote a title or hierarchical position.

current literature does not fully explore these and as such management and leadership development is not focussed on preparing leaders to address such Wicked Problems.

The second assertion is that Wicked Problems are, in many cases, discussed and written about as if they are binary, static and semi-independent of other variables, whereas I see them as non-binary, in constant movement and as part of a constellation of interrelated influences. If we consider Wicked Problems in this different way, we will more accurately understand the Ways of Being needed to engage with them effectively.

The contribution is two-fold. Firstly, a research-based understanding of the Ways of Being needed for engaging effectively with Wicked Problems that can be utilised when developing managers and leaders. Secondly, a new view on the nature of Wicked Problems, which adds to and furthers the debate, discussion and understanding.

8.2. Background and rationale.

This chapter responds further to the research questions, by discussing what this research concludes and adds to the subject. One of the aims of this research is to understand how people engage with Wicked Problems and from this, what Ways of Being they use and find useful in doing so. Whilst there is some disparate literature on doing this with Wicked Problems (Danken, Dribbisch and Lange, 2016; Ferlie *et al.*, 2010; Raisio *et al.*, 2019; Termeer *et al.*, 2013), there are no works published on the specific Ways of Being when working with a Field Theory perspective (Lewin 1946; Parlett 1991; Stevenson 2018) in organisations. This research responds to this literature, adds new insights and findings and brings all this together.

It is possible to derive from other fields, especially around Organisational Development (OD), and around leadership development, however, these are usually contextualised without reference to Field Theory or Wicked Problem principles. The growth of the use of Field Theory in Gestalt psychology is closely related. Historically the focus of work carried out in Gestalt research, predominately appears to focus on individuals and groups, but less so on large systems/organisations. If we draw from literature around how Gestalt psychology and Field Theory works with the field, we can explore this in an organisational setting. This will bridge a gap in the literature on Ways of Being and add to the literature regarding the application of Field Theory in organisations.

The research frame outlined in Chapter 1 Figure 1A, was a very useful guide during the research, especially in the coding and analysis phases of the data. However, what became clear during these phases was that the data collection had not produced much specific data on the *Emotions and Reactions* section as part of the quartile *Ways of Feeling*. The data instead elicited information on 'Self' and how this related to Ways of Being. This is one area for possible further study.

8.3. The research findings summary.

The findings in this research resulted in four areas of analysis:

- Ways in which leaders experienced and perceived Wicked Problems, how they made sense and framed this, and the implications for this on Ways of Being (Chapter 5).
- Ways in which leaders engaged with the Wicked Problem and the implications for this on Ways of Being (Chapter 6).
- * Ways in which leaders relate and interact with others when engaging with Wicked Problems and the implications for this on Ways of Being (Chapter 7).
- * Ways of understanding self when engaging with Wicked Problems and the implications for this on Ways of Being (Chapter 7).

** During the analysis of the data, it became evident that these two areas were so closely related that they were written into the same analysis chapter (Chapter 7).*

A summary of findings is represented in Figure 8B. below:

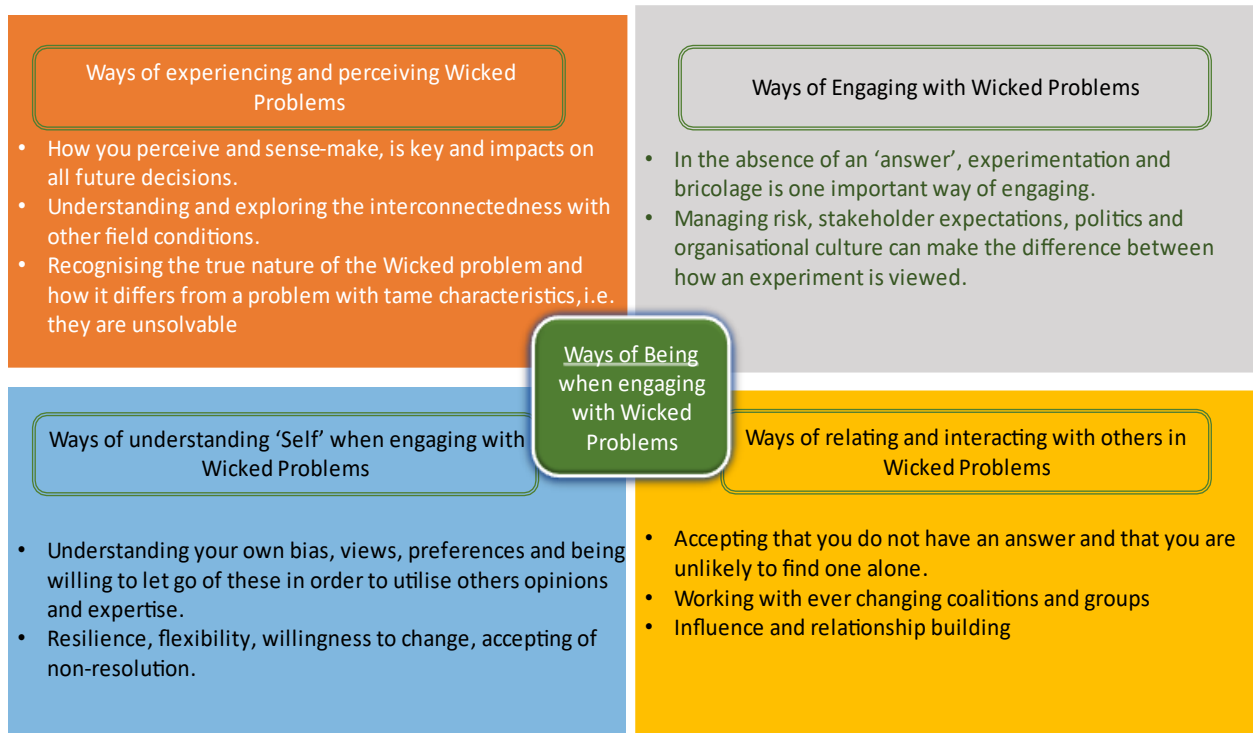


Figure 8B. Summary findings for engaging with Wicked Problems.

Whilst **RQ 1. is** the primary question being considered in this research, it has been placed last in this discussion due to the fact that it draws heavily from the other research questions **RQ 2.** and **RQ 3.** and so, in order to understand **RQ 1** fully, the discussion surrounding the other research questions are placed first.

8.3.1. RQ 2. – Reflections and discussion on how leaders view Wicked Problems and how this is reflected in their Ways of Being.

There is a whole layer of considerations for leaders *prior* to any intervention being made. In particular, how leaders viewed, sense made and framed the Wicked Problem they were about to engage with. This phase in the engagement shaped any following interventions and actions, furthering the point of Fairhurst (2005) regarding a leader's ability to shape the meaning of a subject, and with it, form a judgement regarding its nature and significance. Most, if not all, Wicked Problem literature discusses the phenomena from an assumption that at that point the leader, as far as they can, knows what the Wicked Problem is. However, the findings from this research demonstrate that there is a key element before this stage and that is making sense and framing the problem (Entman, 1993; Fairhurst and Sarr, 1996; Pondy, 1978).

There is a timeline of engagement with a Wicked Problem, in which understanding is an early and continuing process. Any leader is surrounded by their own field, their history, their work, their relationships, and their experiences (Lewin, 1952; Parlett, 1991; Stevenson, 2018). At some point they encounter the Wicked Problem, which sits in its own field of influences, history, stakeholders and organisation. The field boundaries between the leader and the Wicked Problem itself meet. Emerging from this research is an indicator that there is a meeting of the field boundaries of the leader and the Wicked Problem itself. This is a first stage which I am naming as **Contact**. As this happens, both the leader and the Wicked Problem are changed as the field morphs, changes, expands. It is at this meeting of the field boundaries that the leader starts to sense-make the Wicked Problem and begins to understand the characteristics and nature of the Wicked Problem. Danken, Dribbiisch and Lange (2016), in their review of Wicked Problems literature, suggest that leaders need to be able to differentiate between different types of problems. However, this research adds a nuance to this theme by using Field Theory to understand this process, finding that firstly, this process starts to happen at a meeting of the field boundary, and secondly, that it is an ongoing process which is emergent, rather than a sudden 'light switch' moment, and thirdly, that naming a problem as wicked is less important than understanding its characteristics, especially those characteristics of wickedness. What Danken, Dribbiisch and Lange (2016) also refer to, is the need for cross-boundary collaboration. This can also be seen as a meeting of field boundaries which influence and shape a new formation of the Field. Perls (1976) suggests that experience occurs at the contact boundary between a person and an environment, and as such, this is where thoughts actions and behaviours are shaped. Similarly, this research shows that these thoughts, actions and behaviours are shaped at this field boundary between a leader and the Wicked Problem. The second stage of this process is where these two fields merge to form a new field, both leaders and the Wicked Problem fields are changed. I am calling this stage **Integration**. The research shows how at this point the leader draws from others' views, knowledge, opinions and experience. It is characterised by the use of experimentation and testing out interventions. As a consequence, awareness is raised both about the Wicked Problem, but also about the leader and others. This is also where the leader is engaged with influencing activities involving others, including stakeholders. Thirdly, there is a stage where the leader and the Wicked Problem withdraw from each other. The leader's engagement is transitional, as is the Wicked Problem itself. This stage I am naming as **Disengagement**. It is

characterised by a recognition that both leader and Wicked Problem are changed. It is consolidation process where learning and gained experience is reviewed. The Wicked Problem has morphed and, as such, re-framed to be understood differently. These stages often repeat with a different leader and a refreshed understanding of the Wickedness (see [Appendix 8A](#) for a visual representation of this process).

This research has shown how framing is complicated, multi-faceted and individually based. In order to clarify this process further, it has shown the different ways in which participants in this study have made sense and framed the Wicked Problem. These ways of framing, outlined in this research, adds to the literature, by demonstrating that the process framing serves a number of different possible purposes. Many, but not all, of these ways, are *purposeful*, in that they may be designed with an outcome in mind, or as part of a normal need to make sense. Gestalt psychology draws on this desire for wholeness and completion, in fact the loose translation of the word 'Gestalt' means 'an organised whole' (Chidiac, 2018). This desire for wholeness and completion is also a driver for leaders to sense make the Wicked Problem itself. Due to the changing nature of Wicked Problems, this drive for completeness is challenged and draws on the leader to either suspend judgement or review on an ongoing basis.

This framing is a mix of habit/out-of-awareness choices and conscious choice, which have further implications for the development of Ways of Being, including that of motivation. This issue arose in the research, regarding how leaders remained motivated and resilient in such potentially difficult situations. What became evident was that they had an ability to frame in a way that allowed self-motivation and resilience, to frame in a way that was key for understanding the Wickedness, and also to frame in a way the aided relationships and influence. The focus in many leadership development programmes is how to *engage* with problems and yet, what this research concludes, is that the ability to sense make through framing, begins *prior* to any intervention and will impact considerably on how the Wicked Problem is addressed. We therefore need to develop leaders in this ability to sense-make with choice through framing. To achieve this development requires elements of heightened awareness of self, bias and habits, awareness and acceptance of other's sensemaking process as different from your own and most importantly, awareness of the changing field conditions

surrounding a Wicked Problem (Chidiac, 2018; Clarkson and MacKewn, 1994; Joyce and Sills, 2002; Perls, 1969).

This research takes what Parlett (1991) and Stevenson (2018) describe as the principle of organisation and the principle of possible relevance (see Chapter 3), and adds how these are relevant in practice, especially for leaders engaging with Wicked Problems. Firstly, when understanding the nature and nuance of the problem itself, by understanding the connectedness and co-dependency of a wider number and type of factors than would normally be considered, and secondly, by offering new insights about how, where and when to intervene in the Wicked Problem itself.

The boundaries between the problem and the field conditions it sits within, are key. They are amorphous, open to varying interpretations, and changing. Understanding the *quality* of the contact boundary between the Wicked Problem and the field is essential in order to work effectively with the problem. Literature does not comment extensively about framing as an ongoing process, although Grint (2008) refers to the ever-changing nature of the problem and King (1993) highlights how a problem resists a static label due to the ever-changing nature of the problem. It is in the application of these constructs to a framing process where Field Theory principles and this research add understanding. This research demonstrated how leaders have a tendency to attribute a label/frame to a Wicked Problem, but not to review the problem until interventions, based on their original frame, failed to achieve the results they were expecting or hoping for. In their framing and sensemaking process, leaders need to constantly scan and review the Wicked Problem as part of their field sensitivity and awareness.

Framing and sense-giving has a key relationship with stakeholders. Whilst most of the literature surrounding Wicked Problems does not comment on the reasons for making sense through framing, this research highlights its relationship with stakeholder management. Participants in this study described the need to keep the stakeholders alongside them and how they used framing and communication interventions to achieve this. This is *sense giving*. Sense-giving can be defined as a “*process used to influence the meaning construction of others toward a preferred definition of organisational reality*” (Gioia and Chittipeddi, 1991. p.442). Grint (2010) outlines how politicians may diagnose a problem to support an ongoing narrative, and this research showed that this same process occurs between leader and stakeholder,

adding a nuance that leaders may do this for an ongoing narrative of a stakeholder. This was an aim to influence the relationship with the stakeholder, showing that leaders will frame a problem to support a desired direction or react to political influences. Chanlat (1997) related this to competition in the organisation, whereas Kahneman and Taversky, (1979) refer to the process of framing to protect prior gain.

A significant number of influences in sense-giving are in relation to *self*, even though participants reported that the way that they sense-gave was largely as a result of managing the boundary with stakeholders and the organisation. Put simply, they put themselves under pressure. There is often pressure either from self, perceived from the organisation or from stakeholder expectations to resolve the problem or at least make it go away, that shapes the decisions and actions of a leader. It can be presented by stakeholders and organisations as if it were a problem with mainly tame characteristics.

In many cases, framing is simply a leader sharing how they view the Wicked Problem not to always influence, but to foster discussion and collaboration in helping others to sense make. It is simply a sharing of information and opinions. All of these occur, framing by a leader to help self, sense-giving in order to influence, and sense description in order to foster collaboration. It does mean that the organisational culture, the relationship with the stakeholder and the willingness of the leader to go against popular and political opinion, are key factors in the overt making sense process. This is an area where further study into influence would reveal how in detail this is achieved, especially if it included how language was utilised.

Sense giving via framing, is a way of actively managing risk. This was how leaders partially managed risk, especially if they were experimenting with interventions that were different from normal or different from expectations. Psychological safety is needed in individuals, if they are to feel willing and capable to experiment (Schein and Bennis, 1965). However, the research demonstrates how the type and amount of this differs between individuals. It is a unique part of each person's field and is situational. Edmonson (1999) outlines the judgement made by individuals about risk to themselves, versus the learning that will be gained from experimentation. This research found that, understandably, when the field conditions were perceived as having high personal risk, that leaders were more careful both with their sense giving of the problem but also with any experiments or interventions carried out. Taken from

a Field Theory perspective, these conflicting accounts of risk can be seen as an unclear element in the field and as such, field awareness from a leader, as well as the ability to gain clarity in the field, becomes vitally important.

Most problems have some tame and some wicked characteristics, despite the fact that much of the literature discusses Wicked Problems as if it is a binary construct, as if it either *is or isn't* a Wicked Problem (Conklin 2005; Levin *et al.*, 2012; Norton 2012; Xiang 2013). Similarly, participants reported problems using these binary terms. However, when examined. Raisio, Puustinen *et al.*, (2019) highlight that problems are not static, as an indication of this, but not explicitly. A more accurate nuanced description of Wicked Problems is '*A problem that has predominantly wicked characteristics*'. For developing leaders in Ways of Being to engage with Wicked Problems, this is a helpful construct to understand as part of the framing process and would lead to a different way of engaging with the problem. Further, a problem's 'wickedness' can shift over time and each characteristic is not equally wicked. Both of these substantially add to the difficulty of dealing with the problem and the challenge in understanding it (or its nature). So, whilst this research found that being able to label a problem as 'wicked' is not necessary. What *is* necessary, is for a leader to be able to understand the elements of that problem that are wicked and those which are tame. This gives further choice about where and how to intervene.

This research demonstrates that engaging with a Wicked Problem benefits from being clear about what the nature of the problem is, but also understanding *why* to engage with it, not only from the perspective of resolution (however that is interpreted) but also in terms of what personal need engaging with the problem is met in self and others. The word re-framing suggests an action at a point in time, whereas in line with the nature of both the Wicked Problem and the field conditions, the research demonstrates that reframing is a process, it is emergent (Chidiac, 2018). As each intervention changes the nature of the problem (Rittel and Webber, 1973) so does the frame change. The word 're-framing' is a misnomer as it suggests a point in time. In this case, for developing leaders, a mindset of emergent framing, plus ongoing discussions about the nature of the problem, is more useful once it is understood that Wicked Problems are in-motion and emerge, develop and change as time passes and interventions are made.

8.3.2. RQ 3. - Reflections and discussion on how leaders engage with a Wicked Problem and the implications for Ways of Being.

When engaging with Wicked Problems, there is no comprehensive list of solutions, at least in the traditional sense of the word (Rittel and Webber, 1973). In the absence of a 'solution', but still having the pressures from stakeholders and organisations to address the problem, leaders engaging with a Wicked Problem are led to find other alternative actions. This research did not have a focus of finding out *every* intervention made, but instead what emerged was what participants saw these alternative actions were.

There is no singular correct way of engaging with a Wicked Problem. Participants described, in various ways, how they worked within the formal expectations of processes and systems used by the organisation such as project management methodology, and yet also described how they employed informal intentional strategies and used interventions that were less readily recognised (or approved). They applied a mix of these methods in order to muddle through. This is supported in the literature, amongst others, Grint (2008) and Verweij *et al.* (2006) advocate the use of clumsy solutions as a way forward when engaging with Wicked Problems as opposed to elegance. Lindlom (1959 /1983) states that in reality, and despite appearance, decision-making mechanisms are little more than 'muddling through'.

One of the most common ways of addressing a Wicked Problem is to 'try something' or to *experiment*. This is *not* the same as treating the Wicked Problem as if it were tame. Drawing from Gestalt psychology the term *active experiment*, introduced by Perls (1976) has been used in a therapeutic scenario, which this research has applied in an organisational context. As Clarkson and Mackewn (1993) point out, in this sense it has a wider meaning than that of a scientific experiment but refers to *trying something out* to see what happens without a predicted outcome. Participants in this study described this exact process, although there was always some hope that the experiment may have a positive impact on the Wicked Problem.

In the absence of an 'answer', those engaging with Wicked Problems have choices – but these can seem limited, therefore experimentation is seen as essential to move forward and to learn about the problem and the surrounding field. This experimentation often included drawing resources and ideas from seemingly unrelated quarters. Whilst commentators such as Ariely (2010) state that organisations don't experiment much, in this study it showed that individuals *do* experiment extensively when faced with a Wicked Problem. In fact, all the participants

mentioned this as their way forward in the absence of an answer and previous failed attempts to resolve it. Whilst an organisation's surface may appear to be resistant to experimentation in many cases as Ariely (2020) suggests, this research has shown that in the shadow or hidden part of the organisation, experimentation is used extensively.

The research found that *how* the experiment was carried out was important. Perceived personal risk, organisational and professional boundaries such as politics, power, and perceived loss of face or threat to loss of position by the participant, played a large part in the leader's thinking, an aspect also discussed in the literature regarding risk and experimentation (Brown and Harlow, 1990; Edmonson, 1999; MacDuffie, 1997). Joyce and Sills (2002) describe how experiments can be graded, which they call the ability to create a 'safe emergency'. Too little risk and learning does not occur, too much risk and the consequences can be damaging. Whilst participants felt that experimentation was one of the few options open to them, we need to understand what purpose this serves, other than to mitigate risk. Chidiac (2018) states the aim of experimentation is to raise awareness and choice in an environment in which risk is managed. Rittel and Webber (1973) made the point that there is a no stopping rule, unlike a scientific experiment where you can test and see. They are making the point that any intervention into a Wicked Problem changes the nature of the problem in an irreversible way, and so an experiment is an intervention in itself. Perls (1976) pointed out, an experiment speeds up the process of awareness, leading to greater understanding and acuity of the field. Certainly, this is how nearly all participants in this research saw the role of experimentation – a hope of a positive impact on the Wicked Problem, but an expectation of learning. This does, however, require a degree of reflection and reflexivity from the leader as well as an acuity of awareness of the emergent Field. What experimentation achieves, is to accelerate the learning process. Joyce and Sills (2002) outline how, from the experiment, a theme may arise that was not figural for the leader prior to the experiment. This is unlikely to be a solution but is a further part of the field to explore.

An experiment is an attempt by leaders to facilitate some kind of movement in the field of the Wicked Problem. This movement is not necessarily a resolution, but includes influencing the field by learning more, by shaping the perception of the problem, by testing and pushing boundaries and by framing the problem in a way that altered the view of how to intervene. The leader shapes the field actively, rather than accepting the field passively as a given fact.

Experimentation encourages people engaging with Wicked Problems to move away from the relatively safe practice of simply *talking* about what could be done. So, in the absence of a clear direction, one key way forward is to influence the surrounding field conditions. This in itself will shed new light on the Wicked Problem and lead to further informed interventions. Using the principle of possible relevance (Parlett 1991), this movement occurs in any part of the field, even if seemingly unrelated to the Wicked Problem. This is a new perspective on intervening in a Wicked Problem. Instead of just intervening in the problem itself or the tame elements of the problem, what is more effective via a wider level of awareness, is intervening anywhere in the field by understanding the principle of interconnectedness and that a seemingly unrelated intervention may impact on the problem itself. Raising awareness, in turn, opens up further choice from the usual practices and can therefore lead to different decisions.

Experimentation is not about trying *anything*, but instead it needs to consider boundaries. There are personal risk boundary influences such as politics, power, and perceived threat to loss of position by the leader which in turn can raise resistance. However, the resistance to an action or decision is an integral part of the field and in itself worthy of attention. Perls (1947) placed a high value on highlighting and discussing resistance, as it may well be highlighting why there is 'stuckness'. In this way then this research highlighted how an experiment with a Wicked Problem will raise energy, uncertainty, different views, resistance and possibly conflict, but if reviewed and learning is drawn from it, it will shift the field constellation, and hence the view of the Wicked Problem and how to progress.

There is a tension or polarity between learning and risk. In balancing the risk and learning from an experimentation, participants discussed nine types of interventions, as outlined in Chapter 6. Although participants said that expansiveness of the risk was largely as a result of managing the boundary with stakeholders and the organisation, the research demonstrates that a significant number of influences were in relation to *self* as part of the field, the willingness and propensity of the individual to work with perceived risk, which I am naming *risk appetite*.

One aspect of the mindset of experimentation is that of Bricolage or as it is called in Chapter 6 - *experimental Bricolage*. In the literature (Baker and Nelson 2005; Lévi-Strauss 1967), it is commonly used in reference to scarcity of resource, but in this research the process was used

in reference to *solution* scarcity, with a purpose of learning. The experimental bricoleur starts from where they are with what they have got (Grint, 2008), drawing from seemingly unrelated sources. Empirical data in this research showed that leaders not only experiment with any idea, but that they also find value in ideas and approaches from other disciplines and other organisations where the transferability of these alternative approaches may not be immediately obvious. Finally, a key aspect from leaders using experimentation and Bricolage is that leaders *engage* with the problem, and do not resign to inaction or defeat due to lack of resource or lack of solution. This has obvious implications for Ways of Being as a leader, not least of which is resilience and tenacity, plus the willingness to consider resources and ideas that others see as unrelated or worthless (Garud and Karnoe, 2003).

8.3.3. RQ 1. - Reflections and discussion on the abilities, qualities, mindset and 'Ways of Being' used when engaging with Wicked Problems.

The mindset of problem-*solving*, which is prevalent in organisations and the development of leaders, can lead to engagement strategies which are doomed to failure, whereas a mindset of problem *addressing, shaping* or even *taming* and *coping*, leads to more effective strategies without the expectation of resolution. This draws on a wide range of Ways of Being from a leader outlined in Chapter 7 and listed in [Appendix 8B](#). Key in the formation of the questions asked in this research is the journal article by Termeer *et al.* (2015). This piece highlights four broad capabilities for dealing with Wicked Problems, but also alludes to the point that people tend to ignore aspects that are in the surrounding conditions of the Wicked Problem. It calls for further empirical analysis, which this research responds to and aims to answer.

Emerging from this research is an understanding that Ways of Being are interrelated, overlapping and changing, These comprise of five main areas:

1. Working with the field conditions surrounding a Wicked Problem.
2. Understanding and working with the nature of the problem.
3. Engaging appropriately and effectively with the unique problem.
4. Working with and through others.
5. Understanding Self.

(These are shown graphically in [Appendix 8C](#)).

These Ways of Being are codependent, they influence each other, they are a constellation of factors within the field. A change in one may facilitate a change in the others, therefore whilst they are identified as separate elements in this research for the purpose of investigation and learning, they need to be considered *as a whole*.

The research has shown empirical data of a linear progression to these five areas. However, due to the uniqueness of each Wicked Problem (Rittel and Webber, 1973), there is no formulaic way of looking at them as a given singular process. Each participant in this research described their own particular priority, which differed between participants. There is an overarching area of agreement, that of *Awareness* – of self, of others, of the Wicked Problem and of the field conditions. Wicked Problem literature does not generally have a focus on field or context awareness, although Grint (2005) does highlight the need for understanding the context, whereas field sensitivity is a key pillar in Field Theory. Ensuring good quality contact with the field and field boundary via awareness, openness to new data, and potential interruptions, assumptions and bias, are important Ways of Being, which Field Theory adds to the study of Wicked Problems. This research then further adds to the importance of this Way of Being for a leader needing to be highly attuned to the field surrounding the Wicked Problem on an *ongoing* basis, not just initially.

Understanding and working with the movement and flux of a Wicked Problem is a key difference from working with a problem with more tame characteristics. Rittel and Webber (1973) imply understanding of how a Wicked Problem is in a state of flux, although some commenters (Levin *et al.*, 2012; McCall and Burge, 2016; Raisio *et al.*, 2019; Van Buernan *et al.*, 2003) are more focussed on naming the type of problem or resolving a problem rather than focussing on this flux in the problem. Certainly, it became apparent in this research that for a leader, understanding the term ‘Wicked Problem’ was less important than understanding the nature of the problem. Much literature on Wicked Problems has a focus on understanding its nature, in fact Rittel and Webber’s (1973) whole message was about this. What this research adds, is the importance of the mindset that leaders need to adopt when *working* with these characteristics, rather than just having an understanding.

A leader of a Wicked Problem needs a mindset of non-resolvability, a mindset of learning rather than a mindset of solving (Termeer *et al.*, 2015). This needs to be shared and understood with stakeholders in the organisation. As such, this adds a challenge to some

current thinking. The assumption in a lot of Wicked Problem literature is that looking for *solution* is the natural and preferred state. Even in seminal pieces such as Rittel and Webber's (1973) article, the word *solution* is repeatedly used as an assumption about what is the aim, even though it outlines how difficult this is. This research has found that a leader's mindset of *improving, altering, shaping* and *coping* allows for a very different set of assumptions to be made. Managing and influencing the dynamic between these two very different mindsets requires further skills for a leader, especially in relation to stakeholders and other invested parties, which is discussed in Chapter 7. This challenges Rittel and Webber's (1973) statement regarding incremental interventions, as running the risk of not addressing the underlying problem. This is true, but if the aim is to learn, to reshape, to discover, as this research shows, then this outcome of non-resolution is acceptable. This mindset also highlights the need for a leader to understand their role as transitional, not as a final and single owner of the Wicked Problem.

One particular set of skills and mindset needed by leaders who consider improving rather than solving, is that of experimentation, of encouraging failing and of living with partial interventions. This is mentioned and implied in the literature on Wicked Problems (Bhat 2021; Gabriel 2002; Grint 2008; Norton 2012; Xiang 2013;) and discussed extensively in literature regarding Field Theory (Parlett 2015; Stevenson 2018; Chidiac 2018). This research supports these findings in the literature and adds a note to how important this is, as it shapes the leader's thinking from the start onwards. Participants found that the skills of designing, implementing and communicating an experiment was essential in the absence of an 'answer'. This brings with it a requirement for leaders to draw on other sets of skills, other than those aimed at engaging with the problem directly, towards those abilities which influence the expectations and understanding of stakeholders. Again, this is intervening in the field. This research has brought together two assertions about Wicked Problems. Contributors such as Rittel and Webber (1973) and Raisio *et al.* (2019) discuss the ramifications of interventions. In Field Theory, Parlett (1991) outlines the principle of organisation and the principle of possible relevance. This study has shown how participants consistently discovered that Wicked Problems do not operate in isolation and often impact on other considerations, which were previously unrealised. Some participants drew actively from these principles to search for

learning and answers from seemingly unrelated fields, which in itself is a form of experimental Bricolage.

Leaders need to understand their role and function with Wicked Problems. Current literature, as summarised by Danken *et al.* (2016), highlights that the focus of Wicked Problem literature is partially on the role of the leader, but predominantly on the actions of a leader, such as collaboration, rather than what the leader considers their role to be, so the mindset as proposed in this research has implications for the development of leaders. The research plus the application of a Field Theory lens to the data suggests a number of qualities that serve to make a leader more successful when engaging Wicked Problems (see [Appendix 8B](#)). It challenges thinking from the view that it is the leader's role to directly address the Wicked Problem itself. Instead, this research has shown that the role of the leader is as much shaping and influencing the field surrounding the Wicked Problem (sense-giving, facilitating collaboration, stakeholder management, risk, experimentation), as it is to address the problem directly itself. This revised view of a leaders' role calls for a review of the qualities needed. Firstly, from a Field Theory perspective, it calls on the leader to be able to focus on what is figural *and* that which is in ground or context. This has been described by Husserl (1931/1967) as *Horizontalization*, the ability to consider all aspects of the problem with potential equal importance. Further, the role of *Bracketing*, being able to temporarily suspend judgement (Husserl 1931/1967; Spinelli 1989). In short, the leader needs to be able to focus inward on the problem in a convergent manner *and* at the same time be able to focus outwards in a divergent manner. It is not, as so many theories imply, one or the other. This view of the role of the leader necessitates a willingness and ability to let go of the leader as custodian of power and control. Instead, the leader can be seen as a facilitator of power, handing it over to others, taking it when necessary, influencing rather than controlling. It requires a focus on collaboration, a willingness and ability to work with diverse mindsets and constructs as described by Grint (2005), Lindblom (1959) and Norton (2012). As such then the view of this role for a leader requires a willingness and ability to re-frame their own views of their role. To date, this has been discussed in literature referring to sensemaking (Fairhurst 2005), but not in literature focussed on Wicked Problems. This also highlights the ability needed to emergently re-frame in order to shed new light and understanding (Fairhurst, 2005; Grint, 2005; Maule *et al.*, 2007).

Implicit in Wicked Problem literature, is an understanding that a different way of engaging is needed when addressing a Wicked Problem, than that of tame problems (Danken *et al.*, 2016; Grint 2005; Norton 2012; Spinelli 1989; Termeer *et al.*, 2005). However, this research has shown that some Ways of Being are common across *both* wicked and tame Problems, whilst some are specific to Wicked Problems, such as field acuity and a mindset of non-resolution. A problem has both wicked *and* tame characteristics, and as such, calls upon the leader to be skilled and developed in both, plus the ability to switch between both, which this research is naming *Style Flexibility*.

Finally, this research has highlighted two further distinct qualities from the participants. Firstly, leaders need to be actively curious. Joyce and Sills (2002) do discuss this in a therapeutic situation, but this research has displayed how this approach works with a mindset of experimentation rather than 'solving'. Secondly, all participants have noted the impact of leading a Wicked Problem and the impact on them personally. Leaders need good abilities or mechanisms to assist with resilience (Lengnick-Hall, Beck and Lengnick-Hall 2011; Richardson 2002; Termeer *et al.*, 2015).

8.4. Reflections on the methodology and method.

The desire in this research, to make sense of subjective data and socially constructed meanings, is conducive with an interpretive philosophy. This research drew from this to determine method (Guba and Lincoln, 1994), following the epistemological question, concerned with determining *what is regarded as acceptable knowledge* (Bryman, 2016), the ontological question, concerned with *what is the form and nature of reality ... and what can be known about it?* (Punch, 2009) and the methodological question, concerned with *how the inquirer can go about finding what he or she believes can be known* (Guba and Lincoln, 1994).

This study followed a phenomenological approach to the research. The lens through which the phenomena was viewed was from a Field Theory perspective (Lewin, 1952). The lens of Field Theory has a clear phenomenologist view (Chidiac, 2018; Clarkson and Mackewn, 1993; Joyce and Sills, 2001; Robine, 2001; Snygg and Combs, 1949; Wollants, 2007), where meanings attached to experiences are individualistic, socially constructed and are in flux, that is, they move and change as time, other experiences, attitudes, and memory, emerge (Joyce and Sills, 2001). Both phenomenology and Field Theory seek to understand the participant's first-hand

views and knowledge as important (Zahavi, 2018). This research sought to understand how participants sense make their experiences of Wicked Problems, which subsequently effects how they choose to engage with the Wicked Problem. Secondly, the field being researched is complex and changing. It involves understanding socially constructed sense-giving processes, which are personal and unique to the individual.

The data collection element of this research utilised semi-structured interviews, the *Emic* in phenomenological interviewing. The first part of these interviews was divergent in nature, following the narrative of each individual and in which the individual led the direction. The second part of the interview, in contrast was more of a convergent process following an *Etic* format. This second part was informed from themes from Wicked Problem literature, past research and Field Theory principles.

8.4.1. What worked well using this methodology and method?

The methods used, truly allowed an individualised tracking of the participants' experiences, thoughts and narrative in a true phenomenological fashion. Each interview was unique, and the direction led by the participant, and as such elicited data previously not considered. This is a lived benefit of following the phenomenological tradition, that it was an exploration into unknown territory and as such largely unfettered by my pre-held views. Due to this, it developed themes that I had not thought of prior to the research, for example the importance of experimentation when engaging with Wicked Problems and the organisational and political tensions that this brought with it.

Following the lead of the participants, a phenomenological approach allowed the research not only to capture and follow the participants' individual experiences but also to understand changes over time and the non-static nature of responses. Participants often talked about how the field conditions (including the length of the Wicked Problem to date) impacted on how they engaged. This point enabled a deeper understanding regarding the emergent nature of Wicked Problems and how engaging with this also needed to be emergent. The interpretivist assumptions and methods used, allowed me to align with the characteristics of Wicked Problems as complex, ever-changing and difficult to define (Rittel and Webber, 1973). Working with this assumption in the interviews, not only was the method aligned with interpretivist phenomenology, and the assumptions of Field Theory, but also with the early literature regarding Wicked Problems. This alignment added certainty about how to progress and

allowed a further level of complexity which is not explained by a single theory using a wholly deductive approach.

Prior to the interviews, one consideration was whether individualistic subjective interpretivism would enable findings that were shared in the experience of participants and the chance that there was no commonality between the experiences of participants. However, in practice the interviews allowed the richness and complexity of human experience to be explored (Crotty, 1998; Lincoln and Guba, 2000; Neuman, 2000; Schwandt, 2001) but also allowed for commonality/common themes to emerge in the richness of individual human experience. The methodology allowed for the research to work with socially constructed meanings which are rich, complex and personal. Further, it allowed the working assumption to be made that there are multiple meanings, interpretations, and realities between people, demonstrated through language (Bakhtin, 1986) and other forms even when participants have the same experience. In particular, Field Theory used in this study, closely aligns with interpretivism, especially drawing from the Field Theory principle of singularity (Parlett, 2019), where every person-situation is unique, the individual will construct meaning. The methodology and methods used in this research looked to study *Ways of Being when engaging with Wicked Problems* from the participants perspective. In this research, understanding their own unique perspective, was central to discovering how subjects construct their meaning, followed by how participants translated this meaning leading to subsequent actions.

8.4.2. The value of using Prompt cards.

The prompt cards, used towards the end of the interviews, elicited some interesting and thought-provoking responses. The use of the prompt cards was, in contrast to the phenomenological methodology pursued initially, a way to *provoke*, (as opposed to *evoke*) a response. For some participants, the open non-directive methods of phenomenology worked well, allowing them to tell their story in their way. For others, this openness using phenomenology, resulted in a hesitation and asking me '*Is this what you wanted?*' For these people, they responded more clearly and assertively to the prompt cards, seemingly giving them more confidence in their answers:

Participant 4.

Nonsense, because actually, well thankfully, in the NHS, and we're getting rid of that.

Participants used the prompts often to build on answers that they had provided in the phenomenological discussions earlier in the interview. They used this opportunity to clarify and add depth. Occasionally, they used the prompt cards to question their earlier responses. In practice, the two approaches complimented each other. For those participants that found the phenomenological interviews more difficult (for example they had not thought of an experience prior to the interview), the prompt cards seemed to help, and often produced a rising in their energy and enthusiasm. For others it was a confirmation of what they had already said, producing the response *“well as I said earlier...”*. This is a form of triangulation for the earlier responses:

Participant 4.

I think we've already answered that one.

The use of Prompt cards allowed people to express their experiences, giving them both ‘permission’ and a language to express this. It gave them something to agree or disagree with followed by their rationale.

The prompt cards allowed me to explore these themes and assertions from literature (see [Appendix 4C](#)), to gain agreement or disagreement with what was written, and to explore and expand on these themes. As they were used *after* the phenomenological approach for the first part of the interviews, they did not interfere with the research ‘following’, rather than leading, the participants lived experience.

8.4.3. Working with the two approaches to data collection

There was a ‘tension’ between the two parts of the interviews, the phenomenological interviews followed by the prompt cards. Use of the prompt cards meant that phenomenology was not truly being followed as the prompt cards led the participants to a topic (drawn from literature), however, the richness of the data emerging from the use of the two methods together, worked well by gaining depth, clarity, confirmation and yet participants were still leading the responses. The order of mixing these two approaches is important. Starting with more participant led phenomenological approaches allowed the research to truly follow the participant. Using the prompt cards *after* this added to the phenomenological exploration by allowing further exploration, probing, and additions to the initial responses.

For me as the researcher, the interviews allowed the research to follow the participants' lead in finding what was important for them whilst the prompt cards allowed me to explore assertions made in literature. Using these prompt cards also brought limitations. Due to time allowed for each participant's interview, the number of prompt cards used was restricted and, as such, there are themes from Wicked Problem literature that were not fully explored, for example, the exploration of feelings. The themes picked from the cards were, although taken from literature, influenced by my views and opinions. However, used *after* the phenomenological section of the interviews, this was not an issue that biased the overall results.

The research worked with the complexity by adopting an inductive approach to data analysis and theory development. By using this approach, the data was organised into themes and further refined these themes via more reflection and organising of the data from particular statements into general themes. These themes were then tested against more data until those in Appendices 8B emerged (Loftland and Loftland, 1995).

Finally, an unexpected benefit from this methodology was that participants repeatedly stated the benefits of the interviews to themselves. Many said that they were now clearer about their own situation in leading a Wicked Problem. Gestalt psychology advocates the use phenomenology in one-to-one work, and it was this that was unintentionally occurring during these interviews. There is scope for further research and development of this method, particularly the role of provocateur in research interviews.

Overall, the methods employed have given rise to further thought and exploration for me as a researcher. Firstly, in the approach of data gathering during an interview. Many approaches advocate an approach which *elicits* a response aimed at drawing out an answer from the participant by using either open or closed questioning. Others seek to *evoke* a response, by bringing a response to the conscious mind such as a feeling, memory or image. This is often used using stories or images. The second part of this research aimed to *provoke* a response by using statement cards, to stimulate a reaction, usually a strong one, from a participant. As stated above, although this can be seen as leading the participant, in practice many participants found this helpful, it helped them formulate their response quickly and energised them. Secondly, this raises the question around using mixed methods, but importantly, how you transition from one method to another. In the interviews for this research, participants

were told that the interview would be in two sections and what these were. In this way expectations were set, and participants were comfortable with a move from a pure phenomenological approach to a more direct provoking set of statements. Further exploration can be made on transitioning between approaches. Thirdly, the use of experimentation in data collection. The use of statement cards was an experiment. Risk was managed, as it was tried *after* a time of phenomenological exploration, and so a lot of useful data had already been collected. The role of experimentation during research can be explored further to examine, how, and when to experiment. Having multiple approaches helps when one approach may not cover all the ground required from data collection.

8.4.4. Learning reflections from using this methodology and method.

Whilst the methodological assumptions and subsequent methods worked well in this research, it might be interesting to follow this research with a more objectivistic method. However, this would provide an epistemological and ontological dichotomy with both Field Theory and the literature surrounding Wicked Problems. This methodology and method were closely aligned to my views and previous training. In this sense then, this method was less of a challenge than a more positivistic approach would have been. There was then, in hindsight, a bias for this approach. The interest in people is directly determined by their relevance to the values of the researcher (Creswell, 2014; Parsons, 1949; Saunders *et al.*, 2019). Values are tied into the research and the researchers' values are part of this. Therefore, reflexive practice, and awareness has been required by me, as has bracketing and an understanding that interpretivism accepts that researchers are part of the social reality being researched (Grix, 2010). The assumption here is that the value systems of the inquirer, the paradigm used, and the social norms of both the participants and the researcher are relevant to the research (Creswell, 2007; Guba and Lincoln, 1988).

Some of the participants worked in the same part of the NHS and as such had a hierarchical relationship, bringing with it a number of unstated power and political influences. Only once was this voiced, where in one case, a participant was very nervous about whether comments could be attributed back to her. In this political environment of the organisations where the subjects work, it may be culturally unusual (the organisations chosen are culturally influenced by a scientific way of working) and hence difficult for people to describe their experiences and interpretations, especially their feelings. Referring to figure 8B (above), it can be seen that the

quartile 'Ways of Feeling' has less empirical data produced from the interviews than the other quartiles. This is partially due to the cultural and political influences mentioned above but also due to the questions and prompt cards that were utilised. Another possible seam of research can consider the feelings of leadership when engaged with Wicked Problems.

As with all retrospective data collection where the participants are working from memory, there may well be memory bias or memory degradation, where memories and reflecting on working with wicked issues, may bring the highlighting and forgetting of some of the experience. About half the participants were referring to a past Wicked Problem and the other half to a current problem. This methodology relies on memory of the participants and of what is figural for them in the field. In this sense then no picture is complete. Instead, it is a reflection of the participants, memories, filters, bias, and noticing what is in their field.

8.5. Using Field Theory as a lens.

Field Theory was first considered as a lens for this research when I noticed the similarities between Field Theory principles (Lewin 1952; Parlett 1991; Stevenson 2018) and the ten characteristics of Wicked Problems portrayed by Rittel and Webber (1973).

Field Theory has offered considerable insights into Wicked Problems throughout this research and as a result of this lens there are numbers of previously undiscovered aspects of Ways of Being when leading Wicked Problems. Field Theory offers a useful and unique perspective through which Wicked Problems can be viewed. There is a gap in the current research regarding Ways of Being when engaging with Wicked Problems, which using a Field Theory lens has met by understanding the wider influencing factors and the application of the five principles of Field Theory (Lewin 1952; Parlett 1991; Stevenson 2018) – see [Appendix 8D](#). In particular the *principle of organisation*, which highlights the connectedness of Wicked Problems and the *principle of possible relevance*, which has encouraged a look outwards from the Wicked Problem itself.

Field Theory is holistic. Everything has possible relevance, therefore it has encouraged an open and genuine curiosity around the research. The interviews and analysis were approached with a mindset of 'possible relevance', withholding judgement as far as possible and following the lead of the answers put forward by the participants. It has encouraged inclusive thinking. i.e., '*I am part of the situation*' rather than a more projective process where

for example, leaders are not considered an intrinsic part of the forces surrounding a Wicked Problem (Parlett, 1997). Field Theory is non-reductive, as it encourages the whole configuration to be taken into account, therefore, used well, it discouraged the research having a solution 'in mind' prior to the data collection taking place, or one solution being an outcome that is looked for. It understands that any situation is a balance of internal processes of a person and external stimuli/ the environment (Burnes and Cooke, 2013), thus allowing for Wicked Problems to be viewed this way.

There are some possible criticisms towards the use of this as a lens. As when Lewin first introduced Field Theory, there is a tension between rigour and useability/relevance. Cases where it has been applied are rare. Those favouring scientific method and rigour may criticise it as being too vague, complex and having too many variables, whereas those favouring qualitative application may consider it as practically difficult to use (Burnes and Cook, 2013). However, it has worked very well in this research, especially in the analysis. It encouraged an open mindedness in the research about the facts and data emerging as having possible relevance. It challenged me not to form judgements too early in the analysis process and hence dismiss other variables. It enabled the phenomenological method to be followed through and into the analysis, encouraging a 'child-like' curiosity about what the data was saying and how the data related to other themes. I entered the analysis phase with areas of interest but with a genuine willingness to consider all data as relevant. Using the principle of connectedness, it also encouraged the analysis to be open to the interplay and co-dependency on seemingly unrelated themes. In turn this allowed the analysis to be considered further than its face value, including questioning what was the meaning of the data and how does the data relate to other information.

This view of the data, which was carried into the analysis, however, does need to be contained in some way as these interdependencies between the data are divergent and expansive. This has meant that some themes were not yet explored fully and are themes for further research. It meant that I had to choose certain themes from the analysis and omit others at this point. Field Theory does encourage heavily a large-scale view of the phenomena, and as such this has resulted in a comprehensive, but holistic view of the research questions. In turn this provides the distinct possibility of further research projects to converge on individual aspects of this research topic.

The literature from Field Theory has predominately been drawn from either a theoretical perspective or from a therapeutic base of experience. This has therefore largely warranted an extrapolation into the organisational field. The transferability of Field Theory principles and thoughts to organisational issues such as Wicked Problems, can be questioned. However, this has proven to be one of the strengths of this research, by drawing together two disparate bodies of thought, it has resulted in new insights regarding Wicked Problems and new directions to follow in Field Theory.

8.6. Reflections of the Doctoral Journey. Early design to post Thesis reflections

8.6.1. What has changed for me?

I started off this research having an assumption about a set of skills that leaders need to be able to utilise in order to engage with Wicked Problems. Not what these skills were, but that there were a set of *skills*. This moved over time to a number of realisations that challenged my thinking. From the participants responses plus additional reading, I realised that some attributes could be labelled as 'skills', but that others were 'abilities' and further, many of these discussed by participants were a 'mindset' or set of beliefs that participants held. Others were feelings based, whilst some indicated greater or lesser 'awareness' of self and others. I did not want to enter into a debate about the precise (and highly debatable) definition of these terms, instead I wanted to recognise the possible relevance of each and all of these, hence the use of the encapsulating phrase *Ways of Being*. On reflection, this was a conscious choice based on my own preferences. Each of the terms mentioned above could have formed a study in their own right, but I realise with my predilection for forming a whole picture and understanding, I wanted to research a wider foundation of research upon which other studies could be based. I believe it has achieved this and as such opens up numbers of possible research themes for further study.

I have considered whether Heidegger's (1962) 'being in the world' is the interpretation of the Ways of Being that I sought to bring. There are similarities such as seeing people inextricably linked to the world around them or 'enveloping the wholeness of being'. This existential view of the debate, however interesting, was not one that I used the phrase *Ways of Being* for in this study. Instead, the phrase is used here to explore a more Gestalt view of the world, to describe the boundary and interaction between a person and the field, in this case Wicked

Problems. It seeks to observe, notice and discover the properties of the individual's interaction with such a boundary.

Secondly, and somewhat unusually for me, I had originally not thought about the temporal nature of participants experiences and subsequent opinions. Through reading around the concept of framing and the concept of sense making, I began to understand that the experiences participants shared with me, demonstrated that they had views and opinions about the Wicked Problem *prior* to engagement. It seems obvious now! Further, that these prior views shaped the responses that they gave to me during the research. In this sense then, I moved my own thinking about Wicked Problems, and indeed the human condition, away from what, in hindsight, appears to be a more positivistic set of assumptions, towards a set of assumptions which are much more holistic, interpretative and temporal in nature. In short my own thinking seems to have matched that which this thesis advocates in its conclusions.

8.6.2. What are my reflections about the process?

In turn this leads me to consider the data collected from the participants. I have three main reflective considerations regarding this. Firstly, I did not discuss the *changing* views of the participants with them. Given the assumption made regarding the temporal nature of both Wicked Problems and people's views, further exploration could take place about how this changed during engagement with Wicked Problems, but also how this changed in the research interviews within myself. Many of the participants expressed a positive response to the interviews, saying that they now had greater clarity about the problem and their own experiences. However, we did not discuss or explore this in any greater depth. There is space for further work to be carried out regarding this, also regarding how research interviews facilitate a change in participants.

Secondly, more could be explored regarding the impact that engagement with a Wicked Problem had on participants. For example, did it leave them wanting more or alternatively vowing never to engage again (given the choice!)? I would be interested in what changed for them during their engagement with the Wicked Problem. This leads onto my third reflection in this area. That this area of possible exploration might be indicated on the lack of data gathered around the *feelings* of the participants. I have commented in the thesis about having less data than I expected regarding participants feelings. However, on reflection, this could indicate a wider point regarding how much ownership and engagement participants felt in

relation to their reflections. Such that they were *giving* data, experiences and opinions, but not so much *exploring* what these meant. Phenomenology has been criticised as being too descriptive of the participants lived experience. This study gathered opinions, and lived experiences of participants, but analysis and sense making of these was carried out in the analysis stage, without the direct involvement of the participants. An approach based on storytelling may add to participants *and* researchers' exploration of the individual and collective story, in turn exploring further the impact of the experiences on the participants.

I have reflected on the choice of lens that I used to consider Wicked Problems, that of Field Theory. I was not originally thinking of this as a lens until I noticed similarities with Rittel & Webbers (1973) paper on Wicked Problems. I was aware of my own positive bias towards Field Theory, and that using a lens I was familiar with was very attractive to me. It allowed me to notice aspects of the data that could otherwise easily be missed. On top of this, others I talked to were very interested in this approach as it had never been carried out before. In hindsight, I still consider it to be a good choice, but due to my bias, I found it difficult to focus on the negative aspects of using Field Theory, even when compared to other possible lenses. Had I considered these negative aspects of Field Theory, it could have possibly led to some additional understanding from the data. However, the choice to utilise this lens was a good one which added considerable new insight into the research.

8.6.3. My reflections about the conclusions.

I have considered to what degree do Ways of Being reflect individual response to context. The analysis and conclusions of this study did meet the research questions. However, the analysis and conclusions would be further enhanced with a greater consideration and recognition of the political (the organisational political dynamic) and Political landscape (national and international Politics). Considering that both Wicked Problem literature and Field Theory principles advocate understanding the wider environment, then more focus on this would enhance understanding. Chapters 5 and 6 particularly discuss the impact of political dynamics. In chapter 5, how framing is used as a process to influence and cope with a political dynamic and in Chapter 6, on how political dynamics impacted on the risk and choices of experimentation. However, in discussions of public health and care, ideological proclivity is always a consideration. A part of how people make sense of Wicked Problems will be

contingent on ideological assumptions and Politics (for example Left and Right views of the NHS).

Similarly, the concept of power and where it resides is an important consideration in respect of how events and problems are framed and has a bearing on how others might view and approach it themselves. These Political, political and power dynamics could bring about a shift in not only how people sense-give to others, but also how they frame the Wicked Problem for themselves. In turn this may create a tension within individuals which could limit Ways of Being that would fully enable individual actions to engage effectively with a Wicked Problem. These are both rich potential seams for further research.

The way that the Ways of Being concluded and represented in Appendix 8B, may be taken (mistakenly) for a 'solution' or a more positivistic view, suggesting that leaders 'should' be doing these things. This is the opposite of the intent. The thesis does state (P243) that these factors are codependent, that they influence each other, that they are a constellation, not a list and that they need to be considered as a whole. It also emphasises the uniqueness of individual experience. However, this could be missed if someone just paid attention to the list in Appendix 8B, so it will be important in any further publications to make it explicitly clear that these are an *observation* and *exploration* of Ways of Being from the participants, *not a prescriptive* set of competencies. This thesis is exploratory with regards to participants experiences. It seeks to ascertain and explore the lived experience of participants within the theoretical frameworks of Wicked Problems and of Field Theory.

The transferability of these experiences outside of the organisations and functions studied is contestable and as such is a limit in the study, especially in the construct and belief regarding uniqueness of each person's experience and each unique configuration of the field. This can form the basis for further study possibly using methodologies such as grounded theory. However, this study does not claim to have provided a universal theory and needs to be read as such.

8.6.4. My reflections on the concept of Wicked Problems.

On reflection, an interesting question and line of thinking has arisen for me. That is, implicit in the word 'problem' or the term 'Wicked Problem' is that these are *bad* and need to be resolved. But are they? If we were to consider a Wicked Problem as serving a purpose or meeting some need, then could this change how we view them? We can only speculate about

the need it might be meeting, but an outcome of a Wicked Problem could be a hidden benefit arising from conflict or failure, the point that humans can work together effectively against a perceived threat, that conflict can result in exploration and awareness of previously hidden information, that experimentation or trial and error can produce breakthroughs in many ways. I feel that this is a rich theme for future exploration, thinking, debate and research.

I have toyed with the assertion of this thesis that problems are not a binary categorisation of 'Wicked' or 'Tame'. Instead, problems have characteristics of wickedness or tameness. Taking this a step further then, is there such a thing as a Wicked Problem? Or is our work to identify the nature of a problem's characteristics, plus how important and impactful these characteristics are? In which case, we need to be discussing the degree of wickedness and/or the characteristics of wickedness, followed by the composition and nature of *wicked interventions*. My hope and belief is that this thesis furthers that line of thought, discussion and debate.

8.7. Summary of contributions and future actions.

This research has contributed to current thinking in a number of ways. Firstly, it provides a wide ranging and empirical data-driven understanding of Ways of Being including skills, abilities, qualities that leaders adopt when engaging with Wicked Problems, that can be utilised for the development of leaders when engaging with Wicked Problems. It has provided an insight into a leader's mindset when engaging with a Wicked Problem and how these impact on their decisions going forward, showing that amongst others, a mindset of non-resolvability is key. It demonstrates that a leader's abilities need not only to be focussed on the Wicked Problem itself but must also be focussed on the field and context that it sits within, considering that anything in that field is of possible relevance. The research shows how effective interpersonal abilities and intrapersonal abilities prove to be key to understand relational issues but also understanding self-bias and habit, understanding that the way forward with Wicked Problems is to work with and through others, requiring a mindset and willingness to accept other insights and frames as equally valid to your own. In the absence of a tried and tested solution, the leader needs to draw on those Ways of Being in relation to trying something out, or experimentation. This brings with it the need to manage expectations and risk especially with stakeholders but also with the organisation (and in some cases the public) as well.

Secondly, it provides further insights into the study of Wicked Problems. The research demonstrates an understanding that a whole set of processes are in motion prior to the Wicked Problem being engaged, such as framing and understanding the nature of the problem. It shows that Wicked Problems sit within an interconnected constellation of factors that influence it and are influenced by it. The problem is not discrete and as such effective engagement needs to take this into account. The research discourages the thinking of *solution* as the goal, instead showing that a shift from this to *shaping, influencing, taming* or even *coping with* a Wicked Problem is likely to lead to more effective interventions. This study has found that the labels given to a problem both within the literature and by participants is either wicked or tame. Closer study in this research has revealed that rarely, if ever, is this true. The research concludes that it is the *degree* of wickedness in a problem that is of importance when understanding the issue.

Thirdly, this research offers a furthering of the use of Field Theory within an organisational setting. Field Theory has largely been in the domain of theorists and Gestalt psychologists to date. Some excellent work has been done on Field Theory and its applications but has been slow to permeate though to mainstream organisational thinking. This research demonstrates how Field Theory can further be utilised into an organisational setting and how massively beneficial this can be. This is an exciting development for thinkers and practitioners of organisational functioning, including academics, leaders, decision makers, Organisational Development (OD) practitioners and leadership development specialists. This research calls on such thinkers and practitioners to draw further on Lewin's work for understanding and particularly application, whether in terms of change and OD, plus of course, Wicked Problems.

This research has focussed on the *leadership* of engaging with Wicked Problems. I defined leaders as any person who is leading the engagement of a Wicked Problem. As such this can lead into a discussion about 'what is leadership', but here I am using this term not in relation to a title or hierarchical position. It therefore raises the question as to whether the findings in this research can be applied to anyone. The participants in this study took ownership or were given ownership for engaging with a Wicked Problem, often as a function of how they saw the responsibilities of their role. I therefore assert that the findings are applicable not by title or role, but by the choice of *anyone* to lead in engaging with a Wicked Problem. I also assert that

whilst the participants were drawn from a healthcare or care organisation, many had previous experience in commercial sectors and drew from these experiences. Whilst further research would be needed to confirm this, I believe that the findings are also applicable across many different sectors and organisations.

Finally, this research calls on policy makers, both governmental and organisational, to devise strategies that are not treating an issue as purely tame. Instead, calling on policy makers to devise policies and actions that are designed to improve, shape or tame a problem, and as such are likely to be more effective and longer term. It calls on OD specialists to consider the findings from this research and incorporate these into their thinking. Finally, this research calls upon leadership development practitioners to re-examine the current provision of leadership development, to now incorporate the findings here, in order to develop leaders for the future that are able to work well with the increasing number and increasing complexity of Wicked Problems in society and in organisations.

8.7.1. Future research directions.

This research produced a vast amount of rich data, too much for one thesis. There are many possible research projects which will continue this work, but which had to be omitted from this study. In short, these include:

- Translation of these findings into development of a leadership development programme aimed at providing leaders with the abilities to work effectively with Wicked Problems.
- The use of Field Theory as a method for critical studies within an organisational setting.
- What are the leadership feelings when engaging with a Wicked Problem?
- How do leaders influence others, especially key stakeholders, when engaging with Wicked Problems?
- What are the key group dynamic influences on the formation of, and engagement with, a Wicked Problem?
- How does hierarchical position, ideological proclivities and the position of power impact on how Wicked Problems are viewed and engaged with?

- If solution of a Wicked Problem is not possible, what are the options around coping with it, reframing it, ignoring it, dealing with the consequences, turning it to an advantage, addressing part of it, incrementalism or simply living with it?

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Appendices.

Appendix 2A.

Table 2iii Characteristics of Wicked Problems. (Rittel and Webber, 1973) additional criteria and clusters suggested by Raisio *et al.*, (2019) and by Levin *et al.*, (2012).

Wicked Problem Characteristic. (Rittel and Webber 1973)	Theme/cluster (Raisio <i>et al.</i> , 2019)
1. There is not one single definitive form of a Wicked Problem. Different people will define the problem differently and their proposed solutions will reflect this.	Problem definition
2. A Wicked Problem is in a constant state of change. It does not stop or wait for decision makers to formulate an answer.	Non-resolvability
3. There is not a definitive true answer to the problem. There are good and bad interventions. Stakeholders will view the proposed solution according to how they see the problem.	Problem definition Non-resolvability
4. There is no test of whether a proposed solution will work or has worked. Due to the complex nature and interconnectedness the intervention will change the context in such a way that the problem is now different.	Multi actor environments Non-resolvability Problem definition
5. Every solution is a one-shot operation in that, good or bad, the intervention will change the problem.	Non-resolvability Multi actor environments
6. There is no comprehensive list of solutions	Non-resolvability Multi actor environments
7. Every Wicked Problem is unique. This makes it difficult to learn from previous problems because they were different in significant ways.	Non-resolvability Problem definition
8. A Wicked Problem is itself a symptom of other underlying problems. Some incremental interventions may not address the underlying problem.	Problem definition Non-resolvability
9. There is a choice about how to see the problem. This will determine the solution(s) that we will try and apply.	Problem definition
10. Wicked societal problems impact on real people's lives. You cannot experiment to see what works without having a tangible impact on people's lives.	Multi actor environments
Super Wicked Problems characteristics (Levin <i>et al.</i> , 2012)	
Time is running out	
Those seeking to end the problem are also causing it	Multi actor environments
No central authority	Multi actor environments
Policies discount the future irrationally	Non-resolvability

Appendix 4A.

Table 4v. **The principles of Field Theory** (Parlett, 1991) which were used to formulate questions in the second part of the interviews and as a stage 2 process in the coding and analysis.

The principle of organisation – everything is interconnected. The meaning of any singular aspect can only be derived from looking at the total.
The principle of contemporaneity – it is the constellation of influences in the present field that ‘explains’ the current behaviour. Field approach is concerned with field conditions at the present time not events of the past or future.
The principle of singularity – every person-situation is unique. The individual will construct meaning and any generalisations are suspect.
The principle of changing process – The field is in a constant state of flux, nothing is fixed.
The principle of possible relevance – Every part of the field impacts on the field and therefore no part of the field can be excluded as irrelevant.

Appendix 4B.

Table 4vi. A structure of Phenomenological interviewing used in this research.

Phenomenological Attitude	Researcher Approach	Interview Structure	Method	Example questions
Phenomenological Reduction/Epoch	Acceptance of Natural Attitude of Participants. Reflexive critical dialogue with self. Active Listening	Contextualisation (eliciting the world in Natural attitude.	Descriptive/Narrative context questions	“Tell me about the challenges you face in your work.”
		Apprehending the phenomenon	Descriptive and Structural Questions of Modes of Appearing	“Of those challenges, how do you approach those that seem insurmountable or ongoing?”
		Clarifying the phenomenon	Imaginative Variation: Varying of Structure Questions	“Describe how your approach would change if you had everything you needed to address it.”

Adapted from ‘A structure of Phenomenological interviewing’ (Bevan 2014)

Appendix 4C.

Table 4vii - Prompt card Statements marked against theoretical constructs (taken from current literature).

	prompt card 1 - 'Ultimately all problems are 'solvable'.	prompt card 2 - 'Unless I/we have the right tools and materials to resolve an issue, then its not worth attempting to address	prompt card 3 - 'Involving others tends to make addressing an issue more difficult.'	prompt card 4 - 'Any problem tends to have a single root cause'.	prompt card 5 - Once we have identified the problem, the solution becomes clear'.	Prompt card 6 - 'My own thoughts/feelings/responses to the problem are not important in its resolution.'	Prompt card 7 - 'Once I've engaged with this issue once it would be easy next time' .	Promptcard - 8 in engaging with difficult issues, it is important to get others different views or Too many cooks spoil	Prompt card - 9 experimentation and failure to resolve are important pieces of learning
Theoretical construct									
Principle of organisation									
The principle of contemporaneity									
The principle of singularity									
The principle of changing process									
The principle of possible relevance									
Responding.									
Interrelating									
Embodying.									
Self-recognising.									
Experimenting.									
Living with uncertainty									
Awareness									
Context and field understanding									
Self									
Working with others									

Appendix 4D. Participants permission form used.



Informed Consent Form for research interviews

This research has been approved by the Suffolk Business School Research Ethics Committee at the University of Suffolk.

Should you have any concerns about the ethics of this research, please feel free to contact the Chair of the University of Suffolk Research Ethics Committee, Dr Sarah Richards s.richards@uos.ac.uk (01473 338564) or the Head of Research Development, Andreea Tocca a.tocca@uos.ac.uk (01473 338656).

Study Title: **Ways of being when engaging with Wicked Problems**

Research Lead: **Warren Scott**

Academic Supervisor (for Student Led Research): **Dr Will Thomas**

I confirm that I have read and understand the information letter dated..... explaining the above research project and I have had the opportunity to ask questions about the project.

I understand that my participation is voluntary and that I can withdraw in accordance with the explanation offered in the Participant Information Sheet, without giving any reason and without there being any consequences.

I understand that my data/responses will be anonymised and any personal or identifying information removed from published materials.

I give permission for members of the research team to have access to my data/responses as outlined in the Participant Information Sheet.

I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.

I agree to take part in the above research project.

Name of Participant

Date

Signature

To be signed and dated in presence of the participant

Researcher

Date

Signature

To be signed and dated in presence of the participant

Appendix 4E - Ethics committee approval of research.



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Neptune Quay,
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9th December 2021

Project Lead: Warren Scott
Project Title: Ways of being when engaging with wicked problems
Type of Study: Post Graduate Research
Start Date: 3 January 2022
End Date: 30 September 2024
Primary Supervisor: Dr Will Thomas
Secondary Supervisor: Dr Robert Price
Co Supervisor: Dr Sanna Laulainen
Paper Number: RETH(P)21/005

Dear Warren

Thank you for resubmitting your application for ethical approval and taking action on the feedback points provided by the University of Suffolk PGR Research Ethics Committee.

The Lead Reviewers within the University PGR Research Ethics Committee, have reviewed your application again, which was resubmitted on 9th November 2021 and consider the project/study as Favourable. This review is based on all your action/s explained or completed.



As principal investigator, your responsibilities include:

- ✓ ensuring that (where applicable) all the necessary legal and regulatory requirements in order to conduct the research are met, and the necessary licenses and approvals have been obtained;
- ✓ approval by the University PGR Research Ethics Committee should not be taken as evidence that the study is compliant with GDPR and the Data Protection Act 2018. You are expected to have completed the GDPR training and follow the guidance from <https://www.ukri.org/files/about/policy/ukri-gdpr-faqs-pdf/>. Final responsibility for GDPR compliance remains with you;
- ✓ reporting any ethics-related issues that occur during the course of the research or arising from the research to the University of Suffolk PGR Research Ethics Committee to the Committee Secretary, Joanna Walpole at J.Walpole2@uos.ac.uk (eg. unforeseen ethical issues, complaints about the conduct of the research, adverse reactions such as extreme distress);
- ✓ submitting details of proposed substantive amendments to the protocol/proposal to the University of Suffolk Research Ethics Committee for further approval.

Yours sincerely

Professor Nic Bury
Associate Dean for Research – School of Engineering, Arts, Science and Technology
Committee member of the University of Suffolk PGR Research Ethics Committee

Appendix 4F – HRA permissions.



Do I need NHS REC review?



i To print your result with title and IRAS Project ID please enter your details below:

Title of your research:
Ways of Being when engaging with Wicked problems

IRAS Project ID (if available):

Your answers to the following questions indicate that **you do not need NHS REC review for sites in England.**

This tool only considers whether NHS REC review is required, it does not consider whether other approvals are needed. You should check what other approvals are required for your research.



Is my study research?

i To print your result with title and IRAS Project ID please enter your details below:

Title of your research:
Ways of being when engaging with wicked problems

IRAS Project ID (if available):

You selected:

- 'No' - Are the participants in your study randomised to different groups?
- 'No' - Does your study protocol demand changing treatment/ patient care from accepted standards for any of the patients involved?
- 'Yes' - Are your findings going to be generalisable?

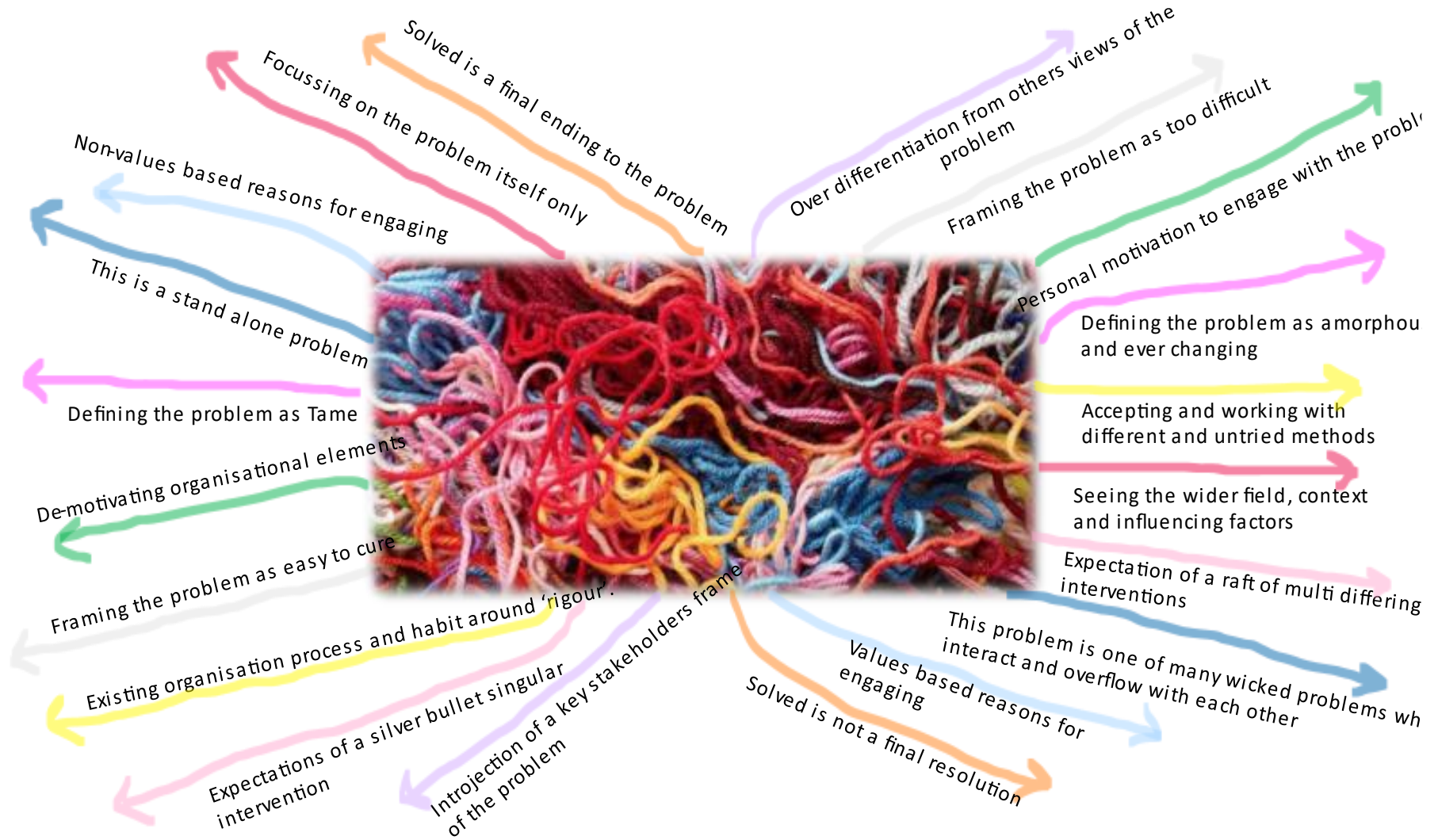
Your study would be considered Research.

You should now determine whether your study requires NHS REC review.

Follow this link to launch the 'Do I need NHS REC review?' tool.

Appendix 5A.

Figure 5Gi. Alternative representation of tensions encountered when framing a Wicked Problem.



Appendix 6A.

Participants description of field influences on their choice of decision.

Field influence on the decision to experiment.	Participant example.
Belief about the value of experimenting	Participant 1 <i>I used to think that if you don't, if you don't get failures, you're not quite experimental enough.</i>
Relationship and trust with Stakeholders	Participant 6 <i>My experience is that executives say that's great, but they are very unwilling to deal with the consequences of that.</i>
Stakeholders' expectations	Participant 4 <i>I think all the people I've worked for have given me the autonomy and I've not been micromanaged.</i>
Small or Larger experiments	Participant 14 <i>So, it will be a case of experimentation and failure. And I think that with the Wicked Problem, this has to happen. It's about trying to make incremental changes, rather than seeking a total resolution to the problem.</i>
Perceived consequences of failure	Participant 11 <i>I think because I know the area and the consequences of where I can fail safely. So, I also trust the people at the higher level that are saying it. I feel like I can manage upwards and hold them to account.</i>
Personal resilience, confidence, courage	Participant 10 <i>We always kept coming back what's the next right thing what's the next right thing what do we do next now we've got these insights what's the next right thing okay it's hugely brave, you need so much courage to be able to do that.</i>
Having a rationale for the experiment	Participant 15 <i>'I don't mind making myself vulnerable by trying something new, providing I've got the theory behind it and the rationale as to why somebody else believes it would work'.</i>
Formal and assumed boundaries.	Participant 12 <i>The boundaries were the regulation and the law we were working within. As long as we stick within them, we can move out towards the edges.</i>
Psychological safety	Participant 3 <i>You have to be able to ask questions about that in a safe environment to understand what went wrong. I need that nurse to feel safe enough to be able to tell us what went wrong. Yes.</i>

	<i>Even if it was something that they perceive as blame. It's important, people <u>have</u> to be able to fail safely.</i>
Framed as 'an emergency'.	Participant 1 <i>If we sparked a national emergency response to it, that would allow us to push the boundaries because its OK in an emergency situation.</i>
Anxiety and excitement	Participant 11 <i>Sometimes we do need to just kind of be a bit of a rebel and just throw some chaos in there and do something very, very different. So, there's times of enthusiasm where I'm like we can, I've seen an opportunity, let's go and do this. And let's go headfirst into that.</i>
Perceived benefits of experimentation	Participant 2 <i>What I don't like is when you don't learn. No problem at all with people failing at something. Providing they take the learning from it. Don't keep doing the same thing. That's when it gets frustrating. But the experimentation phase, it's absolutely fine as long as you're learning.</i>
The organisational culture	Participant 2 <i>It's the culture. I think for me it's recognition that in the culture it's okay to actually push boundaries and try things different.</i>
Timescale	Participant 1 <i>You know, if you've got a problem that's got an end point and you need the end point within a year's time, then you can't try something and it fail, because you don't got time to get it completed. But this problem certainly isn't going to be resolved in my life. So, it allows me to do that.</i>

Appendix 8A.

A visual representation of the order in which participants referred to the process of engagement with a Wicked Problem.



1. - Prior to engagement

- The field influences of the leader and the Wicked problem are separate.
- Awareness is low.



2. - Contact

- As the two fields meet, they begin to influence each other.
- Sense-making starts to happen
- The leader starts to understand the nature of the problem.
- Pre-conceptions and previous solutions are challenged.
- The leader 'frames' the problem to meet self-need, others need and organisational requirements



3. - Integration

- The two fields merge to form a new field.
- They are both changed.
- The leader draws from other people's views knowledge and experience.
- Experimentation is utilised as well as other interventions.
- Awareness of self, others and the field is raised.
- The leader is engaged in a wide range of influencing activities with stakeholders and others.



4. - Disengagement

- As the leader moves away from the Wicked problem, both are changed.
- The leader has learning and experience from working with the Wicked problem.
- The Wicked problem has morphed, been re-framed and is understood differently.

Appendix 8B.

Summary of **Ways of Being** when engaging with Wicked Problems.

Findings from this research on Ways of Being when: <u>Understanding and working effectively with the field and context of the Wicked Problem</u>
<ul style="list-style-type: none">• Understanding that everything is interconnected and that the meaning of any singular aspect can only be derived from looking at the total. Being able to see the complex and organised whole and understanding and paying attention to interconnectedness and co-influence.
<ul style="list-style-type: none">• Understanding that the field conditions are not fixed and that any attempted intervention is likely to change the problem without resolution.
<ul style="list-style-type: none">• Seeing the field context as dynamic phenomenon which evolves and changes over time. The ability not only to understand the constellation of influencing factors, but also on an ongoing basis to notice changes in the field and respond to these changes.
<ul style="list-style-type: none">• Understanding the principle of contemporaneity – it is the constellation of influences in the present field that ‘explains’ the current behaviour. Being able to understand the field conditions at the present time not relying on events of the past or future. Understand that Wicked Problems are context relevant, which in turn is not static, and act on this view of the problems.
<ul style="list-style-type: none">• The principle of possible relevance – Knowing that every part of the field impacts on the field and therefore no part of the field can be excluded as irrelevant. Acknowledging that these interdependencies exist and the ability to map out these constellations.
<ul style="list-style-type: none">• Understand that problems are context relevant. Having Field awareness and field sensitivity. View the problem and its context as a whole and navigating these polarities to the best effect in any particular situation.
<ul style="list-style-type: none">• Ability to temporarily suspend judgement, beliefs, and assumptions in order to see the Wicked Problem as far as possible with childlike curiosity, sometimes called <i>active curiosity</i>
<ul style="list-style-type: none">• ability to describe the Wicked Problem in terms of the ‘<i>what is immediately obvious to the senses</i>’
<ul style="list-style-type: none">• Ability to treat all aspects of the Wicked Problem field as having the potential of equal importance
<ul style="list-style-type: none">• Ability to redefine the situation and take a wider, longer-term view of all the forces at work.
<ul style="list-style-type: none">• Ability to reframe a problem in a way that may stimulate different thinking
<ul style="list-style-type: none">• Willingness and ability to re-frame how sense is made of a problem and to manage a change in the field conditions.
<ul style="list-style-type: none">• Ability of paying attention to, having awareness of, and acting on knowledge of ‘Self’.

Findings from this research on Ways of Being when
Understanding the nature of the problem and engaging accordingly.

- An understanding of the different types of problems
- Ability to address both tame and wicked characteristics, as well as the ability to identify when to use certain approaches, and the ability to move between these as needed,
- Knowledge that people sense-make in different ways and that their own sensemaking is only one view
- Ability to enable a diverse set of sensemaking conclusions to be reached, realising that the Wicked Problem is multi-faceted and that a simple frame is unlikely to capture the essence of its Wickedness
- A willingness and ability to suspend judgement, or 'bracket' their own reading of a situation in order to genuinely hear the constructs of others
- Skill to acknowledge differences and polarities
- Ability to articulate the problem considering the field conditions, the disparate views, and frames, plus the changing nature of the problem
- Able to communicate the essence of the problem in a way that brings understanding for stakeholders
- Able to hold the view of multi causal factors and hence multi-faceted interventions, whilst resisting pressure and temptation to find a single solving intervention
- Able to understand the changing nature of the problem.
- Willingness and ability to engage with a Wicked Problem not knowing or fully understanding the problem itself.
- Willing and able to reevaluate their current sensemaking on an ongoing basis
- Understanding and mindset where the leader realizes that they are themselves *part* of an ongoing Wicked Problem and a temporary leader
- Ability to suspend judgement on their own sensemaking process in order to understand others' views
- Mindset and acceptance of incremental and messy interventions
- Mindset from '*I must find a resolution*' to '*How can we improve this situation?*'
- Mindset of learning and viewing ambiguity as an opportunity to learn
- Ability to re-frame expectations as a way of influencing others
- Willingness and ability to experiment
- Mindset of accepting that imperfection and 'making do', together with clumsy solutions is the way forward

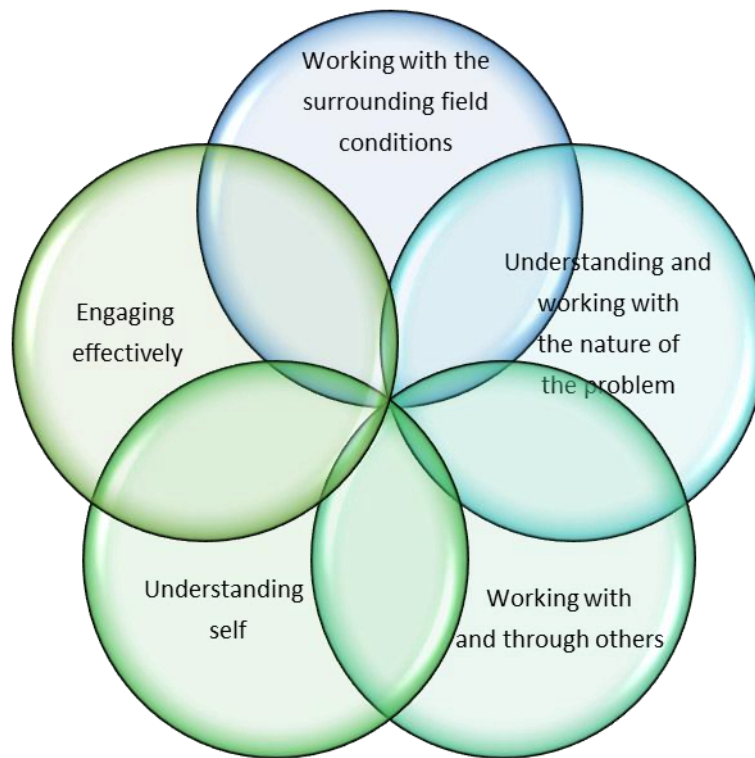
<ul style="list-style-type: none"> • Ability to redefine tools and materials whether or not it bears a relation to the current problem and redefine or reframe the task
<ul style="list-style-type: none"> • Ability and willingness to change, to let go of held views, to redirect effort and energy.
<ul style="list-style-type: none"> • Ability to influence stakeholders effectively, but also to hold your nerve/be brave/courageous. •
<ul style="list-style-type: none"> • Willing to operate outside of the rules and outside of their own comfort zone.
<ul style="list-style-type: none"> • Understanding that the field is in a constant state of flux, nothing is fixed.
<ul style="list-style-type: none"> • Understanding that causes and resolutions are outside of current awareness. They are multicausal and complex. That all aspects of the context have relevance.
<ul style="list-style-type: none"> • Mindset of non-resolvability
<ul style="list-style-type: none"> • Understanding the nature of the problem and adjusting engagement accordingly.
<ul style="list-style-type: none"> • Seeing a leader's role as transitional not final and therefore accepting partial solutions which are not complete
<ul style="list-style-type: none"> • Understanding that a different way of engaging is needed from tame problems.
<ul style="list-style-type: none"> • Ability to consider all aspects of the problem with potential equal importance.
<ul style="list-style-type: none"> • Able to operate within uncertainty and live with ambiguity.
<ul style="list-style-type: none"> • Ensuring good quality contact with the field (field boundary) via awareness, openness to new data, and potential interruptions, assumptions, and bias.
<ul style="list-style-type: none"> • Understanding that rational analysis alone cannot be brought to bear on these problems.

Findings from this research on Ways of Being when
Working effectively with Self and others.

- Willing and able to form coalitions and operate in a pluralistic context
- Ability to ask the right questions rather than provide the right answers
- Able to recognise that they do not have all the expertise to address the Wicked Problem, recognising that diversity of thinking is needed.
- Understanding their role as an enabler or facilitator of progress rather than leader as expert.
- Able to influence others especially stakeholders
- Ability of a leader to gain voluntary agreement rather than using coercive power.
- Ability to facilitate group dynamics
- Understanding the complexity of different frames and layers of experience that occur in relating to others and the context we find ourselves.
- A genuine belief in having a diversity of ideas, frames and observations, and a desire to work with pluralistic constructs. A willingness to consider these different views as equally valid as your own.
- Ability to use communication and influence skills to gain a shared identification and ambition
- Ability to recognise and acknowledging difference whilst at the same time finding commonality especially in relation to a shared goal.
- Willingness and ability to foster inclusion, collaboration, and communication
- Ability to listen and understand from another's view and interpretation, whilst attempting not to let your own bias filter the communication.
- Understand and accept your own bias and preferences
- Accepting that that their own view may not be correct.
- Ability to facilitate difference to a point where a wider, but shared understanding, can be reached
- Ability to involve different stakeholders, acquiring new skills, especially those related to collaborative governance
- Understand and engage with collaboration as a moving entity
- Willingness to forgo more traditional views of leaders as the custodians of power and of holding onto control
- Ability to facilitate the space in which influencing and interested parties can genuinely converge, diverge, where some control is held by the leader to facilitate this process, balanced against the willingness to relinquish some control and power over to others
- Humility in a view of their own expertise.
- Ability to facilitate a shared ambition/vision/goal, both with others engaging the Wicked Problem and the stakeholders

<ul style="list-style-type: none"> • Willingness not to hold on too closely to an initial idea or vision, but to react to changing field conditions
<ul style="list-style-type: none"> • Understand that their own views, if taken alone, may restrict understanding and subsequent action
<ul style="list-style-type: none"> • Ability to remain resilient when needed to adjust actions to uncertain changes
<ul style="list-style-type: none"> • Able to stay resilient and tenacious
<ul style="list-style-type: none"> • Genuinely feeling that the work they are carrying out, mattered and was important.
<ul style="list-style-type: none"> • Being curious rather than working with or even searching for an 'answer'.
<ul style="list-style-type: none"> • Mindset of experimentation. Encourage failing or living with partial interventions
<ul style="list-style-type: none"> • Willingness to operate outside of the existing processes and rules
<ul style="list-style-type: none"> • Ability to manage a balance of risk, through experimentation, failure, learning and stakeholder influence.
<ul style="list-style-type: none"> • Capability to unblock stagnations or a fixed 'Gestalt'.
<ul style="list-style-type: none"> • Mindset of 'making do' with resources available, redefining tools, redefining the problem.
<ul style="list-style-type: none"> • Ability to re-frame in order to shed new light and understanding
<ul style="list-style-type: none"> • Able to identify an emerging figure in the field of the Wicked Problem which appears stuck or problematic, repetitive.
<ul style="list-style-type: none"> • Willingness and ability suggest the experiment in a way that is acceptable to stakeholders, taking into account perceived risk and challenge.
<ul style="list-style-type: none"> • To design the experiment or intervention and carry it out, then review the impact, draw out and assimilate the learning.
<ul style="list-style-type: none"> • Style Flexibility as the field conditions change
<ul style="list-style-type: none"> • Ability to see what is figural (in focus) <i>and</i> ground (present but out of focus)
<ul style="list-style-type: none"> • Willingness and ability to let go of the leader as custodian of power
<ul style="list-style-type: none"> • A mindset of learning rather than a mindset of solving
<ul style="list-style-type: none"> • Bracketing. Being able to temporarily suspend judgement.
<ul style="list-style-type: none"> • Awareness of Self, others, Interrelationships, environment including resources
<ul style="list-style-type: none"> • Embodiment and 'self as instrument'.

Appendix 8C.



The clusters of Ways of Being and their interrelatedness.

Appendix 8D.

Unified Field Theory principles (Lewin, 1952; Parlett, 1991; Stevenson, 2018).	Relevant points to Wicked Problems
<p>The principle of organisation – everything is interconnected. The meaning of any singular aspect can only be derived from looking at the total. Lewin (1951) explains that behaviour is not dependent upon a single element, but on the constellation field as a whole.</p>	<p>Wicked Problems cannot be looked out without consideration for the environment that it exists in (Rittel and Webber, 1973; Grint, 2005; Grint, 2008; Danken <i>et al.</i>, 2016). Problem definition - the complexity and uncertainty related to trying to understand the problem. Wicked Problems are multi-faceted and ambiguous. (Raisio <i>et al.</i>, 2019)</p>
<p>The principle of contemporaneity – it is the constellation of influences in the present field that ‘explains’ the current behaviour (Lewin, 1951). Field approach is concerned with field conditions at the present time not events of the past or future. The character of the situation may include the past as remembered in this present moment or the future as anticipated in this present moment, which will form part of the person’s in-the-moment experience of the field (Stevenson, 2018)</p>	<p>Non-resolvability - any attempt to resolve a Wicked Problem will change the problem and cause new (often unpredicted) consequences. (Raisio <i>et al.</i>, 2019). A Wicked Problem is in a constant state of change. It does not stop or wait for decision makers to formulate an answer. (Rittel and Webber, 1973)</p>
<p>The principle of singularity – every person-situation is unique Lewin (1951). The individual will construct meaning and any generalisations are suspect (Parlett, 1991). Each construction of meaning is unique (Stevenson, 2018).</p>	<p>There is not one single definitive form of a Wicked Problem. Different people will define the problem differently and their proposed solutions will reflect this. (Rittel and Webber, 1973). Multi actor environments – those people both involved in and impacted by a Wicked Problem have a wide range of views, backgrounds, and cultures. This results in many different and diverse proposed solutions and interventions for a Wicked Problem. (Raisio <i>et al.</i>, 2019) Every Wicked Problem is unique. This makes it difficult to learn from previous problems because they were different in significant ways. (Rittel and Webber, 1973) The context of a Wicked Problem is not independent of human factors and therefore cannot be looked at in a purely scientific form (Grint, 2005; Grint, 2008).</p>
<p>The principle of changing process – The field is in a constant state of flux, nothing is fixed Lewin (1951). Theories support understanding but cannot replicate reality perfectly (Stevenson, 2018).</p>	<p>Wicked Problems are ever changing and are divergent in nature, in itself resisting a static label in one point in time (King, 1993).</p>
<p>The principle of possible relevance – Every part of the field impacts on the field and therefore no part of the field can be excluded as irrelevant Lewin (1951). This requires paying attention to what is momentarily or persistently relevant or interesting in the moment (Parlett, 1991).</p>	<p>There is no test of whether a proposed solution will work or has worked. Due to the complex nature and interconnectedness the intervention will change the context in such a way that the problem is now different. (Rittel and Webber 1973). Those seeking to end the problem are also causing it (Levin <i>et al.</i>, 2012)</p>