

**Understanding system change through complexity  
theory: a case study in delivering a programme for  
adults with multiple needs**

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## Abstract

The aim of the thesis is to increase understanding of system change for people experiencing multiple and complex needs, applying complexity theory as a means of generating new insights into this challenging area. It further seeks to explore the role of Psychologically Informed Environments (PIE) as an objective within a system change project, specifically its conceptualisation as a complex response to a complex problem. The research uses a qualitative, embedded case study design: the main case study is the system change project, and the specific objective of PIE; an embedded case study explores the implementation of PIE within one of the project's partner organisations.

While the systemic nature of the issues facing people with multiple and complex needs is increasingly well-articulated, and there is significant interest in system change, a definitive understanding of how system change occurs remains elusive (OECD 2017; Birney 2021). Complexity theory is seen as having potential value in increasing this understanding but there is a need for more empirical research which applies the theory (Thompson et al 2016). PIE is seen as a complex response to the issues of multiple and complex needs (Cockersell 2018b). However, there is no literature which empirically explores this claim.

Complexity theory (although itself an ill-defined and contested theory) challenges traditional views of change as a deliberate and managed process (Haynes 2015). The findings of this research are congruent with this theoretical position, not least in the differential understanding of key concepts such as the 'system' and PIE which has implications for engagement with, and perceptions of success of, the project. The emergent processes by which the system change objectives (including PIE) developed were found to be non-linear, multifarious, path dependent, and impacted by local context. These complex processes of implementation also challenged the postulation of PIE as a complex response.

As well as providing an empirical example of the application of complexity theory, the research offers a theoretically informed challenge to the feasibility of delivering transformational, sustainable and beneficial system change; indicates the importance of 'system' redundancy; and emphasises the significance of values – both as part of the system change process and as an important (and often overlooked) facet of



complexity theory. It further indicates challenges to PIE as a complex response and the potential mitigation of these via engagement with complexity theory.

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## List of acronyms

**CAS** - Complex Adaptive System

**ICP** - Integrated Care Partnership

**ICS** – Integrated Care Service

**MEAM** - Making Every Adult Matter – a coalition of national charities established to support local areas in working with adults with complex needs.

**NPM** – New Public Managerialism

**PIE(s)** - Psychologically Informed Environment(s)

**SMART** –Specific, Measurable, Achievable (or Attainable), Relevant, Timebound

# 1. Chapter 1: Introduction

## 1.1. Background to the research

The aim of this thesis is to explore the processes of system change through the experiences of those tasked with managing and delivering such change. As the system change project in which the research is taking place is large and wide-ranging, the research additionally focuses on one particular objective of the project – that of promoting Psychologically Informed Environments (PIEs) as a means of enabling a more in-depth view at multiple levels of the project. Importantly, PIE itself is becoming increasingly prevalent in system change projects and has been posited as offering a complex solution to multiple and complex needs and thus a further aim of the project is to explore this contention within one of the partner organisations involved in the system change project. The research uses a novel, theoretical approach – that of complexity theory - as a means of generating new insights into these issues.

This research was undertaken within a system change project which formed part of a larger programme which funded 12 programmes over a period of eight years. The programme aims to address the issue of multiple and complex needs, defined as two out of four of: mental ill health, substance misuse, homelessness and offending. As well as improving individual lives of project beneficiaries by the delivery of a specialised support service, the programme aims to create beneficial, transformational and sustainable systemic change. The aim of the system change element was to ensure that the project reached beyond the lives of those individuals who engaged with the service and delivered fundamental changes to the ways in which multiple and complex needs were understood and in which services were commissioned and operated. The project sought to effect system change via a linked set of objectives which evolved during the life of the project but consistently included the following: a more joined up, holistic system of support; services which were welcoming (including the objective of services becoming psychologically informed); a system which was beneficiary led; as well as broader aims to influence policy and practice via greater awareness and understanding of multiple and complex needs.

System change, for people experiencing multiple and complex needs, emerged from an increasing awareness that a substantial minority of people experiencing these individual needs are, in fact, the same (Bramley, Fitzpatrick and Sosenko 2020) and that these needs overlap and interconnect in ways which not only cause but continually reinforce the difficulties experienced (Bramley et al 2015; Westaway 2016). This has led to an increased understanding of the added complexity which derives from the combination of these (Lamb et al 2019a; Duncan and Corner 2012). Responses to the issue of multiple and complex needs, therefore, are identified as requiring change not just at the level of individual services but also at the level of national policies and local strategies. The system change programme (and the project in which this research is taking place) is seen as a means of transforming this system across all these levels. Although there is increasing awareness of the issues of multiple and complex needs, and the importance of systemic approaches to addressing complex problems such as this, how to achieve such transformation remains challenging. Despite increasing interest at the policy level, there remains a lack of theoretical or methodological clarity or, indeed, consensus about how such change can be achieved (Briggs et al 2018; Kreindler 2019; White 2000; OECD 2017).

As indicated in the opening paragraph, this research also examines the specific objective of PIE. PIEs are prevalent within the homelessness sector and feature in many of the system change projects for people with multiple and complex needs. Within this project, the objective of PIE evolved as part of a focus on welcoming services. Services are perceived by beneficiaries as unwelcoming for a number of reasons but in large part because the complexity of their needs do not fit the way that many services operate. PIE focuses on the impact of trauma and the psychological needs of those accessing services and emphasise the importance of taking a holistic view of the person (Whelan 2012). As such PIEs have been described as offering a complex response to this issue and, more recently, as an example of a well-adapted complex adaptive system (Cockersell 2018b) - a concept taken directly from complexity theory which forms the theoretical basis for this research.

As I go on to discuss in Chapter 4, my interest in using complexity theory as a means of exploring the system change project in this research came, in large part, from my previous work experience as a consultant and senior manager with responsibility for

delivering (often large scale) organisational change. My experiences here echoed those articulated in much of the literature on complexity theory as to the limited success of many such projects (Burnes 2005), and the limitations of managerial control in such circumstances (Stacey, Griffin and Shaw 2000). A later career in a university research centre which focused on policy evaluation and contract research within criminal justice was also an important influence. It exposed me to the complex interplay of factors which impacted on the success or otherwise of interventions and which often seemed to be overlooked in the more simplistic theories of change and evaluative metrics favoured by policy makers. Although conflicting with much of my formal training, complexity theory seemed to have the potential (albeit relatively untapped) to offer a radically alternative perspective on these experiences.

Complexity theory suggests that change is an emergent process created by the interaction of agents adapting their behaviours in relation to what is known to them locally, including their history, local context, and mental models. Small local actions may lead to more radical transformation but this will be unpredictable; similarly large actions may be dissipated and have little impact resulting in non-linearity between input and outputs. Change therefore will be episodic, emerging from the multiplicity of interacting causes and outcomes, influenced by the past and local context and characterised by unexpected behaviours and consequences (Boulton, Allen and Bowman 2015). Complexity theory, however, is not clearly defined and there is a dearth of empirical research which applies the theory (Preiser 2019; Thompson et al 2016).

This research, then, aims to address the following gaps in the literature:

- The systemic nature of the issues facing adults experiencing multiple and complex needs is increasingly well-articulated. However, there is an absence of empirical research which theorises understanding of the experience of system change in this context.
- Complexity theory is posited as having potential value in increasing this understanding but is itself multiply defined and there is an acknowledged need for more empirical research which applies the theory (Thompson et al 2016; Houchin and Maclean 2005; Lowell 2016). There is currently no empirical

research which applies the theory in the context of system change for multiple and complex needs.

- There is an increasing awareness of the need for complex problems (such as multiple and complex needs) to have solutions which respond to this complexity (Joosse and Teisman 2020; Haynes 2015). PIE is seen as representing such a solution (Cockersell 2018b) but there is no literature which empirically explores this claim.

The four research questions which the research has sought to answer are therefore as follows:

- 1) How is system change for adults with multiple and complex needs conceived by those pursuing it?
- 2) Where does promoting and implementing Psychologically Informed Environments fit into this process?
- 3) How might these questions be answered in a case study of a programme that seeks to transform the lives of these adults in a single locality?
- 4) How might complexity theory inform a critical evaluation of this programme of system change?

To address these questions, the research uses a complex, critical realist paradigm and an embedded qualitative case study design. The main case study is the system change project, with a particular focus on the specific objective of PIE. Within the main case study, a further embedded case study investigates the implementation of PIE within one of the project's partner organisations, a service for people experiencing multiple and complex needs within a large housing association. The primary method of data collection was via semi-structured interviews with: staff from the core system change project team; strategic stakeholders from the system change board who were collectively responsible for governance and developing and delivering the system change plan; and managers and operational staff from the embedded case study organisation. These were combined with analysis of core project documentation, including system change plans and progress reports, and observation of system change board meetings.

As perhaps might be expected from a thesis combining complexity theory, system change and multiple and complex needs, the disciplinary boundaries of the research are not strictly delineated. It is located within the emerging policy area of multiple and complex needs which is constituted of, but distinct from, the policy areas of, for example, health and criminal justice. Its focus, however, is on system change and by extension organisational change (in the embedded case study) which overlaps with academic disciplines of business and organisational studies. Complexity theory itself is not specific to any particular discipline and has been used (inter alia) in disciplines as diverse as health (see for example Trenholm and Ferlie 2013; Paley and Eva 2010), education (Cohen, Manion and Morrison 2017; Cochran Smith et al 2014), criminal justice (Pycroft and Bartollas 2014), as well as contributing to debates within public policy more generally (Haynes 2018; Morçöl, 2005). The contribution of the research is similarly broad. In applying a defined model of complexity theory to a set of empirical data it contributes to the field of applied complexity theory (which as shown above is itself diverse). Applying this in the context of system change for multiple and complex needs locates it mainly in this emerging policy area but in challenging the concept of managed, transformational change could have applicability to system change more broadly. Equally importantly, its contribution extends beyond the theoretical into practice.

## 1.2. Structure of the thesis

To address the research aims identified above, the remainder of the thesis is structured as follows:

***Chapter 2: Multiple and complex needs, system change and PIE: a review of the literature*** contextualises the research within the literature in the three main areas of focus: multiple and complex needs, system change and PIE. It begins by exploring the definition of the term multiple and complex needs and how these needs are constituted, maintained and experienced. It goes on to examine how system change is understood, before focusing more specifically on system change for adults with multiple and complex needs. The final section of the chapter explores what PIE is, and how it might represent an appropriately complex response to the issues of multiple



and complex needs, before exploring approaches to implementation. A final section explores the role of PIE in system change.

**Chapter 3: Theoretical framework - complexity theory** presents the theoretical framework of complexity theory which will be used to interrogate the findings later in the thesis. The chapter looks at the origins and multiplicity of complexity theories before clarifying the precise meaning and definition used in the thesis and what this indicates about change in complex systems. The chapter concludes by examining some of the strengths and limitations of the theory.

**Chapter 4: Research approach** offers a detailed account of the complex critical research paradigm used for this research. It describes the main and the embedded case studies and the justification of the case study method. It further articulates the research design and the sampling strategy and explores the ethical considerations. It concludes by reflecting on the experience of undertaking the research.

**Chapter 5: Findings - the system change project** is the first of the three findings chapters. The structure of these three chapters follows the structure of the case study with this first findings chapter examining the system change project as a whole. It explores how key terms : 'the system' and 'system change' are articulated and understood; the experience of managing the change project and the factors impeding and enhancing implementation at this level.

**Chapter 6: Findings – PIE as a system change objective**, the second findings chapter, focuses on the specific objective of PIE within the project, examining the understanding of the term PIE, its development as a system change objective and the ways in which this objective is being approached.

**Chapter 7: Findings - implementing PIE: the experience of the embedded case study**, the final findings chapter, presents the findings of the embedded case study and the experience of the organisation (a partner within the system change project) as it implements PIE and the extent to which this relates to the wider system change project.

**Chapter 8: Applying complexity theory to the empirical findings** analyses the empirical findings in Chapters 5 to 7 via the core precepts of complexity theory which were identified in Chapter 3.

***Chapter 9: System change and PIE – a complexity informed critical evaluation.***

evaluates what the application of complexity theory in the previous chapter (Chapter 8) means for the overall aims of the system change project. It identifies fundamental challenges to the aspiration of a managed programme of transformational, beneficial and sustainable system change, and specific challenges in relation to PIE's conceptualisation as a complex response.

***Chapter 10: Conclusion*** is the final chapter and summarises the contribution of the research to the previously identified gaps in the literature. It reviews some of the limitations of the research and indicates areas where future research might focus. It concludes with some personal reflections on the research.

## 2. Chapter 2: Multiple and complex needs, system change and PIE – a review of the literature

### 2.1. Introduction

This research examines participants' experience of implementing a system change project in general and psychologically informed environments in particular, the latter as part of a system change programme. It is located within a project which aims to deliver both individual support and systemic change for people with multiple and complex needs. To contextualise the research, this chapter will examine the literature which intersects with these three main areas of focus: multiple and complex needs; system change and PIE. It begins by exploring the meaning of the term 'multiple and complex needs' and how they are constituted, maintained and experienced. It then looks at the ways in which this experience has informed the development of systemic responses, beginning with an exploration of the meaning of 'system change' generally before exploring the way system change has been operationalised for people with multiple and complex needs. A greater understanding of the high incidence of trauma within the lives of people with multiple and complex needs has driven the interest in responses such as Psychologically Informed Environments (PIEs), which feature both within and outside of system change initiatives. The chapter therefore goes on to describe the key features of PIEs, how organisations have approached becoming psychologically informed and, finally, PIE's role in system change.

### 2.2. Multiple and complex needs

The term 'multiple and complex needs' is broad and covers a range of different combinations of needs. Rosengard et al (2007a) in their literature review on the term, for example found it used (inter alia) in relation to people with severe mental health issues, people with disabilities, vulnerable elderly people, and women experiencing domestic abuse. While acknowledging the breadth and lack of precision within the terminology, the context for this research is (driven by the project in which it was undertaken) located in the interacting network of issues, involving contact with the criminal justice, homelessness, substance misuse and mental health systems which is at the extreme margins of disadvantage (Bramley et al 2015; Bramley, Fitzpatrick and

Sosenko 2020). Even within this context, multiple and complex needs (or variations of these) are not the only terms used and there is a large degree of overlap with, for example, 'multiple exclusion homelessness' and 'severe and multiple disadvantage' (Bowpitt et al 2011; Cornes et al 2011). Indeed, there has been a more recent shift towards the use of 'severe and multiple disadvantage' rather than 'multiple and complex needs' (see for example literature from the Making Every Adult Matter (MEAM) coalition and the National Lottery's Fulfilling Lives programme). This shift is not just one of terminology but reflects an attempt to recognise more fully both the relative level of disadvantage when compared to others and the role of societal and political influences rather than locating the issue primarily as an individual characteristic (Duncan and Corner 2012)<sup>1</sup>.

There is an increasing awareness at the policy level that many of the people experiencing the individual issues of homelessness, mental ill-health, substance misuse and offending behaviour are, in fact, the same individuals (Bramley, Fitzpatrick and Sosenko 2020). Notwithstanding the difficulty in collecting accurate data due to the absence of a consolidated set of data across all the need areas, there have been a number of studies which examine the frequency and prevalence of these co-existing needs in various combinations. Maguire et al 2009, for example identified the high prevalence of mental health issues in homeless people while Fitzpatrick, Johnsen and White (2011) and Fitzpatrick, Bramley and Johnsen (2013) in their studies of multiple exclusion homelessness, demonstrated a high degree of overlap between homelessness and substance misuse (as well as experience of institutional care and street survival activities such as begging and street drinking). Bramley et al (2015) combined data from 3 data sets and determined that (at a conservative estimate) 58,000 adults had needs in three areas (homelessness, substance misuse, and

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<sup>1</sup> While recognising the importance of terminology, it should be noted that in this research, the use of multiple and complex needs is not intended to individualise the problem, its use is merely practical in that it reflects the terminology in use within the project when the research began and was thus used in research instruments, ethical approvals etc. It is therefore used synonymously with severe and multiple disadvantage.

offending behaviour), rising to 250,000 with two out of three.<sup>2</sup> This study also indicated the demographic characteristics of people with multiple and complex needs as predominantly white males, aged 25-44 though subsequent research has identified the particular effect of the inclusion of offending behaviour within this category. As offenders are predominantly male, the inclusion of it as a category has the effect of underestimating the number of women facing severe and multiple disadvantage (Sosenko, Bramley and Johnsen 2020). Women also present later to services and are thus less likely to appear within caseload data (Rankin and Regan 2004a). Revising both the criteria and the data sets analysed, the better to capture this, results in an increase to the overall number of those experiencing severe and multiple disadvantage (now defined as experiencing three of: homelessness, substance misuse, poor mental health and being a victim of violence or abuse) to 336,000 people and results in a roughly half and half split between women and men (Sosenko, Bramley and Johnsen 2020; McNeish et al 2016).

This highlights an important difficulty in defining multiple and complex needs. While definitions are helpful in highlighting a particular set of experiences, they can exclude people who are experiencing multiple and complex needs, do not adequately cover issues relating the intensity of need and can also falsely suggest a degree of homogeneity. It is important to note that, though the experiences of people facing multiple and complex needs may have commonalities, they are not a homogenous group and their experiences are distinct. The experience and the ways in which the different needs interact are different for different individuals who respond differently even in similar situations (Rankin and Regan 2004a). Gender and ethnicity are also associated with differences in presentation and treatment: poor mental health and violence are the most commonly co-existing experiences for women (whereas for men it is poor mental health and substance misuse) and women more frequently have childcare responsibilities (Sosenko, Bramley and Johnsen 2020). The Sainsbury Centre for Mental Health (2002, cited in Rankin and Regan 2004a), noted the more negative experiences of health and social care (particularly mental health services) for African-

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<sup>2</sup> Mental health was excluded from their analysis due to its high levels of prevalence and the absence of data which combine it with other factors. It was however included as a complicating factor.

Caribbean men who are more likely to experience compulsory mental health treatment and more police involvement. The lack of cultural sensitivity within services also impacts on the particular experiences of BAME people with language barriers, discrimination and social and community exclusion impacting on the experience of BAME service users (Everitt and Kaur 2019a; Adamson et al 2015).

Despite differences in terminology and the individuality of experiences of those experiencing multiple and complex needs, there is broad consensus about some of the characteristics of these issues and the way in which they overlap and interconnect which not only cause, but continually reinforce the difficulties faced by people experiencing them (Bramley et al 2015; Westaway 2016). Each problem on its own is challenging but there is an added complexity which derives from the combinations of these and it is the accumulation of impact which is at the heart of the particular severity of multiple and complex needs (Lamb et al 2019a; Duncan and Corner 2012). This has been articulated as a combination of breadth (that is the number and range of needs) and depth (the severity of need) which interlock requiring the negotiation of multiple issues at the same time (Rankin and Regan 2004a; 2004b). While the depth of the issue amongst people with multiple and complex needs may, in some cases, be lower - for example: involvement with the criminal justice system for people with multiple and complex needs tends to be as persistent, low-level offenders rather than more serious forms of offending - the multiplicity of needs has a cumulative effect which means they are mutually reinforcing (Anderson 2011; Bramley et al 2015). This also impacts on access to services where thresholds for access are based on depth rather than (or combined with) breadth of need. This often results in people with multiple and complex needs being excluded from the services they need (Rankin and Regan 2004a; 2004b).

Breadth of need also results in conflict with narrow, bureaucratic definitions of services. The organisation of services in organisational silos with little connectivity between them means that, even when the multiplicity of need is recognised, services may be unable to provide the necessary support (Adamson et al 2015). Agencies typically deal with single issues, with services increasingly fragmented and specialised, and excluding those who do not meet particular criteria (Cockersell 2018b). As well as exclusion, either because they do not meet the criteria for services or fail to comply

with service rules, this creates logistical complexity such as clashes in appointments (Anderson 2011). The result is that care is often poorly co-ordinated, with repeated assessments and a limited understanding amongst the agencies involved of the scale and inter-relatedness of needs. This linear and single-issue approach does not meet the holistic needs of people whose needs span multiple agencies and systems (Cornes et al 2011a; Anderson 2011).

That is not to say that this problem of breadth (or multiplicity) means that the problem is located with the individual (Valentine 2016). Cockersell (2018b), for example, argues that it is not the complexity of the person that is the problem but rather that services are organised on a single issue basis which is problematic for many groups of people – not just those with this definition of multiple and complex needs – e.g. elderly, children and people with disabilities are often also described as having complex needs - so the single issue approach of ‘universal’ services is unhelpful for a greater number of people than just those with multiple and complex needs. In short, the problem lies less with the multiplicity and complexity of the issues presented but with the system with which they have to contend which is not organised in such a way as to provide effective support. Because each agency has its own professional and organisational lens through which the person with multiple and complex needs is viewed, agencies tend to work in parallel rather than holistically (Fitzpatrick, Johnsen and White 2011). The result is that people with multiple and complex needs are ‘known to everyone but are often served by no-one’ (MEAM 2019, p.5) and are characterised by what Rankin and Regan (2004b) identify as the “inverse care law’: the more complex a person’s needs the more likely they are to fall between the gaps in the services society provides’ (p. 11).

Exclusion from, or non-engagement with, services is another commonly identified characteristic and indeed people with multiple and complex needs are sometimes defined in terms of being hard to reach, difficult to engage or falling between the cracks of service provision (Anderson 2011; Rankin and Regan 2004a; Johnson 2013b). Exclusion from services can be a result of people not meeting services’ thresholds for access or other eligibility criteria or, conversely, because they are considered too challenging or complex (Rosengard et al 2007a; Dwyer et al 2015). Despite the common co-existence of mental ill-health and substance misuse, each can preclude

people getting help with the other (Anderson 2011). Similarly, the conditions attached to provision of accommodation can result in exclusion as a result of inability or unwillingness to abide by these (Bowpitt et al 2011). Further, exclusion is sometimes driven by commissioning practices which prompt agencies to reject service users who are more chaotic and less likely to achieve the positive outcomes required by commissioners whose targets do not reflect the non-linear trajectories of service user journeys (McDonagh 2011; Lamb et al 2019a). Lack of engagement with services can result from processes and procedures which alienate or do not meet the needs of the service users as well as a lack of trust and previous poor experiences of services as stigmatising or unhelpful (Rosengard et al 2007b). Non-engagement results often from an experience of disjointed services with limited access, little continuity or co-ordination of care, a perception of services as unwelcoming with staff perceived as judgemental and lacking compassion, of exclusion due to not meeting criteria or poor behaviour and breaking the rules (Anderson 2011; Bowpitt et al 2016). The significance of the experience of stigma for people presenting with multiple and complex needs when accessing services is well established and increases and, is increased by, behavioural issues. Stigma is further affected by staff perceptions relative to the amount of perceived social harm resulting from the behaviour together with the extent to which it is seen to be in the control of the individual (Anderson 2011; Bramley, Fitzpatrick and Sosenko 2020).

This challenging behaviour often has its roots in early (and continuing) traumatic experiences which not only affect wellbeing in childhood but continue to impact into adulthood. The prevalence of trauma and adverse childhood experiences amongst people with multiple and complex needs is well documented in the literature (McDonagh 2011; Fitzpatrick, Johnsen and White 2011; Sundin and Baguley 2015; Sandu 2020; Bramley et al 2015). A quantitative study by Fitzpatrick et al 2010 (cited in McDonagh 2011) for example, indicated that a large majority (78%) of multiply excluded homeless people had experienced at least one experience of childhood trauma, distress or exclusion. Bramley et al (2015)'s *Hard Edges* report found that of the (conservatively estimated) 58,000 people experiencing three needs (homelessness, criminal justice, substance misuse), 85% had experience of childhood trauma. Experience of trauma is associated with little family, or social support, problematic



peer relationships, maladaptive behaviours such as drug taking, decreased likelihood of employment and increased use of health and social services, as well as high rates of mental health issues (Maguire 2009). The experience of trauma is not restricted to childhood and the impact and occurrence of early trauma often continues into adulthood. Cockersell (2018d) refers to this as compound, rather than complex trauma, the better to capture the cumulative experience and impact of repeated traumatic experiences. As well as the incalculable human cost, the experience of such trauma impacts on people's abilities to form productive and helpful supporting relationships, leads to challenging behaviour, difficulties in sustaining accommodation and making progress within support services (Westaway 2016; Cockersell 2018d; Anderson 2011).

The causation of the issues of multiple and complex needs are equally characterised by complexity and multiplicity, emerging from a complex interplay of structural issues such as poverty and economic marginalisation alongside interpersonal factors and individual disadvantage. As indicated above, experiencing one need is predictive for others and the multiplicity, multi-directional and mutually reinforcing nature of these can make it difficult to establish not just causation but also which is cause and which consequence (Johnson 2012; Anderson 2011). There have been some attempts to analyse the sequencing of issues to inform this: Fitzpatrick, Bramley and Johnsen (2013) for example, while acknowledging a bi-directional relationship between drug problems and homelessness suggested that, in most cases, drug problems (though often aggravated by homelessness) predominantly preceded it. Their study also found evidence of substance misuse and mental ill-health appearing earlier in the pathway than homelessness and other adverse life events (Fitzpatrick, Bramley and Johnsen 2013). By definition, adverse childhood experiences and childhood trauma happen early in the life-course of people with multiple and complex needs, but, as indicated above, the experience of people with multiple and complex needs tends to be one of compound trauma multiply and cumulatively experienced (Cockersell 2018d). There is increasing evidence (with the publication of Bramley, Fitzpatrick and Sosenko's recent (2020) geographical study of the incidence of severe and multiple disadvantage) of the role of poverty and reduced access to the labour market in the causation of severe and multiple disadvantage. They further cite growing evidence that the stresses of living in

poverty, with ill-health and homelessness alongside experiences of childhood trauma negatively impact on decision making and behaviour (Starcke and Brand 2012, cited in Bramley, Fitzpatrick and Sosenko 2020). With growing understanding of the role of psychological factors such as these in multiple and complex needs, there may be a temptation to move towards more individual explanations of the problem but the importance of structural issues both in creating, maintaining and reinforcing these issues should not be understated (Westaway 2016).

There is, then, an increasing understanding that the problem of multiple and complex needs is significant in terms of numbers of people's lives affected, the impact on those lives as well as cost to the public purse. While those experiencing multiple and complex needs are a heterogeneous group and each person's experience is differently created, maintained and reinforced, there is consensus on the importance of both breadth and depth of need, the lack of alignment with the way that services are organised and the prevalence and importance of trauma in creating, maintaining and reinforcing the problems faced.

### 2.3. System Change

It is the increased awareness of the interconnected and mutually reinforcing nature of these problems and the lack of commensurate interconnectedness of responses together with a growing understanding of the impact of trauma on the lives of people with multiple and complex needs that is behind programmes such as the one in which this research is based and the growing interest in system change as a means of moving beyond the provision of support at an individual level to changing the 'system'.

Although system change is a relatively recent phenomena, it should be noted that there is a historically longer tradition of attempting to improve partnership working and integration of services whose ambitions overlap with those of system change. Collaborative and partnership working, for example are inherently systemic, concerned as they are with the links and associations between different parts of the 'system' while integration seeks better to connect the fragmented services which characterise multiple and complex needs. Indeed most system change projects encompass such objectives and have been influenced by the history of such initiatives. Spours (2021), for example points to the revitalisation of improving collaboration within broader

programmes of system change such as the one in which this research is based; section 2.3.2 below identifies the prevalence of integration and partnership working in system change programmes for multiple and complex needs. System change as a specific and distinct (if related) concept however, has been gaining traction across a range of policy areas in the UK (Birney 2021), including criminal justice, and perhaps most notably health and social care (see for example the NHS website on system change in health and social care<sup>3</sup> and whole system approaches in public health<sup>4</sup>) But it has also been seen in wider ‘whole system’ initiatives covering a range of public services such as the unified public services model in Greater Manchester<sup>5</sup> (Centre for Local Economic Strategies 2016).

Although work in the areas of e.g. health and social care, drugs services or public services more broadly coincides with the individual areas of need articulated in multiple and complex needs, the concept of system change specifically for people experiencing these – i.e. as a specific and discrete group - has more recently been gaining ground due largely to the work of the Making Every Adult Matter (MEAM) coalition<sup>6</sup> and the National Lottery funded Fulfilling Lives programme<sup>7</sup> and the subsequent Changing Futures programme<sup>8</sup>. However, before looking specifically at the

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<sup>3</sup> <https://www.england.nhs.uk/sustainableimprovement> (accessed 26/1/21)

<sup>4</sup> <https://www.gov.uk/government/publications/community-centred-public-health-taking-a-whole-system-approach> (accessed 26/1/2021)

<sup>5</sup> - [gtr\\_mcr\\_model1\\_web.pdf](https://www.greatermanchester-ca.gov.uk/gtr_mcr_model1_web.pdf) (greatermanchester-ca.gov.uk) (accessed 26/1/2021).

<sup>6</sup> MEAM is a coalition of charitable organisations in England which works to support local areas in redesigning services for people with multiple and complex needs and embed these changes to create wider and longer-term systemic change, as well as conducting research and working to influence at the policy level <http://meam.org.uk/> (accessed 27/1/2021)

<sup>7</sup> A National Lottery funded 8 year programme which began in 2014, aimed at improving the lives (and the systems of support) for adults with multiple and complex needs. Fulfilling Lives, 2019. Changing systems for people facing multiple disadvantage. <http://meam.org.uk/wp-content/uploads/2019/06/MEAMJ7105-Fulfilling-lives-publication-WEB.pdf> (Accessed - 2/12/20).

<sup>8</sup> The Changing Futures programme is a 3 year (2020 to 2024), £64 million programme, working with 15 local partnerships across England and Wales aiming to improve outcomes for adults experiencing multiple disadvantage aiming to deliver improvements at the individual, service and system level. <https://www.gov.uk/government/collections/changing-futures> (Accessed 22/1/2022).

literature on system change for people with multiple and complex needs, it is perhaps helpful here to articulate what the term system change means.

### 2.3.1. What is system change?

System change inherently recognises a system which exhibits behaviour which is distinct from (but created by) the behaviours of its component parts (OECD 2017). While organisations can be considered to be systems in their own right, they exist within a wider context, and system change is generally considered to involve multiple organisations (Parsons 2007). System change is generally described as change in multiple parts and at multiple levels of a system, with system change programmes usually involving the micro (level of individual relationships), meso (organisational level) and macro (system level) (Briggs et al 2018; Van Tulder and Keen 2018). Echoing the language used to describe the issue of multiple and complex needs earlier in this chapter, system change is seen as having both breadth (i.e. it involves a high number of people and organisations) and depth (i.e. it involves change in the relationships of the parts of the system) (Waddell et al 2015). It is predicated on an acknowledgement of the interconnection and interdependence of agents within the component parts of the system and often involves attempts to raise awareness of this interdependence and encouraging collaborative effort as a means of improving mutual performance (Dattee and Barlow 2017).

System change programmes have become increasingly prevalent in recent years in response to a recognition of the interconnected and complex nature of many social problems such as the ones described in Section 2.2 which would fit the definition of a 'wicked' problem. The concept of wicked problems emerged within systems theories in the 1970s to describe problems which involve multiple stakeholders, lack definitive understanding (due to the different perspectives of those involved), defy optimum solutions, and are unpredictable because of their inherent complexity and interconnectedness (Rittel and Webber 1973). Although organisations themselves can be seen as systems, system change within social systems is generally considered to transcend organisational boundaries and to refer to change both in hierarchical (and sometimes formal) groups of organisations and non-hierarchical (and sometimes informal) networks of organisations and individuals (Parsons 2007; Waddell 2016). Applying systems approaches to wicked social problems has become increasingly

important alongside an understanding of the inherent difficulties in solving such problems. This has led to an increasing interest in system thinking and systemic approaches (used here in their widest sense) to address these (OECD 2017).

Also important in discussing system change is the consideration of deliberate or intentional change. System change is generally considered to involve some intentional action. Foster-Fishman, Nowell and Yang (2007), for example, describe system change as: 'an intentional process designed to alter the status quo by shifting and realigning the form and function of a targeted system' (p 197). In this instance system can be thought of as organisations, networks or communities. The intentional change in this instance does not necessarily preclude unintentional consequences (Abercrombie, Harries and Wharton 2015) but rather refers to a concerted and organised effort to create change akin to the system change project which is the subject of this research. This typically involves changes to structures, relationships, policies, processes and power relations as well as values, cultures and core beliefs, on the basis that this will lead to improved functioning of the system and better outcomes for those involved (Foster-Fishman, Nowell and Yang 2007).

Implicit within this (and usually implicit within definitions of system change) is of change which is radical or transformational. While what differentiates transformational from other types of change is not always clearly articulated, it generally involves a combination of depth and breadth (Catrien, Termeer and Biesbroek 2017). As indicated above, the concept of breadth is already implicit in system change as it refers to change in multiple parts of the system. Depth of change differentiates between superficial change which does not challenge existing ways of thinking or operating, unlike transformational where changes are made to the underlying assumptions and mental models, power structures and relationships (Merry 1995; Catrien, Termeer and Biesbroek 2017). Within the complexity theory literature, Waddock et al (2015) in their paper on large scale change helpfully elucidate this, building on the work of Waddell (2011) and describe a typology of three different types of change: incremental, reform and transformation. Incremental change involves doing more of the same and does not radically alter the norms and relationships; reform change seeks to develop a greater understanding of the system and begins to offer the possibility of changing the rules and interactions;

transformational change, however, involves creating something new and previously unimagined. For them large scale change is transformational: unlike reform change it does not just change the rules within the prevailing logic, it challenges the entire economic, social and political context of the system, redefining power relationships and structures. Most definitions of system change (and specifically for system change for people with multiple and complex needs) describe their ambition in terms of transformation (Fulfilling Lives 2019) as discussed below, but this is often not explicitly defined, although it would usually (aspirationally at least) fall somewhere between reform change and transformation in Waddock et al's typology.

It is hard to separate a discussion about system change from a wider discussion about systems thinking and systems theories as (as indicated above) it is these which underlie the concept of system change. Essentially though, in its widest sense, system change differs from more traditional views of change which see it as a top down, incremental and linear process built on careful planning and with participants encouraged to change their own behaviours via mandate, reward or sanctions (Stacey and Mowles 2016; Burnes 2005; OECD 2017). System change initiatives however, implicitly or explicitly, are predicated on a view of systems which sees them as complex, dynamically interacting and uncertain. This necessarily results in different approaches to managing and implementing change. While there are many practical tools and methodologies which have developed to assist in achieving systemic change (see for example: Thinking in Systems (Meadows 2008); the Cynefin Framework, (Snowden and Boone 2007); the Vanguard Method (Seddon and O'Donovan 2013), a definitive theoretical understanding of how system change occurs remains elusive with little sign of an established consensus, and a tendency towards methodological pluralism (Kreindler 2019; White 2000; OECD 2017; Birney 2021). This research uses the theoretical framework of complexity theory which, as I will explore in the following chapter is influenced by, but distinct from, the systems theories upon which many of these methodologies are based.

### 2.3.2. System change and multiple and complex needs

Given the relative newness of the interest in system change and multiple and complex needs, other than practice documentation and evaluations (of which there are a growing number), there is a limited amount of literature on the specific area in which

this research is based – that is the experience of system change for organisational stakeholders within the context of multiple and complex needs. Since most of this literature is practice-based or evaluative, it often does not have a clearly identified theoretical basis. Sometimes this literature is placed broadly within a systems thinking theoretical framework, or less commonly in a broader critical realist position (see for example, Cornes, Whiteford and Manthorpe 2015; Hough 2017). However, as will be discussed in the following section, system thinking is itself a multiply defined and poorly articulated theoretical position and there is often a lack of clarity about the precise version of the theory which is being used. This represents a significant gap in the literature to which this thesis responds by clearly articulating (within the next chapter) the theory which will be applied to the empirical findings.

While, with some exceptions (see for example Cornes, Whiteford and Manthorpe 2015), clear theoretical positions may be scarce within the evaluative and practice literature on system change for multiple and complex needs, there is a level of consensus in regard to the **types** of changes which need to happen in order that the needs of people with multiple and complex needs are more effectively met. These, underpinned by effective service user engagement at all levels, are summarised below:

**Changes at the level of national policy:** these include: the recognition at central government level of multiple and complex needs as a specific and discrete group and a requirement for cross departmental collaboration (Rosengard et al 2007b; Gallimore, Hay and Mackie 2009; MEAM 2018); a greater level of funding enabling better access to services (Anderson 2011; Gallimore, Hay and Mackie 2009); a focus on preventative early years work (Fitzpatrick, Bramley and Johnsen 2013); and a shift away from approaches focused on conditionality and punishment and towards a greater level of policy responsibility for marginalised and excluded people (Dwyer et al 2015).

**Changes at the level of local strategy and commissioning:** including pooled budgets, and with a strong emphasis on integrated pathways (Rankin and Regan 2004a; Rosengard et al 2007a; Moss 2020; Turner and Krescy 2019); flexible commissioning of services that allows for multiple relapse and long term individualised support and which encourages collaboration and innovation (Adamson et al 2015; Lamb et al 2019b; Gallimore, Hay and Mackie 2009; Cattell et al 2011; Hough 2014); local workforce development including shared training to support collaborative working

across professional disciplines (Anderson 2011; Rankin and Regan 2004a; Rosengard et al 2007a; Adamson et al 2015; Gallimore, Hay and Mackie 2009).

**Changes at the operational / service delivery level:** including the provision of services which are non-stigmatising, trauma informed, holistic and person-centred, with single points of access and better integrated (rather than parallel) service provision (Rosengard et al 2007b; Rankin and Regan 2004a; 2004b; Fitzpatrick, Johnsen and White 2011; Cornes, Whiteford and Manthorpe 2015; Moss 2020); more support for staff in working with challenging clients (Anderson 2011).

The **ways** in which projects seek to achieve these changes as part of a managed programme of system change is, again, mainly contained within the evaluation and practice guidance literature and broadly falls into the following areas:

**Influencing.** This takes place in various forums with the projects representing multiple and complex needs in a variety of strategic and inter-agency forums. The importance of being at the table in wider discussions is seen of critical importance in ensuring that multiple and complex needs are recognised and understood, particularly within organisations for which this is not their major focus. It is also a way of mitigating some of the issues in engaging partners in the project's own forums (Isaac et al 2019; Ipsos Mori Social Research Institute 2019; Bowpitt et al 2018; Rice 2017; Crisp et al 2020).

**Demonstrating.** the softer, cultural changes within the system, are largely seen as being delivered by means of modelling and demonstrating different ways of operating (CFE Research 2020). This takes a number of forms: the projects' direct service delivery sometimes acts as an exemplar for practice, as do attempts to demonstrate alternative commissioning models. Projects also use, and augment, the growing body of national and local research, as well as offering wider workforce development via training (see below) and the creation of Communities of Practice to bring together agencies to reflect on and improve practice (Fulfilling Lives 2019; Cornes, Whiteford and Manthorpe 2015; Boobis 2016; Fulfilling Lives South East Partnership, undated; Bowpitt et al 2016).

**Training.** Closely linked to demonstrating and seen as a means, not just of upskilling the workforce but also disseminating the softer, cultural changes identified above, most of the projects have offered some form of workforce development and training



as a means of sharing knowledge and expertise in multiple and complex needs. This takes the form of specific training courses, for example in PIE and trauma informed care, as well as the creation of dedicated units offering larger programmes of training and development, and support for the aforementioned Communities of Practice (Bowpitt et al 2018; Hough 2017; Rice 2017; Fulfilling Lives 2019).

**Collaborating and working in partnership.** All of the projects are constituted as local partnerships, involving (to a greater or lesser extent) networks of voluntary sector and statutory agencies involved in delivering services which relate to the four core areas of need, alongside people with lived experience of multiple and complex needs. Delivery of the objectives of the system change projects is intended to be a distributed activity, with shared responsibility and accountability / governance constituted as local partnerships, led by voluntary sector organisations though, in practice, this is sometimes more aspirational than actual (Isaac et al 2019; Bowpitt et al 2018; Hough 2017).

**Funding and delivering services.** System change projects often include some form of direct service delivery – often via co-ordinators or navigators, providing advocacy and support for people with multiple and complex needs. However, these are often seen as distinct from system change (Bowpitt et al 2018; Blackpool Fulfilling Lives 2019; Hough 2017). As well as delivering services, there is sometimes an element of direct funding/commissioning services both to fill gaps in provision and as a means of demonstrating effective ways of working and commissioning (Isaac et al 2019; Rice 2017; Crisp et al 2020).

**Integrating.** Joining up services is seen less at the level of re-structuring and more in co-location of services in Hubs, providing common assessments and referral processes as well as sharing data and shared IT platforms (Birmingham Changing Futures Together 2019a; Ipsos Mori Social Research Institute 2019; Fulfilling Lives 2019).

Most of the literature does not explicitly identify a theoretical basis to the implementation of system change, other than at the broadest level – i.e. they may identify their approach as system thinking but not specifically articulate what that means. Some use more generic approaches such as action experimental methods. Perhaps the most explicitly theoretical approach is in the Newcastle and Gateshead

Fulfilling Lives project which draws on the work of Donella Meadows (2008) on systems thinking, and Burns (2007) on systemic action research. Their approach involves a focus on system attributes - both physical and less tangible elements (such as cultures and meanings), relationships and connections and system purpose. As well as focusing on the preconditions of change, implementing a system change project is seen as involving six steps beginning with experiencing the need to change, diagnosing the system, creating pioneering practices, to extending these more widely, sustaining and cementing the change (Hough 2017).

The literature on the experience of effecting systemic change for adults with multiple and complex needs, then, is growing but at present largely limited to the experience of the Fulfilling Lives programme, alongside some of the work of MEAM and Lankelly Chase, organisations which have been at the forefront of funding system change for multiple and complex needs. Again, this naturally tends to be evaluative or practice-based literature and here too, there is a limited amount of literature which has a clear theoretical basis. It should be noted that this literature review is focused specifically on system change for people with multiple and complex needs. The reasons for limiting the literature review to the experience of multiple and complex needs (rather than including the wider and more extensive literature on system change in health) are two-fold: most importantly, while sectors such as health overlap with multiple and complex needs and are also highly complex, they fall within one defined category; the system for multiple and complex is distinct from other system change in that it involves the interaction of multiple such sectors, and does not sit within a single area of public policy. Secondly, and more pragmatically, any literature review requires that choices are made in order to retain focus and direct relevance to the research question.

### 2.3.3. The characteristics of system change for adults with multiple and complex needs

As we saw above in Section 2.3.1 system change in general tends to carry with it some level of expectation of 'transformation', though this is often not clearly defined. The literature on system change for multiple and complex needs is no exception. While transformation is ubiquitous, definition tends to centre around what it is not, rather

than what it is – i.e. a one-off change, or a change which is reliant on a key individual would not be considered transformation (Fulfilling Lives 2019). There is some differentiation between system change and service delivery or changes to individual services, with these, alongside, flexing of the system or change reliant on key individuals generally not being regarded as system change. The potential for incremental change to have a wider and more transformational impact at the system level is articulated (Lankelly Chase 2016; Fulfilling Lives 2019) but there is some evidence of potential tension between transformation and incremental change. Isaac et al (2019), for example identified an implicit hierarchy of change within one project between transformational change and transactional change which they considered to be in tension with systems thinking. In their evaluation they determined that the project differentiated between transformational change (interpreted as change at the senior or strategic level) and transactional change (change at the operational level). This was seen as preserving existing power differentials and disempowering operational staff). More radically, in their evaluation of the Camden and Islington project, Cornes, Whiteford and Manthorpe (2015) suggested that incremental, grass-roots change might be a more effective focus (alongside campaigning for better services) given the impact of the wider context of austerity, under-funding and cuts to services (discussed in more detail below). This is an interesting challenge to the concept of transformational change and one which will be returned to in the context of the findings for this research in the final chapters of this thesis.

Other descriptors associated with system change for multiple and complex needs (and which again are returned to in this research) are that system change needs to be 'beneficial', and 'sustainable' (Fulfilling Lives 2019, p.4). While the concept of beneficial system change is less commonly referred to in the general system change literature, it importantly, recognises the possibility that system change is not necessarily positive. Cornes, Whiteford and Manthorpe (2015) for example identify New Public Managerialism as system change but suggest that it created a system which, in large part, led to the issues which the Fulfilling Lives programme aims to address. Similarly, the criminal justice reforms of Transforming Rehabilitation resulted in significant structural changes to the criminal justice system which have widely been considered to be far from beneficial (National Audit Office 2019). Of course, whether

or not system change is beneficial also depends on perspective, and the capacity for complex systems to lead to unintended consequences (some of which may not be beneficial) alongside the difficulties in foreseeing the impact of actions in such systems is an important theoretical consideration (See Chapter 3, for a discussion of this).

Although this is acknowledged within the descriptions of systems thinking within the project literature, the experience of this within individual projects is largely unexplored. The centrality of people with lived experience within all aspects of the project may, in part, be seen as a means of mitigating this (Hough 2017).

Sustainability of change is probably the least clearly defined characteristic. It is sometimes used in system change for multiple and complex needs synonymously with system change: i.e. that it is longevity of the change as well as the scale of the change which determines whether or not a change is system change. The importance of learning is commonly highlighted (see for example Hough 2017; Rice 2017) but in some cases this is also used alongside concepts of cementing or embedding practice. These terms, I would argue (and discuss more fully in Chapter 9), have the potential to be in tension with continuous learning and adaptation, suggesting as they do something more tangible but also with the potential to be more fixed.

The three concepts of transformation, benefit and sustainability are central to the project which forms the basis of this research. They are the criteria by which judgements in relation to the achievement of system change were to be made and thus, as in the examples above, form the central defining characteristics of current initiatives in system change for people with multiple and complex needs. As we will go on to see in the final chapters of this thesis, they also represent one of the main challenges identified in this research by the application of complexity theory.

#### 2.3.4. Challenges and barriers to system change for multiple and complex needs

Achieving system change is universally recognised as an ambitious and challenging objective. Within system change projects for multiple and complex needs, it is identified as an area where less progress has been made than in, for example, service delivery. There is also a degree of commonality in the challenges experienced in the literature and those identified in this research.

Although partnership and collaboration are seen as central to system change for multiple and complex needs, the difficulty in effecting deep, rather than superficial commitment was a recurring theme. The need for shared, systemic vision, distributed project leadership and shared responsibility for actions was well-documented within the projects but achieving this was more difficult with many projects suggesting that partners either did not participate, or engaged at a superficial level, with responsibility for delivery remaining with the small, core project team or lead agency, rather than being shared more widely (Isaac et al 2019; Hough 2017; Crisp et al 2020; Ipsos Mori Social Research Institute 2019).

This was often related to the pressures within the external environment: partners sometimes saw themselves as operating in a competitive rather than collaborative environment, for example with commissioning practices working against collaborative aims of the project (Crisp et al 2020). Conflict between project priorities and organisational ones were a further disincentive to partnership working (Bowpitt et al 2018; Isaac et al 2019; Ipsos Mori Social Research Institute 2019). There was a tendency for projects to be reliant on key individuals which made the projects vulnerable to losing momentum and commitment if these individuals left their organisations. This was exacerbated by significant reorganisations in statutory services (Ipsos Mori Social Research Institute 2019; Bowpitt et al 2018; Isaac et al 2019; Crisp et al 2020).

The projects themselves operated in a context where national policies (for example: changes in welfare policies) impacted significantly on their ability to achieve their ambitions but where they had limited power to make changes. Similarly, operating in an environment of austerity, with cuts to services not only impacted in concrete ways – such as limiting the availability of suitable housing or support services, but also in less tangible ways such as decreasing appetite for risk and innovation (Bowpitt et al 2018; Isaac et al 2019; Crisp et al 2020; Ipsos Mori Social Research Institute 2019; Rice 2017). These gaps in service provision also had the impact of the projects focusing more on filling these immediate gaps than achieving lasting system change (Blackpool Fulfilling Lives 2019).

All the projects noted successes in achieving change in individual services, and in services being more willing to flex their approach for individual cases, alongside

greater levels of understanding and awareness of multiple and complex needs. However, this was often not regarded as being sufficient to meet the definition of system change. Projects pointed to the difficulties in moving beyond diagnosis of the problem to concrete actions (Hough 2017) or converting individual service's willingness to flex their approach to systemic change (Isaac et al 2019; Crisp et al 2020). While most had seen individual service changes and some identified changes in values, there was less evidence of fundamental system change or changes in power relationships or resourcing (Blackpool Fulfilling Lives 2019; Crisp et al 2020). However, within the Newcastle and Gateshead project, the work they had done so far were seen as creating the necessary conditions for system change to occur (Hough 2017).

What is particularly marked in the existing literature on system change for multiple and complex needs is that system change projects are typically categorised by defined sets of objectives, often with specific (e.g. SMART targets) and with an ambitious aspiration of transformation, beneficial and sustainable change. This is in spite of the acknowledged complexity of multiple and complex needs and the plethora of organisations and networks that are involved in supporting people experiencing them. Haynes (2015) identifies two particular lenses through which such complexity can be viewed. The first of these is to see it as inherently problematical and something therefore to be reduced and the second sees complexity as a potential source of creativity - unleashing and working with complexity to create more adaptive, innovative and creative practices and organisations. This latter is behind such recent research on 'complexification' by Joosse and Teisman (2020) and also seen within the conceptualisation of PIE as a complex response (Cockersell 2018b) and discussed below. There has historically been a prevalence of simplification responses, which are driven by a search for greater efficiency and value and epitomised by New Public Management (Hood 1991; Joosse and Teisman 2020). Such responses are linear, place clear boundaries around a problem, identify clear, efficient and transferable models of practice but are becoming increasingly seen as inadequate for complex social (wicked) problems (Joosse and Teisman 2020). While this limitation is explicitly acknowledged in much of the literature on system change for people with multiple and complex needs, as we will see later in this research, this acknowledgement often co-exists (and creates tension with) a need to establish clear parameters and objectives.

As indicated above, there is a good degree of clarity and consensus on what needs to happen, and there is commonality at a general level of the issues which impact upon the achievement of system change. However that these ultimately remain amenable to being addressed by a system change project of the kind described above (and the subject of this research) is rarely challenged. There are a plethora of tools and methods which purport to help with this process, but system change remains an elusive and challenging ambition. While many of these tools and frameworks have a theoretical basis (usually within some form of systems theories), this is usually not explicit, and, arguably, their focus on creating practical toolkits is necessarily a simplification of what is, in reality, a complex and poorly understood process. It is a criticism levelled at both some versions of complexity theory and systems theories more generally that they seek to constrain and tame the inherent complexity of human systems to make them more amenable to simplistic solutions (see for example: Stacey and Mowles 2016) and this is discussed more fully in the following chapter. The aim of this research is to contribute to the knowledge in this area by examining the experience of change in one such project and, in later chapters, via the theoretical lens of complexity theory. As we will go on to see, the experience of the project shared much in common with that described above. However, the individual particularities – e.g. of the cognitive representations of system and system change are little covered in the literature but were found in this research to be important factors in the implementation of the system change project. Further, the application of complexity theory to the findings calls into question the very feasibility of such projects' ambitions to create transformational, beneficial and sustainable system change.

Of course, system change does not just happen at the strategic, project level and, in order to explore the wider experience at an organisational level, this research is also examining the experience of an organisation implementing PIE within a system change project. The reason for selecting PIE for this more detailed examinations are threefold: firstly, PIE is ubiquitous within the system change programme and thus provides some comparative experiences across a number of projects; secondly: it is an example of one of the main ways in which the programme seeks to effect change; and thirdly, it requires change at an organisational or sub-system level so provides an opportunity to explore the experience of change at multiple levels of the system. The remainder of

this chapter will therefore explore Psychologically Informed Environments, beginning with a definition of what they are before examining the experience of organisations in becoming PIEs and their place in system change.

## 2.4. Psychologically Informed Environment and system change

### 2.4.1. Background

As seen in Section 2.2, there is a growing understanding of the importance of early and continuing trauma in multiple and complex needs, and Psychologically Informed Environments are one of the ways in which this is being addressed. While PIEs feature prominently in most of the system change projects for people with multiple and complex needs, their creation predates these programmes. They have their antecedence in work by the Royal College of Psychiatrists' Enabling Environment Working group which was established between 2007 and 2011 (with a particular focus on those with mental health issues and therapeutic environments) and a good practice document on complex trauma which was produced by the Department for Communities and Local Government and the National Mental Health Development Unit in 2010 (Haigh et al 2012). The growing interest in approaches such as these led to a pilot programme in prisons and approved premises or bail hostels being developed by the Ministry of Justice – PIPE (Psychologically Informed Planned Environments). There was simultaneous government interest in the mental health and wellbeing of homeless people which led to the creation of guidance in dealing with complex trauma which identified a range of approaches which could be broadly described as psychologically informed (Haigh et al 2012).

Essentially, PIEs are environments which take account of the psychological and emotional needs of those accessing them and emerged from a need to understand and address the particularly traumatic life experiences identified in Section 2.2 (Haigh et al 2012; Johnson and Haigh 2010; Keats et al 2012; Breedvelt 2016). The definition of what constitutes a psychologically informed environment (PIE) is broad, deliberately avoiding a prescriptive approach, and encompassing many psychological frameworks (Keats et al 2012; Johnson and Haigh 2010). PIEs emphasise the importance of taking a holistic view of the person, including their social environment, the importance of the physical space, and relationships. They centre the importance of reflective practice



and learning as a means of ensuring the development and promotion of responsive and effective practice and services as well as supporting staff in the difficult work of providing services in such a challenging environment (Whelan 2012; Keats et al 2012; Johnson 2012). They are a response to, and an acknowledgement of, the trauma from childhood and into adulthood which characterises the experiences of those with multiple and complex needs (Breedvelt 2016; Cockersell 2018b). The model of PIE within an organisation should emerge as part of a reflective process within a local context, focused on building an understanding of service users' psychological and emotional needs which can then be operationalised across an organisation (Keats et al 2012; Johnson and Haigh 2010; Haigh et al 2012).

PIE continues to evolve and a new version - PIE 2.0 has emerged in the last 2 to 3 years, although the more recent version is not radically different from the original. PIE 2.0 refines some of the language – for example explicitly articulating the wider meaning of environment (beyond the physical environment); and focusing on the importance of relationships as a constant underlying theme. It is not considered to be a major departure or to require significant revisions for organisations which had already begun to use PIE 1.0<sup>9</sup>. It should be noted that at the time that this research was undertaken, the predominant understanding of PIE related to the original version as this had formed the basis for the training at that point.

#### 2.4.2. The theoretical perspective – PIE and complexity

PIE is essentially intended as a holistic response. It was conceived in such a way as to be responsive to the inherent complexity and systemic nature of the experience of multiple and complex needs (Johnson 2013a and 2013b; Cockersell 2018a; 2018b), but until recently there was little which considered it in relation to the theoretical perspective of complexity. In 2018, Cockersell made an explicit link between complexity theory and PIE, describing PIE as a complex adaptive system (Cockersell 2018a). The next chapter looks in detail at the theoretical perspective (including complex adaptive systems) but essentially, Cockersell's definition of PIE from this perspective is of a system in which different elements interact via multiple feedback

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<sup>9</sup> <http://pielink.net/pies-2-0-2/> (accessed 28/1/2021)

loops resulting in unpredictable and non-linear outcomes. Of particular importance, in the context of this discussion of PIE and system change is the openness of complex adaptive systems which affect and are affected by their environment which highlights the importance of the wider system on both the implementation and operation of PIE. Cockersell (2018b) agrees with the contention that complexity is not inherently problematical and indeed sees it as a source of creativity in responding to the unique and interconnected problems of multiple and complex needs. He indicates that the responses to complex problems are ineffective because the solutions proffered are complicated or simple, rather than ones which recognise and respond to the complexity of the problem. To this end, Cockersell (and others though less explicitly related to complexity theory - see for example Johnson 2013a; 2013b) considers that PIE is an appropriately complex response to a complex problem due to its behaviour as a (well-adapted) complex adaptive system. In this, there are implicit parallels to the 'complexification' models described above which posit that complex issues need to embrace and engage with complexity rather than simplify it (Joosse and Teisman 2020; Eppel and Rhodes 2018; Boulton, Allen and Bowman 2015; Klein 2016).

I would suggest that while it is hard to support the assertion of PIE as a complex adaptive system<sup>10</sup>, an organisation which is operating as a PIE might well be considered as such. Cockersell's categorisation of well-adapted is located in such an organisation's ability to adapt and respond holistically to the individual service user, taking into account the wider environmental context. There are certainly strong similarities between some of the features of PIE and those suggested by much of the literature on complexity theory as being important for organisations operating within complex systems – these include a focus on learning and reflection, professional autonomy and a relaxation of central, bureaucratic controls. Interestingly the term 'enabling environment' is used (independently of any reference to the work of the Royal College of Psychiatrists) by Eve Mitleton-Kelly (2018) in her methodology for operating within complex environments which is perhaps indicative of these

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<sup>10</sup> As explored in the next chapter, organisations are often characterised as complex adaptive systems, but their application to abstract concepts is disputed. Paley and Eva (2010) for example critique the application of complexity theory to clinical governance, while Cilliers 2010 makes similar observations in relation to the subject (rather than the teaching of) mathematics.

similarities. The concept of holism is also central to both complexity theory and PIE, as are relationships and connections. The way that PIE is seen not as a specific model but as evolving in response to local conditions echoes ideas of emergence and self-organisation in complexity theory (see Chapter 3). The focus on learning and reflection rather than outcomes also links closely to complexity theory.

Importantly, however, in the context of this research, for an organisation to operate as, what Cockersell (2018a) refers to as a well-adapted complex system requires that PIE is implemented and understood in the way in which it is described in the guidance and summarised above and that it operates effectively within that organisation and the wider system. As we will see later in this thesis, the findings for this research will indicate challenges to this.

### 2.4.3. The experience of becoming a Psychologically Informed Environment

For an organisation to seek to become psychologically informed necessarily represents some level of change for the organisation itself. While there is a limited amount of academic research into this specific element, there are a number of evaluation reports and a collection of practice guidance documentation – often shared within the PIE online community of practice which have considered this.

The approach taken towards becoming PIE (as opposed to the psychological framework itself) is not often explicitly located within a theoretical framework. Where this is articulated, it is mainly within the context of learning organisation theory (Woodcock and Gill 2014) or similar theories of reflective practice, including examples from Communities of Practice<sup>11</sup> (Boobis 2016; Cornes et al 2014) and Appreciative Inquiry (Quinney and Richardson 2014a and 2014b). All of these share a common thread which is the importance of reflection in the implementation as well as in the operation of PIE: indeed, Robin Johnson describes reflective practice as ‘the golden road to becoming PIE’ (Johnson 2013b, p213). Reflective practice is seen therefore as both a way of achieving better outcomes for service users, providing opportunities for development and, importantly, support for staff within a challenging working environment as well as a means of embedding learning from PIE and helping them to

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<sup>11</sup> These are discussed in Section 2.4.4 in relation to PIE as a systemic response.

navigate the process of change itself (Keats et al 2012; Scanlon and Adlam 2012; Cockersell 2018b). Implementing reflective practice itself, however, is sometimes described in a somewhat reductive way – i.e. in terms of number and length of sessions as well as debates about the advantages and disadvantages of external facilitation (Boobis 2016; Keats et al 2012; Scanlon and Adlam 2012). Reflection is also discussed in relation to leadership and management – sometimes framed as support – e.g. in terms of protecting / providing dedicated time and space for reflection, but also articulated in terms of mandating reflective practice, making it a non-negotiable aspect of staff practice (Birmingham Changing Futures Together 2019b). Unsurprisingly, this is not always welcomed by staff who reported finding it at odds with the underlying values of PIE and not conducive to building the trusting and safe environment generally agreed as being required for effective reflective practice (Birmingham Changing Futures Together 2019b; Keats et al 2012). The tension between the time required for reflective practice and the pressures on staff time in delivering services is indicated in a number of service evaluations (see, for example: Turley, Payne and Webster 2013; Birmingham Changing Futures Together 2019b; Westminster City Council 2015). The role of senior managers in protecting this space (discussed further below) is frequently indicated as a solution in these circumstances (Johnson and Haigh 2010; Breedvelt 2016)

There is broad agreement as to the need for PIE to be locally responsive, with ‘local’ generally used to mean the organisational level (Keats et al 2012; Boobis 2016; Breedvelt 2016); some also refer to the need for consistency in approach across the organisation and most implementations are based around training staff in a standard and consistent psychological framework, though tailored to the particular approach of the organisation, and with standard approaches to the practical arrangements for reflective practice. The lack of a standard version of PIE is seen sometimes identified as a strength – allowing it to be responsive to local needs and creating a sense of autonomy but it can also be experienced as a source of tension and uncertainty (Turley, Payne and Webster 2013). The importance of consistent approaches and levels of commitment across an organisation implementing PIE are also frequently indicated (Breedvelt 2016).

The way organisations become PIE tends to be differentiated either as part of an explicit (often top down) decision – sometimes as a result of external pressure from, for example, commissioners or in response to other organisations in the sector – or an organic process by which PIE evolves from existing ways of working (Cockersell 2018a; Keats et al 2012). The majority of the literature, unsurprisingly, relates to organisations which have specifically made a decision to become PIE and implemented a programme accordingly, therefore there is little about the experience of more organic approaches. One thing to note here though is that in the majority of examples, the organisations concerned all indicated that they already exhibited many characteristics of PIE. Thus, although the programme was a top-down implementation in most cases, it built somewhat organically on practice which was already there. This was seen as positive in that it provided reassurance of the overall quality of the service being provided and the feasibility of it as an approach, though it was also experienced as a barrier to implementation. Some staff for example were dismissive of the need to change, given that it was seen as what they were doing anyway, making them more challenging to engage (Westminster City Council 2015; Boobis 2016; Birmingham Changing Futures Together 2019b).

Importantly, the concept of implementation at all is contested. The PIELink website indicates the importance of PIE as a journey, rather than a destination and the tool created to assess progress - Pizazz – is focused on staff reflecting and assessing themselves on this journey (<http://pielink.net/pie-assessment/> Accessed 22/1/2021). This ties in with concepts of learning organisations and continual organisational reflection and learning which sometimes underpin the organisational approach (see above). However, similar to the discussion on top-down vs organic approaches, most examples in the literature have some concept of a specific and time limited programme implementation even where it is acknowledged that the process of learning and reflection is continuous. The Pizazz tool (and its online version the PIE Abacus) has been launched to help services evaluate their progress in becoming psychologically informed is intended to support this process of reflection, learning and inquiry (<http://pielink.net/pie-assessment/> Accessed 22/1/2021).

Though it is difficult to assess fully given the limited amount of detail on this aspect, most of the ‘implementations’ seem to be implicitly predicated on a fairly traditional

model of change. They usually involve some envisioning of a desired ideal and consistent model, led by senior managers and with planned steps towards that in the form of training and changes to working practices – such as the introduction or extension of supervision and reflective practice models. The importance of learning and reflection are foregrounded with a strong focus on reflective practice sessions with and between staff, but it is less clear how this learning is then translated into ongoing changes to the service. While there is acknowledgement of different mental models and beliefs amongst staff and indeed the importance of the model developing locally with staff, this is sometimes challenged by a focus on creating consistency, and in these circumstances diversity of viewpoints can sometimes seem to be presented as a barrier to be overcome (Boobis 2016).

Within most of the implementations there also seems to be an implicit belief that managers have a considerable level of influence – e.g. in protecting staff from conflicting pressures in their wider environment; as well as in inspiring, leading and delivering change. The extent to which managers of services feel equipped or empowered to do this is not generally discussed. Further, the experience of staff is sometimes at odds with this perception and the impact of the external context (for example in contractual targets or time limits on support) is often identified as a major challenge for staff.

The external context (the wider system in which an organisation operates), represents perhaps, one of the biggest challenges to the implementation of PIE. The impact of austerity on services, including cuts to provision, reductions in staffing, fewer resources available for training all have the potential to significantly impact on staff willingness and ability to engage in a change programme. Staff for example sometimes view activities which take them away from frontline service provision (such as training and reflective practice) as getting in the way of the real job of working with clients (Boobis 2016). While this view can be challenged by managers, it can be a hard mindset to shift in a context of over-stretched services (Rayner 2012). Consequently, it can be difficult to implement PIE in a fragmented system challenged by commissioners' targets and timescales which do not recognise the length of time it takes to build effective relationships (Reid 2018; Moss 2020). Similarly, an environment of cuts to services, and increasing pressure on provision is not necessarily conducive to creating

the comfortable, safe and trusting spaces needed for reflective practice. While assisting with coping with pressures and challenges is part of the aim of the reflective element of PIE – when a large part of this pressure is seen as beyond the control of the individual (or the service) it can become very challenging to implement.

It is perhaps unsurprising therefore that PIE has a place within larger programmes of system change. As shown earlier in this chapter, there is widespread understanding that the very concept of multiple and complex needs that the problems faced by people experiencing them are multi-faceted and emerge from a complex network of factors. Clearly PIE could never seek to be the only answer to these issues, and it is to its place in system change that this chapter now turns.

#### 2.4.4. PIE and system change

As indicated above, PIE is ubiquitous in the objectives of organisations in the current programmes of system change for multiple and complex needs. There is, however, a limited amount of literature on if, and how, PIE might constitute a systemic, as well an organisational, response or how implementing PIE might lead to wider, transformational systemic change of the sort described earlier in this chapter.

One of the ways in which PIE is seen as having the potential to create systemic change is in its implementation in multiple agencies. Boobis (2016) for example in her evaluation of PIE within a pilot project in the Fulfilling Lives programme suggest that its introduction on a wider scale would ‘change the dynamic’ (p.19) of the system by changing cultures of services making them more holistic and less risk averse, less likely to stigmatise or exclude and thus create more seamless care as service users moved between the agencies involved in their support. The agencies which are included when PIE as a systemic change is proposed as emanating from its wider rollout are not explicitly identified and what is included in the ‘system’ typically tends to be undefined in the literature. While it is assumed that it, at the very least, would include agencies from the four core areas of need, there is a lack of consensus about the appropriateness of PIE for some agencies. Those for which people with multiple and complex needs do not make up the majority of their client base or which do not typically undertake more therapeutic work with clients (for example Jobcentres or the police) do not often feature in the literature despite the frequent contact which people

with multiple and complex needs may have with these services. As indicated above (see Section 2.2), poor experience of services can result in disengagement and marginalisation which raises the question of whether poor experiences in one (non-PIE) area of the system attenuates any beneficial impact of PIE in another (psychologically informed) part of the system, thus reducing the overall systemic transformative effect. Some suggest that PIE is appropriate (and indeed recommended) for all organisations, not just those working specifically with multiple and complex needs (Everitt and Kaur 2019b; Walton and Walton 2012). However, others see it as requiring certain types of environments – i.e. ones which have an emotionally safe social environment or where there is appropriate opportunity, scope and time for staff to develop the necessary psychological understanding (Cockersell 2018a; Maguire, Johnson and Vostanis 2010; Johnson and Haigh 2010). Similarly, the extent to which the main user-base of the service has complex and entrenched needs or trauma is seen to be a factor in determining not just the applicability of PIE but also impacting on successful implementation. Boobis (2016), for example identified that the less severe the level of need or the less chaotic the lives of the service users, the more difficult it was to demonstrate the value and efficacy of PIE (a factor which was suggested was important in encouraging staff to buy in to PIE).

Further potential benefits were identified (even where other services were not necessarily PIE) in that service users who were (or had been involved with a psychologically informed service) might be better able to cope and less challenging in other (non-PIE) services (Edwards 2012). Equally, upskilled and better trained service staff (as a result of PIE) might also have the impact of reducing demand in other parts of the system as staff would be better able to cope themselves with challenging behaviours (Boobis 2016).

The creation of a common language and psychological understanding between services was also identified as a potential systemic benefit in that it could contribute to breaking down some of the barriers existing between staff in different organisations (Moreton et al 2018). Although not explicitly raised within the literature, and depending on what is meant by a common understanding, this could raise the question of potential area of tension between a commonality in approach and agreement on



(for example psychological approach) and the need for PIE to be locally (i.e. organisationally) driven and determined.

Although there are limited examples of any form of accreditation of PIE within organisations, one of the system change projects for multiple and complex needs has implemented a broader accreditation for multiple and complex needs friendly organisations which it identifies as being based on PIE principles (Blackpool Fulfilling Lives 2019); others are considering or attempting to make operating as a psychologically informed environment a requirement of services being commissioned (Hough 2017) in order to encourage services to become PIE. This again raises questions about possible tension with the underlying ethos of PIE as locally determined and which eschews a standard model and views PIE as a constant and ongoing journey.

#### *Training, good practice and communities of practice*

Implicit (and sometimes explicit) in the focus on PIE within a system change agenda – and a means of achieving the wider implementation described above, is via transfer of good practice. The thinking behind this is that agencies implementing it act as exemplars of good practice, demonstrating both its effectiveness and feasibility and thereby encouraging other agencies within the ‘system’ to use it. Boobis 2016 and Birmingham Changing Futures Together 2019b, for example, both cite the potential of the organisations implementing PIE acting as exemplars and learning to spread PIE more widely. System change programmes are also, in some cases, offering training in PIE as a means of sharing and transferring learning throughout the sector, as well as attempting to create Communities of Practice around PIE (and other areas).

The transfer of good (or best) practice emerged as part of the wider knowledge management movement and was widely promoted in organisations (particularly in the professional services sector) in the 1990s (Metaxiotis, Ergazakis and Psarras 2005) though has subsequently been subject to a more critical scrutiny. It assumes, for example, that there is a clear evidence base for what works which is often not the case in complex systems (Soubhi et al 2010). Similarly, centrally designed and provided training programmes may conflict with the local and reflective design which PIE is said to demand. The conceptualisation of multiple and complex needs as a systemic

problem, with uncertain and individual trajectories, and what some consider to be a lack of an evidence base for PIE may therefore be somewhat at odds with the concept of best practice (Cornes et al 2014; Maguire 2015, cited in Phipps 2016). Further, the concept of transferring of evidence between contexts is challenged by systems thinking in general and complexity theory in particular, given the importance of context (Chapman 2004). What constitutes good practice in relation to people with multiple and complex needs can differ depending on professional background (Cornes, Whiteford and Manthorpe 2015). Further, even if PIE is determined to be unquestionably beneficial, these approaches are predicated on what may be a flawed hypothesis that it is a lack of awareness rather than, for example, a lack of time or resource (particularly given the systematic cuts in service budgets due to austerity) that is the reason that agencies are not already implementing PIE (Cornes, Whiteford and Manthorpe 2015).

Communities of Practice are often seen as a more effective way of developing and supporting system wide learning and development of practice (including, but not limited to PIE). Communities of Practice, again, were a fundamental part of the knowledge management movement and are defined as: 'a group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise by interacting on an ongoing basis' (Wenger, McDermott and Snyder 2002, p.xii). While they can exist within single organisations, they can also offer a reflective space where staff from different organisations and different professional backgrounds can exchange and develop their learning and expertise. Although they have the potential to offer a more responsive, mutually created and reflective approach than, for example, good practice exemplars or centralised training, Cornes, Whiteford and Manthorpe (2015) indicated that some of the issues in relation to implementation of PIE also beset the community of practice. The inability of the community to influence wider structural (and seemingly intractable) issues which create and sustain the issues facing those with multiple and complex needs limited its usefulness. The interprofessional aim of bringing different professions together can also be challenging and the utility of communities of practice can be limited when there are gaps in personnel meaning that key agencies (e.g. adult social care, mental health, and local authority housing staff) are missing (Cornes et al 2014; Cornes,

Whiteford and Manthorpe 2015) – a problem which has beset system change for multiple and complex needs and identified within this research.

### *Psychologically Informed Commissioning, Complex Commissioning and Enabling Environments*

As indicated above, the experience of implementing PIE or similar approaches is that they require a different type of commissioning which recognises the difficulties of achieving outcomes, the non-linear trajectory of recovery and the length of time needed for building trusting relationships. The wider commissioning context therefore impacts both on the ability for individual agencies to operate in a more psychologically informed way and the ability of the implementation of PIE to lead to more systemic change. This has led to an increasing interest in extending the psychological approach beyond service provision to commissioning (Cockersell 2018b; Liverpool Waves of Hope, no date). This is not just reflected in the explicit reference to the importance of a wider system (i.e. beyond the organisation implementing PIE) in the most recent iteration of PIE, but also in (albeit as yet fairly limited) calls for psychologically informed or complex commissioning.

Cockersell 2018b suggests that although PIE itself is not directly transferable to commissioners, the concept of Enabling Environments (which influenced the initial development of PIE) could offer a suitable framework for a more creative, responsive approaches to service design and commissioning. Enabling Environments are described by Cockersell (2018b) as both a quality assurance framework and a conceptual one - the latter aiming at providing an ethical framework creating services which are responsive and humane. They focus on relationships between stakeholders, all of whom are equally valued, transparent and accountable leadership, shared accountability for both individual contributions and the overall environment, value flexibility and creativity and encouragement of communication and understanding (Johnson and Haigh 2010; Cockersell 2018b). These principles, he argues, could be used to design the overall system with PIE used to design service delivery. Although not explicitly linked to Enabling Environments, Johnson (2013b) makes similar calls in his suggestion for more psychologically informed commissioning whereby commissioners and providers work together with service users and other stakeholders to reflect on and identify shared aims and strategies, sensible pathways between and

within services, in a non-competitive, collaborative way. More recently, via the PIELink site, Johnson has been supportive of complex commissioning as a way of achieving this – which he describes as a whole systems approach

<http://pielink.net/evaluation/whole-systems-evaluation/> (accessed 21/01/2021).

Complex commissioning for multiple and complex needs is one of the aims of Collaborate for Social Change (a community interest company which aims to support collaborative working in public services) and Northumbria University. Essentially, complex commissioning seeks to recognise complexity both of the individual and the systems in which they operate, and the interdependence involved in the creation and sustaining of issues such as multiple and complex needs (Lowe and Plimmer 2019; Davidson Knight et al [no date]). The approach that Collaborate and Northumbria have developed is based in Human, Learning, Systems (HLS)<sup>12</sup> which explores the principles, cultures and processes which respond to the complexity within public services (Lowe, French and Hawkins 2020). It explicitly recognises complexity and diversity of need, focuses on strengths and building trusting relationships at all levels, including between commissioners and services (Human); adapts and responds to individual needs with commissioning based on learning and improvement rather than narrow specifications and (rigid) performance management (Learning); and recognises that what happens to an individual and the outcomes they achieve is the product of a whole system and thus is a joint and collective responsibility of both purchasers and providers (Lowe and Plimmer 2019). Inherent within this approach is a recognition of the complexity of the issues and the interdependence of commissioning and service delivery and the potentially unhelpful way that current commissioning systems operate.

## 2.5. Concluding comments

This review has critically examined the literature to provide a contextual and descriptive background to the main focus of this research: multiple and complex

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<sup>12</sup> HLS has since widened in scope to include, not just funding and commissioning, but management of public services more broadly. It aims (via an engagement with complexity) to bring together academic theory and practice and is a collaborative approach to engage organisations globally in an alternative way of thinking about and engaging with public management and theory (Lowe et al 2021).

needs, system change and PIE. In so doing, it has identified a number of gaps in the literature to which this thesis aims to respond.

The complexity of the issues relating to multiple and complex needs, the need for systemic change and the difficulties of achieving this are increasingly well-articulated in the literature. This is largely via the growing body of practice literature and evaluations which explore system change in this context, mostly as a result of the efforts of MEAM coalition, the National Lottery Fulfilling Lives programme and the work of Lankelly Chase. There is, however, a less well-developed body of literature which provides a theoretical basis for understanding the experience of system change in this context.

While core concepts and characteristics – such as system change, transformation, and even system itself – are widely used, they are rarely clearly defined and often implicitly suggest a homogeneity which is challenged by the findings of this research. Further that such differences are important factors in what happens within system change projects is also not widely explored but forms a significant part of the findings in Chapters 5 to 7.

The need for complex problems to have complex and systemic solutions has received some attention in the literature, and PIE has been posited as potentially offering such a solution. However, there is no research which explores this in the context of an implementation of PIE rather than as a more abstract concept. This is an important consideration in the light of PIE's increasing ubiquity within the homelessness sector and within system change programmes for people with multiple and complex needs. As will be explored in later chapters of this thesis, this research suggests that there is a potential for some of PIE's inherent potential as a complex response to be attenuated in practice.

This aim of this research then is to: supplement existing practice and evaluation literature reviewed above in relation to the experience of system change for people with multiple and complex needs; and to provide a potential theoretical basis for this experience, enabling novel insights into said experiences. It also seeks to apply complexity theory to the practical implications of implementing PIE and the impact of

this on its capacity to offer an appropriately complex response to the problem of multiple and complex needs.

Its final contribution is to build on the limited amount of empirical research which applies complexity theory (Thompson et al 2016) which is itself multiply defined and under-developed. The next chapter will therefore complete the contextual review for this research by exploring the literature relating to this theoretical framework.

## 3. Chapter 3: Theoretical framework - complexity theory

### 3.1. Introduction

My interest in the application of complexity theory as the theoretical basis for this research has been driven by its potential to deliver new insights into system change for inherently complex social problems such as those facing people experiencing multiple and complex needs which transcend perceived bureaucratic and geographical boundaries (OECD 2017). The theory is itself a complex hybrid of approaches and it is important therefore to be clear about how the theory developed, in what ways it has been used and exactly which model of complexity theory (among the many that exist) is being used as the basis for this research. This chapter therefore aims to:

- Outline the origins of the theories
- Examine the key concepts associated with the theory and determine the model of complexity theory which is being used for this research
- Explore how the theory has been applied to increase understanding of processes of change
- Explore the strengths, weaknesses and challenges of the theory

### 3.2. Origins of complexity theory

Perhaps the first thing to note is that it is generally accepted that there is no single, unified theory of complexity (see, for example, Gilpin and Murphy 2008; Stacey, Griffin and Shaw 2000; Preiser 2019). This, in no small part, contributes to the difficulties of accurately charting its development and its application in the study of system change. It is perhaps unsurprising, when one considers the fundamental principles on which complexity theory is based, that Preiser (2019), for example, indicates the impossibility of identifying the precise time and process by which it came into being. It has typically been understood as 'an amalgam' or a 'hybrid', coming from many scientific disciplines, though with a perceived commonality (Thrift 1999, p.33). In spite of the multiplicity of variants of the theories, they have in common a shift in thinking away from reductionist and deterministic approaches which assume a level of predictability between inputs and outputs and a linearity of cause and effect and towards an understanding of the behaviour of a system as the result of the interaction of its

elements which is not predictable from an understanding of its component parts (Thrift, 1999; Kernick 2006).

It is helpful to attempt to briefly chart the origins of complexity theory to provide a contextual understanding of its development. It is generally regarded as having originated in mathematics and the natural sciences and, in particular, to have emerged from chaos theories in the 1960s and 1970s, developing via Prigogine's work on dissipative structures and the work of the Santa Fe Institute on complex adaptive systems (Capra 2005; Waldrop 1992; Stacey, Griffin and Shaw 2000). While these are commonly identified as direct influences on the development and application of complexity theory across the range of disciplines, its antecedents are often seen as far more historic and wide-ranging than this might suggest. Gare (2000), for example suggests that the theories share similarities with views expressed by 'anti-reductionist' thinkers in the natural sciences (p. 334) over the past 200 years: Byrne and Callaghan 2014, for example, identify concepts akin to complexity, in the responses to Darwin's evolutionary theories in the late 19<sup>th</sup> century, while Boulton, Allen and Bowman (2015) cite (among others) the pre-Socratic influences of Daoism. For Boulton, Allen and Bowman (2015), the principal difference between these early influences of complexity theory and the development of the theory itself is that the former described and understood the world as complex but complexity theory has the potential to offer an explanatory framework for how variation in systems occurs.

Chaos theories emerged during the 1960s and 1970s with the work of Edward Lorenz, a meteorologist whose work described how small variations in initial conditions could lead to major impacts on weather patterns – the so-called 'butterfly effect'. Lorenz's work indicated the importance of small variations in outcomes and the resulting impact on the feasibility of long-term predictions (Gleick 1987; Trenholm 2012). This challenge to existing scientific orthodoxies of linearity and predictability impacted across mathematics, physics and biology (Capra 1996). Work by Prigogine (for which he won the Nobel Prize in 1977) in the field of thermodynamics introduced some of the core concepts which we now see in complexity theory - for example, the idea of self-organisation and its ability to lead to both order and transformation (Trenholm and Ferlie 2013). Prigogine observed that structures are maintained by energy passing from outside the system, this energy means that they pass through unstable states



until they reach a bifurcation point. At this point, a different structure will be created and, importantly, it is a structure which cannot be predicted from its previous state (Burnes 2005). Crucially, the work of Prigogine challenged the underlying assumption in Newtonian physics that systems were closed and he demonstrated that in systems that are open to external influences new systems and patterns can emerge (Boulton, Allen and Bowman 2015). It was, however, the establishment of the Santa Fe Institute in the 1980s that captured the attention of scholars of organisational and social sciences. The aim of the Santa Fe Institute was to establish a multi-disciplinary study of complexity across natural, physical and social sciences and it was the Institute which coined the term Complex Adaptive System (discussed in Section 3.4) which foregrounds the importance of ways in which elements of the system adapt as a result of their interaction with other elements. This includes the work of Stuart Kauffman (2000), an evolutionary biologist who challenged concepts of natural selection, highlighting the importance of self-organisation and the evolution of complex adaptive systems to a state between order and chaos (see Section 3.5.3) (Waldrop 1992).

Given its focus on system change, particularly important for this research is to differentiate between systems theories and complexity theories. The move within organisational and social sciences towards thinking in more systemic ways as a way of addressing complex social problems is in large part drawn from system theories in their various forms but, like complexity theory (which is sometimes seen as a branch of systems theory), they themselves are far from a unified body of thought (OECD 2017). It is beyond the scope of this chapter to detail the origins and development of systems theories which, as indicated above, are as multi-faceted as (and inter-related with) those of complexity theory. What is of most interest here is their point of divergence from complexity theories.

Complexity theory, for example, is inherently systemic in that it sees the world as interconnected, greater than the sum of its parts and both complexity theory and systems theories stress the importance of inter-relatedness within the system and between the system and its environment (Burns 2007; Lowell 2016). While they overlap, share common features and have influenced each other, it is important to note the differences between them. Phelan (1999) considers that systems theory focuses on optimising and confirming the relationships between parts of the system

whereas complexity theory is more exploratory in nature, seeking to understand the influences and interactions which determine the system behaviour (Thompson et al 2016). This unpredictability is of particular interest in the orientation of this research which draws, among others, on the work of Stacey and for whom this unpredictability is a crucial point of difference between complexity theory and systems theories. For Stacey, this differentiation is not always maintained and one of his critiques of many applications of complexity theory is that they sit within a systems theory teleology and thus implicitly (if not explicitly) retain concepts of predictability (Stacey, Griffin and Shaw 2000). For Stacey and colleagues, much of the way that complexity theory is applied within organisations implicitly assumes that the end state is already known and can be influenced by managers to achieve or sustain an optimal state or pre-defined ends (Stacey, Griffin and Shaw 2000; Mowles, Stacey and Griffin 2008). Further, predictability is not just an important distinction between systems theories and complexity theory but also within complexity theory itself and the following section looks at this in more detail.

### 3.3. Restricted and general complexity theory

While this brief overview begins to demonstrate the multiplicity of influences on the development of the theory, the literature also identifies an important distinction between different approaches. Essentially, this difference is articulated as a divergence between general and restricted approaches (Cilliers 2010). Within this distinction (originally made by Morin and following the distinction of George Bataille between restricted and general economies (Woermann, Human and Preiser 2018)), restricted complexity theory (sometimes also referred to as reductionist complexity theory - see for example Gilpin and Murphy 2008) is predicated on an underlying belief that complex systems can ultimately be reduced to a set of general laws, that they can be modelled, and therefore that ultimately some level of prediction and forecasting is (at least theoretically) possible (Woermann, Human and Preiser 2018). For Cilliers (2010) and Woermann, Human and Preiser (2018), these approaches are based on three underlying principles: determinism – i.e. that we can predict and determine the current future state of a system from examining its current state; reductionism – that we can derive an understanding of the whole system from an examination of its components, and disjunction – that disciplines are cognitively separate from each

other. Restricted complexity theory uses quantitative methods, and computer-based/mathematical modelling epitomised by much of the work of the Santa Fe Institute and facilitated by the increased potential of computers in general and artificial intelligence in particular (Trenholm 2012; Houchin and Maclean 2005). Within human or social systems, they acknowledge that human agents are aware of themselves or their actions but suggest that there are commonalities which can potentially be reduced to a few 'prototypical' behaviours (Miller and Page 2007, p. 28).

General approaches (sometimes referred to as connectionist, transformative or as complexity-based thinking - see for example Houchin and Maclean 2005; Gilpin and Murphy 2008; Walby 2007) are more concerned with relationships and connections. This school is more focused on understanding principles of change and novelty and is more concerned with the connections and inter-relationships within systems. While some believe that general tendencies can be observed in these systems, their focus is on observing the constant evolution, adaptation and reflection of human agents who are able to reflect on their own behaviour and that of others. General complexity theory does not seek to reduce the complexity but rather acknowledge it such that any understanding or modelling of the system is considered to be contingent and partial (Woermann, Human and Preiser 2018). General complexity theorists do not typically argue that modelling is unnecessary or undesirable, nor are they against planning, rather they suggest that any such activity needs to recognise that there is a level of reductionism inherent in any such activity, and the particularity of any system and as a result, be cognisant of the provisional nature and partiality of such activities (Boulton, Allen and Bowman 2015; Cilliers 2000)<sup>13</sup>.

This distinction between restricted and general complexity is considered by some to be overstated. Walby (2007) for example articulates the focus of the (restricted) Santa Fe school as being on the internal workings of the system while the more general or transformative approaches focus on the external – i.e. the context, relationships and interconnections between elements of the system. She also indicates that the two

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<sup>13</sup> Gilpin and Murphy (2008) also identify a third strand, citing Introna, which challenges the idea that concepts from the natural sciences can be easily transferred into the social sciences but identifies a use for them as metaphorical devices. (See Section 3.7 for a further discussion of this issue).

share a common language of concepts – e.g. relationships, emergence, self-organisation, non-linearity, historicity, co-adaptation. Rather than see them as conflicting or competitive, Walby (2003) suggests that they are complementary and that complexity theory has the capacity to bridge the gap between ‘the tension between the search for general theory and the desire for contextual and specific understanding’ (p.1)

Further, many researchers in the field do not explicitly acknowledge this supposed differentiation or place themselves or their research in such categories. Even where they do align their research in one or other of the schools, there remain differences in the way they understand and operationalise the theories (Murray 2003). Neither is there a hard and fast division between the two approaches: some restricted approaches for example take a more reductionist position than others (Byrne and Callaghan 2014). Within and between restricted and general complexity are also incorporated different (though often unstated) ontological and epistemological positions. Within what could broadly be described as the general school, Cilliers (1998) and Woermann, Human and Preiser (2018) for example, locate their thinking within a ‘critical complexity’ framework. They view complexity not just as rendering impossible access to an objective reality (which they describe as an epistemological concern), rather they think that a simple reality does not exist due to the absence, within complex systems, of a central organising principle. For them this does not imply the necessity of taking a relativist position, rather they consider it emphasises the importance of a greater sense of modesty and self-criticality in what we observe within systems and the assumptions we make.

Although they do not explicitly locate their work as either restricted or general complexity theory, this call for greater modesty and less hubris is also apparent in the work of Boulton, Allen and Bowman (2015). Although Allen (one of the co-authors with Boulton, Allen and Bowman 2015) is sometimes located with a more restricted school (Byrne and Callaghan 2014) he worked closely with Prigogine in his work on thermodynamics whose work, despite its location within the physical sciences, is also commonly seen to fall within a more general transformative approach as a result of its emphasis on the myriad and unpredictable ways in which the system can move (Stacey 2001). Stacey views his own version of complexity theory – that of complex responsive

processes - as being thoroughly located in a general, transformative approach, but, more radically, in his later work eschews the concept of a system altogether. Byrne and Callaghan (2014) locate their version of complexity theory in a critical realist paradigm, a connection first made by Reed and Harvey (1992) and discussed further in relation to the ontological and epistemological orientation of this research in Chapter 4.

It is certainly true that there is a great deal of commonality between general and restricted complexity theory, particularly in their terminology, and that the distinction between the two approaches is not always clear-cut or easy to discern. The variety of ontological and epistemological positions they encompass impact on the way that terms and concepts are used, understood and operationalised. It is important, therefore, to be clear about the influences on this research. It is located within a general, transformative approach which holds that the importance of human agents within organisations and systems and their innate capacity for reflection and adaptation, indicates the particularity of system behaviour and the unfeasibility of more restricted approaches which attempt to model and predict human behaviour from which can be determined or created a knowable future state (Trenholm 2012; Stacey 1995; Cilliers 2010). What is true of the natural and physical sciences in terms of modelling complexity is not necessarily easily transferable to human agents who have the capacity to choose and reflect on their own schema or patterns of behaviour; whose behaviour is affected by power imbalances and their own hopes, fears and aspirations and able to recognise and reflect on the overall system to which they belong (Thompson et al 2016).

Considerations of general vs restricted and ontological and epistemological positions, however, are not the only challenges of applying complexity theory in this research. There is a plethora of approaches and there is additional complication as a result of the aforementioned overlap in the use of terminology. This means that there needs to be clarity, not just about what terms are being used but of their precise meaning when used within a general, transformative approach. One significant (and, in many cases, justified) criticisms of research using complexity theory is that terms are transferred from the natural to the social sciences without due regard for their precise meanings

or the ontological implications of treating people as no more than natural phenomena (see, for example, Price 1997; Tsoukas 1998).

### 3.4. Defining complex systems

Before beginning to detail the exact model of complexity which is being used in this research and how it fits within the context of systemic change, it is helpful to consider what is considered to constitute a complex system, and to make a distinction between this, the merely complicated, and the more general definition of the words 'system' and 'complex'. While Abercrombie, Harries and Wharton (2015) point to a number of different interpretations, most definitions include concepts of interconnection and encompass a notion of these elements coming together to form an interconnected whole usually to serve a particular purpose or function. Systems can vary in size and be nested within other systems (Kreindler 2019).

Not all systems however are necessarily complex and the distinction between, for example complicated or complex is not always easy to make (Cilliers 2010). Simple or complicated systems have a greater amount of homogeneity, operate independently, behave in a linear way, and, as such are predictable. Complex systems on the other hand are heterogeneous, adaptive, non-linear, unpredictable and with a high level of interdependency (Finegood et al 2014; Miller and Page 2007).

As indicated above, the Santa Fe Institute is thought to have coined the term complex adaptive system to encapsulate the adaptation which takes place when the actions of one part of the system change the context for other parts of the system (Plsek and Greenhalgh 2001). While it is sometimes described as a restricted approach (Trenholm 2012), it is commonly referenced in the social and organisational sciences even when the research itself does not necessarily fit within the restricted definitions of complexity theory (or more often, is not explicitly stated). Within general approaches to complexity theory, some prefer the term complex systems to complex adaptive system (see for example Cilliers 2010) though there is often commonality between the two. Most definitions, for example, agree that they are open, that they consist of a large number of elements, that these elements interact with each other and that these interactions create the behaviour of the system reinforced or negated by positive or negative feedback loops. While there is a high degree of commonality of definitions of

complex systems, the particular differences of human systems with capacities for reflection and intentionality, have resulted in some divergence these definitions. These represent attempts to capture more fully the complexity of human systems. Eve Mitleton-Kelly of the Complexity Research Group at the London School of Economics, coined the term Complex Co-evolving Systems (building on Peter Allen's description of Complex Evolving Systems) to better capture the capacity to learn, the intentionality and reflexivity of people within human systems.

The term complex system/complex adaptive system has been used to describe individuals, as well as organisations and group/networks of organisations as in this research (see for example: Cockersell 2018b; Styrhe 2002; Waddock et al 2015). However, the concept of system within complexity theory is not uncontested, given that, for some, it has implications of a boundary and consequently elements which are inside and outside of the 'system' (Stacey 2001). Thus, a more significant divergence within the literature on organisations is in the extensive work of Ralph Stacey and colleagues at the University of Hertfordshire. Stacey's original interest in complexity theory started with complex adaptive systems but in his later work, his focus (and that of his colleagues) has been on what they refer to as complex responsive processes. In this, they reject the idea of a system at all, suggesting that it is a reification of what is essentially a responsive process of human interaction (Stacey and Mowles 2016).

Within this research, I take the more commonly held view that the term complex system is a helpful, if pragmatic and somewhat artificial, construct. Although as indicated above, complex adaptive system definitions overlap considerably with broader definitions of complex systems, the term complex adaptive systems is often associated with more restricted versions of the theories. Thus, the model used in the research incorporates some of the thinking of Stacey and colleagues (see for example: Stacey, Griffin and Shaw 2000; Stacey and Mowles 2016) in relation to the distinct teleology which differentiates complexity theory from other (e.g. systems) theories. However, in order to situate the research within the existing body of literature on system change and complexity theory it also seeks to draw on a wider consensus (see Section 3.5) and thus the more general term 'complex system' will be used in this research context. The definition of complex systems which is applied here, therefore, considers them as open, sensitive to their context and their history, consisting of a

large number of elements which dynamically interact and respond to each other in a non-linear way which determines the behaviour of the system (Boulton, Allen and Bowman 2015, Cilliers 2000). It is also helpful to consider here concepts of holism, a predominant feature of a complex system which means that the whole is greater than the sum of its parts (Holland 2014). This irreducibility means that any attempt to break it down into its component elements loses an understanding of its essential nature (Cilliers 1998). Of course, this itself makes undertaking practical research using complexity theory particularly challenging and inevitably leads to a degree of complexity reduction (discussed in Chapter 4). It is also somewhat artificial to separate the definition of a complex system from the model itself and thus these concepts are further explored in the section below.

### 3.5. Model of complexity theory

Notwithstanding the variety of models of complexity theory and the lack of a single, coherent framework for researching social and organisational sciences using the theories, there is a degree of commonality in the concepts used and these have formed the basis of the model used in this research. The model for this research is therefore based on the following five core concepts: ***non-linearity; openness; self-organisation and emergence; context; and relationships, interactions and interconnections*** which are defined in detail below.

The selection of these concepts was informed by a number of studies which reviewed the existing literature to identify the core, most commonly used concepts within the social sciences. These include recent attempts to scope and consolidate approaches to the theories such as Thompson et al's (2016) scoping study of complexity theory in health; Wallis's 2008 mapping of concepts in complex adaptive systems and, more recently, Preiser's 2019 review of trends in complex systems research. Thompson et al (2016) for example identify an overlap between their findings in health systems research and those of Wallis (2008) in organisational research. Thomspen et al (2016) found that concepts such as self-organisation, emergence, non-linearity, feedback loops and relationships / interconnections, alongside diversity were the most commonly identified concepts. Preiser (2019) identifies six principles of complex systems which overlap with those identified by Thompson et al 2016: that system



behaviour emerges from the relationships of the different parts of the system which mutually influence each other; that they adapt and self-organise in relation to changes in their environment; that they are dynamic and non-linear making them unpredictable; that how the system behaves is contingent on its context; that they are open with no clear boundaries and that they exhibit emergent phenomena. Preiser's two additional concepts – openness and the importance of context and environment are generally (if sometimes implicitly) included as significant concepts in organisational and social sciences research in complexity which is broadly located (as is this research) in the general approach (see for example: Cilliers 1998; Boulton, Allen and Bowman 2015; Van Uden, Richardson and Cilliers 2001) and thus these have also been included in the model for this research.

Although for clarity, these concepts are identified separately, it should be noted that these concepts overlap and interconnect with each other. Further, and importantly, Durie, Lundy and Wyatt (2018) offer a more nuanced understanding of a number of features of complexity suggesting that these do not necessarily exist in diametrical opposition (e.g. open vs closed) but rather may fluctuate over time.

### 3.5.1. Non-linearity

Non-linearity is at the core of the unpredictability identified as a core feature in complex systems (Thompson et al 2016). While, within a linear relationship between two elements, changing one results in a proportional change in the other, in non-linear relationships a small change in one element could lead to a large change in the other (or vice versa). This makes prediction problematical as it is not possible in non-linear relationships to predict what impact changing one of the variables will have (Finegood et al 2014). The complexity of the system and the interaction and dynamic actions of the elements within it mean that a small perturbation in the system can have a large impact on the behaviour of the system whereas a large perturbation can have virtually no impact (Tsoukas and Hatch 2001). As indicated above, it can be difficult to separate concepts within complexity theory: Cilliers (2000), for example, links concepts of non-linearity to the history of the system which, along with the context affects how a system responds – the same input may have a different result depending on the history and context; while for Preiser (2019), non-linearity is described as part of a web of complex causality which results from the inter-

relationships and dynamic interactions of a complex system. This complex web of causal relationships dynamically responds to negative and positive feedback within the system. Non-linearity by definition gives rise to feedback (Boulton, Allen and Bowman 2015) as parts of the system interact with each other. These feedback loops exist both as negative and positive influences on the system. Negative feedback loops suppress actions within the system serving to maintain the status quo or stability within the system while positive feedback loops amplify and accentuate them, promoting change or instability (Stacey 1995; Miller and Page 2007; Lauser 2010). It is important to note that negative and positive in this context carries no implication of good or bad, desirable or undesirable. Further, within human systems what acts as a positive feedback loop for one person or set of circumstances, can act as a negative one in others. Houchin and Maclean (2005), for example, in their four-year study of change in a public sector agency in the environmental sector found that some actions (e.g. in relation to changes in staffing/organisational structures) acted as a positive feedback loop at some levels in the organisation (amplifying change efforts) while operating as a negative one (suppressing change) at others.

Non-linearity has been identified in a number of studies examining complexity theory in organisations/social systems which are relevant to this research. Trenholm (2012) for example identified non-linearity in a chance encounter between two healthcare professionals leading to a significant change in the way that socially excluded TB patients were treated; Beeson and Davis (2000) identified it in relation to the diversity of ways in which individuals within an organisation responded to a change initiative; while others, for example in healthcare settings have observed non-linearity in the lack of impact of major infrastructure investment or in reactions to changes in staffing / leadership (see for example: Plsek 2001; Anderson et al 2005).

### 3.5.2. Openness

That systems are open is an inherent property of a complex system. They affect and are affected by their environment (Walton 2014), and this makes it impossible to establish where the system begins and ends. This interaction between system and environment mean that the system cannot be understood in isolation from its environment (Cilliers 2010). System boundaries are not a fixed, concrete entity but a

function of the perspective of the observer (Kernick 2006). As Van Uden, Richardson and Cilliers (2001) put it:

‘Boundaries are not as much features of the system itself as they are the result of the act of framing by the observer.’ (p 63)

Actors within the system under investigation will be part of many different systems, some of which overlap with each other; and membership of systems is dynamic and changes over time (Plsek and Greenhalgh 2001; Waddock et al 2015). This openness means that system needs to be understood in its context (Cilliers 2000) which is discussed in more detail below (see Section 3.5.4).

While critical to the understanding of complexity theory, this openness presents particular challenges when applied to research in the real and social world. Cilliers (2010) for example acknowledges the need to put boundaries around things and ‘frame the problem in a specific way’ P 41. Within research in organisations, while the organisational boundary is typically recognised, the importance of the wider context is stressed and thus there is considerable overlap between this and the concept of context discussed later. Mitleton-Kelly (2018), for example, describes a ‘multi-dimensional problem space’ which includes a cultural, political and economic context; Miller and Appleton (2015) cite the importance of the wider (in this case) commissioning context in their study of complexity in multiple and complex needs. Plsek and Greenhalgh (2001) use the term ‘fuzziness’ in their depiction of the complex interplay of factors (e.g. genetics, lifestyle, environment) which (in their example) causes disease. Similarly, in a policy context, Eppel, Matheson and Walton (2011) point to the artificiality of boundaries and the importance of exploring the nature of the boundaries between individuals, groups and organisations and how these are created and sustained.

This version of complexity theory used in this research does not go as far as Stacey in using a model of complex responsive processes which dispenses with the concept of a system altogether. It recognises the openness of the boundaries of system but also responds to pragmatic considerations common to much research: the constraints of time and resource and the need to frame the research problem. Further this research is located within a system change project with an implicit conceptualisation (at a

strategic level) of a bounded system<sup>14</sup> which stakeholders were aiming to change. The important common point here is to acknowledge this and reflect the resulting differences and partiality of what is being observed.

### 3.5.3. Self-organisation and emergence

This section discusses the core concept of self-organisation alongside emergence as it is difficult to separate them. Indeed Goldstein 2018 suggests that the two are often (though incorrectly) used synonymously. Essentially emergence describes the new or novel behaviours which emerge as a result of self-organising interactions of different parts of the system (Cohen, Manion and Morrison 2017; Colón-Emeric et al 2006). It describes irreversible changes in the system which are affected by, become part of, and in turn affect, the way it evolves (Mitleton-Kelly 2006).

Self-organisation is the spontaneous interaction of actors or agents within the system (Stacey 1995). It is what happens as a result of actors within the system changing and adapting their behaviours in response to the actions of others within the system (Anderson et al 2005). The crucial point of self-organisation is that actors within the system are acting and reacting as a result of interactions with other parts of the system locally, rather than in response to an overall plan or central direction (Houchin and Maclean 2005; Stacey 1996). An important consideration is the importance of human agency and autonomy: individuals within a system may have different interpretations of the rules and thus the relationship between rules and system behaviour is more complex (Stacey 2001). These rules are often implicit; they are not restricted to the explicit rules which appear to govern a system. The rules which drive the behaviour of the system in complexity theory therefore are likely to include internalised mental models of individual actors which may not be clear to, or articulated by, those holding them, nor to other individuals within the system (Plsek and Greenhalgh 2001). Further, there are constraints (for example: power relationships, hierarchy and resources) which exist within the system and agents within the system both operate within constraints and constrain each other (Stacey and Mowles 2016).

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<sup>14</sup> Although, as we will see in later chapters, there was no consensus amongst participants about the boundaries (or even the existence of) the system they were aiming to change.

While what emerges as a result of self-organisation is unpredictable (Stacey 2000) and may lead to transformation this is influenced by history and context, and it may also result in a resistance to change and maintenance of the status quo (Boons et al 2009; Trenholm and Ferlie 2013; Rhodes et al 2011). It is sometimes seen as arising in response to a system being in a state of disequilibrium - sometimes called 'the edge of chaos' (Burton et al 2019; Trenholm 2012). The edge of chaos is a term coined by Chris Langton in his work at the Santa Fe Institute in the 1980s (Waldrop 1992) in his work with cellular automata which identified a 'phase shift' (i.e. a change from one form to another) between order and chaos (Boulton, Allen and Bowman 2015) and further developed by Kauffman (2000). When there is little diversity, few connections and little in the way of flow of information, the system will be stable and thus predictable; it is, however, unlikely to be able to react to changes in its environment which is likely to lead to stasis and a low chance of survival (Stacey 1996). Conversely, if the system is too unstable, it will be thrown into chaos; the edge of chaos therefore represents the place where the system exhibits the optimal conditions for innovation and survival (The Health Foundation 2010; Burnes 2005).

The edge of chaos was popularised within the management literature during the 1990s where it was promoted as the optimum state for an organisation (Boulton, Allen and Bowman 2015). However, even were there agreement that such a place of balance between control and chaos exists in human systems, the extent to which this can be created by managers or leaders is thrown into question by the lack of complete control implicit within complexity theory over the outcomes of actions (Macintosh et al 2006; Boulton, Allen and Bowman 2015). Similarly, the edge of chaos and self-organisation are seen as positive states for human systems to aspire to but some research has suggested that there is no certainty that self-organisation or the edge of chaos either lead to change or that any change which does ensue is necessarily beneficial (Macintosh and Maclean 1999)

#### 3.5.4. Context, history and environment

The term context here is used in a broad sense to capture both the system's environment as well as its history. Of course, context is inextricably linked to openness and the concept of system boundaries. If complex systems are open then what is context/environment is necessarily as subjective and provisional as the system itself.

Thus the conceptualisation in this research of 'system' as a pragmatic, if artificial and subjective phenomenon also applies here.

What happens to a system and how it responds is determined not just by the context but also by its history (including the memories of individuals and organisations, shared cultures and rituals) (Gilpin and Murphy 2008). While the history of the system is seen as being an important influence on its future behaviour, this does not make such behaviour predictable (Cilliers 1998). The inter-connections and inter-relationships can result in different outcomes even if the context and sequence of events appears to be the same:

'...the way change happens and the way the future emerges is dependent on the detailed and particular events and patterns of relationships and particular features in the local situation. By generalizing we *risk* throwing out the very information that sheds light on why things happen and what might happen next' Boulton, Allen and Bowman 2015, p.8

Boulton, Allen and Bowman (2015) also link this to path-dependency, which is to say the specific way in which the system develops including the sequence in which events actively, irreversibly and dynamically influence (and are influenced by) the trajectory that the system takes (Eppel and Rhodes 2018; Burton et al 2019; Waddock et al 2015). Thus, what happens (the outcomes) of interventions depend not just on the current conditions but also on historical decisions and these can also constrain or enable future actions (Marchal 2014). The importance of previous, past experiences on the present and the future manifests itself at the individual as well as the organisational level (Tsoukas 1998).

### 3.5.5. Relationships, interactions and interconnections

Interconnectedness of the system is at the core of complexity theory. When one part of a system does something, that affects and influences other parts of the system which in turn impacts on the first part (Waddock et al 2015). The behaviour of the system is not predictable because it is this dynamic interaction of agents within the system which creates the emergent behaviour (Durie, Lundy and Wyatt 2018). There is a high degree of consensus within the literature that understanding relationships and connections between parts of the system is more important than the components

themselves (see for example: Plsek and Greenhalgh 2001; Anderson et al 2005; Thompson et al 2016).

All three terms (relationships, interactions and interconnections) are used within the literature but they all generally describe the same characteristic – i.e. the importance of the interaction of different agents within the system in driving the behaviour of the system as a whole. Stacey (1995) indicates the importance of the number of connections within the system as this determines the level of stability and change within the system. He argues that where interconnections are few, then the system is more stable and can become stuck in particular patterns of behaviour, where there are too many connections, the system is more subject to change and patterns can be difficult to detect. Importantly, these interactions do not necessarily come from formal organisational structures but include the more random interactions that occur with different people interacting with different parts of the system depending on what they are doing. There needs to be sufficient diversity for the agents within the system to encounter difference but this needs to be balanced by a level of similarity (redundancy) to allow for meaningful interactions to take place (Davis and Sumara 2006). This balance is required to ensure that systems can manage the competing pressures of being able to operate in the present and be sufficiently adaptive to respond to new challenges (Levin et al 2013).

The model of complexity theory used for this research then, incorporates five key concepts: non-linearity; openness; self-organisation and emergence; context; relationships, interactions and interconnections. The following section applies these concepts, using examples for the literature to explore what the application of these indicates for a complexity informed understanding of the processes of change which will be used for this research.

### 3.6. Change and complexity theory

One of the purposes of this research is to analyse the experience of change observed empirically in the forthcoming findings chapters via the theoretical framework of complexity theory. Part of my personal interest in using complexity theory in this way comes from my own experiences as a change management consultant and senior manager as well as a later career evaluating criminal justice policy and practice

interventions and thus its potential to provide theoretical insights into my lived experience of the limitations of controlled and managed approaches to change. This is echoed within the literature which indicate the frequent failure (estimated as high as 80%) of managed change projects (Burnes 2005; Macintosh and Maclean 2001) and the limited understanding of the processes of change (Kreindler 2019).

As indicated in the previous sections of this chapter, there is a significant amount of literature on the concepts of complexity theory. There is also some (more limited) literature which aims to apply versions of complexity theory in the context of organisational (and less commonly) system change (see for example Dattee and Barlow 2010; 2017; Mitleton-Kelly 2011; Mowles, van der Gaag and Fox 2010). While, as with the theory itself there is naturally no single, agreed definition of change in complexity theory, there are areas of commonality.

Perhaps the first thing to note is that, within complexity theory, change is a constant process of adaptation. A complexity informed concept of change, therefore, sees change not as a defined entity which can be 'achieved' as is implicit within, for example, a system change 'project'. Change is created via the interplay at any given time between the patterns of relationships and events at different levels – for example cultural, social and political. Events can destabilise these patterns – for example new technologies or changes of governments and tip an organisation or a network of organisations into a new pattern (Johnson and Boulton 2014). In this way, complex systems are seen as continuously evolving, responding to incremental changes, adapting at the micro level even when things may seem stable at the macro level (Gilpin and Murphy 2008). The context of any change programme is also dynamic and changing throughout (Boulton, Allen and Bowman 2015). The ongoing interactions between agents within the system as they adapt their practices in response to these interactions means that even where organisations may appear stable, within this there are constant micro adaptations as these agents impact and are impacted by them. Tsoukas and Chia (2002), for example, give an example of a study of call centre operators who did not just apply the rules of the organisation but actively determined and changed them in practice; and routines in a university hall of residence where rules were modified and adapted in practice to address new problems as they arose. The continuous nature of change means that sustainability has a different meaning in



the context of complex systems and the extent to which, in its traditional sense, it is a desirable aim is questionable. As Gear, Eppel and Koziol-Mclain (2018) suggest:

‘sustainability is not an outcome which can be achieved in perpetuity, but a continuous evolving process dependent on the interactions between multiple factors at different levels of analysis, points in time, and settings’ p 1055

If change is continuous and causal relationships difficult to establish and context sensitive, then sustainability acquires a different significance. Rather than seeking to identify, develop and embed an optimal solution, the focus in complexity theory is on the co-creation of change via environments which support and encourage continuous learning and reflection (Mowles, van der Gaag and Fox 2010; Mitleton-Kelly 2011).

As we saw above, the role of interrelationships is a key concept in complexity theory. Changes, such as the ones described in the previous paragraph, are local - they can result in wider, systemic or more transformational change but this happens as a result of the local interactions and thus change is not a top-down process but happens at all levels of the system (Cilliers 2000; Beeson and Davis 2000). The research by Dattee and Barlow (2017) into the Scottish healthcare system, for example emphasised the importance of multiple levels of the system (individuals, departments, hospitals, regional and national boards) and the way that the interactions between these impacted on the change efforts and were often dissipated by the cognitive as well as physical distance between them.

The capacity for transformational change within complexity theory comes from perturbation either within or outside the system which disrupts it, creating emergent behaviour at which point small change can become radical (Brown and Eisenhardt 1997). This is not, however, uncontentious when applied to human systems. Linked to the discussion above about control, there are questions in the research about the extent to which systems can be deliberately managed towards and maintained in this state, or indeed whether such transformation is necessarily either positive or what was intended. Houchin and Maclean (2005) for example found that despite numerous examples of both deliberate and unplanned destabilising events, the organisation in their study actually tended toward stability and exhibited little change. This contrasts with the experience of other research: Plowman et al (2007) for example: found that

destabilising conditions helped a small change (of offering breakfast to people who were homeless) become a radical organisational change for the organisation; Macintosh and Maclean (2001) in their research in a poorly performing manufacturing organisation identified events which created disequilibrium as a mechanism of organisational change. While there is some disagreement within the literature about the extent and nature of control in this regard, there is a consensus at the fundamental level that emergence within complex systems means that changes will occur which were not expected, planned or intended (Boulton, Allen and Bowman 2015). Further, it cannot be assumed that any such change would necessarily be positive or play out in the way envisaged or desired.

The path dependence/history of complex systems means that historical factors (including implicit and explicit structures, mental models, values and past experiences – e.g. of change initiatives) impact on how change occurs. Further there are also delays and time lags between interventions and outcomes (Boulton, Allen and Bowman 2015). This discontinuity between an action and an outcome further complicates the identification of any precise mechanism of change and thus has implications for how this is managed (Boyatzis 2006). The core concepts of complexity theory – their dynamic nature, emergence and adaptation essentially indicate movement over time and thus any attempt to fix them in time – for example in planning or modelling are problematical: in policy terms this is seen as indicating (among other things) the need for longer timescales in change programmes (Eppel and Rhodes 2018).

The inherent unpredictability of change has important implications for both for planning and implementation of change programmes. The implications of complexity theory, for example, suggest a greater level of tolerance for risk and uncertainty and underscore the importance of contingency and the need for a level of redundancy within the system. If change is non-linear and emergent then the ability to achieve pre-determined aimed and objectives is challenged. Thus, change becomes experimental, planning provisional and responsive (Lowell 2016).

As I have indicated throughout, this research sits within a general, transformative approach. If the underlying premise of complexity theory is that systems have the potential to transform in non-linear and unpredictable ways then it seems important to retain the concept of an unknowable future not least because it is this which

differentiates complexity theory from systems approaches or other more mechanistic models of change (Stacey 2001; Mowles, Stacey and Griffin 2008; Cilliers 2010). Thus, one important principle which differentiates the complexity theory view of change is the extent to which it is seen as a deliberate process, and the extent of control over this which can be exercised by managers or leaders. Stacey, Griffin and Shaw (2000) point to this tension in relation to those tasked with leading change:

‘Managers are supposed to be in charge yet they find it difficult to be in control. The future is recognizable when it arrives but in many important respects not predictable before it does.’ (Stacey, Griffin and Shaw 2000, p.8)

Essentially, change within complexity theory is seen as happening without managerial control or plan (Styhre 2002; Tsoukas and Chia 2002). However, that is not to say that the actions of managers or leaders of change have no impact on the process of change, nor that they are external, objective observers of the system (Cilliers 2000). Like anyone else involved, they both influence (and are influenced by) the system, not least because their position in the system gives them particular opportunities to influence meaning and understanding (Tsoukas and Chia 2002). Within complexity theory, power is an important part of the complexity of the system (Boulton, Allen and Bowman 2015): the capacity of any individual within a system to act is constrained and enabled by power (both formally sanctioned and informally created), as well as their knowledge, understanding and interpretation of any given situation (Stacey 2001; Stacey and Mowles 2016). However, the theory would suggest that those perceived or deemed to be in positions of power may not necessarily have the level of influence ascribed to them by their hierarchical position. In Trenholm’s (2012) study of resurgent TB in London, for example, although medical consultants were seen almost universally as being the dominant parties in managing the TB control system, they were found to have limited power and influence within it. This clearly has significant implications for accountability for outcomes within complex systems. Lowe and Wilson (2017) indicate the importance of recognising that outcomes in complex systems are neither the result, nor in the control, of the actions of an organisation or even groups of organisations despite the prevalence of this way of thinking in most social interventions, nor can they be reduced to simple metrics (Lowe and Wilson 2016). What happens within a complex system is the result not just of actions by

individuals but their interaction with their wider environment; even if an individual reacts in the same way, different outcomes may result due to their interaction with the system (Lowe and Wilson 2017). The limitations of control in complex systems do not, however, suggest an absolving of responsibility but rather a focus on accountability for actions, decisions and practice rather than accountability for outcomes (Lowe 2017; Mowles, Stacey and Griffin 2008; Cilliers 2000).

Complexity theory, then, suggests the need for a different approach to ‘managing’ change. However, while it emphasises the uncertainty and unpredictability, the limitations of control and the need for adaptability which require a shift in the way of thinking about the world, no versions of the theory position themselves as against planning or accountability. Rather, they stress the need for flexibility, a need to understand the particularities of the system, an acceptance of unpredictability, and a greater level of humility, with accountability for decisions taken rather than outcomes achieved (Boulton, Allen and Bowman 2015; Cilliers 2000; Mowles, Stacey and Griffin 2008).

In conclusion, then the ways in which change happens in complex systems, based on the concepts described in Section 3.5 can be neatly encapsulated in the following quote:

‘the future is a contingent, emergent, systemic, and potentially path-dependent product of reflexive non-linear interactions between existing patterns and events. Its variety, diversity, variation, and fluctuations can give rise to resilience and adaptability; is path dependent, contingent on local context and on the sequence of what happens; subject to episodic changes that can tip into new regimes; has more than one future; can self-organize, self-regulate; and have new features emerge.’ Eppel and Rhodes 2018, p.950

This echoes what is perhaps the clearest summary of a complexity informed model of change developed by Boulton, Allen and Bowman (2015). With some minor modification, this encompasses all the concepts in Section 3.5 and thus is the one which will be used within this research. It is summarised below:

- The ‘system’ will be open and what constitutes system and differentiates system from context will depend on the perspective of the beholder;

- Change will be a constant process of adaptation rather than a time limited event;
- It will be sensitive to context, influenced by its history and path dependent. The context itself will be dynamic and changing;
- There will be a multiplicity of interacting factors which influence what happens and there will be no precise mechanism which can be identified by which change will occur. These factors will include internal mental models / cognitive representations, and personal values;
- Change will occur as a result of local interconnections between elements of the system and the system and its wider context;
- What happens within the system will be emergent, non-linear and unpredictable.

(Boulton, Allen and Bowman 2015; Kernick 2006; Van Uden, Richardson and Cilliers 2001)

### 3.7. Strengths, challenges and limitations of complexity theory

The preceding sections have attempted to place complexity theory within its wider context and to determine, by means of an analysis of its multifarious iterations, to determine a core set of concepts and a model of change which can be applied to the empirical findings of this research. As I indicated at the beginning of this chapter, the theory itself is contentious, not least because of this variety of interpretations. I will therefore conclude this chapter with a critical evaluation of the strengths, weaknesses and limitations of complexity theory identified within the literature.

One of the most fundamental questions which have been raised about complexity theory is whether or not it actually warrants the description of a theory. The questions about the validity of its status as a theory tend to centre around three main areas: that it lacks sufficient rigour and organisation to be considered a theory and is better described as a loose coalition of ideas or a way of thinking (Davis, Sumara and Luce-Kapler 2007; Lissack 1999); that there is insufficient empirical data to justify its status as a theory; that it serves only a metaphorical purpose which (though perhaps useful) is not sufficient for it to offer anything other than description – it cannot, for example, be falsified experimentally or predict or prescribe action (Burnes 2005; Health

Foundation 2010). Implicit (and sometimes explicit) in these discussions about theory is the conflating of theory with 'science', often associated with positivist assumptions about universal truths (Richardson and Cilliers 2001).

As indicated above, it is certainly true that there is a lack of consensus around the specific components of complexity theory and how these have been used. Further, the multiplicity of approaches, using different models, while sometimes seen as a strength (suggesting a level of flexibility and wide applicability) makes it difficult to compare or consolidate the body of research (Wallis 2008). The review of complexity theory in health conducted by Thompson et al in 2016, for example, found that many of the studies they identified lacked detail on how the theory had been used which made it difficult to assess their validity and rigour. This is exacerbated by the fact that, in some cases, there is not a sufficiently precise articulation of the concepts used (Paley and Eva 2010). Similarly, despite the ongoing interest in, and awareness of, complexity in organisations, social systems and policy, there is still relatively little empirical research which seeks to apply complexity theory, rather than simply describe it or promote its potential usefulness (Houchin and Maclean 2005; Lowell 2016). While these are undoubtedly valid concerns, they present an opportunity for this research which seeks both to clearly define the model of complexity theory used (See Section 3.5) and the ontological and epistemological underpinnings and the methods employed (discussed in more detail in the next chapter) and, in so doing, contribute to the body of empirical research.

There are a number of research studies which suggest that the usefulness of complexity theory is as a metaphorical device (see for example Miller and Appleton 2015; Houchin and Maclean 2005), particularly in the general school of complexity theory in which this research sits (Burnes 2005). This is, in part, linked to considerations of whether or not social and natural sciences are truly commensurate (Introna 2003) as well as the extent to which the theory may need to be combined with others in order to move beyond the metaphorical (both of which are discussed below). That is not to say, however, that operating as a metaphor is necessarily without value: it can, for example be useful in creating a different view of the world which alerts us to its inherent complexity – illuminating factors which historically have been ignored or misunderstood – such as the role of interconnections and

interdependency and the significance of time, context and history (Tsoukas 1998). Implicit within criticisms of complexity theory as a metaphor is a view of metaphor as being less than rigorous – a kind of ‘pseudo-science’ (Richardson and Cilliers 2001, p. 19). This, again, carries with it certain ontological and epistemological assumptions about what constitutes ‘theory’ or ‘science’. Many complexity theorists (particularly in the general, transformative school) would argue that more reductionist views of complexity theory which might have a greater claim to what is meant (in this sense) by scientific validity are incompatible with (and contradict) the essence and fundamental irreducibility of complexity (Richardson and Cilliers 2001). Additionally, this perceived innate sensitivity to the complexity of the real world, is seen as offering a clearer and more realistic reflection of how things operate which resonates with, and more closely matches, the experiences of many of those involved in (and attempting to change) complex systems (Lowell 2016). In this way – some consider it cannot be a metaphor since it is a description of how things are. This ‘realism’ is sometimes articulated as one of the major strengths of the theory in that it explicitly acknowledges the complexity of real-life systems thus avoiding the simplification inherent in many other theories (Boulton, Allen and Bowman 2015).

However, approaches which move away from an aim of modelling complex systems are sometimes seen as deficient due to their inability to predict and prescribe appropriate courses of action. This is seen in suggestions of inherent nihilistic or laissez-faire tendencies in general complexity theory, for example that the lack of predictability of outcomes absolves those involved from responsibility (Health Foundation 2010). This danger has been identified (and also countered) in many iterations of the theory by the identification of a need for a greater focus and transparency on the ethics and values which underpin decisions taken by those involved in the system and an accountability for decisions rather than outcomes (Lowe 2017; Mowles, Stacey and Griffin 2008; Cilliers 2000). In research, it has been observed that there is a danger that complexity theory could provide a reason for deficiencies in understanding what is happening in a given situation which inhibits further examination – that it essentially becomes ‘a refuge for our epistemic gaps’ (Kaehne 2016, p.317). This concern is also implicit in the suggestion that to be useful, complexity theory needs to be combined with other theories (discussed below).

Allied to the concern that complexity theory could mask deficiencies in understanding is another important challenge - i.e. the extent to which the theory can be operationalised. I have discussed above the issues of clarity in concepts which confound some research but even where these are articulated clearly, there remain some particular issues in operationalising the theory. Some of the concepts are 'esoteric and challenging' to apply (Lowell 2016, p.157). It can be difficult to know, for example, whether the phenomena being observed are due to partial understanding rather than non-linearity – i.e. that a linear, causal relationship has simply not been observed by the methods used; or that the delay between input and outcome is such that a simple causal linearity exists but has not yet emerged. Goldstein (2018), for example, illustrates this in relation to the identification of emergence. While some research uses unexpected events as evidence of emergence (see for example Anderson et al 2005), Goldstein indicates that this could simply be a facet of the subjective experience of the observer – i.e. what may be unexpected for one person, may not be for another). These are important considerations and complicated by the myriad and, sometimes unclear, ways in which the concepts have been used.

The appropriateness of transferring theories from the natural to the social sciences more generally has also been cited as a weakness by some. In some cases this criticism is general – that is that social systems are too different from natural and physical systems (Johnson and Burton 1994), for such transfer to be appropriate, often associated with the risk of ignoring human agency (Houchin and Maclean 2005); for others there are specific difficulties of complexity theory in relation to the terms themselves being misunderstood or inappropriate resulting in it being misapplied (Kaehne 2016). The first of these criticisms is perhaps more applicable to the restricted approaches to complexity given the importance and significance placed on human agency by the more general, transformative approaches (see Section 3.3). The second of these criticisms links to the earlier discussion in relation to the laxity with which the terms are used (in some cases) and the questions raised in relation to its status as a theory. Richardson and Cilliers (2001) also point to the value of 'methodological pluralism' (p 12) when dealing with the incompressibility of complex systems. If the complexity of systems means that any description of them needs to be as complex as the system itself, they suggest that this not only necessitates a shift



from developing a precise understanding to understanding the limitations of our knowledge. This they argue suggests the importance of the physical and social sciences working together to challenge each other's assumptions and suggest that complexity theory can go some way to bridging the gap between them (Richardson and Cilliers 2001). Importantly, and equally ambitiously, it has been suggested that complexity theory may have the capacity to resolve a long-standing dilemma in social sciences:

'This facilitates the development of some of the concerns of classical sociology, such as combining an understanding of both individual and social structure, that does not deny the significance of the self-reflexivity of the human subject while yet theorising changes in the social totality.' Walby (2003), p.2

Clearly there are dangers of transferring concepts wholesale from the physical/natural sciences to the social sciences, not least in relation to issues of clarity and understanding of the terms, particularly where these (as do some of the restricted approaches) do not necessarily fully allow for the importance of human agency. However, the potential for complexity theory to bridge the gaps between the natural/physical and social sciences as well as within them provides an exciting opportunity for further exploration.

The importance of methodological pluralism is also evident in some of the calls for complexity theory to be combined with other theories. This also links to the extent to which it is considered to be a novel approach which also is, in part, determined by the model used. As indicated above, Stacey, Griffin and Shaw (2000) for example consider that many models of complexity theory do not offer anything distinct from other systems theories, and as such (although they have the potential to be radically different) this is often not realised because they remain embedded within systems thinking approaches. Many of those using complexity theory combine it with other theories, often because they consider it insufficient in its own right and it has been used in combination with theories of public policy development, social theory and psychological theories (Houchin and Maclean 2005). Trenholm and Ferlie (2013) for example found it a useful but partial theoretical explanation for organisational responses to resurgent TB, adding to its theoretical value by combining it with Kingdon's theory of public policy development; Room (2011) suggests that complexity

theory can (when combined with institutionalism) provide the micro level which institutionalism lacks, while institutionalism provides a macro view which he considers is missing in complexity theory; Mowles, Stacey and Griffin (2008) and Stacey and Mowles (2016) situate their (distinct) version of complexity theory alongside the work of Elias (on power relations), theories of language and mind of Mead, and reflexivity of methods of Bourdieu and Wacquant (Mowles, Stacey and Griffin 2008). This combination of theories may suggest that its value may be in supplementing and augmenting existing theories rather than as a discrete, novel theory in itself.

### 3.8. Concluding comments

To conclude, this theory was chosen because of its potential ability to offer new and distinct insights into the challenges of achieving systemic change. It also responds to an acknowledged gap in the literature which identifies a need for more empirical research which applies the theory (Thompson et al 2016). As demonstrated throughout this section, it is clear that the theory is not without its challenges – both in terms of its status as a theory and more practical considerations of how it can be used and operationalised and what it can tell us about the world in general and the way that change happens in particular. This research has itself grappled with these questions not least in defining a clear and precise set of concepts which can be applied to the empirical data. Defining both the concepts and the model of change to be applied in this research, has been an important stage in the research, not least because such clarity offers an important counter to some of the criticisms in the previous section.

In summary, the version of complexity theory which will be applied to the empirical findings of this research sits within a general, transformative approach. It uses the concept of system as a pragmatic device, recognising its essentially subjective nature. It builds on the five most commonly identified core concepts of the theory in the general approach: openness; self-organisation and emergence; context, history and environment; and relationships / interactions / connections to identify a theoretical model of change which would suggest that: change will occur as a result of multiply interacting factors, including mental models; that what happens will be context sensitive, influenced by its history and path dependent; that change occurs as a result

of local interactions between elements of the system and its environment; and that what happens will be emergent, unpredictable and non-linear.

These previous two chapters have established the context for the research by (in Chapter 2) reviewing the current literature on the core focus of the project: multiple and complex needs, system change and PIE; and in this chapter identifying the theoretical framework of complexity theory which will be applied to the findings. The next chapter will conclude the overall framework for the research by articulating the research paradigm, the methods used, and the resulting ethical considerations.

## 4. Chapter 4: Research approach

### 4.1. Introduction

The research is a qualitative case study of a systems change programme with an embedded case study which aims to examine the implementation of one specific objective (that of implementing PIE) in one of the organisations involved in the programme.

The main case study – the system change project - is one of 12 projects which form part of a national eight-year programme funded by a large national charitable foundation, beginning in 2014. The aims of the programme are to help people experiencing multiple and complex needs (defined here as two out of four of mental ill-health, substance misuse, homelessness and offending) access better, more person-centred and joined up services. As well as a focus on changing the lives of individual project beneficiaries, they aim to change the systems of support, by achieving transformational, beneficial and sustainable and systemic change.

The project itself began in the middle of 2014 and is due to run until the middle of 2022. It is led by a large voluntary sector organisation, chaired by an independent chair and comprising partners from statutory and voluntary sector partners across the city. These include city council, health services (including mental health); probation and police services; service user organisations, and voluntary sector organisations delivering services across all four of the need areas indicated above. In common with the overall programme aims, the project aims to empower beneficiaries to enable them to take control of their lives; to change operational delivery services to meet the articulated needs of people experiencing multiple and complex needs – making them more person-centred, welcoming and responsive and to use the learning from the project to radically transform the system. The project effectively has two main strands. The first of these is a service delivery element involving the creation of a co-ordinator service which aims to provide personalised support for project beneficiaries, providing both direct support and acting as a broker, co-ordinating access to other services. The second is a broad objective to deliver system change. An important aspect of the system change element of the project is the objective of creating welcoming services with the aim of improving access to, and engagement with, the

complex network of services necessary to support people with multiple and complex needs. This objective includes the implementation of psychologically informed environments within a range of partner organisations.

The whole project is underpinned by service user involvement via an expert citizens group of people with lived experience. Governance for the project is provided by a Partnership Board, chaired by an independent chair and consisting of representatives from the partner organisations described above, as well as expert citizens representing project beneficiaries. The governance of the system change element of the project is via a system change board, again chaired by an independent chair and representing the same range of organisations as the Partnership Board.

The organisation in which the service for the embedded case study sits is one of the partners represented on the system change board. The organisation is a large housing provider which, in total, employs over 1000 staff and houses over 20,000 people, providing both general needs housing and housing with care and support. At the time of the research, PIE was being implemented in several services (including the one selected for this research) as part of a wider divisional / organisational initiative. The implementation formed part of an overall organisational strategy to become more psychologically informed with responsibility for implementation devolved to individual services. While it was difficult to delineate precise timescales given the approach to implementation, staff suggested that PIE first became part of the service's strategic objectives approximately 12 months prior to the research beginning. The service provides supported accommodation for people experiencing mental ill-health. It comprises seven staff, including keyworkers, a strategic manager and a service manager and provides supported accommodation for up to two years for adults with poor mental health. Accommodation is provided in bedsits or furnished self-contained flats and each resident has a named keyworker who provides person centred support directly and in conjunction with other specialist services tailored to the needs of the individual (e.g., education/employment, benefits and financial management budgeting, life skills). To be eligible to use the service, service users must have a mental health diagnosis and be homeless or at risk of homelessness. Many service users also have substance misuse issues, and some have offending histories. Referrals into the service typically come from the service user's mental health/community

psychiatric team and staff refer into a number of external support services (dependent on need), including referrals to the service which formed part of this project. Additionally, two of the staff within the organisation had attended PIE training which was offered by the project's Development Unit as part of its system change activities.

## 4.2. Aims of the research

The previous literature review and theoretical framework chapters identified significant gaps in the literature to which this research aims to contribute:

- The systemic nature of the issues facing adults experiencing multiple and complex needs and the consequent need for systemic change is increasingly well-articulated. However, there is an absence of empirical research which theorises understanding of the experience of system change.
- Complexity theory is posited as having potential value in increasing this understanding but is itself multiply defined and there is an acknowledged need for more empirical research which applies the theory (Thompson et al 2016; Houchin and Maclean 2005; Lowell 2016). There is currently no empirical research which directly applies the theory in the context of system change for multiple and complex needs.
- There is an increasing awareness of the need for complex problems (such as multiple and complex needs) to have solutions which respond to this complexity (Joosse and Teisman 2020; Haynes 2015). PIE is seen as representing such a solution (Cockersell 2018b) but there is no literature which empirically explores this claim.

The aims of this research, therefore, are:

- To improve understanding of the processes of system change by exploring the experiences of those tasked with implementing such change;
- To understand the role of PIE in system change, and specifically its conceptualisation as a complex response.

By placing these in the novel theoretical context of complexity theory, the research aims to generate new insights into the acknowledged challenges of creating such change. This approach is probably best described in terms of Byrne and Callaghan's

(2014) typology of applications of complexity theory as a contribution which considers 'the implications of the complexity frame of reference to make sense of the findings of an empirical project' (p. 233).

The four research questions which the research aimed to answer are therefore as follows:

- 1) How is system change for adults with multiple and complex needs conceived by those pursuing it?
- 2) Where does promoting and implementing Psychologically Informed Environments fit into this process?
- 3) How might these questions be answered in a case study of a programme that seeks to transform the lives of these adults in a single locality?
- 4) How might complexity theory inform a critical evaluation of this programme of system change?

### 4.3. Research Paradigm: ontological and epistemological orientation of the research

The research paradigm encapsulates the ontological, epistemological and methodological assumptions of the researcher (Blaikie and Priest 2017). There is a strong and long-standing connection between the theoretical perspective of complexity theory and critical realism. Placing this research within a complex, critical realist paradigm is supported, not just by the compatibility of critical realism and complexity theory but also by the use of it as a paradigm (where this is stated) in many of the previous studies which have attempted to apply the theory (see for example: Trenholm 2012; French 2017; Hood 2013).

Critical realism allows for an external reality but one which is only accessible via the accounts, experiences and perceptions of individuals thus combining an ontological realism with a constructivist or relativist epistemology (Archer et al 1998; Maxwell 2012; Danermark et al 2001; Ritchie et al 2014). The ontological assumption underlying critical realism identifies three different levels of reality: empirical (experienced through the senses); actual (exists whether or not anyone is there to observe it) and real (the underlying processes that generate events) (Blaikie 2007;

Hood 2012). According to Blaikie and Priest (2017), the epistemological assumptions within the critical realist paradigm indicate the importance of examining the complex structures and mechanisms that determine the observed events and the role that context plays. The paradigm does not exclude causal explanations but recognises that any such explanation will be necessarily partial and fallible (Maxwell 2012). This complexity is even more evident within human systems where the agency of individuals accentuates this interactive complexity (Hood 2014), resulting in the 'double hermeneutic' of researchers interpreting the interpretations of others (Danermark et al 2001).

The connection between critical realism and complexity theory was first made by Reed and Harvey (1992) and is a position which has continued to be developed over the subsequent decades. There is of course a distinction here between 'restricted' and 'general' complexity discussed in the previous chapter. For example, while most restricted computational versions of the theory tend towards the more positivist paradigms, general complexity theories tend towards post-modernist or, most commonly, critical realist positions (Byrne and Callaghan 2014). The links between complexity theory and critical realism have been identified by many authors, in particular the concepts of emergence, openness and interconnections and more broadly in the understanding of the provisionality of what is observed (Easton 2010; French 2017; Byrne 1998). Mingers (2011), for example, concludes that the two have much to offer each other with critical realism providing a firm philosophical basis, while complexity theory provides a clearer articulation of specific concepts (such as emergence).

Within research which is theoretically located within more general approaches to complexity theory (and where this is explicitly stated), a combination of complexity and critical realism is, perhaps unsurprisingly, the most common (see for example: Trenholm 2012; Hood 2013; Byrne 1998; Byrne and Callaghan 2014). As we saw in the previous chapter, however, there are many different versions of complexity theory and thus research which operates within a critical realist framework encompasses a range of different theoretical approaches. This research is also influenced by the work of Cilliers – which is explicitly described as sitting within a post-modern framework. While these two may seem incompatible, Byrne (and others - see for example:



Boulton, Allen and Bowman 2015) suggest that Cilliers' post-modernism is entirely compatible with Reed and Harvey's meta-theoretical position. By way of example: Byrne and Callaghan describe Cilliers' understanding of boundaries of systems (discussed in the previous chapter) as demonstrating that such systems are both real in the sense of having an actual existence but that this reality is simultaneously created by our own definitions (Byrne and Callaghan 2014). Both Boulton, Allen and Bowman (2015) and Byrne and Callaghan (2014) indicate the compatibility of Cilliers theoretical position with their own complex critical thinking. Indeed, Walby (2003) suggests that complexity theory has the potential to transcend the divisions between realism and post-modernism; while Boisot and McKelvey (2010) see it as challenging the dichotomy between positivism and post modernism in organisational and social sciences. The other theorist on which I have drawn is Ralph Stacey. His theoretical position has developed and changed throughout his career and, some of his later work, is identified as less 'realist' than, for example, Byrne's (Byrne and Callaghan 2014). It remains important in a theoretical sense, not least for the philosophical challenges it poses to ideas of the extent of control and predictability as well as its resonance with some of the empirical findings.<sup>15</sup>

#### 4.4. Case study method

Neither complexity theory nor critical realism is prescriptive as to method but there is some consensus as to the applicability of a qualitative case study approach (Cohen, Manion and Morrison 2017). Case study research itself can have different ontological orientations. Within a positivist tradition it seeks to create a level of generalisability by drawing on scientific methods via replication and the testing of rival hypotheses (Yin 2009). In more constructivist understandings the focus is on the case within its immediate context, with issues of reliability located within the context of the credibility and trustworthiness of the conduct of the research (Schwandt and Gates 2018; French 2017).

The breadth of the project and the theoretical imperative to examine change at multiple levels of the system indicated the need for an embedded case study.

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<sup>15</sup> See, for example, the discussion of representations of system in Chapter 5.

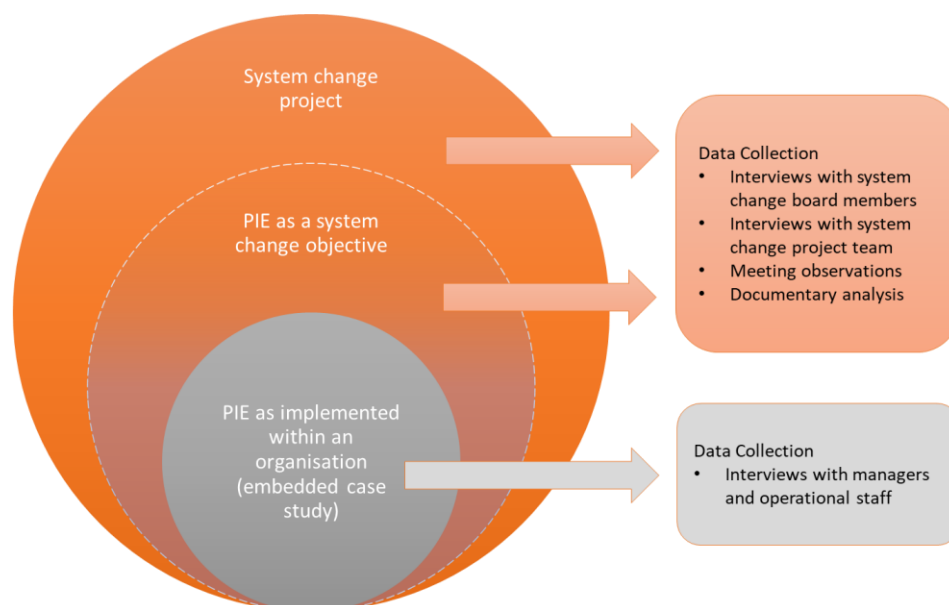
Embedded case studies help to avoid the pitfall of examining a case at too high a level of detail and abstraction, resulting in a failure to explore operational detail (Yin 2009). Whereas within a positivist paradigm embedded case studies may be considered as individual experiments designed to strengthen generalisability of findings, within a complex, critical realist framework their strength is in offering a richer and more complex understanding (French 2017). Further, an embedded case study approach is particularly appropriate method from a structural, theoretical and pragmatic perspective:

- The structure of the project consists of discrete objectives which can form appropriate layers of analysis.
- The theoretical perspective of complexity theory requires an understanding of these layers and the connections between them and an exploration in the context of its environment.
- The exigencies of PhD (or indeed any research) require a manageable focus within the time and resources available.

The case for this research treats the system change element of the project as a distinct entity and defines it as the strategic activities identified as the systems change project and intended to be delivered by the lead agency and organisational partners who form the systems change programme board. The system change project at this level is very broad and wide ranging and in order to understand the relationships between the broader strategic context and the operational implementation it requires an additional and more detailed focus. The research therefore focused on a specific objective of the system change project, the creation of psychologically informed environments which itself emerged from, and formed part of, a broader aim of creating welcoming services.

The system change project in general, and PIE in particular is predicated on change occurring within individual organisations. To enable the examination of this element and the connections between the system change project and the organisational level required a further layer of examination. Thus the final layer of the case study – the embedded case study - examined the organisational implementation of PIE in a service in one of the project's partner organisations.

**Figure 1: Conceptual representation of the case study design**



The selection of the case was, in part, driven by the framework for the PhD which was designed as part of a broader evaluation of the programme. This limited the area of study to the project described in the introduction. The gaps in the literature in relation to theories of system change for multiple and complex needs suggested that the system change element of the programme would be a fruitful focus for the research. The breadth of the system change project, the need for it to achieve change at both a strategic and an operational level and the theoretical imperative to explore multiple levels both indicated the need for a more focused examination of one aspect of the project.

The objective of PIE was selected for the following reasons: it was a discrete objective which, although relatively recent as a specific aim of the project emerged from a broader aim of creating welcoming services. As a result, it would allow: the exploration of its historical development; and its place within the wider context of the system change project (both important elements of complexity theory). It required operational (rather than just strategic) change enabling the exploration of multiple levels. Equally importantly, as discussed in Chapter 2, it has itself been considered to be a complex solution and thus had a direct theoretical link.

The timescale for the research had to be balanced between the need for sufficient change to take place and the requirement to complete the research in a timely

manner. Thus, the requirement for the embedded case study organisation was to find one which fulfilled the criteria as described in Figure 2:

**Table 1: Criteria for selection of embedded case study organisation**

<b>Criteria</b>	<b>Rationale</b>
It had already begun to implement PIE	The research required an examination of the experience of the process of implementation
It was part of the system change project and had been involved in some associated activities (e.g. training)	One of the purposes of using an embedded case study was to explore the extent to, and ways in which it linked to the system change project
It supported people with multiple and complex needs	This was the core aim of the programme

This necessarily limited the pool of organisations available. Two such organisations were identified, and both agreed to participate in the research. However, only one was ultimately included as an embedded case study in the final research as I was unable to undertake a full set of interviews with the second organisation identified. In this second organisation, delays in their implementation of PIE meant that the interviews were due to be undertaken during the Covid-19 pandemic during which time they were necessarily focused on coping with the impact of this and unable to respond to requests for interviews. Although having two embedded case study organisations would no doubt have given useful additional perspectives and richness, the purpose was never intended to be as a comparative approach. While exploring a number of such cases can allow for such cross-case comparisons, the local, contextual differences of PIE militate against such comparisons (Phipps 2016).

The decision to have two such case studies was, then, primarily a pragmatic one to manage potential risks and uncertainties (as suggested by complexity theory) and, in the light of the pandemic, this mitigation turned out to have been well-founded. Although the research would undoubtedly have been richer for having two (or even more) embedded case studies, real life research in complex systems is inevitably far from straightforward and needs to respond and adapt to such external events and work within constraints of time and resources.

## 4.5. Generalisability and validity

The concepts of generalisability and validity are related concepts and important considerations in case study research. Internal validity of research is determined by the rigour with which the research is undertaken, while external validity is determined via replicability or transferability to other contexts (Yin 2009). The validity of qualitative research is sometimes seen in its ability to reflect more accurately what is being described (Diefenbach 2009). Qualitative research is sometimes seen as having greater internal validity because of its richness and the closeness to the experience of participants while quantitative research has external validity in its applicability to other contexts (Trenholm 2012). Yin (2009) indicates the value of case study research in its ability to offer rich, realistic and meaningful descriptions of events - arguing that while the findings may not be transferable to other contexts or settings, the theoretical insights which it generates may be.

As this suggests, there are then different forms of 'generalisation'. Hammersley (1992), cited in Ritchie et al (2014) identifies two forms of generalisation – empirical (which is related to concepts of transferability and external validity identified above) and theoretical which involves the wider applicability of theoretical constructs. Ritchie et al (2014) helpfully define a typology of three different forms of generalisation which are relevant to qualitative research:

- Representational – the generalisability of findings to the wider constituency from which the sample has been drawn
- Inferential – the generalisability of research to other settings or contexts
- Theoretical – the generalisability of theoretical propositions.

As a case study within a complex, critical realist paradigm, concepts of validity and generalisability are not considered in relation to generalisability to other settings or contexts or the wider constituency. Validity is related to its representation of the reality of the experience of participants, the careful elucidation of the research process and reflections upon it and the insights it offers into applying the theoretical framework. Research within this paradigm will necessarily be context specific, but the applicability of the theoretical perspective can offer insights to guide future behaviour. For example: the precise way in which characteristics of complexity theory will play out

may not be predictable. However, knowing that those characteristics operate within complex systems can indicate more effective ways of operating (Boulton, Allen and Bowman 2015). For Stacey, Griffin and Shaw (2000) the value of complexity theory is the way in which it resonates with the experience of those involved in the research process and the way in which it can assist in making sense of and responding to that experience. In this research, the implications of applying complexity theory to system change - for example in terms of what it suggests about transformational system change - also offers this potential wider value.

#### 4.6. Data collection

Earlier in this chapter, I discussed the particular value of case study in the context of complex, critical realist research, and the importance of multiple perspectives. Case study research in this context needs to include multiple viewpoints, to track development over time and 'to explore *around* the issue or situation, not just *within* it' (Boulton, Allen and Bowman 2015 p. 113). The research used qualitative data collection combining data from multiple sources: interviews, documentary analysis and participant observations to gain an in-depth and contextual understanding of the system change project, its objectives and its implementation. Collecting data from a variety of sources is strongly indicated as a means of enhancing the validity of case study research.

As an examination of change, there was a theoretical and an empirical requirement to conduct the research over a sufficiently long timescale, but within a suitable timescale for a PhD. As indicated in the previous chapter, change within complex systems is episodic and thus initiatives and outcomes may be temporally distant. Thus the research design was longitudinal, with the aim of being completed over a period of 18 months between January 2019 and July 2020 (though as discussed below) this was seriously impacted (and extended) by the Covid-19 pandemic. The theoretical perspective was also accounted for in the phased approach for the research which allowed for a period of immersion in the context of the research – an iterative process by which the eventual design was refined and revisited.

## **Phase 1: Familiarisation and Scoping**

This phase of the research began with an initial literature review to identify a potential focus for the research and extensive exploration of the theoretical perspective of complexity theory. My supervisory team were integral to this phase – helping to shape, develop and challenge my thinking. The composition of the supervisory team was particularly helpful in this regard. My Director of Studies, Dr Graham Bowpitt had been closely involved with the project and the organisations involved over many years and this combined with his expertise in issues of multiple and complex needs, in particular multiple exclusion homelessness<sup>16</sup> was instrumental in determining the focus of the research, the feasibility of its scope and the formulation of the research questions. Dr Craig Lundy's research on the nature of transformational processes, and in particular the application of complexity theory to community identity, service learning and public engagement<sup>17</sup> was particularly significant in helping me to navigate the multiplicity of approaches and understand the challenging concepts of complexity. Professor Elaine Arnull also brought experience of the project and the psychological approach of PIE, together with extensive policy research, alongside system change and, in particular, its antecedence and overlap with partnership working.<sup>18</sup>

The main aim of the phase was to gain a greater understanding of the project and its context and to identify a suitable focus for the research. This was an iterative process and informed by the developments within the project (for example: the interest in PIE) and involved meetings with project team staff, attendance at project meetings and events (such as their annual meeting). During this phase I also reviewed core documents and undertook secondary analysis of 21 beneficiary interviews. This latter analysis is not directly presented within the thesis but was used to inform and augment understanding of the project and to determine the exact focus of the research. The greater level of understanding of the issues identified by people with

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<sup>16</sup> See for example: Bowpitt (2020); Bowpitt et al (2018); Bowpitt et al (2016); Bowpitt et al (2011)

<sup>17</sup> See for example: Durie, Lundy and Wyatt (2018); Burton et al (2019); Lundy (2022).

<sup>18</sup> See for example: Arnull and Patel (2002); Arnull et al (2007); Arnull and Fox (2016) and Arnull, Park and Heimer (2021).

multiple and complex needs accorded by this analysis helped me to focus my research and to settle upon the objective of PIE. It also deepened my understanding of the specific needs of people with multiple and complex needs and the challenges they face when interacting with services. This directly informed the development of the interview schedules as well as enabling me to contextualise the responses of staff in the experience of their service users.

## Phase 2: Fieldwork phase

During this phase, I undertook a more structured documentary analysis and undertook interviews with the project team, system change board members, as well as the organisations selected as possible embedded case studies. I also observed system change meetings and continued to attend key events and activities organised by the project throughout the year. Full details of these activities are indicated in the sections below, but the overall activity is presented in the timeline below. This is presented in a linear way for clarity, but the different activities informed each other.

**Figure 2: Timeline of fieldwork**

	Jan-Mar 2018	Apr-Jun 2018	Jul-Sept 2018	Oct-Dec 2018	Jan-Mar 2019	Apr-Jun 2019	Jul-Sept 2019	Oct-Dec 2019	Jan-Mar 2020	Apr-Jun 2020	Jul-Sept 2020
<b>Phase 1: Familiarisation and scoping</b>											
Documentary analysis											
Secondary analysis of project beneficiary interviews											
Meetings with project team stakeholders											
Attendance at key meetings and events											
<b>Phase 2: Fieldwork Phase</b>											
Interviews with strategic partners											
Interviews with project team											
Embedded case study interviews											
Meeting observations											
Documentary analysis											
Attendance at key meetings and events											

### 4.6.1. Interviews

The primary method of data collection was semi-structured interviews and 38 such interviews with 29 individuals were undertaken over the 22 months of the fieldwork phase. The semi-structured format for the interviews was indicated by the need for rich, thick and contextual understanding of the perceptions of those involved in the system change project and the implementation of PIE (Silverman 2005; Ritchie et al 2014) and the theoretical need to respond to emerging topics and unexpected directions or events. The need to explore, understand and capture the meanings,



attitudes and values ascribed to events by the participants themselves strongly supported this approach (Ritchie et al 2014; Kvale 1996). A broad set of questions was formulated focused on the first two research questions which sought to understand the perceptions and experiences of system change and PIE amongst those tasked with pursuing it. As indicated in the schedules in Appendix 1, questions here were designed to help me to explore and interrogate:

- perceptions and understanding of core terms used within the programme (for example: system, system change and PIE) and differences in this understanding between, for example, the core project team, partners and staff in the embedded case study;
- the ways in which the implementation of the system change project and PIE were approached both within the system change project and the embedded case study;
- how PIE fitted in to the overall system change project and any relationship between the system change project and PIE in the embedded case study;
- the overall context in which both the system change project and the implementation of PIE in the embedded case study were taking place, and the extent to which these aided or impeded these implementations.

The final research question involved applying complexity theory to the findings.

Although specific research questions in relation to complexity theory were not explicit within the schedules, the theoretical perspective had helped shaped the questions asked. For example: the significance of mental models and perceptions highlighted by the theory indicated the importance of including a series of questions relating to participants' understanding of core terms such as system, system change, transformation and PIE.

The schedule was very detailed to ensure all aspects were explored but used flexibly in response to the experiences being articulated by the interviewees. The interview schedules were piloted with each group prior to use and refined slightly in the light of these initial experiences. The content of the schedules remained largely constant, but the order of questions was amended slightly to improve the flow.

The interviews typically lasted around 60 to 90 minutes. The interviews themselves were face to face with the exception of the final set of interviews with the project team which were undertaken during the Covid-19 pandemic and were thus done via an online video conferencing platform. All of the interviews were digitally recorded, then transcribed prior to analysis. The process for the interviews was the same for all participants and the consent process is described in Section 4.8 below. In all cases, the selection of participants could best be described as purposive in that they were chosen because they represented the key perspectives required by the research questions, but the sampling varied slightly between the groups (as did the number of interviews undertaken) and this is discussed in more detail below.

#### *System change project team interviews*

The system change project team is a small team of three staff who are employed exclusively on the project. Their roles are varied but include setting the strategic direction, liaison with the main programme, project management and reporting, undertaking and commissioning research and evaluation, connecting and liaising with partners and partner organisations and ensuring that multiple and complex needs is visible and represented at strategic fora. The team also oversees the provision of the development unit, a unit set up by the project to provide development, training and networking opportunities for local organisations and employs a psychologist to lead on developing local skills and understanding of trauma-informed care and psychological informed environments. The psychologist and the manager of the development unit were core to the objective of PIE and thus, for the purposes of this research (and to assist in preserving anonymity) were also included as part of the core system change team interviews. This group was most actively involved in designing, developing and implementing the project but each had different and specific roles within it. Thus, I interviewed all staff within the team who were in post at the two time points. Self-evidently, the process of change takes place over time and thus undertaking two sets of interviews allowed for exploration of this alongside reflection on some of the key events which were identified during the meeting observations. Following the initial interview with the independent chair, their role was discovered to be more central than might have been expected and thus they were also included in this group and

interviewed twice. Thus, within this group, 11 interviews were undertaken with seven individuals<sup>19</sup>.

The decision to interview at two time points, one year apart, was considered (in consultation) to be the minimum to allow time for activities (particularly in relation to the specific objective of PIE) to unfold. It was envisaged that this timescale would be treated somewhat flexibly, and respond, for example to unexpected developments or delays. What, of course, was completely unforeseen was the Covid-19 pandemic. At the start of the pandemic, staff were naturally focused entirely on supporting people with multiple and complex needs and organising a rapid response to the crisis and project staff were redeployed into client facing roles. Undertaking research in this context would have been impracticable as well as unethical. This was exacerbated by the direct personal impact for me in terms of my own experience of bereavement as well as my own infection which resulted in a period of sick leave during the time the interviews were due to be undertaken. Thus, the second set of interviews with this group were undertaken much later than had been originally planned. This had unexpected consequences in that it enabled an (albeit limited) reflection of the impact of the pandemic on system change – a significant external perturbation.

#### *System change board interviews*

The system change board is described within its terms of reference as being responsible for overseeing and directing progress against the system change priorities, with collective responsibility for developing, reviewing and implementing the plan in collaboration with other agencies and organisations. Individual members of the group are responsible for promoting and delivering system change in their home organisations and providing advice, guidance and support for the system change priorities. The system change board reports to a partnership board responsible for overall governance of the project.

The system change board consists of an independent chair, representatives from the programme funders, representatives with lived experience, the system change project

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<sup>19</sup> One member of the team joined later in the process so was only interviewed once; one member of the team left so was only interviewed once, as was the member of staff who replaced them.

team, external evaluators and representatives from partner organisations responsible for implementing the plan within their own organisations. The sampling strategy was purposive, aiming to identifying organisational representatives across all four need areas (mental health, substance misuse, homelessness and criminal justice) and the range of types of organisations (e.g. VCS, statutory agencies). Given the numbers of each were small, and not all were likely to respond, I decided to invite all organisational representatives on the board to be interviewed. The research was first introduced at one of the system change board meetings and I then sent an email to all relevant board representatives, asking them if they would be willing to be interviewed for the research.

The initial invitation elicited five positive responses and I followed up those who had not responded (with a particular focus on under-represented need areas or types of organisation) with one further email. I was also approached by some of those I had contacted at meetings and events I attended so was also able to add to the interviews in this way. The purpose of the sampling was to get as broad a range of viewpoints and experiences as possible given that there were likely to be differences not just at the level of individual experience but also the impact of the wider context. For example, the regulatory context of statutory agencies is different from that of the VCS, (and, of course, differs between agencies); the understanding of PIE within the homelessness sector (where it has had a longer history) will be different from that of agencies less centrally working with multiple and complex needs. The tables below show the breakdown of numbers by need area and organisational type. In each table, the first column shows the number of people I interviewed in each need area or organisational type. The second column shows the total numbers of representatives of each need area / type of organisation on the system change board.

**Table 2: Numbers interviewed by need area**

<b>Need area</b>	<b>Numbers interviewed</b>	<b>Total number of system change board members representing each need area</b>
Housing/homelessness	3	8
Substance misuse	2	3
Mental health/health	2	4
Criminal justice	1	3

<b>Need area</b>	<b>Numbers interviewed</b>	<b>Total number of system change board members representing each need area</b>
Other	3	3
	11	21

**Table 3: Numbers interviewed by type of organisation**

<b>Organisational type</b>	<b>Numbers interviewed</b>	<b>Total number of system change board members in each type of organisation</b>
VCS	4	6
VCS - Lead agency	2	4
Statutory	2	7
Local authority	3	4
Total	11	21

Of course, this sampling strategy could mean that the agencies most likely to respond were agencies which were more closely related to the system change project and would thus represent a partial view of the perceptions within the wider system. While this cannot be ruled out, an analysis of attendance undertaken during the familiarisation phase suggested that many of those interviewed were not regular attendees at the system change board, and three of the interviewees specifically identified themselves as having very limited involvement. Clearly this carries its own issues in that, as such, they are less likely to have detailed views on implementation, for example. However, the reasons for lack of engagement are also important so this remained an important perspective.

I interviewed the system change board members only once and the interviews took place over a period of around 15 months. Many of those interviewed had had limited involvement with the project and none were directly involved with implementing PIE – thus a single set of interviews was seen as sufficient to gather their perceptions. Where greater involvement was identified (i.e. in the case of the independent chair), second interviews were undertaken.

### *Embedded case study organisation*

As indicated above, in order to meet the research needs, the embedded case study organisation needed to meet certain criteria (See Table 1). The pool of organisations meeting these criteria was quite limited, but two organisations were identified, and initial discussions undertaken with the senior, strategic contact represented on the system change board to ascertain the feasibility of undertaking research within the organisations. The first organisation contacted was the one which was ultimately used for the embedded case study and is described in Section 4.1. Initial meetings with senior staff confirmed that the service had already begun implementing PIE, staff were willing to be involved and the managers were supportive of the research. A series of first interviews was therefore organised. The service comprised seven staff including two managers: a service manager and a strategic manager, all were invited to be interviewed and six of the seven accepted. After the first interview, I asked for consent to contact them again in approximately 12 months' time and all staff consented to this. A second set of interviews was undertaken with the same staff 12 months later (with the exception of one member of staff who had left the organisation).

Establishing rapport here took a little longer as there was some nervousness amongst some operational staff that their knowledge of PIE might not be sufficient for my needs. I took additional time to ensure that they were fully apprised of the research, my interest and my role. As a result, the first interviews here tended to be longer. The longest lasted almost 2 hours but most lasted between 60 and 90 minutes. The second interviews were shorter, typically lasting between 45 to 60 minutes.

The principle behind undertaking two sets of interviews was to examine the experience of becoming PIE over a period of time. In fact, given the nature of the way PIE was approached, little change was identified though this was, in and of itself a useful finding. The first set of interviews focused on eliciting their understanding of PIE, the way they viewed its implementation within the organisation and exploring their links to/experiences of the system change project; the second set was focused on revisiting the findings from the first set of interviews. This was done by means of a verbal summary of my understanding of what had been discussed in the first set of interviews. This gave the opportunity not just to assess any changes but also to verify

my interpretation of what had been said the first time. As a result, the interview schedule for the second set of interviews was used particularly flexibly.

#### 4.6.2. Observations

The system change board meets on a quarterly basis and a complementary source of data for the case study came from the non-participant observation of these meetings over the course of the year. The aims of the observations were to: provide ongoing information about the evolution of the project to inform the interviews and to assist in understanding the context for some of the views expressed there; and to provide a level of corroboration of perceptions, for example, in relation to the contribution of partners and the relationships between the partners and the system change project. A total of four meetings were formally observed. Observations are considered suitable for data collection within this research paradigm and in a naturalistic setting such as this (Curry et al 2009, cited in French 2017).

As indicated in Appendix 1 the protocol used for the observation was quite loosely defined. In the pilot observation, I first used quite a structured proforma which included theoretical precepts as well as more general observations. However, I found that this was unhelpful in two main respects: firstly, it served to constrain what I was observing and was complicated to apply, thus becoming a distraction from the meeting itself. Secondly, it felt that it was more appropriate as an analytical rather than a data collection stage. In subsequent observations, I therefore used a much looser framework – focusing on interaction and participation as well as eliciting useful information about the development of the project and the barriers and enablers to their progress. The notes from the meetings were typed up immediately after the meeting to ensure maximum recall. This also provided a further opportunity to capture and reflect on my own thoughts and perceptions.

The extent to which useful information about the particular objective of PIE was gleaned from these meetings was more limited. Discussion of PIE was not a major agenda item at the system change meetings which tended towards a more strategic focus. A further limitation was in the attendance at the meetings which was inconsistent and involved a limited number of partners. Nevertheless, they provided useful complementary and contextual data and enabled some observation (within the

limitations described above) of interactions between the project team and the wider system change board.

#### 4.6.3. Documentary analysis

In addition to triangulating data from other research activities, to provide a rich and contextual picture of the experience of system change, the documentary analysis provided background information on the project which supported the development of the research focus, research instruments and the identification of participants.

Importantly it enabled a historical view of the development of the project over time, from its inception to the end of the fieldwork period. The documents analysed for this purpose included: system change and partnership board meeting minutes and notes from the project's inception; the original business case for the project; the original and revised versions of the system change plan and associated documents; terms of reference and governance structures; theory of change and programme monitoring returns; and slides and presentations from events and workshops on PIE. All the documents were read carefully for overall meaning and then re-read several times. Detailed notes were taken at each stage of reading to capture core ideas and to develop the themes as in the analysis described below.

Documents were identified from a review of the project's website (the initial system change plan and the theory of change, for example were publicly available documents). References to other documents came from conversations with the project team or within other documents and were provided on request (for example: the business case and the monitoring returns). Helpfully the project team ensured that I was copied in on meeting notes and minutes and I also received these from the meetings I attended. Clearly, the researcher can only access documents they are/have been made aware of and thus can never be certain that all potentially useful documents have been identified or provided. As a result, the picture they provide will always be partial (O'Leary 2014). Analysing such documents, requires an awareness of audience and purpose (Bowen 2009). Further, the lack of context for some documents – e.g., historical meeting minutes - could make them difficult to interpret and thus there is risk that the importance of some data within these may have been overlooked.



All the qualitative data was analysed thematically, and this process is described in the Data Analysis section below.

#### 4.7. Data analysis

The logic of enquiry most commonly associated with pure critical realism is retroductive – seen as a balance between inductive and deductive logic with an objective of explanation rather than prediction, and an iteration between theory and data (French 2017; Trenholm 2012; Sayer 2004). While there is a limited amount of literature on the practicalities of approaches which balance the two or have a more purely retroductive focus (Trenholm 2012), this research draws on the critical qualitative approach of thematic framework analysis described by Ritchie et al (2014) and Barnard (2012), identified as a practically useful approach within a qualitative, critical realist paradigm.

The inductive-deductive balance in Barnard (2012) and Ritchie et al.'s (2014) is described as 'u-shaped'. It begins with existing literature and theoretical review; moves on to the empirical phase which focuses on gaining an understanding of the rich and varied perceptions and experiences before moving back to explore the findings from the empirical phase in the context of the theory. In reality, this is a more iterative and less linear process than is perhaps captured in this description. The theory, for example shaped the way that the research was conducted – in allowing for the emergent and the unexpected and responding to extreme events; as well as the design of research instruments (the focus on definitions and understanding of core concepts, for example, was particularly indicated by the theoretical perspective).

The actual analysis of the data was undertaken via a number of inter-linked stages, beginning with an extensive period of familiarisation. All interview data were transcribed verbatim from the audio tapes, anonymised and cross-checked. The transcription itself formed part of the analysis: during transcription I began to note thoughts and reflections on the data and indications of possible initial themes. The familiarisation with the data continued via repeated reading, and re-reading of the interview transcripts, the meeting observation and documentary analysis notes.

Data analysis was an ongoing process which continued throughout and beyond the period of fieldwork. This protracted period of analysis had many benefits: it enabled

me to have an extended engagement with the data to engage in what Patton (2002, p. 514) describes as ‘mental excursions’, ‘side tracking’, testing and challenging my interpretations. It also facilitated the sharing and discussion of findings with my supervisory team – each of whom<sup>20</sup> brought different perspectives which helped to shape and challenge my understanding. This was further assisted by the processes of review and progress monitoring within the University whereby early findings were shared with internal reviewers. This provided a further opportunity to present emerging themes from the analysis to academic staff outside of the supervisory team. This ‘rolling’ approach to analysis was also indicated by the need to undertake interviews at two time points, whereby the findings from the first interview, in part, informed the second, and by the observations and documentary analysis described in the previous sections which were ongoing throughout the fieldwork phase.

All the data were uploaded into NVivo, a software package which aims to assist in the process of managing, coding and analysing qualitative data. This process was itself iterative, going through a number of distinct but interconnected phases. I initially created three separate NVivo files for the interview data for each of the following: project team interviews; system change board interviews; and embedded case study interviews. The purpose of keeping them separate at this stage was purely as a means of retaining clarity about which themes were emerging from which groups – this was particularly important where two sets of interviews were being undertaken. The second stage involved merging all the data into a single NVivo file. My initial approach was to attempt to analyse the data across all the research questions within this single NVivo file. However, this quickly became unwieldy and so I took the decision to create three separate NVivo files – each containing all the merged data. These corresponded to the three main areas from my research questions and mirrored the structure of the case study and the subsequent findings chapters. Thus, one NVivo file focused on system change, one on PIE as an objective of system change and one on the embedded case study. A final stage involved merging these three files back into a single file again. This was necessary to enable me to identify common themes across the research questions and to undertake the final stage of analysis: applying the theoretical lens of

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<sup>20</sup> See Section 4.6

complexity theory to the findings. This somewhat 'messy' process was not pre-planned but emerged in response to the, sometimes seemingly overwhelming, amount of data, the structure of the case study and to retain focus on the research questions.

Each of the NVivo files created above went through a similar process of analysis. A preliminary thematic framework was created to assist in organising the data. These are a small number of broad, organising categories (Saldana (2009) suggests between five and seven), with more detailed sub-themes underneath (Ritchie et al 2014). Following Ritchie et al 2014, the themes here were descriptive rather than analytical. Analytical thoughts were captured in notes for consideration at a later stage. This created an 'index' to the data (Richards and Richards 1994; Ritchie et al 2014). The data were then sorted such that similar materials were co-located allowing a complete picture of all the content relevant to the particular sub-theme. These were then reviewed to identify, for example, where themes overlapped and could be merged or needed to be split into further sub-themes.

The data were then extracted and viewed theme by theme. Although thematic framework analysis enables data to be viewed by case (e.g., the individual transcript) or by theme, in this case a thematic view was chosen to give a more in depth and richer view of each theme (Ritchie et al 2014). I felt that this approach enabled a better overview of the data and avoided some of the risks of grouping data in masking variability. Thus, I was able to see more easily, for example differences in the cognitive representations of the system held by different individuals, and to retain the subtle nuances of these differences.

Ritchie et al (2014) view these stages as largely concerned with data management, rather than analysis and recommend that analytical thoughts are kept separate from the data and brought into play in this next interpretive stage. I began this stage with a further process or re-familiarisation, reading across the themes, before beginning the process of identifying elements and dimensions within each theme. This again was an iterative process, involving reviewing themes, combining overlapping categories and splitting ones that were not detailed enough. This enabled the identification of linkages between the data at the different levels of the case study and patterns within the data. The final analytical stage involved revisiting these themes via the model of complexity theory identified in the previous chapter. Importantly, this is not a search

for causation, rather an exploration of the interplay of multiple and nuanced facets within the data. The complexity of this process is difficult to articulate as it involved going backwards and forward between the data and the themes, and the theory, evaluating possible interpretations of the empirical data as well as refining the theoretical model. In this way, the analysis is not seen as emerging from the data but rather the product of an active and iterative process of construction between the researcher and the data (Braun and Clarke 2006).

The method of analysis described above is a simplified and linear presentation of what was an extended, iterative and reflective process which involved multiple visiting and re-visiting of data and themes, the keeping of a reflective analytical log, noting thoughts, themes and interpretations throughout the process. The analysis also directly influenced the design of research instruments between the two phases, with analytical findings from the first phase revisited and replayed during second interviews.

#### 4.8. Ethics

Prior to beginning the research, ethical approval was obtained via Nottingham Trent University's College of Business, Law and Social Sciences Research Ethics Committee. The ethical approval was granted in two phases. The first phase (granted on 31<sup>st</sup> May 2018) covered access to and analysis of documents relating to the project and the programme and analysis of secondary interview data from project beneficiaries which had been undertaken as part of the project's evaluation. The second phase (granted on 22<sup>nd</sup> October 2018) gave ethical approval for the second tranche of research: the interviews with project staff, system change board members, and staff within the embedded case study organisations, as well as observation of a series of system change board meetings. The ethical process for the research followed the Social Research Association's code of ethics which is based not on exhaustive or definitive guidelines but highlight the importance of ongoing reflection on ethical issues throughout the research process. They highlight the obligations of the researcher (to society; to funders/employer; to other researchers and most importantly to research participants), stressing the importance of informed consent, confidentiality and

anonymity, avoiding harm, and integrity in research practices (Social Research Association 2003; and 2021).

The process followed in this research was as follows:

### *Interviews*

Interviewees were invited to interview by email to which was attached a copy of the Information Sheet (Appendix 2) and Consent Form (Appendix 3). At the start of each interview, the interviewee was given time to read the information sheet and the consent form again and given the opportunity to ask any questions. Their attention was particularly drawn to the voluntary nature of their participation, their rights to withdraw from the research and how their data would be used including limitations around anonymity. Following this, the consent forms were signed by me, and the interviewee and a copy given to the interviewee. At the end of each interview, interviewees were once again asked if they had any questions or concerns and given a copy of the debrief sheet (Appendix 4). They were thanked for their participation and their attention was drawn to the means of contact in the event of later concerns or to withdraw from the research (and the timescales for doing this). For those who were to be interviewed twice, consent was also sought to retain contact details and to make contact again to arrange the second interview. At the interview, I went through the information sheet and the consent form again and gave participants the opportunity to ask questions or seek clarification on any points.

### *Meeting observations*

Prior to each meeting, a copy of the Information Sheet was circulated by email to all members of the system change board (Appendix 2). Board members were asked to contact me if they would prefer that I did not observe the meeting. An alternative contact was given in the event that they were uncomfortable in contacting me directly. No objections were received. At the start of each meeting, system change board members were given a hard copy of the information sheet and asked by the chair if there were any objections to the observation. In the event that there were no objections (all meetings), I was invited to give a brief outline of the research at which point I reiterated that I would leave the meeting at any point (and destroy any notes made) if any member objected. Objections could be made directly to me or via the

Chair of the meeting. Each member of the system change board was given a copy of the debrief sheet (Appendix 4) and encouraged to contact me or my supervisory team in the event of any concerns or questions.

#### *Data protection*

To ensure compliance with GDPR and relevant data protection legislation. The following process was agreed as part of the ethical approval process.

Interviews were recorded on an encrypted digital recorder. On completion of the interview, the audio file was uploaded onto the University's secure computer network to an area to which only I had access and deleted from the digital recorder. Having been recorded on an encrypted device, the individual uploaded files were themselves also password protected. During the transcription process names and other distinguishing features were removed. All transcriptions were saved with a secure code name and the list of codes were password protected and stored separately but securely from other transcripts. Notes from interviews and observations were typed and stored securely on the University system after which hard copies were confidentially destroyed. Hard copies of signed consent forms were kept in a locked cabinet.

#### *Anonymity*

Anonymity was important to encourage participants to be as open and honest as possible. However, within case studies it is important to capture contextual features and thus the consent form and information identified that while names and specific geographical information would not be used (including the name of the project), contextual information would need to be included – such as the nature and type of the organisation to which they belonged and its sector.

There are invariably issues of anonymity in case study research. The need to give a meaningful description of the case(s) is invariably in conflict with protecting the anonymity of participants and this is compounded where the number of participants is small (Mills, Durepos and Wiebe 2010). This was demonstrated clearly in this research. While the programme has not been named, there are a limited number of such programmes in operation in this timescale. Further, the inclusion of some descriptions, for example, of the aims and objectives emerging from the documentary

analysis also potentially compromise complete anonymity, particularly within the multiple and complex needs sector where there are high levels of awareness of the programme.

All case study research grapples with the issue of balancing anonymity and making meaningful observations situated within their context. The way I addressed this was to begin each interview with a clear articulation of the risks of identification of the programme from the inclusion of the contextual information referred to in the consent forms and information sheets. None of those interviewed expressed any concern about this possibility at this point. During two of the interviews, the participant expressed a view and then immediately indicated they were uncomfortable with what they had said being shared more widely, even anonymously. These comments were therefore not transcribed and thus were not included in the analysis or the report. After each interview, during the debriefing process, I re-confirmed that all the interviewees were still happy for their interview to be included in the research and highlighted the process for withdrawing consent after the interviews.

Concerns of anonymity are particularly highlighted where numbers of participants are small. Within the embedded case study service there was a small number of staff and an even smaller number of managers. I have limited the description of the service (and its parent organisation) as much as possible while retaining some sense of their activities. As I undertook two sets of interviews here, this enabled me to feed back to participants my understanding of their original contributions. This provided another opportunity to check, not just the accuracy of my interpretation but also that they were still comfortable with this being included in the research in the light of the discussions about anonymity at the beginning of the interview.

One way which I considered of further obscuring identities would have been to make no differentiation between, system change board members and the project team, or to combine operational staff and managers in the embedded case study. However, here, the specific roles were relevant to the opinions expressed. Thus, to combine in this way would have removed important contextual information and thus I took the decision to retain this distinction.

Concerns of anonymity are also, to some extent, affected by time. The length of PhD research (extended in this case due to the impact of the Covid-19 pandemic and other personal challenges) goes some way to obscuring some of the issues of identification as changes in structures and personnel make it more difficult to identify individuals even if the programme is identified. This is less true of organisations who may of course suffer reputational or other damage as a result of being identified in research. In the preliminary discussions with senior staff in the organisation in the embedded case study, I raised the difficulties of complete anonymity in such research and they confirmed that they were happy to proceed as long as neither the organisation, nor the service was named directly.

#### 4.9. Reflections on the research process

This section aims to reflect on the process of the research, and in so doing, identify some of its limitations. The research paradigm in which this research sits, starts from the position that it is not possible for the researcher to be completely objective and recognises that the beliefs, experiences and views of the researcher will influence the research process (Ritchie et al 2014). Diefenbach (2009), also indicates the importance of reflection in case study research – identifying research as a creative process between the researcher and the research. The importance of reflection is further identified within complexity theory which positions the researcher as part of the complex system rather than a neutral observer of it (Stacey, Griffin and Shaw 2000; Boulton, Allen and Bowman 2015). This makes such reflections a particularly important part of the process of research.

##### *Personal background*

Complexity theory is widely held to require a different mindset and one which is at odds with much traditional management discourse which privileges predictability, control, planning and simplification (Boulton, Allen and Bowman 2015; Stacey and Mowles 2016). Prior to beginning my PhD, I have had a long career as a senior manager and consultant, with responsibilities for change management in a variety of different settings from large retailers and financial services institutions to smaller grant funding and VCS organisations. Within these roles, my formal training and formal and informal mentoring and learning from colleagues has largely been at odds with what I



have subsequently been exposed to in my study of complexity theory. It has, for example, fostered simplified, linear models of change management, immersed in conceptions of predictability, control and cause and effect. Understanding complexity theory has required a constant surfacing and challenging of these long-held (and often previously unconscious) beliefs. As well as being challenging in and of itself, this has also meant that it can be difficult simultaneously to shift mindset and retain a level of critical distance. While, essentially, this is no different from the reflexivity required in any qualitative research, the radical difference of complexity theory arguably considerably adds to this challenge. An important part of the data analysis process therefore involved actively reflecting on these issues, particularly during the final stage of the analysis which iterated between the data and the theory. This emphasised the importance of keeping a reflective diary which I have done throughout the process. For me, the keeping of a reflective diary not just provided a focus for such reflection but also encouraged it to become a regular practice.

#### *Position of the researcher*

There is, of course, another issue raised by (though obviously not exclusive to) complexity theory: the extent to which the researcher (or manager) is an external observer or part of the complex network of influences within the system being researched. This was directly observed in my experience within the embedded case study organisation where the very action of my asking questions about PIE prompted some staff to think about what had, until then, a very peripheral concern to which they had paid little attention. Clearly, in such circumstances, the very act of research has an impact on what is happening within the organisation. This would be more problematical if the research was being undertaken from a more positivist perspective, and indeed the theoretical model inherently expects such influences. It is important, however, to recognise, and explicitly acknowledge these as part of the context of the research.

I was quite a visible presence within system change board meetings and other events and I found that my role was sometimes misunderstood, and I was occasionally, for example, mis-identified as a member of the project team. The danger here is that such association may have led to more socially desirable responses – for example in relation to the role of the lead agency. While this risk can never be completely mitigated in any

qualitative research, I tried to anticipate this with clear statements in my information sheets and in early conversations with staff about their participation. I also found it helpful to reiterate this at the start of any research activity and to allow sufficient time to reassure participants as to the purpose of the research and my role.

### *Complexity reduction*

Undertaking research using complexity theory raises a number of specific issues which could broadly be considered under the heading of complexity reduction. The previous chapter examined issues about the artificiality of system boundaries in complexity theory which conflicts with the more pragmatic need for research to be manageable and deliverable within time and resource constraints. Boulton, Allen and Bowman (2015) specifically identify the linear nature of PhD research and the difficulties this raises in terms of not just what is examined but also, while following a specific focus for the research, allowing the research process to unfold, respond to and follow emerging events. Inevitably, any research will face the same issues. Indeed, when compared to previous contract research which I have undertaken, the PhD process allowed for a much higher degree of responsiveness and flexibility. Hetherington (2012) points out that: 'any attempt to undertake research in complexity theory must ignore some fundamental principles of complexity in order to move forward' (p.108). There has, then, within this research necessarily been an element of complexity reduction – for example, in the conceptualisation of the system change project as an entity and the temporal snapshot of 22 months within an 8-year programme. While these risks can never be completely mitigated, the research attempted to do this by more flexible use of the interview schedule – following new themes which emerged during the interview, recognising and responding to the different levels of experience (e.g. of PIE and system change); and adjusting the focus of the interviews accordingly and allowing time and space for interviewees to add their own thoughts outside of the specific questions asked. In terms of the research design itself, this was an iterative process and the focus of the research changed in response to the emergence of PIE as part of the system change project enabling a focus on this specific element. The importance of research which looks at different levels of the 'system' (Gilpin and Murphy 2008; Briggs et al 2018; Room 2011) was also reflected in the design of the case study.

### *Covid-19 Pandemic*

Clearly, undertaking research during the Covid-19 pandemic brought its own challenges. There was as an immediate and direct impact on the timing of the second set of project team interviews. This resulted in a disconnection in terms of the timing of the interviews relative to those in the system change board. This meant that some issues identified by the project team occurred significantly after the system change board interviews and thus the perceptions gathered on these were more limited. While theoretically it may have been possible to undertake a second set of interviews with system change board members at this point, the timing of this (close to the deadline for PhD submission), along with the difficulties of accessing staff whose focus was necessarily on the pandemic response rendered this infeasible. Conversely, what happened as a result of the pandemic did raise some interesting findings in relation to the theoretical perspective of complexity theory. That is not to imply that such a devastating event was in any way positive. Of course, the pandemic was an unprecedented event, and no research design could have anticipated such a dramatic occurrence but it is important to acknowledge the consequences of this on the research.

### **4.10. Concluding comments**

This chapter has explored the research approach, detailing the research paradigm and the process of conducting and analysing the research. It has reflected on issues of ethics and, the particular challenges with regard to anonymity in case study research. It has concluded with some reflections on the process of undertaking the research.

Chapters 2 to 4, then have provided the context for this research. They have: reviewed the literature in the main areas of the research, providing a contextual background and identifying gaps in the literature to which this thesis responds; established the theoretical framework which will be used to analyse the findings in the final chapters; and detailed the research paradigm, and the process of the research. The next three chapters will describe the findings for this research across the three elements of the case study: the system change project; the objective of PIE within the system change project and, via the embedded case study, the experience of implementing PIE within an organisation involved in the system change project.

## 5. Chapter 5: Findings - the system change project

### 5.1. Introduction

This chapter is the first of the three ‘findings’ chapters. The composition of these reflects the structure of the research as described in Chapter 4. This first findings chapter therefore begins at the highest unit of analysis – the system change project and examines: how system change (and the system) are articulated and understood; the experience of managing the change project; and the factors impeding and enhancing implementation at this level. To enable a more detailed scrutiny, the second chapter explores the specific objective of PIE within the system change project: examining the perceptions of PIE and its place in the system change project and the ways in which the implementation of PIE is taking place within it. Finally, the third findings chapter presents the findings of the embedded case study and the experience of the organisation as it implements PIE and the extent to/ways in which this relates to the wider system change project.

These first two Findings chapters draw on the documentary analysis, interviews with members of the System Change board and, where appropriate, meeting observations. The views of operational staff are included to a limited degree. This is because staff within these organisations had, for the most part, little to no awareness of the system change project (a finding in itself) so were unable to comment on what might be meant by the term system change or the role of PIE in the system change project. Some were, however, able to consider in a more theoretical sense what might be meant by the term ‘system’, so these views have been included.

### 5.2. Defining the system

#### 5.2.1. The ‘service’ view

Within the original business plan, the system is not explicitly defined. The business plan is undated but covers the period 2014 to 2016 so represents the initial thinking on the system change project. Within the plan, there are references to both ‘system’ and ‘services’, suggesting a perceived distinction between the two. References relate, for example, to difficulties service users have in navigating ‘the system’ or for benefits and

cost savings to accrue across 'the system'. While the exact nature or composition of the system is not articulated, these references suggest a conceptualisation of it as a collection of services with which beneficiaries come into contact in the course of their lives, implying a level of coherence or connectivity, which, as indicated in Chapter 2<sup>21</sup> is contrary to the experience of service users.

The references to partners and organisations involved in delivering these services locate these services within the four need areas, with statutory and voluntary sector organisations from health/mental health, substance misuse, criminal justice and housing indicated alongside some organisations providing services for specific groups – e.g. BAME beneficiaries or supporting and promoting meaningful involvement of service users in service design and delivery.

The terms system and services are used similarly in the first system change plan. However here system is explicitly defined referring to organisations, groups and individuals whose policy, planning and commissioning decisions directly impact on people with multiple and complex needs, as well as the services that directly support them. The focus of the plan is here articulated as being on three different levels: the national level, described in terms of national government/public sector bodies- i.e. Department of Health, Department for Communities and Local Government, Home Office, Ministry of Justice, Department of Work and Pensions, National Probation Service and the National Offender Management Service (NOMS) and NHS England, as well as the Making Every Adult Matter (MEAM) coalition of national charities; local organisations (both strategic and delivery) across the four areas of need, represented by statutory and voluntary and community (VCS) sector agencies in mental health, substance misuse, housing and homelessness and reoffending and rehabilitation. It thus represents the system as a collection of services, focused on formal organisations, again with an implication of coherence or connectivity. In the second version of the plan (produced during 2018 and covering the period between 2018 and the end of the programme in 2022) the system is conceptualised with a slight but significant difference. Here, the reference is not just to services but also to other individuals that those with multiple and complex needs encounter, including explicit reference to

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<sup>21</sup> See, for example: Anderson 2011; Cockersell 2018b

networks of friends and families. In this way it moves away from what one system change board member called purely 'service' view of the system to one which suggests a wider, interacting network of influences on the journeys and outcomes of people with multiple and complex needs. As noted above, in all these cases the language suggests underlying assumptions of coherence (in the use of the term system) and connectivity (in the use of the word network) which contrasts with the fragmented nature of the services experienced by beneficiaries.

Within the interviews, most of the system change board members also identified the system as representing a collection of services in the four need areas, similar to that articulated in the documents examined. This is perhaps unsurprising since the system change board are partners within the project and familiar with (and, in some cases, contributed to) the documents above. However, most also expressed the importance of recognising the limitations of this 'service' view of the system, in terms of its omission of informal networks (e.g. of friends and family):

'In a more informal kind of way, friends and peers and the people who may surround that person so it could be members of the family but probably more likely to be other people they have met in their journey. So, the system is quite far reaching' (System change board member (25) – Statutory sector)

Clearly, how the system is defined has an impact on who/which organisations might be involved in developing and delivering the system change project and there were indications that some perspectives might have been omitted at different points. Where these omissions were identified, they were remedied as the project responded by inviting new organisations and people to join the project:

'Definitely different things would have emerged if there'd been different people there, yeah definitely women for example... So yeah I think if you'd had a wider mix of people things like that might have been in the plan and there might be some other areas missing from it as well that they haven't thought about but women's is the one that jumps out to me.' (Project team member (02) – Timepoint 1)

However, more fundamentally, there was an acknowledgement that the service view of the system risked focusing resources and attention on those areas which might not

have the greatest capacity for achieving systemic change and omitting those that did. Focusing on the problem upstream, for example in schools or early years support for example was seen as potentially having a greater long-term impact, but these interests were not explicitly included in the project's definition of the system, nor represented within the system change board:

‘What you could see was the impact of certain dynamics in a person's early years leading to homelessness, so I said well what about going more upstream?’ (System change board member (28) – VCS)

Perhaps unsurprisingly, then, there is then a degree of congruence between the ‘service’ view of the system encapsulated in the plan and the views of many of the system change board members interviewed. However such a definition was not without difficulty: the inclusion of friends and family in later iterations of the plan, highlights one of the limitations of this view. Similarly, such a view does not preclude the omission of key services, where there may be greater potential for systemic change. Further, stakeholders were clear that the system should not be considered as a static entity – even when regarded in these ‘service’ terms. New organisations providing services, restructuring and re-organisations as well as changes in staffing and personnel meant that what constitutes the system is changing all the time – indicating something which is perhaps more fluid than the conceptualisation of it as a service view might first suggest. Equally importantly, the ‘service’ view was not universal, and, even where it predominated was associated with a number of limitations, suggesting a more nuanced understanding (explored in section 5.2.3 below).

### 5.2.2. Indefinability

As indicated above, most of the system change board and project team stakeholders interviewed centred their definition of the system around formal organisations and services. However, for two system change board members and the operational staff, the concept of a system as a definable entity was more problematical. This manifested itself in two distinct but related ways. For one of the system change board members, the ‘system’ was amorphous, with component parts which were difficult to identify, linked together in complex and unclear network of relationships with each other, making them difficult to navigate for service users and staff alike:

'I would describe it as a web of complexity. And I think in one sense it is like an indefinable amoeba with kind of just a tangle of structures within it.' (System change board member (28) – VCS)

For the operational staff, the question of how they defined the system for people with multiple and complex needs was simply impossible to answer. While they recognised that their service users accessed a number of support services, they simply did not conceive of this in terms of a system. For them, the system could only be defined in terms of the individual service user, impossible to determine as it would be unique to every individual service user with the system taking on 'the shape of the person' (Operational staff - VCS).

While this was largely an operational staff viewpoint, one of the system change board members also viewed the system in this way - different for every person and defined by their individual needs:

'I suppose it would depend on the individual really what the system is. What controls my life might be quite different from what controls someone else's.' (System change board member (24) – VCS)

This conception of the system as different for every individual was not just related to the organisations or services that the service user came into contact with: the variation in the amount, type and timing of contact different service users had with different parts of the system (even though contact with core agencies might be common to most service users) and the differences between individual workers within different agencies was seen to mean that the system might be experienced as qualitatively different even when the same organisations were involved.

These differences in viewpoint are of more than theoretical importance. Although there was limited awareness of this system change project, for operational staff the limitations inherent in a service view of the system translated into a level of cynicism about such strategic initiatives. Attempts to, as they saw it, oversimplify the complexity of the system risked masking the particular and unique nature of the problems facing their service users and were symptomatic of an unrealistic view of how things worked in practice.



### 5.2.3. An artificial divide

The separation between a service view of the system and a view of the system as indefinable as presented here is, however, somewhat artificial. For example: despite the predominance of this service view of the system, there was a concurrent concern (similar in type, if not intensity, to that of the operational staff) that describing the system in this way implied a level of order and structure this belied the experience of beneficiaries and risked masking the complexity and fragmentation that characterised this experience.

There was then, even amongst those who tended towards a service view of the system, a sense that presenting the system in this way was an over-simplification. For them, however, the clarity of the service definition was seen as necessary in order to communicate system change, to develop and manage a plan and engage stakeholders within the resources available. Essentially, the risks of over-simplification associated with more tightly defining the boundaries of the system were seen by some as being outweighed by the benefits of this in enabling them to retain control and effectively manage the project. While some were entirely comfortable with holding these two potentially conflicting positions, others expressed a greater level of tension which, for them raised the question of whether imposing such a structure was feasible in such a context.

‘Maybe it’s just, maybe I’m trying to put a layer of structure on something that is a bit amorphous. There are too many possible intervention points and too many combinations of how people would use intervention points (Project team member (10) – Timepoint 1)’

### 5.3. Defining system change

While system change board members were comfortable with using the term system change and seemed to feel that they broadly understood what it meant, they often found it difficult to articulate precisely what they understood it to be. Echoing the

language of the programme, however, there was a widespread view that system change needed to be transformational<sup>22</sup>.

As indicated in the literature review, the term transformation is commonly associated with system change though it is not always clearly defined. This ambiguity is also evident in the funder's definition of transformational which tends to be focused on examples of what it is not, rather than what it is. It excludes, for example, activities which were already happening being re-hashed in a different guise, simple implementation of good practice, or changes which are not sustained or are reliant on key individuals. Although this definition recognises that these may be stepping-stones to system change, it does not consider them system change in and of themselves. While the funder is not prescriptive as to what it considers to be system change, it does suggest examples such as changes in the way services are commissioned, workforce development and changes in policy.

Within the first iteration of the system change plan, there is a much greater use of language which evokes transformation than is evident in the second version. The initial plan talks about 'changing the DNA', a metaphor which has strong indications that change has to be fundamental and radically alter the structures of what is currently there. The tone of the second system change plan is more focused on the practicalities of the change: for example, a large part of the second plan is an action plan for each of the objectives with measurable targets and assigned responsibilities. This shift was also raised by stakeholders in the interviews and was seen as a necessary part of creating clarity and ensuring progress was made during the latter part of the project.

'So, the plan was reviewed and we have a new plan now and I think we are keen that it is a leaner, fitter plan...So that was one thing but also there was no-one responsible, it wasn't I didn't think it was SMART enough in terms of being a plan.' (Project team member (01) – Timepoint 1)

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<sup>22</sup> The funder's definition also included the terms beneficial and sustainable. Although sustainability and legacy were seen as important by those interviewed, they were not commonly articulated as a definition of system change.

This represents an interesting shift and perhaps points to a tension between the language of transformation with its evocation of radical structural alteration from the status quo and the need for change to be managed and achievable within the scope, scale and resources of the project.

Interestingly, although the language of the second plan is less explicitly evocative of transformation than the first, it conversely coincided with (and in part was driven by) a greater focus from the funder on transformational system change. This was perceived by stakeholders to have emerged from a concern that there was a disparity across the different projects in the way that system change was being defined and a desire to ensure that initiatives were not described as system change unless they were truly 'transformational'.

Within the interviews with system change board members there was a great deal of agreement that to be considered system change, changes needed to be transformational but there was less agreement as to what constituted this. For some, changes in culture and attitudes were the most important; while for others, to be truly transformational required more fundamental changes in policies or the way services were commissioned or structured. Perhaps most importantly, most participants identified that, at the time of the interviews, the project had done much to improve the understanding of multiple and complex needs and the type of services needed to support them but they did not view this as representing transformational system change:

'I mean I've not heard of anything radical that comes out of it, not system change.' (System change board member – VCS)

Although there was a widespread view that the project had not thus far achieved transformational system change, there was also some recognition of the difficulties of doing so. This was also linked to the findings in the earlier section whereby, the boundaries of the project were seen as omitting the causal factors of multiple and complex needs which consequently limited their ability to achieve such change.

Having explored the way that stakeholders articulate their understanding of the system and system change, this chapter will now turn to examining stakeholders' perceptions of their experience of implementing system change. The system change

project is a large-scale project and thus it is not feasible to examine the implementation of all their objectives (hence the more detailed examination of PIE in subsequent chapters). Within this chapter therefore, I will examine the major themes from the interview data in relation to the stakeholders' experiences of being involved in the implementation of the system change project overall rather than in connection with any specific objective.

## 5.4. Managing the change

While the original business case document identified a model for managing the change – the McKinsey 7s model<sup>23</sup> this was not used and nor was any alternative theoretical or other framework identified though the project team more broadly referenced system change approaches that had influenced their own thinking as well as the work of the wider programme and other projects. Similarly, the project team and the partners had a very diverse and extensive experience not just within multiple and complex needs services but also in national and local policy arenas which influenced the way in which they approached the system change project. There were three main themes identified within the research pertaining to the way the system change project was approached.

### 5.4.1. Flexibility and responsiveness

Throughout the interviews, the project team interviewees stressed the importance of the system change plan as a living (rather than a static) document which responded and changed according to what was happening within and outside of the project (See Section 5.5 below). Inherent within this was a recognition that the potential for change could come from unpredictable sources. Project staff were clear that their main concern was that the lives of those with multiple and complex needs were

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<sup>23</sup> The McKinsey 7s model is a change model designed by the international management consultancy firm McKinsey. It purports to address the interrelated factors which impact on the ability of an organisation to change, focusing on issues of co-ordination as well as issues of structure. It consists of 7 elements to be addressed as part of a change programme – 3 are hard elements (strategy, structure, systems) and 4 soft (shared values, skills, style and staff). <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/enduring-ideas-the-7-s-framework#> [accessed 10/3/21] While it was described within the original business case as the intended model, it was not referenced in any future documentation relating to the project and none of the project staff reported using this, or any other framework.

improved in the short as well as the longer term and a commitment to doing whatever was needed to address this – irrespective of whether it was part of their original plan or not and that as a result, the plan though perceived as important - could only ever be provisional:

‘When it started there was a plan and the idea was that it would be implemented... But even when you plan things out, it’s still not, because there are these other forces at work...So you need your destination but you might change the route’ (Project team member (01) – Timepoint 1)

This flexibility also extended to the way in which the project sought to influence across multiple and connected levels – nationally, locally, strategically and operationally. The literature review identified risks of levels being translated into a hierarchy - with operational level change being seen as inferior to strategic change (Isaac et al 2019). However, the experience within this project was that the project team sought to influence wherever they saw the possibility of change, recognising that it was difficult to predict where transformational change might come from and the importance of building on enthusiasm wherever they found this:

‘Within the organisation that can be change at senior level and obviously that’s good to do that because that can then affect the whole organisation, that sort of top-down approach but again that’s not necessarily where change first appears. It can be staff on the frontline seeing things that are wrong and wanting to do something about it. Equally it can be in the middle where you get someone looking at different services, the management in there can affect things.’ (Project team member (01) – Timepoint 1)

There was also an element of serendipity in some of these interactions and sometimes opportunities would present themselves through chance encounters with individuals, or about individual issues. Here they would seek to take the opportunity to use existing relationships and connections to address, not just the individual issue but also as an opportunity to potentially foster wider change:

‘I was in the kitchen making a cup of tea and bumped into [name] and he mentioned that he’d been having a nightmare with universal credit and one of their most dangerous and severely personality disordered persons on their

books has... just had all his money stopped and now has become unmanageable. And it's quite easy for me to say, I know the person at the job centre...we solved a problem we had had for 8 weeks by ringing this person up it was solved in 15 seconds....And then I thought if it's your team it may be others so I went to talk to some other managers and they said yes please so I emailed him and he has agreed to come and talk to them. That has led from a chance conversation over a tea urn...It was a simple thing to do but it might be effective much more widely.' (Project team member (03) – Timepoint 1)

Such encounters, however, were not entirely attributable to chance, being underpinned by a long history of building relationships and raising understanding of multiple and complex needs which enabled such opportunities to be maximised.

#### 5.4.2. The role of targets

Overall, the major change between the two plans was usually referred to in terms of its greater focus on SMART<sup>24</sup> targets which were seen as indispensable in enabling the team to focus on, and monitor, progress against the plan. This was also identified as being driven, in part at least by a greater focus from the funders and emanating from an underlying concern about the extent to which the projects as a whole were meeting the requirements to achieve system change. There was a sense that the project team felt there was a danger of drift in the absence of a more proactive approach to managing the project. This was largely described as moving away from broader, more aspirational statements to more defined (and sometimes quantified) targets. There was also a greater emphasis on making the plan leaner with a focus on fewer but more achievable targets and importantly those which were seen as having the greatest capacity for achieving change. Whether the capacity was in relation to the type of change – i.e. that it had the greatest capacity to transform the system or the extent to which it was practically achievable was difficult to ascertain. However the increased importance of SMART targets and the focus on the lead agency (rather than partners) as a means of achieving these (discussed in relation to PIE in the following chapter) perhaps suggest the latter.

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<sup>24</sup> SMART is an acronym generally given used in connection with objectives to mean Specific, Measurable, Achievable (or Attainable), Relevant, Timebound (Doran, 1981)

The increased importance of SMART targets itself points to a potential contradiction sitting as they did alongside a clearly articulated understanding of the capacity for gaming of such targets. The project team and partners were generally clear that within the specification of outcomes, outputs and targets there is the danger of manipulation which could lead to focusing on the wrong areas.

‘There will always be a perverse incentive in it somewhere, for someone to do something stupid that will not help the situation because we have all done it. You know we have all squeezed outputs and outcomes out of contracts that you know that’s not doing anyone any good. (System change board member’ (14) – VCS)

However, this view co-existed with a perceived need for these within the system change project. Indeed staff in the project team themselves described their own attempts to make their actions fit within the template they had created.

‘So we are trying to write up progress towards each little section but [project team member] will go yes but we are also doing that and it’s like yes, we are doing that but that’s not actually what the target was.’ (Project team member (18) – Timepoint 1)

The funders themselves described their approach as being particularly focused on learning from what works and there was widespread acknowledgement amongst the project team of the funder’s flexibility – for example around changes to the plan. There were, however, indications that despite this, projects within the programme still felt some pressure to impress the funder, to clearly show progress against targets and therefore to focus on what had gone well rather than learning from what had been less successful:

‘It was quite refreshing to see that – we tried this and it didn’t work or it didn’t work as well as we had hoped and I think it would be good to have more of that coming out of the programme.’ (Project team member (01) – Timepoint 2)

### 5.4.3. Control and influence

One of the most commonly expressed themes was the extent of control and influence of the project in relation to implementing its system change objectives. While

changing power dynamics could be considered an indicator of transformational system change, within the interviews conducted for this research, issues of power and control were expressed primarily in relation to the project's influence on other organisations.<sup>25</sup> There is also a relationship here with the discussion above on what constitutes the system – for example in the inability of the project (as configured) to address the fundamental causal factors which appear earlier in the system - for example in poverty and deprivation.

The perception that the project had limited power to mandate change within other organisations was probably the most frequently cited and, most commonly, with reference to the statutory sector. This was sometimes related to a perception of the statutory sector as holding the power with the VCS as subordinate:

‘From my experience...I see the statutory sector as largely in control with the voluntary sector fitting around that to a large extent.’ (Project team member (18) – Timepoint 1)

The sheer size and organisational complexity of the statutory sector were seen as rendering it less flexible and able to change even if individuals within the organisation recognised the need. Alongside this, are the particular requirements of individual agencies - for example in performance monitoring and statutory requirements - which are beyond the control of the project (or even the local agencies themselves) but have the potential to limit the ability of the project to effect system change:

‘And then I think each agency has its own culture, rules, regulation and they are inevitably pretty much always driven by policy or national guidance. So any of the statutory agencies like probation...or mental health trusts, they are guided and funded, or not, by central government and I think that has a huge impact.’ (Project team member (12) – Timepoint 1)

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<sup>25</sup> This was somewhat different in the second set of interviews with project staff where there was explicit reference to the Covid-19 pandemic shifting some of the power structures - see section 5.8



The project is theoretically constituted as a partnership which would potentially imply a level of shared power and responsibility, so this also links to the points made later in this chapter in relation to the difficulties in getting engagement from partners, particularly in the statutory sector.

For the most part, stakeholders considered that, the limitations to the project's power to directly effect change meant it should seek to influence via other more powerful players (where the objectives aligned with those of the system change projects).

'So, everyone likes the systems change work as long as you come to my table please. And so I think from [the project's] point of view it needs to be out there and it needs to be at other people's tables. Expecting the systems change board to be the vehicle that delivers the systems change plan may not be the most productive.' (System change board member (19) – VCS)

Achieving through influencing and aligning (where appropriate) the objectives of the programme was also seen as a way of sustaining change beyond the life of the project. Perhaps the most significant organisational example of this was the implementation of the Integrated Care Service (ICS) and latterly the Integrated Care Partnership (ICP)<sup>26</sup>. At the time of the stakeholder interviews, the ICS was in development and there was uncertainty about how exactly it would operate. The project was working to ensure that they were involved at a strategic level in the discussions to maintain their influence and ensure that multiple and complex needs were properly represented. At this earlier stage, it was frequently identified by stakeholders as a key opportunity whose objectives of a more cohesive and systemic approach were seen as an opportunity for the project to leverage the power and influence of such a significant body:

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<sup>26</sup> ICS and ICP are part of major reforms to health and social care in England which are ongoing at the time of writing. They are partnerships between NHS, council, VCS and other providers aimed at systemically addressing and meeting the health and care needs of the local population. In the area in which this research was undertaken the ICS operates at the county level, setting the overall objectives for the ICP which operate at the city level and is responsible for bringing together commissioners and providers to co-ordinate and integrate services. <https://www.england.nhs.uk/integratedcare/what-is-integrated-care/> [accessed 3/3/2021]

‘Well, the ICS should be an enabler, shouldn’t it? ... I do hope though that the ICS is the thing that brings it together. I think otherwise it is kind of individuals that are interested that are trying to pull together in spite of the constraints that their organisations are under. So, it is that, the ICS, that has got the national sign off, this is how we are supposed to be working together.’ (System change board member (25) – Statutory sector)

When the second interviews with project staff were undertaken, the project was represented on the local ICP (where multiple and complex needs was a key strategic priority) and the statutory powers which it held gave it significant power and influence within the local area. As a result, it represented a key source of power within the system but also raised questions for the project as to its ongoing role with regard to its own system change objectives:

‘And where does that leave our system change plan? Do we just support the ICP, or do we try and do other things ourselves and try and you know influence things differently?’ (Project team member (01) – Timepoint 2)

The power of structures such as these, then, make them impossible to ignore and they certainly present significant opportunities for influencing the agenda of multiple and complex needs. They are, however, not without tension and carry a risk of objectives becoming subsumed within a bigger sphere with potentially conflicting priorities.

Nevertheless, one of the great strengths of the project was seen to be its ability to monitor and respond flexibly to changes in the local environment and identify areas where there was potential to align their objectives and, in so doing, providing a powerful voice for multiple and complex needs and increasing the project’s influence and ability to effect change. This means of operating was seen as not only desirable but essential given the breadth and size of the system – even when understood in purely service terms - and the relative power of the project compared to other interests. The relationships with other organisations (most notably strategic and commissioning relationships) and the potential for the lead agency to leverage these for the benefit of the project was generally seen as a major benefit though not without challenge.

## 5.5. Context and environment

The broad category of context and environment is used here as a way of bringing together a disparate set of contextual influences - indicative of the breadth of perspectives from the different professional and organisational backgrounds of those interviewed. These influences could be either/both positive and negative.

### 5.5.1. More systemic focus and understanding

There was a widely held view that there was emerging a greater level of understanding of system change and a greater appreciation of the complex and systemic nature of issues, not just relating to multiple and complex needs but more widely. As indicated in the literature review, there is significant and growing interest in system change across all policy areas. This is perhaps seen most directly (though not exclusively) in health and this was echoed in the experience of three stakeholders (who worked both directly and indirectly at a strategic level with the health system). Health (particularly mental health) was identified throughout as both a key part of the system for multiple and complex needs and one of the most complex and difficult to navigate and engage. The more systemic understanding observed here (as well as in other areas such as the local authority) was seen as crucial in helping the system change project to communicate the complex and interrelated nature of multiple and complex needs and thus encourage partners to take a more systemic view.

‘There is a certain momentum so certainly the approach to systems change and the approach to complexity seem to have found some kind of foundation now and it’s not regarded as, there’s a body of thought that has gone into it that I don’t think was the case before and I think that does mean that it’s not regarded as weird and eccentric an approach as it was before, so working against that background does enable you to have more advanced conversations and more informed discussion about it.’ (System change board member (14) – VCS)

Of course, the project itself was not just a passive recipient of this beneficial context, rather the work that they had done in communicating the particular complex and systemic issues facing people with multiple and complex needs also impacted on building this understanding amongst partners.

Alongside the growing, broader understanding of systemic approaches and system change was a more specific understanding of the complexity of homelessness and a growing realisation of it as more than a problem of housing but as the consequence of a systemic and dynamic interplay of factors:

‘So ...they are not just talking about homelessness, they are talking about complex needs, they are talking about the effect of people leaving prison or leaving healthcare, leaving hospitals, having substance misuse.’ (System change board member (21) – Statutory sector)

While articulated here as relating specifically to homelessness, the increased awareness and understanding of multiple and complex needs was seen to have been in large part due to the work of the project (and the programme more generally). Indeed, this increased understanding of multiple and complex needs was seen by most of the stakeholders as being the area where the project had, at the time of the interviews had the most impact:

‘I think it has raised the profile of multiple and complex needs, I think more people are aware of it, understand it at, kind of, commissioner and organisational level. So, I think it has really helped get it on the agenda for discussion, people realise it is an issue and people are prepared to talk about doing things differently.’ (System change board member (22) – Statutory Sector).

Thus, while these shifting attitudes were articulated as part of a more favourable context for the system change project, they were, in large part, also created and sustained by the work of the project, from its dissemination of research undertaken within the project to its promotion of different and more systemic ways of working such as PIE (discussed in the following chapter).

### 5.5.2. Austerity/lack of resources

Echoing the findings in the literature review, perhaps one of the most important contextual factors with which the project had to work was the context of reduced funding and cuts to services as a result of the ongoing austerity agenda. As indicated in the subsequent Findings chapters, this was almost universally identified as being a major barrier to PIE, and inhibiting the ability to work in a more systemic way. This

view was no less common with regard to the system change project as a whole, where all stakeholders identified a lack of funding and cuts to service as, not only a causal factor of the systemic issues but also a major inhibiting factor in the ability of the project to achieve system change. This meant that the services became focused on meeting the immediate (and increasing, and increasingly complex) needs of people with multiple and complex needs. This resulted in a tendency for services to move towards approaches which were more focused on ‘firefighting’, addressing immediate concerns rather than looking more outwardly and creatively seeking systemic solutions:

‘I think it has been deeply affected by austerity and cuts which have caused some organisations to hunker down and whilst I think there is a lot of talk in the partnership world that sharing resources is the best way to manage less resources, I think there is a lot of will to do that with strategic leaders like myself but when it actually comes down to it, it is very, very difficult to achieve when your own resource is cut to the bone and it’s about frontline delivery in your own organisation.’ (System change board member (27) – Statutory sector)

This was also linked to perceptions about the cost of addressing issues of multiple and complex needs and the perception that the solutions were costly to implement even though ultimately savings might accrue, a particularly acute problem in a context of austerity.<sup>27</sup>

A minority view, only expressed by one stakeholder (and that somewhat tentatively) was the possibility of austerity actually having a positive impact in providing an impetus for more radical and innovative thinking:

‘I think that probably at a time of austerity, there is a willingness to think a bit more radically than they had done’ (System change board member (14) – VCS)

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<sup>27</sup> This was also related to the point above in relation to a more systemic viewpoint since costs and savings do not necessarily occur within the same agencies thus requiring a consideration of the system as a whole rather than as individual organisations.

Relatedly, the increasing numbers and visibility of people with multiple and complex needs was seen as having the potential to instil a sense of urgency and focus amongst agencies (though this was expressed speculatively and in the context of an acknowledgement of the more commonly held views identified earlier).

‘There are more people with multiple and complex needs, life is harder and that is quite visible now which I think has got people’s attention that maybe necessarily before. So people can see the burning platform for want of a better word.’ (System change board member (19) – VCS)

Within these views is encapsulated a view that the dramatic (albeit negative) results of austerity could have within them the capacity to create more radical change, though combined with an acknowledgement that this had largely not occurred thus far. This forms an interesting contrast with the interviews conducted with the project team in relation to the Covid-19 pandemic which conversely was seen as leading to greater creativity and innovation and a speeding up of some of the objectives of the system change project. Of course, in many ways the two events are diametrically opposite in that the Covid-19 epidemic resulted in additional funding and resources, it also happened over a much shorter timescale than austerity which was a longer and more insidious process. They, do however, raise interesting issues in relation to the theoretical framework and these are discussed in Chapter 8.

### 5.5.3. Continuous change

In addition to the broad context of austerity and cuts to services, the project took place at a time of significant change within key services. These had numerous impacts on the project’s system change implementation. While some of these were (or were felt to have the potential to be) positive – such as the ICS/ICP – others (e.g. the Transforming Rehabilitation<sup>28</sup> reforms which dramatically (and damagingly)

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<sup>28</sup> Transforming Rehabilitation was a programme of reform of the probation service which began in 2014, splitting the work of the probation service between the National Probation Service (NPS) and a new set of Community Rehabilitation Companies (CRCs) across 21 geographical areas and extending the provision of services to offenders receiving sentences of under 12 months (Ministry of Justice 2014). Following a series of highly critical reports, probation services were returned to the NPS in 2019 and renationalisation of the service announced in 2020 (Grierson 2019).

restructured probation services were seen as more likely to fragment rather than cohere the system and thus work against system change projects such as this. Such a level of change also made it difficult to identify which people were likely to be the most helpful in achieving system change:

‘I think we had the right people around the table at one point but then things changed very quickly so you have to bear that in mind...with all that change going on we don't know who is going to be the key person to sit round the table in the next 6 months’ (System change board member (20) – VCS)

Further, the importance of relationships and the amount of time it takes to build relationships with key individuals was also challenged both by larger structural changes and smaller, local changes when people moved on:

‘The other risk we have got is that we have made some brilliant relationships with individuals but people move jobs and there are one or two key people who you know we have been so lucky to have and if they go you just think oh so it takes us a year to build a relationship and we get a relationship if we are lucky and it can just get scuppered.’ (Project team member (10) – Timepoint 1)

This is a perennial problem and one which I have personally encountered frequently in other research<sup>29</sup>. The definition of system change used within this programme also explicitly identifies change which is reliant on key individuals as not being system change, presumably (at least in part) for this reason. However, interviewees identified an inevitability both to changes in key personnel over time and also the importance of personal relationships between individuals in achieving change. Although there were calls to try and embed the relationships within organisations as a means of protecting them from such changes, there were no clear indications of how this might be achieved and the response here mainly consisted of starting again and building new relationships.

As well as making it harder to build relationships with these organisations, the ubiquity of change had the additional impact of creating a level of fatigue and disillusionment

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<sup>29</sup> See for example: Wong, Ellingworth and Meadows (2015a and 2015b)

about change initiatives (which was also evident within the operational staff interviews) and may also contribute to the dissipation of change discussed below.

‘Personally, I think I have, there is a certain level of change weariness, particularly as we have been pared down at a strategic level in terms of numbers so there is a certain level of change weariness and it is a real challenge.’ (System change board member (27) – Statutory Sector)

#### 5.5.4. Conflicting priorities

Notwithstanding the generally more systemic focus and understanding identified above, there was a very strong sense that, because multiple and complex needs was not a core focus for many of the agencies involved, this added a layer of complexity:

‘The main thing that sometimes does make you feel like you’re wading through treacle, because you are involving agencies and it’s not their sole focus and so it’s these other things going on.’ (Project team member (01) – Timepoint 1)

This was not just an issue of universal versus more specialist services but also conflicts created by different rules and regulations. Essentially, the different commissioning priorities and performance indicators unsurprisingly in place across such a broad spread of service sectors, can conflict with each other. These not only make it difficult for services to work together operationally but, given that they are often driven at a national level also limit the ability of a project to deliver systemic change at the local level:

‘So that’s the only thing I’d add to that, the systems approach to performance or whatever word you want to use, success criteria, whatever, you know there isn’t a holistic view on that and for most of us that is a national issue for us in terms of certainly the statutory agencies and that would limit [the project’s] ability to do something about it.’ (System change board member (27) Statutory sector)

Clearly this also links to the earlier points about the extent to which there is understanding of the systemic nature of these issues and the need for more holistic strategies and the increasing optimism that there were beginning to be signs of a



greater understanding of this issue. However, this suggests that this increasingly systemic viewpoint had not yet translated into major changes in practice at this level.

### 5.5.5. Dissipation

An important impact of the complexity of the context in which the project (and the organisations within it) operates was the potential for change initiatives to dissipate. As I indicate in the next chapter, there was a sense (expressed in relation to PIE) that although changes in the wider context happened all the time, in fact the impact of that change at the organisational level was often limited. This was echoed at the strategic level, where commitments to change made by partners were seen as having the potential to be defeated not just by conflicts with specific issues of organisational priorities or performance targets but also by internal bureaucracy within organisations, which were beyond the scope of the project (or the partner organisation's representatives) to address:

‘Even though we have made our point and our point has been listened to, and to a significant degree accepted, that once matters leave the hands of the people involved in the conversation it finds its way into the hands of systems, internal systems that are in charge of drawing up contracts, specifying contracts, issuing contracts, presiding over procurement processes, that those are so engrained in big organisations, that it, that working out how you would ever get round those in the ways that you really would need to get round them if you were going to achieve systems change is challenging, because unfortunately it is just the default position that whatever you agree will eventually get sent to legal and will get sent to procurement who will come back with any number of reasons why we can't do it like that.’ (System change board member (14) – VCS)

The following chapters indicate the potential for this dissipation to occur in the objective of PIE. A broader and more significant finding was the experience of operational staff that, although there were a lot of changes happening around them, the impact on their day-to-day practice was limited:

‘I suppose yes there is always change... But then in some weird respects nothing ever changes either...So yeah it is funny you get a bit of disturbance but

then it settles back into the same, I'm never sure, we are always absorbing change, there is always a lot of change but it doesn't feel like a lot of it impacts us' (Operational staff – VCS)

This phenomenon has been observed in other contexts<sup>30</sup> and was also expressed in relation to PIE in the embedded case study. The reasons for this were not always clear but were most commonly linked to the perceived importance of their own personal values and attitudes (rather than organisational change initiatives) on their practice. It was also linked to the frequency of change initiatives and the sense of fatigue this engendered which was identified above.

## 5.6. Partner engagement

Partnerships were generally seen as positive and, at the time of the interviews, there was little disagreement as to the need for change for people experiencing multiple and complex needs. We saw above, however that some of the different interpretations of system change indicated that, for some staff, system change was beyond the influence / remit of the project and this undoubtedly impacted on their active engagement with it.

Further, while most partners interviewed clearly were comfortable in describing themselves as partners, some issues were raised in relation to this. From the perspective of the project team, this centred on the difficulties converting agreement to actions. For the partners it was articulated as difficulties in finding the time to engage as fully as they might, given the pressure from their own organisational priorities which were not always obviously aligned with the priorities of the project. This was exacerbated by their experience of limited resources and over stretched services:

'So I think you know, [the project] is one of those things where I can see its worth, I can see its value, I can see what it can achieve but it is on that long list of things that I would love to be more engaged, more involved, or I'd want the organisation to be more involved or engaged with but you know, we have to be realistic and sometimes it really is about the strategic partnerships and

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<sup>30</sup> See, for example: Hood (2014) in relation to integrated working in children's services.

meetings that we are statutorily obliged to be at, that has to be the priority for us' (System change board member (25) – Statutory sector)

The project as a partnership was clearly understood in theory and most organisations were clear that the project was intended to operate as a network of partner agencies. They typically articulated any difficulties of more active engagement down to themselves and their own pressures (described above) rather than a lack of a sense of partnership. However, as demonstrated within many of the quotes used (including the one above), most tended to refer to the project as the small project team - i.e. something external to them rather than something of which they themselves were an integral part.

There were also some concerns expressed in relation to the extent to which the partnership extended to the whole 'system' and had engaged the full range of services or indeed the staff within them. This concern was also borne out by the embedded case study where operational staff were largely unaware of the system change element of the project or what it sought to achieve.

For one stakeholder interviewed, however, the concerns were deeper and his view was that the project was not in effect a partnership but rather was dominated by the project and the lead agency:

'No I don't think it is [a partnership], no. I mean one of my staff used to go to the board meetings and she said I'm not going anymore because all I hear is how great [the lead agency] is and how great [the project] is and how they have done this, that and the other, as if it hadn't been done before, and as if they are the only ones doing anything and that is not the case.' (System change board member (28) – VCS)

This viewpoint was only expressed by one of the partners interviewed but there was a more widely held view that partners tended not to get involved at the detailed level of implementation with most actions undertaken by the project team or the project team in association with the lead agency. I discuss in the following chapter the perceived importance of the lead agency acting as an exemplar (in this case for PIE). However, a downside of this was articulated as exacerbating a tendency for responsibility for

action within the plan to remain within the project team/lead agency, potentially limiting the ability of the project to achieve its system change objectives:

‘I think largely, [the project] has gone and done it and that is not to say that partners aren’t on board with what we are trying to do but I don’t know, I certainly haven’t seen much of it and if I think about the actions on the systems change plan, it doesn’t feature a lot of the partners there to go away and do certain things.’ (Project team member (18) – Timepoint 1)

One of the purposes of the meeting observations was to experience at first hand some of the interactions between the partner organisations. Without exception, the system change board meetings were cordial and there were clear, positive relationships between the small core of partners who attended regularly and the project team. As indicated above attendance at these meetings by partner organisations outside the lead agency, however, tended to be very patchy. While there was no evidence of relations being strained within the meetings, neither were there many areas where partners (again outside the lead agency) took the lead on actions and there was a clearly observed tendency to view the project team as responsible for delivering and / or persuading the partner agencies to act, rather than any clear sense of shared endeavour.

This was encapsulated in one interaction I observed within a system change meeting. Within this meeting, a case study was explored whereby a probation officer had been persuaded to undertake a home visit and to take a more lenient view (i.e. not to breach) one of the project’s beneficiaries. The support worker indicated the long and trusting relationship which had been built up between themselves and the probation officer. The conversation which was led by the project staff in relation to this was focused on the ways in which other probation officers might be persuaded to change and to take similar approaches. This perhaps reveals two things: an underestimation of the importance of trust and the mutually respectful professional relationships which had built up between these two workers which could be difficult to create instrumentally; and an underlying tendency within the project staff to see such change as something which staff in the partner organisations needed to do rather than a more collaborative endeavour. This is also perhaps echoed in the project plans which explicitly frame the objectives as a ‘challenge’ to partners and is linked to perceptions

in the following section in relation to the role of the links between the lead agency and the project and the relationship between service provision and system change.

## 5.7. Relationship between service provision and system change

The neutrality of the project and its differentiation from the lead agency were issues raised by a number of participants. The project was keen to maintain its independence from the lead agency and preserve the sense of a neutral partnership:

‘I think we are, we do have, we are perceived as more neutral. We’ve worked hard to distance ourselves, to assert our independence. So you know if you ask people, well [lead agency] pay our wages but we are a partnership and the partnership have bought into this. And that’s why we have individual ID badges and different branding.’ (Project team member (03) – Timepoint 1)

However, there were concerns expressed by some of the partnership board members that this separation was not always clear or well understood.

‘I think the whole idea was that it was meant to be separate from what I can gather but it is sort of a bit entwined...a bit muddled.’ (System change board member (24) – VCS)

This confusion, however, was also expressed not just in relation to the system change project but rather related to the provision of the service delivery arm of the project. The relationship between this service provision and the system change project is particularly interesting and reveals some differences in perceptions as to the ways in which the two complement or conflict with each other. It is also important to note here that for the operational staff interviewed, the project **was** the service and they were unaware of the system change element.

The original theory of change for the project identifies the need for the service delivery element diminishing as the system change arm of the project begins to have an impact – i.e. that the service would no longer be required once the system change project had achieved its objectives. It was suggested that, at the outset, there was a resistance to the idea that the solution to the issues faced by people with multiple and complex needs would be a service, as this would not be considered as system change.

‘Yeah, yeah, it’s almost that people didn’t want to think that the answer might be a service like [the project’s service]. Success was that it wouldn’t exist.’  
(Project team member (10) – Timepoint 1)

This view was shared by some of the partnership board members in the interviews, articulated most clearly in the quote below, that setting up a service could be counter-productive when attempting to achieve systemic change and less likely to achieve the radical change envisaged by the programme.

‘I’ve always found that slightly strange that something that is supposed to be about systems change is also about a service as well because to my mind, because I think that sometimes that can go counter to the objective...I have to say, that is something that does puzzle me a little bit about it, is that really what systems change is about, setting up another service? I’m not so sure..’  
(System change board member (27) – Statutory sector)

There was also a sense amongst some stakeholders that the provision of the service had the effect of ‘letting partners off the hook’, making them less likely to need to effect any radical change themselves because the project was taking care of the needs of people with multiple and complex needs.

Conversely, for some, the service was seen as actually assisting in system change. This is in part by acting an exemplar for practice (discussed in the next chapter in relation to PIE), and a demonstration of effective ways of supporting people with multiple and complex needs. However, this was not a universally held view and, for some stakeholders, echoed the findings in the literature review (Cornes, Whiteford and Manthorpe 2015) in that the perceived generosity of the funding available for the service was seen as making the difference – i.e. that the barrier to changing practice was not a lack of awareness or a need for an exemplar but more structural factors such as the way the service was commissioned and funded. This was allied to another factor identified in the literature – i.e. the potential for conflicts in practice which challenges ideas of transfer of good practice (Cornes, Whiteford and Manthorpe 2015):

‘A lot of services didn’t like [the project] very much because [the project] had money and resources and there was some, and I can see why, there were some conflicts around, well we have just told this person this because they’ve been

doing that and you've just gone out and bought them a telly, brilliant.' (Project team member (18) – Timepoint 1)

One significant broader impact of the provision of a service was that it was seen as building credibility for the project, and crucially, making more visible both the needs of people with multiple and complex needs and the problems with the services that were supposed to support them. This was seen as being particularly compelling when partners realised that the project was entering its latter phases, reinforcing the need for system change:

'The fact that they are going but they are now valued is what is changing things.' (System change board member (19) – VCS)

The perceived impact of the provision of the service on the system change project was, therefore, extremely varied. While there was little doubt about the need to provide support for people with such a high level of need, and a great deal of respect and support for the service provided, it was its impact on the system change project that is explored here and here there is no real consensus. This links, also to the discussion about the definition of system change and what it means to be transformational in this context. It is interesting that even in the earlier interviews with the system change project team there was a sense that opinions on the relationship between system change and the provision of a service had shifted away from the idea that the system change could achieve such a level of structural systemic transformation that the service would no longer be required. This was driven not just by the complexity and challenges in driving such radical change but more fundamentally also that the learning about the needs of those with such high level of multiple and complex needs which pointed to the need for some kind of service:

'So I did, yeah, it did, I think there was a moment where admitting that some kind of service was going to be needed felt a little bit like defeatism but it fits, it stops people bouncing around the existing system which works for 80% of people anyway, then that is, like a say it is more than a sticking plaster, you are changing the system, you are improving it yeah (Project team member (10) – Timepoint 2)

This provides an interesting insight into the shift away from a linear model of change epitomised in the initial theory of change. In this later iteration service delivery was equated with system change rather than being an alternative to it. This shift emerged from the greater level of understanding of both the complexity and structural barriers within the system as well as the complexity and prevalence of need.

## 5.8. Impact of Covid-19 pandemic

This section is presented separately as it was based on a very small number of interviews with the project team early in the outbreak of the Covid-19 pandemic. Clearly, it is not my intention to present the Covid-19 pandemic as positive, given the devastating loss of life and its far-reaching impact on health and wellbeing across the globe. However, this second set of interviews suggested some interesting and dramatic impacts on the system change project, beyond anything experienced within the project thus far:

‘I think this [covid] has given more of a kick to system change than anything else we have done’ (Project team member (01) – Timepoint 2)

### 5.8.1. Staff attitudes and cultural change

Interviewees suggested that one of these dramatic impacts had been in the attitudes of staff as a direct result of the Covid-19 pandemic, changing ways of working established over decades. This was typically described as being towards a more positive, can-do approach – not reliant on changing processes but on staff collaborating and working together (rather than in silos) to determine what needed to be done and addressing issues in ways which would previously have been dismissed as impossible:

‘You don’t want a global pandemic but what a blessing in disguise in terms of how it has just turned stuff around and that’s the thing, people had to do it and lo and behold they could, despite sometimes 20 or 30 years of saying it’s not possible.’ (Project team member (03) – Timepoint 2)



## 5.8.2. Innovation

Closely allied to this was the ability of staff to try new approaches which had not previously been considered and the willingness to bypass the previous bureaucracy which historically might have stifled and dissipated such change:

‘But I think that the removal of the red tape I think was just down to individuals and I think people were maybe like, what made them decide that was ok to do, I don’t know but there just seemed to be a change in people’s attitudes of right, ok, let’s do this then...you had to come up with solutions and for whatever reason organisations have felt they have had permission to be creative about things and be ok to do that.’ (Project team member (18) – Timepoint 2)

It also opened up new ways of thinking, for example, the success of the Everyone In initiative whereby homeless people were housed in hotels was posited as having provided learning in relation to the positive impact of high-quality accommodation and service users interacting with staff trained primarily in delivering a high level of customer service rather than support work. This was identified as enabling research and learning on the impact of such environments in the context of multiple and complex needs which would otherwise have been unavailable in these contexts.

The Covid-19 pandemic was not only identified as changing cultures, practices and processes in terms of what was delivered for people with multiple and complex needs but also in the way that such initiatives were managed. Initiatives and activities were seen to come about less as a result of planning or being led or owned by a particular organisation or group. Rather they were seen as emerging directly from the regular contact between people involved in delivering services and support:

‘This wasn’t planned out in a traditional sense. So whereas things usually take months to plan, it has grown organically out of people regularly meeting...and it comes out of that, an enthusiasm to do something rather than having a rational plan’ (Project team member (03) – Timepoint 2)

### 5.8.3. Shifting power

As indicated in the previous section, the VCS were sometimes viewed as a subordinate rather than an equal partner with the power held by commissioners and larger statutory sector organisations. As a result of the Covid-19 pandemic, some identified a shift, for example, in the power dynamic between commissioners and VCS providers, given the urgent need for services to respond to the crisis. The very challenging of pre-conceptions about what was possible for people with multiple and complex needs, was also seen as potentially giving more power to the project to counter some of the longstanding barriers within such influential organisations:

‘But actually something like Covid shifts preconceptions and power doesn’t it because a view that we can’t just put all homeless people in a hotel , oh it turns out you can. Or oh well actually we are the commissioners and you are the providers...oh my goodness don’t we need some providers right now because these guys are all in the hotel and it is not the council that’s going to find them all is it, it will be [lead agency] or [system change board member VCS organisation].’ (Project team member (10) – Timepoint 2)

Of course, the extent to which this shift was a real transfer of power or a more temporary arrangement was unknown at the point of the interviews.

### 5.8.4. Sustainability

This latter point was raised generally, not just in relation to the power relationships and staff highlighted the danger of things going back to normal once the immediate crisis was over:

‘There is a beautiful simplicity to a crisis, you just have to focus on what’s in front of you and you don’t have to worry about permission, or budgets or clearance or authorisation, you just get on and do it and then 6 months later we return to the real world where there is no money and suddenly your boss is interested in what you are doing again and you have got all this other rubbish stuff to do again in your day job and it becomes more difficult again’ (Project team member (10) – Timepoint 2)

Of course, it was far too early for those interviewed to draw any conclusions in relation to the likelihood of things reverting to their previous state and it remains to be seen what longer term impacts there are and this would be a useful direction for future research.

Notwithstanding earlier comments on viewing Covid-19 as something positive, as indicated above, it did have some positive impacts on the overall system change project. What is also clear is that the previous work of the project, its history (for example around the ICP), the relationships and respect that it had built up were all seen to have impacted on the way that the response to the Covid-19 pandemic played out in the city.

## 5.9. Concluding comments

This chapter has examined the experience of systemic change from the perspective of those involved in delivering it, either as part of the project team or as members of the system change board.

I will discuss these findings within the theoretical context of complexity theory in later chapters but these findings have yielded some interesting insights which both support and augment those in the current literature. The differential understandings of core terms such as 'system', 'system change' and 'transformation' have received little attention in the literature but have been identified here as important factors in how participants viewed, engaged with, and responded to, the project. In common with other similar projects, the approach to managing the project was defined by a need for flexibility and responsiveness. This research, however, highlighted tensions between the need for targets and more managed approaches. Although the risk of gaming and the difficulties of attributing change in such a complex environment were identified, this co-existed with a perceived need for such approaches.

The system change project was, on the whole, regarded positively by partners – most notably as a result of the increased awareness and attention it had brought to the issue of multiple and complex needs. However, such achievements were not generally considered to represent systemic change nor to be transformational (concepts which were themselves defined differently by different participants). A range of contextual and other factors which impact on projects' abilities to achieve system change were

identified in the literature review and at the highest level of analysis, there was a high degree of commonality between these and the findings in this chapter. However the precise ways in which these manifested were particular to the project, driven for example by the precise composition and relationships between different partners in the system. Factors less commonly reported in the literature included the potential for austerity to create a greater level of focus and visibility for multiple and complex needs, the dissipation of change initiatives as they move through partner organisations and specifically to this project, the relationship between service delivery and system change.

As indicated in Chapter 4, there were delays in undertaking a second set of interviews with project staff. This had the unintended but positive consequence of enabling a brief examination of the impact of the Covid-19 pandemic which staff identified as having created major shifts in practice – an interesting observation from the theoretical perspective of complexity theory and one which is returned to in Chapter 8.

This first findings chapter has given insights into the approach and perceptions at the overall system change level; the following chapter looks in greater depth at one specific objective of the project – that of the implementation of PIE.

## 6. Chapter 6: Findings – PIE as a system change objective

### 6.1. Introduction

As indicated earlier in the thesis, the breadth of the system change project required a focus at a more detailed level, and this is approached via an examination of one of the specific objectives – that of promoting PIE. This chapter therefore combines findings from the documentary analysis, the interviews with project staff and system change board members (and, where appropriate, the meeting observations) to explore this objective and its place in the system change project.

### 6.2. Defining PIE

As indicated in the literature review, one of the key characteristics of PIE is that it is not a single prescriptive model but a broad, locally defined framework, emerging from and determined by the particular organisational context in which it is being implemented. The lack of a prescriptive model has, been considered as both a tension and an opportunity in the literature (Turley, Payne and Webster 2013). The different interpretations of what PIE means have a significant impact its place in the system change project as well as being important from the theoretical perspective. These perceptions are explored in this research in two ways: firstly, the definition of PIE is examined through the perspective of the strategic partners within the system change board; it is then explored in the next chapter at the operational level within the embedded case study organisation.

#### 6.2.1. PIE as a continuum

Given the individual nature of PIE, the predominant view of system change board members that PIE would look different in different services is not unexpected and is consistent with the non-prescriptive approach which is embodied within PIE. What is perhaps less congruent with the literature on PIE but which was articulated by a number of system change board members is the concept of different levels of PIE depending on different organisations: conceptualised as a 'sliding scale' (System change board member (26) - VCS) with organisations specifically aimed at services delivering support for adults with multiple and complex needs at one end of the scale, implementing a 'full' version of PIE (possibly with some kind of accreditation or quality

standard), with a less intensive version for those agencies not solely providing support for people with multiple and complex needs, for example, the police, Department for Work and Pensions. In these latter organisations, the focus would be on improving understanding of multiple disadvantage and trauma and the impact of this on the way that people with multiple and complex needs present and engage with staff and as a means of improving these interactions:

‘We can always have better conversations and better interactions and if PIE is the vehicle that lets us have better conversations and better interactions then we should all do it.’ (System change board member (19) – VCS)

There was a concern that, while a desire for a consistent approach might be contrary to the ethos of PIE and thus a diversity of applications within organisations was entirely appropriate, there was a danger of PIE becoming so diluted that some of the elements – such as, for example, the importance of reflection and learning, or the application of PIE principles to the whole of the service, including, for example: rules, roles and responsibilities, were omitted completely.

‘You couldn’t really have a consistent framework cos the idea with it is that you choose the psychological approach that you want, that fits with what your service users’ needs and wants. I think they just don’t want people doing it bitty and bobby or making it fit what they already do and saying we’re psychologically informed when actually you’re not, you might not be.’ (Member of project team (02) -Timepoint 1)

### 6.2.2. PIE – an abstract concept

As might be expected, some of the system change board members (for the most part those who were not directly working for organisations involved in service delivery) did not feel especially confident in defining PIE, describing their knowledge as ‘sketchy’ or otherwise lacking in detail. Even amongst those interviewees who were more familiar with PIE (either because their organisations or others they knew) had implemented it, there was a sense that PIE was an abstract concept, difficult to grasp and to define:

‘I can talk about it and read about it and I have read about it and I think I get it but sometimes it is a concept that seems a bit out there (System change board member’ (23) – VCS)

As will be seen in the embedded case study, this view was not exclusive to strategic stakeholders and was shared by many of the operational staff directly involved in implementation of PIE. Again, in common with operational staff, there was a focus on those aspects of PIE which related to the physical environment where those interviewed more able to give examples and express the most confidence in their understanding of the term. This focus was also attributed in part, to the prominence of the word 'Environment' in the term PIE.

'They all talk about PIE, they all know what it stands for, but how much people understand it I don't know. I think they might just think about it being the physical environment because of the name – environment' (Project team member (18) – Timepoint 1)

While it is reassuring that there was some awareness that this represented a partial or superficial understanding of PIE, the tendency to focus on this aspect was seen as running the risk of PIE becoming simply 'rearranging the furniture' (System change board member (25) - statutory sector) and of subsequent failure to contribute to systemic change. This is an important point and one which not just impacts on the project's system change agenda but directly challenges PIE's positioning as a complex response (Cockersell 2018b), discussed further in Chapters 8 and 9.

### 6.3. The evolution of PIE as a system change objective

PIE was not initially part of the system change project. Although not explicitly included in either the business case or the first system change plan, in both of those documents there were references to (beneficiary led) person centred services and support. Elements of PIE (though not identified as such) were also implicit within some of the other objectives in the first plan. For example: the physical environment and the need for physical spaces to be comfortable and welcoming appeared in an objective relating to improving access to services; strengths-based approaches (which are often used within PIE) were referenced within an objective relating to unified assessments and sharing of data; the need to recognise the non-linearity of pathways and the importance of recognising human complexity are included in an objective aiming at joining up services. Throughout this first plan, the need for attitudinal and cultural change within services to make them more accessible and appropriate for people with

multiple and complex needs (which clearly overlaps with the aims of PIE) is foregrounded.

The objective of PIE first explicitly appears in the official plan as part of the refreshed version produced in 2018. However, it makes a much earlier appearance in the system change board meeting in early 2016 when it is identified as an area where the (then proposed<sup>31</sup>) Development Unit could offer workshops and these were reported as being convened as Action Learning Sets<sup>32</sup> at the end of that year.

How PIE came to be included in the system change plan is not entirely clear as its evolution was characterised as coming from the interaction of a multiple array of factors including: a combination of increased awareness in the project team; growing prevalence within the homelessness sector; as well as its close fit with the values and aims of the project and the opportunity for training presented by the creation of the Development Unit:

‘It wasn’t in the original plan, no. I can’t pinpoint an exact time and I’m not entirely sure about the who... Very quickly I became aware that it was something that we, it fitted with what we were trying to do, there was interest and that it was going to become what I term the next big thing. And I can remember saying it about PIE and actually hatching some plans to introduce the concept to individuals who I thought would latch onto it, there was mileage’ (Project team member (03) – Timepoint 1)

PIE first becomes an explicit objective within the refreshed system change plan within a broader aim of creating welcoming services. This exemplifies the shift in the plan towards a more focused and targeted approach which was identified as an important development by the project team in the previous chapter. Importantly, there are also, for the first time, specific metrics set in relation to these. Although it is not specific

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<sup>31</sup> The development unit began operating in 2017.

<sup>32</sup> Action learning sets are intended to provide collaborative and action-oriented spaces where small groups meet to discuss a specific issue. Sets are usually held periodically and between meetings participants are encouraged to take actions within their organisations which they then reflect on and discuss at the next learning set. They are seen as a way of promoting and embedding individual ownership of learning and facilitating action and change (Lamont, Brunero and Russell 2010).



about which agencies would be targeted, there are specific metrics around the number of training events (10 per year); the community of practice (32 staff to attend); and the number of agencies whose progress towards PIE would be audited (4 per year). I discussed in the previous chapter, the move to SMARTer targets more generally within the plan and the potential conflicts between these and a purported focus on learning. This tension was particularly acute within the objective of PIE where, for operational staff, PIE's positioning as a holistic, complex response, locally and contextually sensitive was challenged by attempts to accredit or measure it. It also conflicts with the focus on collaborative commissioning and the perception of the limitations of control the project had over external organisations. both of which are discussed later in this chapter.

#### 6.4. How is PIE perceived as contributing to system change?

With regard to wider stakeholder views about the place of PIE within the system change project, there was a very high degree of consensus that it was a constructive and laudable aim. Theoretically at least, system change board members were involved in both iterations of the plan so perhaps it is to be expected that interviewees were positive both about PIE and its place in the system change agenda. This also, however, needs to be considered in the light of the different views of what PIE actually is described above. Although there was no perceived tension between the aims of PIE and the system change project, views on how (and indeed if) PIE would lead to system change were more varied.

The themes identified here to some extent echo some (though not all) of those identified in the literature review which identified four main ways that PIE might do this: as a complex, systemic response in its own right (Cockersell 2018b); via multiple organisations/services within the system becoming PIE (Walton and Walton 2012); as a result of a more broadly upskilled workforce better equipped to understand and cope with challenging behaviours (Boobis 2016), and by extending PIE to commissioning approaches (Cockersell 2018b). However, on the whole the relationship between system change and PIE was often unclear, with little consensus and, as will be seen in the next chapter, not evident at all in the embedded case study.

### 6.4.1. Individual outcomes

It is interesting that, in some cases, PIE was seen as being focused more on change for beneficiaries rather than achieving system change per se. One stakeholder, for example, indicated that there was not necessarily a perceived link between implementing PIE and achieving system change, suggesting that the purpose of PIE was to improve access to services and ultimately better outcomes for beneficiaries, rather than to achieve systemic change:

‘It is in the plan now but whether we have made that connection, I don’t know. I suppose the purpose of working to try and make services psychologically informed is because they will be better and produce better outcomes, not necessarily because that will achieve system change’ (Project team member (01) – Timepoint 1)

This is part of a wider context of a system change approach which foregrounds the importance those interviewed placed on doing things which they considered would improve the lives of those with multiple and complex needs, rather than because it would necessarily result in broader systemic change as defined by the programme. While system change clearly remained the aim of the project, the previous chapter demonstrates the perceptions of the limitations of influence and control and the difficulty of predicting how precisely system change will occur and what actions will result in the kind of systemic change articulated by the funder.

### 6.4.2. Impact on the wider system

Other stakeholders did, however, consider there was a link between PIE and system change<sup>33</sup>, considering that improving outcomes for individuals (via PIE) was linked to system change but indirectly in that it would ultimately lead to better engagement, thereby reducing overall numbers of people with multiple and complex needs within

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<sup>33</sup> It should be noted that the interviews specifically asked about the connections between system change and PIE so connecting the two did not necessarily come directly from the interviewees themselves. The potential for social desirability bias in circumstances such as these alongside other reflections on the methods used in this research are discussed in Chapter 4.

the system. This improved engagement and lowering of numbers would ultimately lead to changes at the systemic level:

‘So, if the environments look after people well, I’m not sure that is the right way of putting it, serve people’s needs well, then that person needs long term are going to be catered for and they won’t back on the streets being arrested again. So, it [PIE] does fit in but it does feel a little bit tangential, but it does fit in.’ System change board member (25) – Statutory sector)

This echoes the logic underpinning the theory of change for the project which made a clear distinction between the provision of a service (designed to improve individual outcomes) and the system change element of the project aimed at improvements to the system. As discussed in the previous chapter, however, this was more complicated than the theory of change model might suggest and the relationship between service provision and system change was more contested.

A further potential impact on the wider system was also identified in the literature in creating a common language and understanding (Moreton et al 2018) and this was also identified by one stakeholder in this research:

‘I think one of the things that often gets in the way of organisational, of organisational co-working is having different language , whereas I think psychologically informed practice brings a sort of similarity of language to organisations working with the same thing’ (System change board member (27) – Statutory sector)

Direct connections between PIE and system change were, however, often difficult for stakeholders to articulate, suggesting a broad support for PIE as a system change objective but no clear pathway by which PIE might lead to system change:

‘I do see it as connected. But don't ask me to connect it for you!’ (System change board member (20) – VCS)

### 6.4.3. PIE as an intrinsically systemic response

As discussed in the literature review<sup>34</sup>, there is some support for the view that PIE represents a (complex adaptive) systemic response to the problems faced by adults with multiple and complex needs – that it is essentially a complex response to a complex problem. In the context of the interviews undertaken for this research, there was some support for this conceptualisation of PIE. Characteristics that were seen to support this were its holism, taking account of the whole person and recognising the interconnections between the problems they face, rather than viewing them as single unrelated issues. Important also are the connections between the person and their wider social environment and the interconnections and inter-relationships of the different parts of the system:

‘Yes, because part of that PIE, that trauma informed drive is basically about taking a more systems approach to a holistic approach, seeing as, working with people not just as individuals but as part of broader family systems, significant other systems and other organisations that, so yeah, that is very much the thrust of it.’ (System change board member (27) - statutory sector)

Conceptualising PIE as an inherently systemic response in this way could be seen as helping to legitimise its position within the system change project. It could be seen as meriting its place there not necessarily because it would be implemented across the system but because in itself it was an inherently systemic response. Its focus on individuals as part of a wider system of organisations and social networks and the interconnections between these were seen as meaning that its implementation would necessarily impact at a systemic as well as an individual level.

This was only expressed by two stakeholders so was not a widely held perspective. This is, no doubt, related to the levels of understanding of PIE of many of those interviewed. As we saw earlier in this chapter, the way PIE was understood by system change board members often did not, for example, include many of those aspects of PIE which might define it as inherently systemic.

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<sup>34</sup> See for example Cockersell 2018b.

#### 6.4.4. PIE in commissioning

One significant way in which PIE was seen as having the potential to deliver more systemic benefit was its inclusion in commissioning. This took two forms. First of these was including PIE as part of the specification for commissioned services. While this was overwhelmingly supported by the system change board members, few (despite previously expressed views on the gaming of targets) considered the potential for this to instrumentalise PIE and reduce its capacity for operating as a complex responsive initiative. This risk was however strongly apparent in the embedded case study. Staff here tended to assume that commissioners were the driver for PIE's implementation in their own organisation and this was associated with a level of cynicism about its ability to offer a response which was innovative and responsive to the complex needs of their clients.

The second way in which this was expressed was in relation to changing commissioning practices to become more 'collaborative'. Within the literature, delivering PIE as a complex and systemic response is seen as closely related to changing commissioning practices (Cockersell 2018b). The project identified collaborative commissioning as a complementary approach to PIE in that, like PIE, it had a focus on learning and relationships and recognised the holistic nature of support. Indeed some of the project team referred to the collaborative commissioning approach as 'psychologically informed commissioning'. Changing commissioning practices was thus seen as one of the main ways in which PIE could indirectly contribute to system change:

'But I don't know, maybe it will. I think more looking at systems change, the commissioning side, I think that if we can change commissioning, and I have called it psychologically informed commissioning so having a different kind of relationship so it is more of a learning approach, less top down and...you know that really resonates with me' (Project team member (01) – Timepoint 1).

The meeting I observed, at which the collaborative approach was introduced and more generally within the interviews there was a good degree of support for the potential of this different approach to commissioning though participants were often (in a similar way to PIE) unclear about what exactly they considered this to be. Interestingly within the later interviews with the project team, it was indicated that the initiative

had largely stalled. Project team staff suggested that progress in this area was impacted not just by the pandemic but also some internal pressures within the commissioning body which militated against such an approach. This was also complicated by subsequent developments in the implementation of ICP which had become a dominant force within the system change project (discussed more fully in the previous Findings chapter) which changed the overall context for commissioning. It is interesting here that one of the project staff explicitly (and without prompting<sup>35</sup>) linked this to complexity theory attributing the difficulties to a tension between the complexity informed ethos of complex commissioning which was not matched by a concomitant understanding of the complex forces which would impact on the process, including an appreciation of the potential for change to occur in unplanned and unpredictable ways:

‘It [Collaborative Commissioning] was proving difficult anyway. And I think that is because of complexity theory because I think they have applied complexity theory but not in a complexity theory way. It’s more the commissioners have commissioned this service, and we are going to use this method and it’s going to produce this and actually as soon as they got into it, other forces became apparent because the organisation isn’t one linear thing, there are different forces at work within it and that is before you might apply what other bodies might want to achieve and so they had to change it saying well we are not going to commission this like this anymore because this part of the organisation doesn’t want to do it like this anymore.’ (Project team member 01 – Timepoint 2)

This is particularly interesting in light of the theoretical discussion in Chapter 8 which finds strong echoes of these issues in the organisational implementation of PIE, and, which I will go on to argue, challenges its position as a complex response.

#### 6.4.5. PIE as transformation

The importance within the programme of transformational change is also relevant to the specific objective of implementing PIE. As will be indicated in the embedded case

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<sup>35</sup> The interviewee was, however, aware of the theoretical framework of the research prior to the interview.

study in Chapter 7, PIE was not seen as representing a major change in the way that the organisation examined was already operating. Clearly, the extent to which PIE is transformational is, in part, dependent on the way an individual organisation is operating prior to implementing PIE and as indicated in the literature review many of the organisations working directly with people with multiple and complex needs have gone some way towards adopting some elements of PIE (Phipps 2016). This was seen by some as helpful in that it made PIE seem more achievable to agencies. However, it also led some to question not just its likelihood of achieving transformational systemic change which, by the funder's own definition excluded activities which were already happening, but also the feasibility of any such change being directly attributable to the system change project:

'It's infecting the whole of the sort of sector so it would come our way anyway through HomelessLink and what have you.' (System change board member (28) – VCS)

There are however other organisations with which people with multiple and complex needs will come into contact which are considerably further removed from operating as PIE than, for example, the organisation in the embedded case study. Also, as indicated above, there may be dilution of the core principles of PIE which could reduce its transformation and its systemic impact. PIE as an example of transformational system change, might depend then, not just on what is being implemented but also where it is being implemented. This echoes the point made in the literature review about the need for both depth and breadth in transformational change (Waddell et al 2015).

For most strategic staff, establishing PIE in the core agencies which had the most, sustained contact with people experiencing multiple and complex needs – i.e. those providing direct support would be sufficient to represent transformational change:

'And so yes absolutely we should be improving the ease with which you can access and represent your view in a drugs setting but can we get to every GP's surgery, you know where you get your bus ticket from, probably not. But if it is improving outcomes and is in the workforce that has 60, 80% of the contact on

the core issues that are holding these individuals back then that is a transformational change.’ (Project team member (10) – Timepoint 2)

This is also directly related to more pragmatic considerations about what could be achieved and thus relates to the wider discussion in the previous chapter about the extent of power and influence of the project. As indicated in the embedded case study, operational staff were more likely to see PIE as needing to be implemented everywhere – not just in services but in shops, on public transport and indeed, for some, in society. This clearly also links to perceptions of what constitutes the ‘system’ which for operational staff tended to be described differently from the ‘service’ view taken by many strategic stakeholders.

## 6.5. Implementing PIE as a system change objective

The implementation of PIE was based firmly in the service view of the system discussed in the previous chapter, but, while the objective within the plan talks about key agencies becoming PIE, exactly which agencies is left undefined. This was largely a pragmatic decision and strongly related to the extent to which the project felt able to directly influence what happens in other organisations (discussed below). There was a general view that specific agencies would not necessarily be targeted but that the project would work with whoever expressed interest and at whatever level the interest came from. This echoed findings in the earlier chapter about the project’s intention to work both top down and bottom up, seeking to capitalise on and amplify interest wherever in the system they identified it – or ‘pushing on open doors’ (Project team member (18) – Timepoint 2). Essentially, the overall approach to implementation was described as ‘organic’ (Project team member (29) – Timepoint 2). Rather than targeting specific agencies, there was a broader communication about PIE and its benefits – described as ‘planting a seed’ (Project team member (03) – Timepoint 2) with individuals within organisations and then working directly with those who subsequently expressed interest. This did not always come to fruition and, where it did, could take some time and staff identified that it was usually difficult to know what exactly had led to the shift towards more active engagement. But working with organisations who were willing and ready to engage was seen as being not just the



most productive use of project staff time but also more likely to result in sustained and committed involvement.

Alongside more general awareness raising, the implementation<sup>36</sup> of PIE as a system change objective was articulated within the system change plans as being delivered primarily in three ways: by demonstrating in practical terms examples of PIE and how it could be implemented; by the provision of training and development (including, workshops, Action Learning Sets and a Community of Practice) mainly via a central development unit which was set up as part of the project; and by some form of accreditation.

### 6.5.1. Demonstration and exemplification

The interviews indicated that the project team intended that a number of initiatives would function as exemplars of good practice, evidencing both the benefits of PIE and the practical feasibility of implementing it. These initiatives included: the co-ordinator service set up as part of the project as well as the other multiple and complex needs services provided by the lead agency:

‘We thought that if we looked at, if we can show people where it’s being done and how and talk about issues and challenges and how they can be overcome that might prompt people to do it.’ (Project team member (02) – Timepoint 1)

There are also indications that the overall limitations of power and influence described in the previous chapter were in large part behind the decision to implement PIE in the lead agency and for that to function as the exemplar for other services. The rationale for this was primarily twofold: a perceived greater level of influence over the organisation than other partners, as well as a need for the organisation to be seen to practise what it preaches in order for it to be a credible example to other agencies. However, the significant differences between sectors – for example between the

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<sup>36</sup> The use of the word implementation in connection with PIE is potentially contested sometimes seen as implying a time limited project rather than an ongoing, reflective journey as is envisaged by the creators of the concept (See Chapter 2). The use of it here is justified by the fact that, its presence within a time limited system change project, with specific objectives in relation to it suggest some element of implementation (even if that implementation is part of an ongoing process).

statutory sector and the VCS were seen as potentially requiring exemplars from a variety of different types of organisations:

‘We just need one public sector body to do it really well because public sector bodies will listen to other public sector bodies so the success story needs to be in one of those organisations and you need to shout about that.’ (System change board member (20) – VCS)

As indicated below, engaging the statutory sector in training events and communities of practice has proved a challenge for the system change project. Further, as discussed in the literature review, while there are structural challenges (such as funding and staffing levels) which may affect all sectors (though not identically), the organisations involved in supporting people with multiple and complex needs are broad and each organisation faces a unique set of challenges in implementing PIE which may dilute the impact of such exemplification. It also risks underplaying the importance of such structural factors in the willingness and the ability of organisations in implementing PIE (Cornes, Whiteford and Manthorpe 2015). A commonly held barrier – and one articulated within the embedded case study, is, for example: the scarcity of specialised support services needed to offer the holistic support exemplified within PIE.

One issue in relation to demonstration and exemplification which was not identified in the literature review was a concern within the project team and the lead agency that acting as a demonstration site in this way could be perceived negatively by partners as giving an unfair advantage.

‘It was very interesting that that set some alarm bells for some of our board members...in that I was contacted to say that no-one had said anything but based on past experience they were worried that people might say that we were using [the project’s] funding to put [lead agency] at an advantage by training staff in PIE and TIC, knowing that it was going to be popular with commissioners and therefore are you doing this as a way to give yourself a leg up in bids?’ (Project team member (03) – Timepoint 2)

Although this was raised indirectly, it does perhaps raise an interesting point in relation to using organisations as exemplars, particularly where they are the lead agency. The perceived advantage of having greater control over the organisation, and

the need to set an example may be somewhat challenged by such perceptions of unfairness. This also links to the issues which the project had in establishing itself as a partnership discussed in the previous chapter, with the use of the lead agency as an exemplar perhaps exacerbating the identification of the project as the lead agency rather than a wider partnership.

Exemplifying that PIE is feasible and can work practically is one element, but encouraging uptake was also seen by some of the strategic board members as requiring evidence that PIE achieved better outcomes. The literature review identifies a number of issues with assessing this – not least the variety of approaches for PIE and the difficulties of identifying a counterfactual example (Breedvelt 2016; Phipps 2016). These issues were not specifically raised by those interviewed for this research. Difficulties in determining outcomes were here related more to the complexity of the service users and the multiplicity of influences on their lives which were beyond the control of any one organisation, however psychologically informed. While there was a great deal of support for the need to prove and evidence impact (not just of PIE but of system change more generally), this was tempered by an implicit understanding that the complexity of issues for people with multiple and complex needs can make this challenging:

‘And, of course, people are subject to all sorts of other, and [name] used the term, ‘the complexities of life’ and I think maybe...it’s going well and then something, their old partner comes back into their lives or something and it is all back to square one. That doesn’t fit with the processes we have for understanding progress.’ (Project team member (01) – Timepoint 2)

This points to a tension evidenced within the findings in all three chapters. That is the need to provide evidence (and a level of support for this amongst strategic staff) co-existing with a recognition of the complexity of the client group and the difficulties in evidencing such approaches; difficulties of attribution and the potential for this to lead to instrumentalisation of practice.

### 6.5.2. Training and communities of practice

The other main way in which PIE is implemented (both in this research and the literature) is in the provision of training and the creation of communities of practice.

Some of the literature suggests that implicit within centrally provided training may be an assumption that what works within one organisation can be translated into another. This could be in tension with the notion that PIE is locally created and may be less sensitive to local variation (Cornes et al 2014). This was recognised within the project and consequently the focus was not just on the provision of training but, more importantly in prompting and supporting organisations in their journey to become PIE:

‘So I think I view our role as being a platform to keep PIE on the agenda, to try and poke people into it and create opportunities for conversation around it and to try and guide and stir people to think about it in the right way, so to make people understand that it is not just coming onto a training session and now you are PIE...no you don’t come on a training session and you are PIE, you need to understand the principles behind it and you need to go on a journey with it...and work on it every single day.’ (Project team member (29) – Timepoint 2)

As discussed in the literature review, one way of addressing this is by the creation of Communities of Practice which aim to encourage broad and ongoing sharing of experiences of implementing PIE, while supporting local variation. Action learning sets is also a way trying to focus participants on their own local context and ongoing action and change rather than just attending static training. Although the system change plan has Communities of Practice for PIE as one of its aims, none of the system change board members interviewed had any experience or involvement with these; neither did any of the staff in the implementation case study. This may have been a result of timing of the interviews as Communities of Practice can take some time to establish. However, there were indications within the interviews of difficulties in engaging some key partners – particularly those from the statutory sector in the work of the development unit:

‘We looked at attendance and it’s 78% voluntary sector and 22% statutory. The statutory sector, they can maybe do a one-off thing but they can’t necessarily commit to a community of practice because they are bogged down, they can’t get out of their services.’ (Project team member (01) – Timepoint 1)

There were also some practical issues identified in the implementation case study in that planned training for PIE (which staff from the organisation were intending to go

on) did not go ahead which also would have inevitably impacted on the engagement of partners. In the second set of interviews with project staff, it was confirmed that Communities of Practice were ongoing albeit with a smaller group. Staff described a process of attrition by which the larger group at the start had gradually dwindled, tending towards smaller organisations but that the core of agencies left were those deeply committed to PIE. Communities of practice are designed to create a reflective space for people from different backgrounds. The lack of diversity within the types of organisations involved here could potentially limit their usefulness as well as their ability to engage those not already committed to PIE (and where therefore the capacity for more radical change may be greater). Echoing the literature in Chapter 2 (see, for example, Cornes et al 2014; Cornes, Whiteford and Manthorpe 2015), within the project, the absence of key personnel and key agencies in communities of practice and the difficulties of engaging these were identified. Similarly, within the embedded case study (see Chapter 7), the wider lack of ability to effect structural changes was seen as fundamentally impacting on the utility of such initiatives.

### 6.5.3. Accreditation

Project staff were clear that, even with communities of practice in place, the extent to which they would retain influence over what happened within organisations was necessarily limited and there were concerns about possible dilution of PIE. The concern here was that this might lead to organisations, for example, purporting to be operating in psychologically informed ways while just paying lip service and ignoring the core, underpinning ethos. This was identified in the appearance of the idea of accreditation and auditing of four organisations which appeared as an objective in the refreshed plan though it was removed in later iterations.

System change board members interviewed did not have strong views on the subject of audit / accreditation, though project team staff reported that the lead agency were planning on using tools such as the TICometer (a tool for assessing progress towards trauma informed care, see Bassuk et al 2017) as well as the Pizazz tool for assessing progress against PIE (<http://pielink.net/pie-assessment/> Accessed 22/1/2021).

However, the timing of the fieldwork was such that these tools had not been deployed. Despite this, there were some concerns expressed both in the embedded case study and in some of the meetings I observed. In one of the workshops observed, where the

Pizazz tool was introduced, there were concerns expressed by many of the operational staff participating about potential tensions between such assessment of progress and embedding a culture of trust which supported the necessary learning and reflection. While this was mainly expressed in relation to the tools being used for internal assessment rather than external audit, similar concerns were also shared in one of the system change board meetings I observed, where one participant (from the lead agency) expressed concern that such tools could be used as tick box exercises which increase, rather than reduce the risk of instrumentalising the approach.

As indicated in the literature review, there are particular issues in relation to externally evaluating PIE (Breedvelt 2016; Phipps 2016), and the tools such as Pizazz are intended to be used internally to assist in the process of reflection and learning. While this is certainly the intention behind such tools, in one of the meetings I attended on PIE, concerns were widely expressed in relation to the potential for such tools to be mis-used as a management tool which would reduce their effectiveness as a developmental and learning aid. Similarly, the accreditation which was mooted in early versions of the system change plan was seen as having the potential to conflict with the need for ongoing learning which is fundamental to PIE:

‘It is difficult isn’t it because you can say, oh we have got our PIE badge now and then just forget about it. And yeah, what does that mean? I think it is interesting isn’t it but there is always, you can never stop learning and never stop improving and there is always a danger of going we are PIE now and we don’t need to learn anymore and we don’t need to keep improving.’ (Project team member (18) – Timepoint 2)

Further risks identified were that accreditation would be difficult to judge given local variation, could conflict with the notion of PIE as a journey rather than a destination and ultimately risk impeding broader improvements in practice but which might not meet all the criteria for PIE.

Equally significantly, while the project saw itself as having a potential role in encouraging the use of the Pizazz tool (via the methods described above, including the Community of Practice), the extent of its power to audit external agencies was limited

and again reinforced the idea of exemplifying PIE as good practice rather than mandating it, resulting in the removal of accreditation from the system change plan.

## 6.6. Factors impacting on implementation

A number of factors were identified as impacting both positively and negatively on the implementation of PIE as a system change objective. While some of these were specific to PIE, others echoed the more general examples in the previous chapter.

### 6.6.1. Control and influence

As indicated in the previous chapter, the extent to which the project was able to influence other agencies to change has been an ongoing challenge for the project. With regard to the specific objective of PIE, there was a recognition that the project could neither control what happened once people who attended the training returned to their organisation:

‘It is about getting buy in and getting them to come and listen and go away with something, whatever that might be, whatever that might be. And you lose control of what it becomes at that point.’ (Project team member (18) – Timepoint 1)

Given the importance of local context in implementing PIE, this is not necessarily problematical, rather a desirable and inevitable function of the way that PIE is conceptualised. However, this loss of control by the system change project was also evident in some of the concerns discussed earlier in relation to the dilution of PIE and the danger of it becoming instrumentalised, adopted in a ‘tick box’ way.

As indicated in the literature review, within implementation guidance on PIE there is a lot of emphasis on the need for managers to protect operational staff from external barriers and the importance of their commitment in successful implementation – ideas which are challenged by the findings in the embedded case study and returned to in the next chapter. A number of those interviewed identified a tension between the amount of control they felt managers had in achieving PIE in their own organisations.

‘I don’t think managers can make change happen. There are a few closer to home examples which I’m not going to use here they are not fair [laughs]. I think managers can come up with great ideas as to how things might change

and you can try to manage that change and the change will not happen.’

(System change board member (19) – VCS)

There were a number of reasons given for this – for some it was related to wider contextual or structural issues, particularly in relation to austerity and an absence of service (discussed below); for others it was related to the importance of personal values which were seen as largely beyond the influence of managers. The significance of values is an important theme in the embedded case study and is discussed in more detail in the following chapter. What is clear is that issues of power and control are not limited to the influence of the project over partner organisations but also within the organisations themselves.

### 6.6.2. Austerity/resources

PIE within an organisation is necessarily impacted by the wider context in which it operates and the literature review demonstrated this as one of the main challenges in implementing PIE. The findings in this research (both here and in the following chapter) are similar to others in the literature – with pressures on staff, funding cuts and austerity all impacting on the ability and willingness of organisations to embark on becoming PIE:

‘And I think again because of the pressures our staff are working under, that then leads our environments to potentially not be psychologically informed. They might be psychologically informed but might not feel to be the most psychologically safe environments, when we are running on lots of bank and agency staff, and you have, so I suppose we know what we should be doing, implementing it is the challenge.’ (System change board member (25) – Statutory sector)

The other factor (and one which was also identified in the embedded case study) was the availability of services in such a context. Reductions in capacity and the raising of eligibility criteria could mean that services are simply not available rendering somewhat moot the discussion of whether or not they are psychologically informed:

‘But what happens when those services’ capacity is diminished? What do you do then? There are still services there. We try and make hostels better places



but increasingly, people can't get in, so whether they are good or bad becomes less of an issue.' (Project team member (01) – Timepoint 1)

Such considerations are not just related to availability of services but also to the ways in which resource restrictions impact on the ways in which they can work. Working in such an environment was described as leading to more routinised practices, with increasingly time-limited engagement all of which militate against the core principles of PIE either within their own organisations or more widely within the services to which they refer.

### 6.6.3. Familiarity

The familiarity of PIE and its history and importance within, particularly the homelessness sector, was largely viewed as helpful at the strategic level - particularly in helping the project to communicate and disseminate it. Again, as with the more systemic understanding of homelessness described in the previous chapter, this was something that the project contributed to as well as benefitted from. As discussed in the embedded case study – for operational staff this could be less positive. Although strategic staff were more positive about the impact of the familiarity of PIE, its ubiquity within the sector could mean that attribution to the project of an organisation's decision to become PIE to the project was not clear cut and impacted on perceptions of PIE as transformational (See Section 6.4.5).

However, on the whole, for the majority of those interviewed, the project itself – even if the exact mechanism could not be identified - played perhaps the most significant part in the wider knowledge, understanding and uptake of PIE. This was particularly in those sectors outside homelessness where there was less familiarity with the concepts.

Familiarity was identified (alongside the sheer size and bureaucracy of some larger organisations) as a means by some of the principles of PIE can be dissipated as it is implemented within organisations and this was a particular finding in the embedded case study and discussed in the following chapter.

### 6.6.4. Role of psychologist

The importance of a psychologist to lead PIE was identified within the literature as somewhat contested. While the guidance does not suggest this is required, there are

indications that having a psychologist involved can increase credibility and also improve levels of support for staff (Breedvelt 2016). Within this project, the appointment of a psychologist was seen as having a major impact on the implementation of the objective of PIE:

‘I don’t think you can get away from the fact that what has driven all of this and what was so crucial was getting [psychologist] in place. Someone with the level of knowledge and understanding and expertise and commitment to it and that rare, as I see, positioning of being a practising clinical psychologist but absolutely having these values embedded in her practice... Yes, the role and the individual were both crucial.’ (Project team member (03) – Timepoint 2)

There were indications in later interviews with project staff and in system change meetings that the engagement of a psychologist to lead on PIE had significantly galvanised interest in the area and, indeed, engaged interest from historically difficult to reach statutory partners in a way which was disproportionate to what might be expected from a single individual. This was related by those interviewed to her professional status which lent a high degree of gravitas and credibility, leading to PIE being taken more seriously by partner agencies, most particularly at senior levels. However, it was the combination of professional status and personal characteristics which were identified as making the difference, not just the appointment of a psychologist per se.

#### 6.6.5. Impact of Covid

As we saw in the previous chapter, the Covid-19 pandemic was seen as having some positive impacts on the overall system change project. With regard to the specific objective of PIE this was more mixed. In the early stages of the response to the pandemic, there were some indications that PIE became less important as services focused on responding to the immediate crisis:

‘I think initially when covid hit it felt like it had gone into the background because services were just focusing on the basic functions so it felt at first like it had gone back 20 years or so because substance misuse for example was just focused on getting someone their script, housing was just about getting someone a roof in the hotel. We weren’t thinking about the psychological side

of things it was just, it was a real emergency here...all that basic stuff and in this the higher level, trying to think about things psychologically is going to get lost.’  
(Project team member (01) – Timepoint 2)

The specific objective of PIE was less readily identified as having been significantly impacted by PIE, and also to have potentially negative consequences in the ability for services to operate in a psychologically informed way. However, this was not clear cut. The attitudinal shifts identified in the previous chapter were also seen to contribute to a more broadly supportive environment for PIE. Indeed the very environment of the hotels which were used for the Everyone In initiative were seen by some (as a result of their customer service ethos) as having provided a more psychologically informed environment than some specialist provision. Further, the housing of people with multiple and complex needs within such hotels was seen as having the potential of reducing stigma and increasing understanding of people with multiple and complex needs. This was seen as having the potential, in some small way, to contributing to a more psychologically informed wider society which (particularly for operational staff) was an important factor.

## 6.7. Concluding comments

The understanding of PIE then was of an abstract concept, difficult to grasp and most commonly associated with the physical environment – a finding echoed in the following chapter. Most interestingly from the perspective of achieving system change was its articulation as a continuum – which went beyond locally responsive models of PIE to a broader set of vague principles which risked dilution of some of the elements of PIE which differentiated it as a complex and systemic response.

PIE’s evolution as a system change objective emerged from an indeterminate combination of internal and external influences. The links between PIE and system change both supported and challenged the findings within the literature – with some support for PIE as a complex response but limited by the variations in interpretations referred to above. Whether PIE can be considered to be transformational change of the sort identified by the funders was more contested and related in part to the familiarity of PIE and its relative prevalence in many parts of the ‘system’.

The approach to implementation reflected approaches in other similar projects and discussed in Chapter 2 (see for example Boobis 2016 and Birmingham Changing Futures Together 2019b). The approach encompassed training, demonstration / exemplification (in the lead agency) alongside more general awareness raising. Participation and engagement with training and the community of practice presented similar challenges to those identified in the literature and in the previous chapter in relation to partner engagement. However, using the lead agency as an exemplar (though having the advantage of being more within the project's control) was challenged by considerations of applicability (e.g. to the statutory sector/less well funded VCS organisations) and the potential for it to be seen as creating an unfair advantage.

The approach to PIE epitomised the approach to system change overall in which the team sought to achieve it wherever and whenever they could in a more organic way. A similar set of impediments to the system change project detailed in the previous chapter were echoed here in the limitations of influence and control and challenged some of the literature (see Section 2.4) which implies a greater level of control than was evident in this case study. The context of austerity and cuts to services was identified in relation to PIE here as well (and in the embedded case study) – and again proved an impediment to innovation but also pointing to more significant problems of service availability which overshadowed the need for services to be psychologically informed. The capacity for initiatives to dissipate was also identified in the abortive attempt to create a more collaborative psychologically informed commissioning arrangements.

This chapter has given an overview of the findings in relation to the implementation of a PIE as a system change objective. The next chapter looks in more detail at the implementation of PIE at an organisational level – using an embedded case study in a service in one of the partner organisations in the system change project.

## 7. Chapter 7: Findings – implementing PIE: the experience of the embedded case study

### 7.1. Background and context

This embedded case study explores the experience of a service in one of the organisations involved in the system change project in becoming a psychologically informed environment. As described more fully in Chapter 4 (Section 4.1), the service which forms the embedded case study operates within a large housing provider, comprising seven staff including a service manager and a strategic manager and provides supported accommodation for up to two years for adults with poor mental health, and typically a range of other support needs. The organisation is one of the partners in the system change project and is represented on the system change board. The aim of this embedded case study is to explore at a detailed level the process of implementing PIE within an organisation and the extent to, and ways in which, this relates to the system change project.

Throughout the chapter ‘staff’ is used to indicate perceptions of both managers and staff. Where there is a distinction/difference between the two, the terms operational staff and manager are used. Managers include both the service manager and the divisional manager with strategic responsibility for PIE.

### 7.2. Making the decision to become PIE

As indicated in Chapter 2, there has been a growing interest in PIE within the housing sector and this undoubtedly played a large part in the organisation’s decision to implement PIE within the service. There was, however, also evidence of the importance of the system change project in influencing and, ultimately, galvanising the organisational decision. While there had been a longer standing awareness of PIE at senior and operational levels of the organisation, and indeed some early forays into it in other parts of the organisation, it was attendance at an event organised by the system change project which caught the attention of the senior manager and catalysed the organisation to begin the project within the service:

'So, it all started with, I don't want to say me, but it started with [the system change project] had the action learning sets which they ran ... which I went on and I was very much like – oh we need to get involved in this, we need to be more psychologically informed. I was at my manager's door.... I was kind of like, you know this is something we really need to get involved' Manager (11) – Time point 1

The decision to begin the implementation of PIE within the service was seen as being entirely made at the strategic level and none of the staff in the service indicated any involvement in it. This lack of involvement in the decision was, on the whole, not seen as problematical, nor did they indicate any resentment about the decision itself or the way it had been made. As will be seen later in this chapter, however, for the operational staff here, PIE often seemed of somewhat peripheral interest to most of the operational staff interviewed who did not view it as representing a major change to their practice.

Operational staff were largely unaware of any influence of the system change project in the decision (in fact, they were unaware of the existence of the system change project at all). Most assumed the decision to become PIE had come from a need for the organisation to keep up with what was happening in the wider sector where PIE was becoming ever more ubiquitous. However, this impetus was not always seen in a positive light: some operational staff saw the senior level commitment to it as superficial, motivated by a concern to look as if they were doing the right thing and keeping up with the rest of the sector, rather than coming from a genuine desire to improve services.

'Their spin on it was there's not a lot of money and people want to look good instead of doing something proper.' Operational staff (06) – Time point 1

The system change project, then, represented one amongst a number of interconnected influences on the organisational decision to become PIE. What is particularly striking is that while senior level support is usually presented as a *sine qua non* in most of the guidance on becoming PIE (see, for example Boobis 2016) this was somewhat challenged by the responses of some operational staff. Senior staff clearly are powerful influences on resourcing and staffing decisions and overall direction of

the organisation. However, that such support can have the opposite effect and impact negatively on staff perceptions by increasing levels of cynicism towards PIE is highly significant for staff engagement but less commonly reported.

### 7.3. How is PIE defined and understood?

#### 7.3.1. PIE as the status quo

Perhaps the most important finding, was the extent to which PIE was considered to represent a real change to the service. This was a particularly significant and recurring theme as it influences every area from attitudes to the way the decision was made (see above), to how the implementation took place. Most of the staff identified few changes in the way they worked with their service users as a result of the organisation's decision to become PIE, with the exception of the physical environment and there was little change in this between the two sets of interviews. Managers tended to be more likely than were the operational staff to identify and ascribe changes in practices to the implementation of PIE, but even here this was limited.

The perception that PIE was largely something they were doing already was universally held but resulted in different attitudes amongst staff. The managers and one of the service staff found such familiarity largely reassuring; they felt it offered confirmation that the way they were working was effective and in line with good practice within the sector:

'I don't think, I didn't find it difficult to think of how we were, how PIE we were which was good, you know you're doing something right, what you're doing is good.' Operational staff (05) - Time point 1

The remaining staff all felt (to some degree) that the language surrounding PIE (and indeed the term psychologically informed environment itself) was an unnecessarily complicated and jargonistic description of what they considered to be their normal practice and, for some, this was associated with a level of cynicism:

'See my view on psychologically informed environment and all this stuff, I hate to be, and maybe it's because I've been, and maybe I'm not the right person to talk to you about it. I think it's just another label for something that we used to

call person centred care really. That's my opinion, it's just a label.' Operational staff (08) – Time point 1

However, for the most part the association of PIE with existing practices did not result in outright scepticism, or a rejection of the concept, rather a lack of interest or belief that it offered anything new or innovative.

### 7.3.2. Understanding of the core elements of PIE

There was no spontaneous recall of any of the dimensions of PIE<sup>37</sup> amongst the operational staff, with the exception of an association with the physical environment (echoing the findings in the previous findings chapters). When asked specifically about the dimensions, the overriding finding amongst operational staff was that PIE provided nothing new or innovative to their practice, again with some limited exceptions. Managers did identify some aspects of PIE as deepening or improve aspects of organisational practice, such as reflective practice.

'PIE has definitely had an impact on reflective practice... absolutely, PIE has made the importance of why reflective practice is such a good thing to do so it has focused it, PIE.' Manager (11) Time point 1

However this was not typically shared by the operational staff interviewed. In fact the only area (outside the physical environment) where specific change was identified by those staff were some indications of an increased flexibility in the application of rules. Managers attributed some changes in their own practice in this area as a result of PIE. This had, in turn, sometimes led to challenges and changes in the practices of operational staff, even though these were not necessarily attributed specifically to PIE:

'I've been in meetings and we all do it, we are all guilty of it, sometimes you say we should adopt a firm approach so to speak... and our manager will say do you really think, perhaps you could do things that way, he gives us another way of looking at things.' Operational staff (08) – Time point 2

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<sup>37</sup> The dimensions of PIE are described in Chapter 2 and are as follows: Psychological Framework; Physical Environment; Managing Relationships; Reflection, training and support; Evaluation of Outcomes. The dimensions here are from version 1 of PIE as this was the most commonly used version at the time of the interviews.



The importance of the physical environment aspect of PIE was the only element of PIE that was universally and spontaneously identified as such by operational staff, irrespective of whether or not they had attended the external training on PIE provided by the Development Unit and described in the previous chapter. For some, physical environment was the only focus and they represented PIE exclusively as a need to consider more the impact of surroundings on service users, with an emphasis on making these more 'homely'. Although it could sometimes be difficult to elicit if the physical environment was the only thing they understood as being PIE or that it predominated because it was the only thing they considered to be PIE which was different from their existing practice/ways of working.

As indicated earlier, two of the operational staff had some level of recognition that the physical environment was only one aspect of PIE, though they were not always clear what they were, despite this member of staff having attended the aforementioned training:

'Yes, I think from the course they were like don't get caught up on the physicality of everything cos there's more to it but then they never said anything more so it's kind of like – there's a door and there's something behind it but we're not going to open it.' Operational staff (05) – Time point 1

There was, then, no sense that the implementation of PIE had brought much in the way of change to the organisation and there was little change across the two sets of interviews. There were however differences in the way that this affected staff engagement. Two of the operational staff were particularly dismissive – tending to view PIE as simply a cynical attempt to re-package their existing practice. This view was somewhat reinforced by the amount of resource which the organisation was seen to be dedicating to the implementation of PIE. As indicated in the literature review, PIE is often seen as requiring little in the way of additional resources (Boobis 2016; Phipps 2016) and this is often presented as a positive - a view shared by managers in this service. However, for staff already sceptical about PIE, this was seen as further evidence of a lack of commitment to, and superficial engagement with, real and meaningful improvement to practice:

‘Apart from like if you wanted to actually do it, then pump money into it.’

Operational staff (08) - Time point 1

For the remaining three operational staff, while less inclined to express such scepticism, they tended to view PIE as somewhat esoteric which meant that they found it difficult to understand and clearly define it. Often their focus on physical environment (in common with findings from the main case study) was because it was easier to understand and more concrete than some of the other elements:

‘Because the terminology is a bit new, it’s a bit, I don’t know, not clear for me – psychologically informed environments – when one of my colleagues said she was going on it I thought she was talking about pie [laughs] until she said no it is about the psychological environment and things like that, so I said what does that mean because it’s difficult to know what it means, it’s not obvious.’

Operational staff (09) – Time point 1

The inaccessibility of some of the concepts of PIE and, conversely, the perceived alignment of them with existing practices were identified literature review as presenting a potential barrier to engagement with PIE (See for example: Turley, Payne and Webster 2013; Westminster City Council 2015; Boobis 2016) and this was undoubtedly the case here as well. The immediate need for change is less apparent than in services which are more obviously operating in ways which are not psychologically informed, and the perceived esotericism of the language can discourage further engagement. There are also links here to the context of where a history of previous initiatives amongst longer serving staff can also lead to more cynical attitudes (described in Chapter 5). As indicated in the previous findings chapters and returned to in the following chapters, such issues invariably impact on implementation and it is to this that this chapter now turns.

## 7.4. Implementing PIE

### 7.4.1. Approach to implementation

The first thing to note is that the term ‘implementation’ is perhaps a little misleading. It is used here merely as a convenient way to describe the activities relating to PIE being undertaken in the organisation rather than in any more formal sense. We saw in

the literature review that implementation is perhaps a misnomer for PIE where there should be a sense of PIE as a continuous and ongoing journey. However, although there was no formal implementation plan for the service to become PIE, there was some evidence of a targeted organisational initiative. PIE features as an objective in strategies at the overall organisational, division and service level, although the actual implementation was left to each individual service to decide. This reflected the variety of different services which form part of the wider organisation and the need for PIE to be sensitive to local context. The implementation at the wider organisational level was described as 'middle-down' – that is to say that it was initially driven at the level of divisional head, who promoted it to their individual services (such as the one which forms part of this case study). The next stage (which was in progress) was to promote it upwards to senior managers within the wider organisation with a view to it becoming policy for the entire organisation:

'We have local policies which are within projects so they are kind of the bottom level, we have it within our strategies which is kind of the middle level if you like and so now the overarching policy is being developed which will include our [Name of division] side as well so it will become much more up down so I think we are still trying to penetrate a little bit upwards but it feels like we are getting closer to getting to this level in terms of being an organisation which recognises the importance of psychologically informed environments.'

Manager (11) – Time point 2

#### 7.4.2. Training and awareness raising

In terms of the service described in the case study, while there was no specific plan drawn up, the original intention was for initial awareness raising via a presentation at internal meetings, followed by all members of staff in the service attending the PIE training which was offered by the Development Unit as part of the system change project. In reality only two members of staff attended this, due to ongoing training being cancelled, reportedly as a result of insufficient numbers, itself perhaps indicative of issues of commitment and reflective of the difficulties in engaging partners discussed in the previous chapter. Those staff who attended training reported that it had been predominantly operational staff and middle managers, from VCS housing providers and this chimes with the findings in the main case study that the training

events offered often struggled to ignite interest outside of the housing sector, and most specifically within statutory organisations. While this had the advantage of enabling similar roles in similar organisations to share and discuss similar experiences, the absence of a wider range of organisations, of higher-level staff, and particularly of commissioners was seen as limiting the potential for PIE to deliver more systemic change.

One of the people attending the training found it quite useful in enabling them to hear others' experiences in similar organisations while the other reported that they did not gain much from attending. Both, however, indicated that they did not think it was imperative for implementing PIE. They considered that most of what they had learned could have been easily gained from reading some of the materials (for example on the PIE website) and discussing it amongst their team. The service did not therefore attempt to find any other sources of training or in-house delivery as they did not consider it necessary:

'I think, I mean the training is kind of useful but I'm not sure – you could probably get as much out of it by reading the information really. I mean it's not rocket science. I think it's quite easy really, people can really quite easily take in the information with some discussion.' Manager (04) – Time point 1

Those staff who had not attended specific PIE training indicated that their awareness and knowledge of PIE had come from reading, or more commonly from the manager talking about it in team briefings and meetings and most, though not all, felt that this had given them an adequate understanding of PIE. However, this finding needs to be considered in the section above which demonstrates a somewhat limited understanding of PIE and an association with the physical environment. Similarly, the perceived close association of their existing ways of working to what they understood PIE to be meant they were less likely to consider that they needed extensive efforts to raise their awareness and understanding.

## 7.5. Barriers and enablers to implementation

When considering issues of implementation, a number of important themes were identified in relation to those factors which enabled, or conversely acted as barriers to, the implementation of PIE within the organisation. Clearly the very familiarity of PIE

itself, discussed in the previous section was identified as both a barrier and an enabler but as this has been extensively discussed previously it has not been repeated here. It does, however, point to the potential for barriers for some staff to be enablers for others and vice versa which is an interesting and sometimes overlooked finding.

### 7.5.1. Importance of values

One of the most commonly expressed themes in relation to the organisation's implementation of PIE was the importance of the personal qualities, attitudes and values of themselves and other of themselves and other members of the team. There was a strong sense that their ways of working with service users came primarily, not from training or other influences within the organisation, but from an intrinsic set of personal values which they held, and were presumed shared by, their colleagues within the team. This shared value set was therefore considered to be the most important factor when recruiting new members of staff into the team.

'We recruit around values rather than experience. We have got two new members of staff just started and one of them... she has no experience in this area at all but on the values thing she scored really high and she is awesome. On paper you might think oh she's never done it before but you might get people with lots of experience who aren't very good. That's what we need new people but people who care.' Manager (04) - Time point 2

There was a strongly held view amongst most of the staff that these could not be taught but rather were intrinsic within an individual, thus they placed more emphasis on recruiting the right people than on training. This was identified across a number of areas but most consistently with regards to their ways of working and reflective practice:

'They can train you I guess but again it's really about attitudes and values... they are trying to make people more aware, to train people in that way I guess but it's difficult.' Operational staff (07) – Time point 1

This importance of personal qualities and values was associated with some resistance to both the formal training for PIE offered as part of the system change project and also to deep engagement with the principles of PIE more generally. Notwithstanding the perceived organisational alignment with the core principles of PIE, this could

operate as a barrier to the ongoing learning and reflection which is so important within PIE. What is clear, though, and echoes some of the findings in the previous chapters is the perception of the importance of personal qualities and values and, as discussed later in this section, the extent to which these are seen as within the control of managers to influence. See Section 7.5.5)

### 7.5.2. Organisational culture

Staff echoed the findings in the literature review (see for example: Keats et al 2012) and identified the importance of the strong and long-standing context of trusting relationships within the service. These were seen as beneficial in a number of areas: in helping with reflection and learning, and operating as a counter to some of the cynicism which was on occasions associated with PIE. This meant that while there may have been scepticism about PIE, this did not translate into a rejection of its core principles or hostility to the service manager's attempts to introduce these.

What was clear from the interviews was that these levels of trust predated the organisational interest in PIE.

'The team ethic here has always been extremely strong and we know we have got one of, as far as the team as a whole, the best teams in [name of department] as far as relationships and how we trust each other, get on and respect each other, how we cope under pressure, under stress, how we cope when manager is not there, how we support each other, deal with situations it is really, really positive.' Operational staff (09) – Time point 2

Staff were not necessarily able to articulate how this trust came about but this was not something that was identified as being 'created' by managers or by organisational initiatives. Rather staff pointed to the importance of the transparency and authenticity of their immediate line managers and again their own personal values (which they saw shared by their manager and the rest of their team) as being the most important contributors. This is an important point. There is much in the literature which identifies the need for such cultures (see for example Keats et al 2012) but often this sits alongside a sense that they can be created as part of the process of becoming PIE. The findings for this research suggest that without a high level of pre-existing trust

within an organisation, some of the issues pertaining to the familiarity (or conversely) esoteric nature of PIE can become even more significant barriers to engagement.

Staff also pointed to things in the wider organisation that they considered suggested a supportive environment and one which valued and cared for the welfare of its staff, for example: access to confidential helplines and professional support. While most staff were positive about the wider organisational culture as supportive of reflection and learning, for two operational staff, there were indications of less trust in, or support from, senior managers in the wider organisation or the sector as a whole:

‘I do think there’s an element of the sector that’s a bit of a blame culture when things go wrong. That’s my opinion over the years, it’s a negative side to the sector. I think when things go wrong there does tend to be a bit of a blame culture.’ *Operational Staff (08) – Time point 1*

This points to some of the challenges associated with supportive internal cultures. While the immediate team may have trusting relationships, these can be impacted by issues within both the wider organisation and within the sector more generally – things which may be even more difficult for line managers within the service to influence. These ranged from a vague sense that other services in the organisation were less understanding of the particular complexity of their service users and had a generally less person-centred, holistic approach to more specific examples. For example: tensions were identified in relation to the ending of tenancies as a result of breach. Attempts to implement approaches (more consistent with PIE) which required a greater level of tolerance were sometimes in conflict with other parts of the organisation: the ending of tenancies as a result of breach was handled by a different department and the requirement, for legal reasons, of a clear audit trail of behaviours leading to breach meant that there could sometimes be problems if breaches were dealt with informally in the earlier stages.

As indicated in the literature review, the guidance is clear on the importance of PIE principles across all levels and areas of an organisation and the need for consistent approaches (see for example: Breedvelt 2016) but perhaps underestimates the particular tensions and difficulties that this can create where values, attitudes (and regulatory or other frameworks) within the organisation are not aligned. It also relates

to the amount of control which even senior managers in the organisation have in addressing these across multiple areas. In this research this was identified as due to a lack of formal authority over other departments such as the department tasked with improving the physical environment, as well as departments being bound by different regulatory frameworks or priorities which cannot be easily reconciled (as in the case of breaches above).

### 7.5.3. Impact of the wider environment

It was not just internal organisational environments which could create this tension. The wider context was identified by staff in a number of ways but invariably as a negative impact on their ability to operate in a psychologically informed way. The resources available to help support their service users and to enable them to provide a holistic and person-centred service were identified as having been severely reduced by austerity measures. While staff often act as key worker for their service users, their support (particularly where their needs are multiple and complex) depends on a myriad of different organisations to provide support for the specific issues their service users face. This echoes findings in the main case study where an absence of services were cited as one of the reasons for the ongoing focus on the service delivery element of the project. Staff reported that the needs of their service users were becoming more complex at a time when organisations' capacity to deal with this was diminishing:

'It's getting more challenging to find services to refer to, because of the cuts, sometimes we struggle and we just have to push, push and push. We can best advise on services because we see them every day rather than CPNs who don't see them often. Sometimes the person is willing to help but the service isn't there and sometimes they just think oh no they are not unwell enough.'

Operational staff (09) – Time point 1

The role commissioning arrangements play in the ability for organisations to become psychologically informed is well articulated in the literature (Chapter 2) and, here too, commissioning was identified as a potential barrier. There was some sense from managers that the local authority commissioners of the service were developing a greater understanding of the issues of multiple and complex needs, the support needed and the impact of trauma on engagement and outcomes. As discussed in



Chapter 5, improving awareness and understanding of multiple and complex needs was identified as something the system change project had impacted on. However, it should be noted that this impact was not identified by any of the staff in the embedded case study organisation. A greater challenge came from the reductions in funding as a result of austerity measures with the reduced funding available from commissioners seen as antithetical to their professed desire for innovative and psychologically informed services.

‘Because I think again they say I think yeah it’s really good but is that actually a priority for them or do they just want a service that is going to be delivered, that’s going to be good, that’s going to cost x amount of money, so you know. And I get it because there is only so much money isn’t there and they can’t expect gold standard and pay bronze money for it.’ Manager (11) – Time point

1

Attitudes within wider society (which were not psychologically informed or trauma aware) were also identified as issues which have the potential to impact as much on the individual service users as the service itself. The wider context in which service users live is often experienced as hostile and, even if all services with which service users come into contact were to operate in a psychologically informed way, there was a perception amongst some staff that wider societal change and understanding was necessary for any real transformation of the experience of adults with multiple and complex needs.

‘What it needs is something on a bigger societal level. I kind of feel that we work on a microcosm, like we are trying to protect all these people and there is constant barrages.’ Operational staff (06) – Time point 2

This was also identified in perceptions about the levels of tolerance and flexibility which staff felt was appropriate. This was reflected in the sense from the member of staff quoted above that an overly tolerant approach would not necessarily be helpful in preparing service users for life in the real world which they saw as linked to perceptions of PIE as unrealistic in their context.

Not only are do all of these factors represent significant impacts on staff’s ability to work in a fully psychologically informed way, they are also largely beyond the control,

not just of staff themselves but also their managers (discussed more fully in Section 7.5.5 below). Of course, the need to influence this wider context this also highlights the importance of the system change project in which this objective sits. However, as indicated in Section 7.5.5, the previous Findings chapters (and returned to in Chapter 9), influence and control were also identified as key challenges.

#### 7.5.4. The service user relationship

There were some interesting findings in terms of the relationship between staff and service users and the impact of this (which could be either negative or positive) on the service's ability to operate as PIE. In this way, how PIE was defined was and how it might be applied were, in large part, seen as being determined by the relationships between the service users and staff.

'What PIE is and what you can do with it changes depends on who you've got in the service, it's not just about staff it's also the service users.' Operational staff (05) – Time point 2

This articulates (consistent with PIE) the central importance of the relationship between the key worker and the service user, the challenges which trauma creates in forming such relationships and the consequent difficulties in achieving positive outcomes (Cockersell 2018d; Anderson 2011). What was particularly interesting within this research was the extent to which operational staff felt that PIE was feasible and realistic in the context of engaging and building relationships with the service users they were working with. For some, for example, PIE felt purely theoretical and somewhat removed from the people they are working with which can mean that it felt unrealistic and difficult to apply directly:

'Theories are great but when you are dealing with someone who has got substance misuse, alcohol, drugs, sometimes it is hard to know how you can adapt. Cos yeah you understand the theories but how are you going to apply it to that particular person.' Operational staff (09) -Time point 1

This is a particularly significant finding. It suggests a view of PIE which is difficult to apply in the real world of complex service users, that is to say that the real-life complexity of service users makes them difficult to engage and consequently makes PIE difficult to implement. This view of PIE could perhaps be seen as conflicting with

the view of it as 'business as usual' which was commonly and concurrently expressed. While staff had no problem with the core principles of PIE, there seemed to be a distinction between these and PIE as an organisational initiative – the latter being seen as a theoretical, jargonistic and a bureaucratic exercise. This would undoubtedly have been exacerbated had the decision to be taken to use any of the tools available to assess PIE – an area where there was consensus that such tools would be not just unhelpful but unfeasible:

'Can you look at the PIE guidelines and think you've now achieved this? You could quite easily make a very arbitrary list – have you got this or that but I don't know what it would prove.' Manager (04) - Time point 2

It is particularly interesting that some members of operational staff conceptualise the service user as a barrier to implementing PIE since it is precisely this level of complex service user for whom PIE was developed. This suggests a view of PIE not as a means or a mechanism of better engaging and supporting complex service users but as somehow representing an ideal, purely theoretical interaction to be aspired to but largely removed from what they experience on a day-to-day basis with their service users. This viewpoint was, unsurprisingly, associated with a level of cynicism about PIE and a reluctance to deeply engage with it. It was undoubtedly related to the sense amongst some staff that PIE was just another in a long line of initiatives designed to make the organisation look good rather than one implemented to effect real change and rooted in an understanding of the service users' needs. Even where such cynicism was not overt, the perception of PIE as a theoretical, rather than a practice-based approach predominated and undoubtedly impacted on engagement.

#### 7.5.5. Control and influence

The concept of control and the limitations of this was a recurring theme with a number of different elements. The first of these was in relation to the limited control that staff viewed themselves as having in their work with service users, for example in encouraging them to use other services, or in achieving pre-determined outcomes.

'If they don't want to there's not a lot you can do – you can't make them. We get brochures and can refer but most of them don't go and you can only offer – you can't make them go.' Operational staff (07) – Time point 1

There was a sense from some operational staff, that inherent within PIE was a tendency to overestimate the amount of control that they had in transforming the lives of adults facing very complex problems leading to an unrealistic expectation of what could be achieved. The following quote illustrates this more strongly than was expressed by most operational staff but there were a number who felt that initiatives such as PIE were, to some extent, not necessarily rooted in a realistic view of the problems faced by their service users and their ability as staff to influence this.

‘My big problem with stuff like this is that it kind of focuses on this ideal service user who wants to engage, who’s willing to turn up, who wants to do that when we’ve got like 24 service users and 90% of them don’t do any support, like it just feels a bit kind of pie in the sky.’ Operational staff (06) -Time point 1

Managers also indicated that, in some instances, they also experienced a lack of control. As indicated earlier, the implementation was described as middle down and managers indicated that it could be difficult to influence areas upwards or over which there was no direct power. This was seen as important because of the reliance of the service on other parts of the organisation for the implementation of PIE.

‘I think it’s difficult for anybody on my particular level to directly influence say somebody on, I mean I can with our director, I can influence them but across any of the other areas is more difficult.’ Manager (11) – Time point 1

The need for PIE to be understood at all levels was indicated by the connections between what staff needed to do in their own service – for example in terms of making changes to the physical environment for which decisions on the budget, timing and implementation were located in another department; or for example, where they worked with other parts of the organisation in dealing with breaches of rules. Thus although many staff saw their service as a discrete team working relatively autonomously from the rest of the organisation, this was belied by its reliance on other departments which indicated the importance of influencing other levels in the organisation and an organisation wide approach to implementation. Clearly this is an area where senior level support is particularly important. However the approach of adapting of PIE to the local context of individual departments in a large organisation such as this, where services can work with very different client groups or have

different priorities and accountabilities (as described above) made this particularly challenging.

The extent to which operational staff felt that managers within the organisation were able to control attitudes of staff, even within their own service also had implications for the implementation of PIE. As indicated above, most operational staff indicated that their main influences in the way they worked were personal attitudes and values which they saw as formed outside of formal organisational structures, and often outside the organisation at all. Some also reflected that they did not think it was possible for managers to fundamentally change attitudes and thus, in order, for initiatives such as PIE, which were seen as requiring a particular ethos or set of values, to be successfully implemented required that staff already had the right value set in place as these were not able to be changed by managerial control.

‘If you come into work like this and you categorise people or have those attitudes then there’s something wrong and no amount of work teams or get togethers or books is going to stop that.’ Operational staff (09) - Time point 1

While operational staff were more likely to see their motivations as being intrinsic, managers were more likely to link these to external targets, for example the absence of PIE in commissioning targets (in contrast, for example with Recovery Star) was seen as making it more difficult to sustain:

‘I think the main barrier we all agreed on was the operational organisational stuff, commissioner level stuff. You know it’s fine putting these things in locally but if you’re not hassled to do it or supported to change in that way, then it’s probably not going to last.’ Manager (04) – Time point 1

There was a strong sense from managers that the solution to perceived resistance to new initiatives was to continue to promote and to ‘push’ them, to seek every opportunity to explain the benefits of these approaches to operational staff or, in some cases to set more formal targets around these. The example below indicates this latter point in relation to assessments of the physical environment.

‘So that is in its second stage at the moment because it was done initially and for me it wasn’t as successful as I wanted it to be. So, we did it the first year

and it wasn't as successful as I wanted it to be so this year. I have been a little bit more prescriptive.' Manager (11) – Time point 2

This echoes with some of the findings in the main case study in relation to the revised approach to managing the overall system change plan which moved towards an approach which was perceived as having clearer, more measurable, demonstrable targets. While these approaches seem to be designed to increase managers' sense of control, there is evidence of some disconnection between this and the extent to which they believe they can realistically impact on operational staff attitudes. Although they see promotion and formal targets and assessments as means of achieving change, they conversely describe attitudes and cultures as a more fixed phenomenon and one which can effectively impede desired change:

'I think that's more about not the organisation's values, I think that's not necessarily the manager's or the service values but just the culture that has been created within a team over 20 years that service has been running. And you get your staff who have been here a while saying this is how we do things so the new staff coming in, they are just doing whatever the old staff did and so nothing ever changes.' Manager (11) – Time point 1

Perhaps more importantly, the external factors – such as the commissioning frameworks and the impact of austerity measures on the availability of services were experienced as beyond the control of managers. While some of the literature suggests that it is part of the manager's role to protect their staff from the impact of commissioning targets, it is difficult to see how this can practically be achieved. Managers in the service were clear that although sympathetic to the pressures that commissioners and other services were working under, this was not something that was within their control, and nor did they see make any links between this and the system change project. Although as we saw in the previous findings chapter, the importance of different commissioning arrangements was understood by the system change project, effecting change in this area was challenging even at this level.

## 7.6. Links to the system change project

One of the aims of the research was to explore the links between the system change project and the implementation of PIE. The only real connection between the two

within this case study was amongst senior managers who explicitly identified the system change project as an important factor in their decision to become PIE (see Section 7.2). The availability of PIE training via the Development Unit provided a further impetus for managers though was seen as less important by operational staff. Although there were attempts to share practice on PIE via early attempts at communities of practice, these had been very limited and engagement had tailed off along with availability of training. Of course, as indicated in the previous chapter later interviews with the system change project indicated that these had recently been re-started but the interviews in this embedded case study largely pre-dated these efforts. It was clear from this research that amongst operational staff there was no awareness whatsoever of the system change arm of the project (though there was limited awareness of the service delivery element). As discussed in the first findings chapter, operational staff found it difficult to comprehend the concept of a system change project. This was, in large part, because they did not conceive of a 'system' for people with multiple and complex needs as a distinct entity which could be identified, acted upon and changed. Their understanding of the system (where expressed at all) was located around the individual service user and unique to them and thus the concept of system change was largely alien to them. This is a very important finding for the system change project. Clearly any system change depends on change at all levels. This view of the system has clear implications for the engagement with the project. It also provides further evidence of some of the issues identified in the first findings chapter in relation to the reliance upon the communication of, and engagement with, the system change being predicated on a cascade of information via senior management representatives on the system change board.

## 7.7. Concluding comments

The most pervasive finding was that, for all those interviewed, the principles associated with PIE (in as much as they were understood) were not seen as representing any significant change for their service. This echoes the findings from similar projects (see for example: Westminster City Council 2015; Boobis 2016; Birmingham Changing Futures Together 2019b). While this was seen as a positive for managers, for staff it (along with the perceived esotericism of the language) had the

impact of discouraging further engagement. Such disengagement is particularly significant given that PIE is intended to involve a continual process of reflection and adaptation (Johnson 2013b). It also links to the discussion in Chapter 6 with regard to the extent to which the implementation of PIE is likely to lead to transformational systemic change when implemented in organisations which are already working successfully with adults with multiple and complex needs.

While staff described ways of working which were congruent with many aspects of PIE (e.g. person-centred, holistic), some core elements (such as effective reflective practices) were not universally identified. Further, many of those elements which were identified as PIE were described as long standing and coming from previous experiences, and intrinsic personal attitudes and values. That these were largely seen as being beyond the control of managers or organisational initiatives has particular significance for implementation and is of particular interest in the discussion in the following chapters. In common with the previous findings chapters this was not without tension. While managers identified the importance of these and acknowledged their lack of control over these important aspects, they combined this with a perceived need for a greater focus on measurable targets as a means of implementing PIE. The research also identified an uncommonly cited facet of senior level support – that it can sometimes have the unintended consequence of discouraging engagement at the operational level.

Unsurprisingly, implementation was also challenged by the external environment of austerity, echoing the findings in the main case study, as well as by conflict with some internal processes and procedures (though this was more limited). The long-standing and trusting environment within the service was seen as particularly helpful for some aspects of PIE (such as reflective practice). The importance of trust in achieving organisational change projects such as PIE is well documented (See Chapter 2, Section 2.4.3). However, the experience within this case study suggests that it needs to be in place already and that it comes from a long history of good relationships between operational staff and managers within the service, honesty, consistency and trustworthiness and a sense of shared values which cannot be easily or instrumentally created as part of an implementation process. Both of these issues link to the wider



discussion in the following two chapters in relation to the feasibility of managed, transformational change in complex systems.

The findings in these three chapters have so far have been presented outside of any theoretical framework. The following two chapters will place the findings within the theoretical perspective of complexity. As will be further discussed in Chapter 10, applying complexity theory to these findings provides empirical evidence to support the development of the theory itself, as well as contributing to practical and theoretical debates within system change for multiple and complex needs. There are implications – both practical and theoretical – for the issues raised in the preceding chapters such as: accountability and control; the role of service delivery; and the impact of austerity; alongside the importance of values. Importantly, a novel contribution of this research is to propose a theoretically informed challenge to the feasibility of delivering transformational, sustainable and beneficial system change as well as examining how the experience of implementation may challenge some of PIE’s positioning as a complex response.

## 8. Chapter 8: Applying complexity theory to the empirical findings

### 8.1. Introduction

The purpose of this chapter is to analyse the empirical findings detailed in Chapters 5 to 7 via the theoretical framework of complexity theory. Following on from this analysis, the second of these chapters will use the theoretical framework of complexity theory to offer a critique of the project's objective of a managed programme of transformational, beneficial and sustainable system change. Additionally it will critique PIE's positioning as a complex systemic response.

To recap: the core precepts of complexity theory indicate the following:

- Change would occur as a continuous process of adaptation and result from **multiple interacting causes** which include **mental models**;
- These are **context sensitive**, influenced by **history** and **path dependent**;
- Change occurs as a result of **interconnections** between the elements within the system;
- What results will be **emergent, unpredictable** and **non-linear**.

### 8.2. Differential understandings and mental models

The empirical findings identified a range of definitions of what the core terms: 'system', 'system change' and 'PIE' meant to the participants. Within complexity theory, such mental models or cognitive representations have a particular significance, forming part of the complex range of interactions which determine the behaviour of the system. As indicated in Chapter 3, within human 'systems' (however these are defined) the, often implicit, beliefs and understanding of the world and context shape (and are shaped by) interactions with other agents, and by the local understanding of the context in which an individual is operating. Research, for example, by Paley (2007) identified implicit models in relation to the need to avoid activities which would delay patient discharge amongst nursing staff in a cardiac rehabilitation unit; while Anderson et al (2005) identified underlying models amongst some nursing staff which viewed elderly residents challenging behaviour as akin to that of children which

influenced the way the residents were cared for. Of course, mental models are not necessarily fixed and they both influence, and are influenced by, context, environment and experiences, in a continual and bi-directional way (see Chapter 3). Definitional issues of these key terms were thus a major focus of this research and additionally respond to a gap in the literature where a detailed examination of these concepts (from the perspective of participants in the process of implementation of system change for multiple and complex needs) was not widely reported.

### 8.2.1. The 'system'

Of fundamental significance is the understanding of the term 'system' as it applies to the system change project. This section therefore considers how the system was understood by participants in the findings, how this relates to complexity theory and the implications of this.

I outlined in the theoretical framework chapter, the characteristics of a complex system and also some of the issues involved in delineating a system within complexity theory. Clearly, the **issue** of multiple and complex needs is, by definition, complex. The literature review, for example, indicates the overlapping and interconnected characteristics of multiple and complex needs which are both cause and consequence reinforcing the difficulties faced and having a cumulative impact. The cumulative and inter-generational impact of trauma and the increased understanding of the complex interplay of structural issues and individual disadvantage have increased awareness of the systemic nature of this issue. The notion of a **system** with which people with multiple and complex needs interact is however, is more contested. People with multiple and complex needs interact multiply, as well as serially and individually with health, criminal justice (and other 'systems') as they seek and receive support and this raises the important question of what system means in this case. In these, as in other complex systems, there is a 'tangle of partly competing, partly co-operating, or simply mutually ignoring subsystems' (Heylighen, Cilliers and Gershenson 2006 [no page number]). However, the very breadth of multiple and complex needs makes this more problematical and the range of organisations and 'systems' involved create additional complexity. It is perhaps less surprising therefore that the notion of a bounded system being an artificial construction, so clearly resonant with complexity theory, was so comprehensively articulated within the interviews for this research. Whereas there is

a unifying institutional rationale within the health or criminal justice systems, this does not exist in the network of services and responses relevant to the needs of people with multiple and complex needs.

Fundamentally, the very concept of a system is challenged by complexity theory which sees it as an artificial construct which only exists in the eye of the beholder (Van Uden, Richardson and Cilliers 2001). Although there were differences in the way that the system was understood, all the strategic staff interviewed (to a greater or lesser extent) considered the notion of a bounded system as an artificial and pragmatic construct. Not only is the system experienced as complex (in both a practical and theoretical sense) but the differing cognitive representations of what is included in the system also mediate the experience of, and engagement with, the project. This was perhaps most clearly demonstrated in the findings in the response of the operational (and a smaller number of strategic) staff to attempts to define the system. For operational staff, the concept of a system was an over-simplification which denied the reality of the individual nature of the problems faced. It is important to note that they recognised the interdependence of their work and that of others (in itself a systemic viewpoint). They were, however, keen to stress the importance of personalised and individualised responses in the work they did and the qualitative differences in support not just between organisations but by individuals within them.

As indicated in the quote in Chapter 5 which evocatively described the system as 'the shape of the person', for some the system only existed in relation to a specific and individual person. While the system's individual components (e.g. organisations involved in providing support) might be recognised as entities (or even systems), the differential ways in which these came together – determined by the needs of the individual service user and the relationship between the service user and the support worker within an individual organisation meant that there was no entity which could be described as a system. Attempts to delineate a system (which could then be changed akin to the system change project) were therefore seen as conflicting with their experience in providing support as well as with their professional and personal values of personalised and person-centred care. This is a good example of the important role such mental models play as part of the interconnected factors impacting on engagement with the project. Interestingly, and contrary to what was

intended, it demonstrates the potential for staff to perceive conflict between the aims of system change and those of personalised approaches such as PIE. Of course, an individual's attitude to system change, and to the system also emerges as an interactive product of their own experiences, history, values and thus this is not an attempt to generalise this experience more widely or to suggest, for example, that all operational staff view concepts of 'system' in the same way. Or that, even if they do, that this will have the same impact on their engagement with system change projects such as this.

Amongst strategic staff there was a more widespread view of the system as the collection of services – the 'service' view explored in Chapter 5 and based around the four key need areas but even here this was understood as a simplification, that is a pragmatic device to assist in making the project more manageable. Even within this, however, the limitations and differences between the 'service' view were apparent and significant. This bounding of the system inevitably involves choices about what is included and what is not and indicates the possibility that some of those omissions may profoundly impact on what happens inside this bounded system. Within the wider partnership, for example, this impacted on some attitudes to the perceived success (or otherwise) of the project in terms of the extent to which it had achieved system change. We saw in the findings chapter, for example that omitting factors of causation in early years, for example, sometimes created a level of cynicism about the feasibility of the project to achieve systemic change. The impact here was not so much in terms of engagement which was mitigated by the perception of the contribution of the project as valuable and necessary, but rather in assessments of feasibility – i.e. whether or not the project had (or could) effect systemic change.

Notwithstanding this, many of the strategic staff, and particularly the project staff articulated a level of comfort and indeed necessity in holding the two potentially conflicting positions of seeing the definition of a bounded system as artificial but nevertheless requiring it as a means of managing the project. This is perhaps indicative of what Mowles, van der Gaag and Fox (2010) describe as the prevalence (albeit often implicit) of systems thinking and more orthodox management theories which privilege concepts of control and predictability. Such representations, for example, of systems as more bounded entities could thus be considered as 'helpful

heuristics' (p.129) in complex situations. This is supported by the seemingly paradoxical relationship between the reality of complexity and the exigencies of working within such a project. Project staff interviewed were cognisant of the risks of omitting systemic factors important in causation and reinforcement of multiple and complex needs but considered such simplification as necessary to contain and direct their resources.

The operational staff view in this research is perhaps closest to the later theoretical perspective of Stacey and colleagues who question the use of system at all (Stacey and Mowles 2016; Stacey 2001; Stacey, Griffin and Shaw 2000; Mowles, Stacey and Griffin 2008), seeing instead complex responsive processes of human interaction. As we saw above, for operational staff, their views on the system challenge the implicit conceptualisation within the programme of the system as an entity which can be defined and then acted upon – for example: joined up. While many complexity theorists recognise that there may be a need to place a boundary around a system as a pragmatic device, they foreground the necessity of recognising and acknowledging that this is necessarily temporary and artificial, a position supported by these findings.

### 8.2.2. System change

As discussed above, operational staff did not typically conceive of a system and were largely unaware of the system change project (a finding in itself). The concept of system change therefore was largely meaningless to them and consequently, they did not express views on what it might mean. Self-evidently, if the concept of a 'system' is as alien as it was to them, then the notion that this can be acted upon and changed is illogical and this was clearly evident in interviews with operational staff. Within this section, therefore, I am exploring the perceptions of the strategic partners and project staff who more commonly held a 'service' view of the system, while acknowledging the limitations of this.

As indicated in the Chapter 5, there was widespread agreement that to meet the definition of system change there needed to be some element of transformation in the ways in which people with multiple and complex needs were supported. Within the interviews, however, perceptions of what transformational system change actually meant varied substantially. For example, some interviewees focused on the centrality

of attitudinal and cultural change in existing services, while others suggested transformational change required major structural reform, or a shift in power away from statutory services. There were similar differences in views about PIE's role in system change. For example, there was disagreement about whether to achieve transformational system change, PIE would need to be instigated within every agency (or even society more widely) - the feasibility of which was viewed as questionable. As we saw in the Findings chapter, the project team indicated their approach of 'pushing on open doors' and this was epitomised in the objective of PIE and their targeting of the lead agency. Given the ubiquity of PIE in the homelessness sector where PIE originated, implementation in services within this sector was seen as more achievable but its existing prevalence meant that it was seen as less likely to meet the project's criteria of transformational change.

Of course, transformation has a long and chequered history within the public sector and specifically within those organisations and sectors related to multiple and complex needs such as health and criminal justice. Transforming rehabilitation, for example was the terminology used for the wide ranging and widely criticised reform of the probation service. For all those interviewed, then their history and understanding of transformation and system change more broadly was shaped by their previous experiences within their own sectors. Many of these public sector initiatives were considered to have failed to deliver beneficial change and this impacted on their attitudes to this project and their views of the feasibility of transformation. These historically influenced cynical attitudes relating to the feasibility of transformation, therefore, impacted on engagement with the project. The resulting lack of engagement with the project made successful implementation more challenging and this in turn reinforced or amplified the sense that transformational system change was unachievable.

It would be fair to say that there was a widespread view within the interviews that the project had not achieved system change. For many this was because existing structures (in relation to multiple and complex needs) were seen as operating largely as they had prior to the project's inception. All recognised significant increases in understanding and awareness of multiple and complex needs and prevalence within policy and other strategies, alongside a growing understanding of the importance of

centrally involving people with lived experience. While recognising that there was a complex mix of factors which had led to this (including broader activities at the programme level), the system change project was seen as having had a significant influence in building this awareness via its research, its co-ordinators/service and other activities, changing the overall context in which the organisations were operating if not the organisations themselves. However, this was, on the whole not considered by those interviewed to be system change (transformational or otherwise). What is important here is not that there are differences, neither am I arguing that such differences are unexpected. Rather it is the impact they have on partners' engagement with, perceptions of, and reactions to the project and the ways in which these are often overlooked and remain unsurfaced. For example, where system change was seen by those interviewed as requiring changes in power relationships or structures, this was associated with a sense that the project was unrealistic or would never achieve its aims, given the relative lack of power of the partnership to effect such change. This undoubtedly had an impact on the level of engagement of these partners, and resulted in a consequent lack of deep engagement in some instances. Importantly, as I will go on to examine in the next chapter, this categorisation of the project's impact as not 'transformational' also served to devalue its achievements – for example in increasing awareness and understanding of multiple and complex needs.

### 8.2.3. PIE

The differing representations of PIE were somewhat less obviously diverse than for the previous two concepts. There was, for example, a relatively commonly held conflation of PIE with the limited aspect of the physical environment associated with an (often acknowledged) relatively superficial understanding. Similarly, within the embedded case study, it was strongly associated with business as usual and little change. This superficial similarity, however, revealed a greater level of complexity when examined at a greater level of detail. For example: some staff within the embedded case study were unable to identify in any detail what PIE was and thus, in similar ways to 'the system' could not really articulate it, despite the organisational focus. Others held seemingly conflicting views of PIE as what they were doing anyway, the status quo, but at the same time considered it to be an unrealistic and idealistic approach unsuited to the complexity of their client group. The attendance at training events or awareness



raising within the organisation seemed to have done little to change these views. In both the system change board and the embedded case study interviews there was a sense that PIE was paradoxically (and sometimes at the same time) considered both esoteric and familiar. The terminology of psychology could be off-putting or conversely locate it in existing practice; 'environment' could mean a focus on physical environment, not least because this was something physical and where impact could most clearly be seen. Importantly, even where participants viewed PIE in the same way, the impact of this could be different: for some the familiarity of PIE as existing practice and its esotericism were seen as acting to suppress further interest in exploring it, while for others, they had the opposite effect.

There is perhaps an assumption, belied by the findings of this research and challenged by this application of complexity theory, that within system change projects such as this, there is a common and shared understanding of PIE. There is a tendency for it (alongside other terms discussed above such as 'the system') to be used as a sort of shorthand without further exploration as to interpretation and understanding. This underlies some perceptions that it can contribute to system change by creating a shared language across professional boundaries. These varying interpretations, some of which omit key elements of PIE present a challenge the positioning of PIE as a complex response as discussed in the following chapter. Indeed its position as an objective of system change, with targets around implementation within organisations and (albeit discarded) plans for accreditation may also inadvertently conflict with some of the more complex features of PIE. Similarly, the way that PIE was described in some of the interviews with system change board members, for example, suggest PIE as a destination rather than a journey, and thus could unwittingly reinforce some of those characteristics which might work to instrumentalise it as a tool rather than its aim of being an adaptive response based around continued reflection and learning.

These three sections, then, have explored the different mental models articulated around the three core concepts of the system, system change and PIE. These form part of the inherent complexity of the system change project and, as we have seen are of great significance in how the system change project played out. They impacted in different ways (but most often negatively) on engagement with both the system

change project and PIE, as well as on perceptions of how successful the project had been.

As I will go on to explore in the following chapter, this has implications for the feasibility of transformational system change and the positioning of PIE as a complex response. Of course, mental models such as those discussed in the previous three sections were not the only (or even the primary) influence in the system change project. As will be shown in the following section – complexity theory would view what happens in the system change project as the result of multiply interacting causes, of which mental models such as this are only part.

### 8.3. Multiple interacting causes and the importance of context and history

Multiple causation and the importance of context and history are core precepts of complexity theory and, are at the heart of the challenges which complexity theorists identify in achieving change. Within complexity theory, it is posited that there will be no single causal relationship and what happens within a system change project such as this will emerge as a result of history (path dependency), structures and norms and the dynamically changing context in which the project is operating (Boulton, Allen and Bowman 2015). As indicated in the theoretical context chapter, internal connections, contextual interdependencies and history impact on outcomes (Hood 2013). The project would be expected to be sensitive to initial conditions (Turner and Baker 2019) and path-dependent, so what happened previously would determine future actions (Boulton, Allen and Bowman 2015). The history is seen not just as irreversible but also shapes what is happening at any given moment and is both determined by, and influences, mental models of agents involved (discussed above) (Zimmerman and Dooley 2002; Trenholm and Ferlie 2013). Choices are made on the basis of previous experiences, what is happening currently and the context in which they are operating, but past behaviour does not predictably determine behaviour in the present (Heylighen, Cilliers and Gershenson 2006).

Of course, the term ‘context’ implies something outside of a system, and as explored above, each person’s conceptualisation of the system (if it is seen as existing at all) is different and thus context will also be individually understood. Clearly, in this regard,

the notion of context at all is as challenging as that of 'system'. Thus context is not a fixed entity – rather it, like the system, is in large part also influenced by the positioning of the people being interviewed and their own particular perspectives. This raises particular issues not just for the project but also for research such as this which uses the theory<sup>38</sup>. However, in contrast with the definition of the system described above which was more fluidly constructed, contextual factors for those interviewed tended to be those things which were outside either their organisation (and/or the service) in which the person worked, or, for project staff, outside the system change project - for example: the strategies and operation of partner organisations, as well as the broader policy environment.

Within the findings of this research, this multiple interaction of influences and context was exhibited throughout the lifecycle of the project in the way in which the project team described the way they developed both strategic and operational parts of the plan. For example, within the findings in Chapter 5, staff identified a major shift away from the original theory of change which showed a linear relationship between the impact of the system change project and reliance on the project's multiple and complex needs service. Similar shifts occurred in the revision of the system change plan with the second version moving away from the transformational language of 'changing the DNA' apparent in the first plan. Although the fieldwork took place during the period of these transitions, staff did not indicate a clear pathway by which these changes had come about. Rather they described a multifaceted interaction of factors including what they had learned from delivering the service, an increased understanding of the complexity of the 'system', an increased focus on system change by the funders, and unfolding external events such as developments within the ICP. These combined with contextual factors at the macro level such as the increasingly evident impacts of austerity within services which changed the context for the service delivery arm of the project as well as the system change project itself. An increasing awareness of the complexity and systemic nature of issues within, for example, health

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<sup>38</sup> As with the discussion of system, the related idea of context is not just challenging for the project but also for research which, like this, aims to use complexity theory. As in the project, conducting research inevitably requires some means of bounding what is being explored which has implications for defining both the system and the context. This is discussed in relation to Reducing Complexity in research in Chapter 4.

was seen as impacting on, and having been positively impacted by, the activities of the project – an example of the dynamic and interconnected nature of such influences within complex systems.

Similar experiences were observed with PIE. The increasing interest in PIE within the homelessness sector, its use within other parts of the programme, the creation of the Development Unit which could offer support to agencies wishing to pursue PIE, were all cited as influences but, as the findings show, there was no single factor which staff felt had led to its inclusion. Similarly, the decision to implement PIE within the embedded case study was attributed to a variety of interconnected influences. Here, the organisation indicated previous interest and small-scale experimentation with PIE but it was the combination of this with availability of support, increasing interest from commissioners (which had itself been identified as having been influenced by the system change project), and growing sectoral interest which led to its adoption in this case. Importantly, in both the system change project and the embedded case study, staff<sup>39</sup> specifically identified the importance of the perceived fit between PIE and their values as part of the decision.

Amongst some of the operational staff (none of whom had been involved in the decision to implement PIE) the impetus for PIE was sometimes attributed to less worthy and more superficial motives – such as a desire to ‘look good’ or paying lip service. This itself impacted on their engagement and had in turn been shaped by their own histories and previous experiences of (what they perceived as) similar initiatives. Thus for each person within the service, their response to the initiative to embed PIE in the service, was impacted by their own history within the homelessness sector as well as their own interpretation and understanding of PIE. This interacted with their own backgrounds in providing support, their experiences of similar initiatives and their own value system and relationships with each other.

For staff in the embedded case study, the wider context (which could include both external services, networks of friends and family as well as society more broadly) was seen as the issue which most challenged their working practices and by extension their

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<sup>39</sup> Managers, in the case of the embedded case study.

ability to operate as PIE. This was related to the availability (or accessibility) of specialist services needed by their service users and which the service was not equipped to provide, as well as their perceptions of the limitations placed upon them by the commissioning arrangements in which they operated. These latter were also seen to oppose some of the values which staff saw as underpinning their work. This of course is not unrecognised and is behind such concepts as Enabling Environments and complexity / psychologically informed commissioning and indeed its place in system change projects. However, as indicated, implementing more collaborative commissioning approaches was itself challenged by complexity.

The project itself was part of a longer history of change initiatives both within individual sectors (e.g. health and criminal justice) – a factor which was seen as impacting on how the system change project was perceived and directly on levels of engagement. Of course, different individuals from different agencies identified differential experiences with correspondingly varied impacts. As indicated earlier, the widely criticised restructuring of probation services as part of the Transforming Rehabilitation reforms, formed, for example the historical context for the CJS representative interviewed and was unsurprisingly equated with a level of fatigue and cynicism about major change projects within their organisation. There were similar experiences expressed in other public sector bodies – such as health, though conversely, here, the latest of these - the ICP was identified as a potentially positive development for the project. Each of these individual contexts and histories formed a complex and dynamically changing picture for the system change project team to navigate; equally the individual contexts of system change board members impacted on their own engagement with, and perceptions of the project. This impact of this complex interplay of history and context is demonstrably evident in the way that the project team describe the way that they managed the project in practice - with its focus on flexibility, alignment and responsiveness to the changing dynamics of the broader context in which they were operating (See Chapters 5 and 6).

This approach itself revealed an interesting tension in the project team. I discussed in the Findings in Chapters 5 and 6 how the increasing recognition of the multiplicity and complex web of influences was challenged by a need to exert some level of control in their management of the project. This echoes the earlier tension described above in

relation to the project team's articulation of the risks of an over-simplified model of the 'system'. This conflict was demonstrated in the ways in which the project team (and on occasion, members of the system change board) described a need for SMARTer targets and ongoing monitoring of performance against these, while simultaneously describing a context which demanded a high degree of flexibility and adaptability and the danger of such targets being 'gamed' or manipulated. With regard to the specific targets for PIE, staff indicated that, for example, although numerical targets were set – e.g. for agencies to become PIE, there was a level of flexibility in how these targets were measured, often as a response to an overall lack of control of what happened in other agencies. This was also a factor in the decision to implement PIE in the lead agency which coexisted with a level of unease about the potential for this to be seen as manipulating the target or giving the agency a competitive advantage.

This multiplicity of interacting causal factors, often opaque to those involved in implementation, combining with the personal and organisational histories and mental models described above then present clear challenges to managed change projects of the sort studied in this research. The following chapter explores this in more depth but the findings here support the literature in relation to the particular challenges of managing change in such a context and the weaknesses of more traditional methods of change management (such as SMART targets), pointing instead to more adaptive methods (Mowles, van der Gaag and Fox 2010; Stacey, Griffin and Shaw 2000).

#### 8.4. Interconnections and relationships

Within complex human systems relationships between people are what constitute the interactions between system elements and thus what happens is a result of the particular interaction between people (Hood 2013). Relationships in this sense are not hierarchical: 'a system which is subordinate to another system in one respect appears superordinate in another respect' Heylighen, Cilliers and Gershenson 2006 [no page reference]. Partners within the system change project are, for example, themselves also operating in relationship with others who may or may not also be part of the project; staff within the embedded case study described interactions outside of their organisations, often personal relationships, impacting on their practice and thus the

relationships and connections which impact on the project are not simply those within the system change project.

Fundamental to complexity theory is the idea of interdependence - that is that it is these interconnections between elements in the system and the system and its context which lead to the behaviour of the system. Of course, here again, we see the difficulties in delineating system and context and the terms are used here as a pragmatic device rather than to describe a fixed and defined entity. Systems are inextricably linked with agents within them who are continuously and dynamically constructing the future behaviour of the system in the present (Stacey and Mowles 2016). People interact with others which changes both themselves and their environment: it is what happens in relationships which creates the behaviour and it is from these that change emanates.

Clearly, within the system change project, relationships are of fundamental importance not least because of the nature of the project. While many complexity theorists argue against the idea that managers have overall control within a complex system (see Chapter 3), the system change project, located within a VCS agency (albeit constituted as a partnership) in most cases lacks any such formal authority over other agencies and thus change is entirely a negotiated process which foregrounds the importance of relationships and the interconnected nature of change (Haynes 2015). This distinction between hierarchies and networks and the importance of the latter have become increasingly important in working with complex systems and there is an extensive literature on the different types of networks and their characteristics and applications (See for example: Rhodes 2000; Room 2011). The lack of a formally constituted system for multiple and complex needs means that the system change project has a significant role in spanning the boundaries between agencies and bringing individuals from other organisations together and thus the importance of these interconnections is not just of theoretical relevance but was identified by those interviewed as the primary way that change in such a system can be brought about. However, their ability to make and leverage these connections was impeded by frequent changes in personnel within partner organisations, as well as the impact of austerity and the subsequent turning inwards of organisations as they struggled to deliver their core services against a backdrop of significantly reduced funding.

Clearly, the role of the partnership is a crucial consideration here and the difficulties in engaging partners was clearly identified in the findings in a number of ways: project team members found it difficult to engage partners and engender any sense of shared responsibility; there was a view of the project as the project team, rather than a partnership; the lead agency was perceived by some as being the dominant driving force. This was exacerbated by the contextual changes identified in relation to changes in structures (as well as personnel) amongst partner agencies. The partner agencies themselves identified their own internal pressures (for example in relation to cuts in funding) and sometimes conflicts with their own targets or ways of working: for example, a perceived conflict between implementing PIE and their own professional standards within mental health services as contributing to the challenges. These issues are well documented and there is a broad literature and a number of theoretical perspectives by which partnerships have been examined, including another PhD study within this same project (Spours 2021) . Within this research and within complexity theory, these issues importantly form part of the wider contextual and historical factors in which the system change project is operating. However, here they are being considered in a slightly different way: as an interaction by which agents within the system respond and react to each other adapting their behaviour and creating adaptation in the behaviours of those with whom they are in contact.

Stacey, Griffin and Shaw (2000), in considering the way that these interactions operate, point to the importance of serendipitous connections and chance conversations between people in understanding the means by which change occurs. There were examples of such chance encounters within the findings for this research, though to describe these as serendipitous is perhaps a little misleading – in that while the particular encounter might have been by chance, rather than arranged, it emerged from existing relationships. For example, the encounter described in the findings between a project team member and a member of staff in a partner organisation who was having specific difficulties with universal credit was seen occurring by chance but the encounter itself (and the resulting wider change which resulted) was seen as emerging from a longer and deeper relationship between the project team and the individuals/agencies involved. The very approach described in the findings in relation to the way the project team manage the project – for example, that of seeking



opportunities and being alert to these in all their interactions is a recognition of the importance of these interconnections.

It has also been identified that the number (as well as the strength of) connections also has an impact on the stability (or otherwise) of a system (Stacey 1995). The capacity of the system change project team to create change within partner organisations was limited – hence the project being designed (if not operating in practice) as a partnership whereby responsibility for implementing change was distributed amongst the partner organisations rather than resting with the project team. However, as we saw within the findings there were considerable difficulties in engaging a diverse range of partners and thus the number of connections was necessarily reduced. Further, while, at the individual level, relationships were strong, they were challenged by a complex interplay of contextual and other factors, including their home organisational priorities, time and staff turnover.

Interestingly, within the objective of PIE the project sought to act as a conduit to connect organisations via Communities of Practice. These acknowledge the creative potential of bringing together and connecting diverse groups of people as well as the capacity for these to support learning/reinforce positive error cultures and improve performance within complex systems (Lowe, Wilson and Boobis 2016). However, the experience of this project (and others – see Cornes, Whiteford and Manford 2015) also shows the challenges of doing this. Within this research, the community of practice for PIE was essentially a top-down initiative. It was created (and managed) by the practice development unit, rather than emerging (or developing) more organically. In a similar way, PIE itself, within the embedded case study was described as ‘middle down (and up). At the time of the fieldwork, there was little sense of ownership or engagement within the community of practice (and this remained challenging) and this was echoed in the experience of implementing PIE in the embedded case study. This finding exemplified the way that internal mental models as to the utility or novelty of PIE, the pressures of the external context interacted in different ways to suppress engagement in such relational processes and rendered difficult, both the implementation of PIE and the creation of such communities. As indicated above, within complexity theory the number and strength of connections in part determines the extent to which initiatives travel throughout the system and create change. The lack of interaction and

connection between the operational staff and the system change project was particularly identified within the findings and impacted on awareness, not just of the system change project but also on the community of practice.

While relationships were generally positively described and, as I concluded from the meeting observations, they generally appeared cordial within this forum. However, as indicated in the findings this existed alongside a lack of shared responsibility for actions and was attenuated by lack of consistent attendance. While not widely observed due to the nature of the discussions in the meetings, there were some indications in the meetings that, despite the rhetoric of partnership and distributed ownership of objectives, there was a more hierarchical approach at play. The discussion of the case study between the probation officer and a support worker, for example, was suggestive of an aim of changing the attitudes of probation staff. This example, alongside some of the language within the documents of 'challenge' to partners is perhaps indicative of an underlying sense that such change was something that was 'done to' partners. This is perhaps indicative of an approach which complexity theory would suggest would not be especially effective – ignoring as it does the significance of individual relationships – for example, the established and trusting relationship which existed between the probation officer and the support worker - or the complex set of interactions which take place as initiatives cascade through organisations, changing (and, in the experience of these findings), often suppressing them.

The view of partnership identified within the conceptualisation of the project perhaps suggests, albeit implicitly, a more linear process than the actual experience of those involved and complexity theory would support. That is to say that it seems to be predicated on an underlying assumption that connections between the project team and an individual(s) within the organisation would mean that initiatives would via the relationships and connections of partners within their organisations permeate more widely, while remaining relatively unchanged by the process. There was some evidence of this happening in the individual relationships between the system change project team and the partners represented on the board, but not necessarily more deeply within the organisation. In the embedded case study, for example, there were connections at a senior management level between the project and the organisation

and this was identified as one of a number of interlinked factors influencing the decision to become PIE. However, the research revealed little in the way of connectedness between the operational staff and the system change project or vice versa. The involvement of the strategic staff in the organisation with the system change project had not filtered at all to the operational service level, and despite some of the staff having attended training organised by the project, there was almost no awareness of the project or what it was trying to achieve.

In simple terms, interactions are local; agents within systems respond to what is known locally. The connections between parts of the system mean that changes/events will pass through to other parts of the system but they will be modified as they do so (Kernick 2006). As indicated in the research of Dattee and Barlow (2017) in their study of the Scottish healthcare system - the further away from the system change project the fewer the interactions, the greater the likelihood of initiatives being dissipated and the greater the impact of individual organisational cultures on how staff in the system related to these initiatives. A comparable experience was identified within the embedded case study where the distance and absence of connection between the system change project and staff in the embedded case study was reflected in staff's awareness of, and attitudes to, the system change project.

Interconnectivity was also, in these findings, related to trust which naturally tended to be more likely to occur where links and relationships were closer or more local. Within the embedded case study, there were for the most part close, longstanding and deep trusting relationships between them and their immediate managers. Trust in more distant, senior management in the wider organisation was also mainly (but not universally) high. On the rare occasions it was not – this had an impact on perceptions of (and engagement with) PIE. Senior managerial support, for example, is largely identified as a sine qua non for PIE. However, the findings here indicated that more cynical motivations could be attributed to senior staff's support for PIE. This militated against more junior staff's engagement with PIE and damaged their perceptions of it as a helpful and positive organisational initiative. Further, even where trust in the service and the organisation was high, for some, this was challenged by operating in a wider

context where, for example, there was a perceived 'blame culture' within the wider professional or commissioning environment.

Implicit within the partnerships such as this is perhaps an oversimplification of the process – suggesting that forming relationships with individuals - for example at a strategic level and then working with them to disseminate change initiatives to operational levels within the organisations, ignores the interactive, contextual nature of change. This seems to be based on an assumption that operating at the higher level will predictably (or at all) impact on lower levels which the experience within the embedded case study challenges. That is not to say that such engagement is not necessary, rather that it will be a contested process of negotiation, the complexity of which may be underplayed within aspirations for transformational system change in projects such as this. It is also not intended to underplay the importance of the project in acting as a connector or a bridge between previously disconnected parts of the system. Complexity theory would suggest that this is of critical importance, it will, however, be messy and unpredictable which itself challenges the idea of transformational, beneficial and sustainable system change discussed in the following chapter.

## 8.5. Self-organisation and emergence

Closely linked to the points made in the previous section in relation to the way connections interact, based on their local experience are the complexity theory concepts of emergence and self-organisation and the related concept of the edge of chaos. Of course, in common with all the characteristics of complexity theory it is difficult to separate self-organisation and emergence from other aspects of the theory. Stacey, for example, identifies that self-organisation is impacted by other issues (discussed elsewhere) such as levels of diversity, and connectivity and importantly, power constraints (Stacey 1996). While one of the most commonly identified concepts within the theory, it is perhaps one of the most challenging. As I indicated in the Chapter 3, the edge of chaos is a contested term (and concept) but many conceptualisations of complexity theory include some element of a system<sup>40</sup> operating

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<sup>40</sup> As indicated above (and throughout) the use of the term 'system' here is a pragmatic device

between order and disorder. Heylighen, Cilliers and Gershenson (2006) neatly encapsulate this describing ordered systems as behaving in accordance with strict rules, disordered systems consisting of autonomous agents and thus not constrained by other parts of the system. In complex systems, however, components within the system operate with some level of independence but the interactions with other parts of the system make behaviour unpredictable. It is this which is seen as producing the novel behaviour as each part of the system responds to what is known to it locally (which may in turn impact on other parts of the system) and which overall may produce results which are not optimal at the system level. This as I will go on to argue in the next chapter is one of the main challenges to transformational, beneficial and sustainable change as a programme objective.

With regard to the empirical findings for this research, this interpretation would seem to be a good fit with the descriptions (in Chapters 5 and 6) of the ways in which the objectives within the project plan were developed. These were not centrally directed by the funder but evolved and emerged as a result of the interaction of the team with the environment and their connections with other parts of the system. At the level of the objective of PIE, there was an explicit acknowledgement within the findings that how PIE was implemented was not within the control of the project team but would rather emerge (and potentially diverge) from what they envisaged. Self-organisation emphasises the ways in which actors within 'systems' respond to what is known to them locally, rather than in response to a central directive and without awareness of the impact on their actions beyond their local environment (Paley and Eva 2010). Within the project team, their approach could often be viewed as an attempt to foster a level of self-organisation. Their relative lack of power to directly influence other organisations (referenced at several points in the research findings) meant that much of their work involved raising awareness of initiatives (e.g. PIE), providing training rather than more direct intervention. The empirical findings, for example, clearly indicate a recognition, shared across the project team, that they had little control – for example, in how (or if) PIE might evolve within those organisations who had attended the training. As indicated throughout, however, this recognition co-existed with a desire to assert some control, in this case by their initial plans for accreditation of PIE.

Within the embedded case study, the direction to become PIE which came from higher levels within the organisation also recognised that there was both a likelihood of, and a need for, local responses. Indeed the empirical findings throughout throw into question the feasibility of central control and there are many examples where local context and staff's own values and mental models mediate and alter centrally mandated priorities – not least in the implementation of PIE. Within the embedded case study self-organisation could be said to have operated at two levels. Firstly, in a similar way to that described by Trenholm (2012), as a means of suppressing change and maintaining the status quo in relation to their engagement with PIE and secondly in the way they directly worked with service users. This they described as an interaction between them, the service user, the service user's wider network, and other professionals involved in their care and support. What happened to the service user was therefore seen as emerging from this unique combination in similar ways to those described by Hood (2013) on integrated care and Gear, Koziol-McLain and Eppel's (2018) research into intimate partner violence. The need for the operational staff to constantly work with and adapt to the uncertainties and unpredictability in these situations meant that much of their work could properly be described as self-organisation with outcomes for service users emerging from the unique and dynamic interaction between them, the service user and their wider network. Interestingly, as I will go on to discuss in the next chapter, this perception of the outcome being a result of this unique and dynamic interconnection and relationships was behind some of the resistance to PIE which was seen as an instrumental and over-simplified response or as having the potential to be used as such.

In much of the literature, self-organisation is seen as a force for change. However, self-organisation has also been observed as having the potential to maintain the status quo rather than lead to change (Trenholm and Ferlie 2013; Boon et al 2009; McKelvey 2003) and also as a means of circumventing elements of a system which do not work well (Haynes 2015). There was support within the findings for both of these aspects of self-organisation: for example in the ways in which changes (to PIE and collaborative commissioning) were suppressed served to maintain the status quo and militate against radical change. A specific example of the latter was seen in the probation officer and the support worker working together to avoid breaching one of the project

beneficiaries and the ways in which staff in the embedded case study adapted their approaches around the requirements of commissioners and sought to fill the gaps in services which were impacting on their abilities to provide support. Both of these provide examples of self-organisation operating as a circumvention of dysfunctional elements of the system.

The popular perception of self-organisation as a positive force (though challenged by these findings) has led to a focus in popular management literature on the characteristics required to create the kinds of environments which foster self-organisation. Indeed, the very flexibility of the programme with a tolerance for error and a focus on learning and experimentation could be seen to be an attempt to mirror those conditions within which theorists suggest that positive self-organisation and emergence flourish. There was certainly a perception within the findings that this approach was a deliberate policy of the funders and that it had been helpful in enabling the project team to adapt and respond to the external context and the emerging understanding of the needs of those they were aiming to help. This was, however, not without challenge and there were some indications that although this may have been the intent, the experience was not always fully representative of this. As indicated in Chapter 5, there was some perceived reluctance to share learning from initiatives which had been less successful. There were also examples where the need to show progress against the targets - for example, the number of organisations becoming PIE - led to a focus on implementation in the lead agency, rather than more widely. This does not necessarily challenge concepts of self-organisation within complexity theory - indeed internalised rules, and power imbalances are identified as part of the local environment to which individual parts of the system respond (Stacey and Mowles 2016). It does however challenge the more popular applications of the theory - that it is possible to instrumentally create such conditions and that so doing necessarily elicits positive results. The findings for this research indicate that, even where such conditions are explicitly identified as optimal, and there is a sustained effort to create them, they do not necessarily lead to the desired end state.

Until the point of the second interviews, there had been no particular evidence of radical change within the project though there was (limited) speculation that austerity might have had the potential to create conditions conducive to such transformation.

The project began during a period characterised by the government's austerity measures which were identified as having had significant, negative impacts on the project's ability to achieve systemic change. These included a retrenchment amongst partner organisations who became more focused on their own internal issues and less likely to have capacity to engage with the project. While negative impacts of austerity might be predictable and well-documented in this as in other contexts, from a complexity theory perspective they raised some interesting questions. There was speculation from one interviewee that austerity might have represented a perturbation in the external context which could have led to organisations exhibiting a greater level of connectivity and innovation in a similar way to what was seen in relation to Covid-19 (discussed below). Indeed there is a wide range of literature which examines the impact of austerity on transformation – including the potential for the discourse of transformation to obscure the reality of austerity by recasting it in such terms (Clark et al 2015). The OECD (2017) report on systems thinking for example cites a US survey identified that 60% of innovations resulted specifically from austerity measures (Borins 2001, cited in OECD 2017). Within this research, however, the context of austerity was perceived as negatively impacting on transformation efforts. The mechanisms by which this happened were various, including increasing numbers of, and severity of need amongst, people with multiple and complex needs which increased pressures on staff giving them less time and space to engage with anything perceived as being outside their core area of focus. One unintended consequence of austerity, however, was identified as the growth in numbers increasing the visibility of people with multiple and complex needs such that partners were more likely to recognise the issue. This is not intended to reframe austerity as a positive impact on the system change project, rather it illustrates the complex interconnected and relational interplay of factors influencing the trajectory of the project.

However, the second interviews with project staff reflected on the impact of Covid-19 and there were indications here that this extreme external perturbation had had a significant impact on the system change project. It was, for example, described as having had the most impact on the project thus far, resulting in rapid and dramatic changes in attitudes, cultures and structures. It seemed as if the relative freedom from rules had freed up people to adapt and self-organise in ways which were highly



congruent with descriptions of the edge of chaos. The Everyone In initiative which provided emergency hotel accommodation for people with multiple and complex needs during the pandemic was identified with a greater willingness and capacity for services to innovate, and a more positive 'can do' attitude amongst staff providing support. They also identified a shift in power towards the VCS because of the reliance on their services which were critical to the success of the initiative and which had the ability to adapt more rapidly than statutory services. There are, however, some important things to note in relation to this. Firstly: the change did not occur as part of a managed process but as the result of an extreme external shock to the system and was also combined with a significant influx of resources. More importantly, the negative consequences of this perturbation were far greater and more widespread than the positive ones identified in relation to the project. It should also be noted that the fieldwork at this point was more limited so is based on a small set of interviews.

While, then, there are indications that something perhaps resembling the edge of chaos was observed, this was not part of a managed process (as popularised management literature suggested during the 1990s), nor was it largely positive (notwithstanding its perceived positive impact on the project's objectives). It is beyond the scope of this research to examine this further given the timing of the events relative to the fieldwork so any conclusions relating to this are necessarily tentative. Nevertheless it provided an unexpected example of a severe and dramatic external perturbation which had profound impacts on the system change project. It is interesting also that a number of those interviewed in the second tranche of fieldwork, identified the loosening of normal rules and a greater freedom to act. These are some of the characteristics which management scholars have determined are the most effective conditions for innovation in complex environments (see for example: Plsek and Wilson 2001).

It also points to some of the difficulties with the concept identified within the Chapter 3. The first of these is the notion that the edge of chaos represents optimum conditions for adaptation and innovation – contrasted with equilibrium and stability which represents a place of stasis (Stacey 1996). While there is evidence that the pandemic led to more dramatic and transformational change than had thus far been seen, it is hard to see this as optimal given its far-reaching and devastating

consequences. It perhaps also indicates some of the other criticisms of the concept – that is the infeasibility of managing and maintaining a system in this state.

## 8.6. Non-linearity

One of the most popularised concepts within complexity theory is that of non-linearity. In its broadest sense, the interconnected elements means that change happens unpredictably and there can be disproportionality between inputs and outputs/outcomes. This means that unlike in closed systems changing a discrete set of variables will not have a predictable impact. A large event may therefore have little impact whereas a small one may have a large impact (Hood 2013; McGill et al 2020) .

There was a widely held and explicit understanding of non-linearity which permeated throughout the findings. The project team quickly moved away from their linear theory of change which suggested that there would be a correlated reduction in need for the co-ordinators' service as system change was implemented. The approach to system change described in the findings epitomised a belief that change could come from anywhere. It reflected an increased understanding that there were no predictable levers which could be pulled to effect the desired change and explicitly recognised the potential for disproportionality and unpredictability. That said, this co-existed with a potentially contradictory aim for control, identified in the findings in the recruitment of a new project co-ordination role and a focus on SMART targets. While there was an inherent understanding of complexity and non-linearity amongst those interviewed, this, at times, co-existed with long-standing and deeply held models of change as a more linear and predictable process. Staff did not on the whole directly identify any conflict with these potentially contradictory positions, treating the plans as provisional and useful frameworks. However, they recognised the potential for gaming within targets more generally. Further, there were some small indications of where staff within the project team felt the need to make their system change activities fit the targets which belies some of the expressed acceptance of the reality of non-linearity. The initial desire to accredit PIE and the unease of some participants with the multiplicity of ways in which PIE might be implemented perhaps indicates a similar conflict between the understanding of non-linearity and a desire for control.

There was also an underlying, implied linearity in the way that participants described the ways in which they envisaged that PIE would lead to systemic change which also echoed the literature on implementing PIE (see Chapter 2), for example in its role in creating a common, professional language or reducing the numbers of people with multiple and complex needs in the system via improved engagement and a better skilled and equipped workforce. Although these were expressed as aspirations, the reality of what happened within the embedded case study and the experience of the project team in implementing the objective of PIE ran counter to this and echoes the experience articulated in the previous paragraph.

Non-linearity was perhaps most clearly expressed in the way that operational staff in the embedded case study described their work with people with multiple and complex needs whereby a large amount of expended effort did not necessarily result in a predictable and positive outcome. Indeed some of the resistance to PIE (and to concepts of system change) amongst these staff was that it was sometimes seen as yet another management initiative which ignored the unpredictability between input and outcome that was inherent within their work.

Within the literature, non-linearity was observed (and with largely negative consequences) in Trenholm's (2012) study of TB in London where, for example, extensive and prolonged programmes of research identified the need for action to address resurgence of TB but resulted in little change; similarly, much research in health points to the limited impact of major change initiatives (Plsek 2001; Anderson et al 2005). Similarly within this research, interviewees also identified non-linearity as a negative rather than a positive force within the system change project - leading to a suppression or dissipation of their activities than an amplification. This is neatly encapsulated in the view of one of the operational staff about the way change initiatives were absorbed and had little impact on the organisation: 'I suppose yes there is always change... But then in some weird respects nothing ever changes either.' The sense amongst most of the partners that the project had not achieved system change, despite its considerable efforts was perhaps a broad example of this, as were the attempts to promote PIE and the communities of practice. The collaborative commissioning pilot where a large amount of effort was expended in trying to get the project off the ground but which ultimately failed to take place provides a further,

more specific, example. While there was a great deal of support for it amongst the partners and a large amount of effort expended by the project team, partners and external consultants, such efforts did not achieve the anticipated results.

Conversely, however, there were examples where small actions such as bringing together mental health workers with the DWP were seen as having the potential to bring about perhaps a greater level of change than might be expected by a relatively small intervention. A further example was the employment of a psychologist was seen as having a disproportionately positive impact on the objective of PIE including (but not limited to) the lead agency, where previous attempts had been made to establish PIE which stalled but identified the particular combination of personality, professional credibility and attitudes of the psychologists in post as providing a greater level of impetus than had been seen previously despite senior management support. The psychologist was also seen by strategic stakeholders as impacting significantly on the training and communication of PIE more widely, though it should be noted that this was not identified within the embedded case study who were largely unaware of them. It is important also to note here that there were strong indications from those interviewed that it was a combination of the role, the person, alongside other activities which led to this seemingly disproportionate impact of one individual. It is important within complexity theory to note that the particular combination of factors is unique and not necessarily replicable in other contexts. The employment of a different psychologist and/or in different circumstances may not have had the same impact and thus we cannot extrapolate from this about the value of a psychologist to lead a PIE project in other contexts.

## 8.7. Concluding comments

As indicated at the start of this chapter, change within complex systems is seen as: coming about via a multiplicity of events; determined by the past; sensitive to its context, with behaviour emerging in ways which may not be expected or planned. The experience of the system change project and the embedded case study articulated within the findings for this research are congruent with such descriptions. The final stage of analysis whereby the features of complexity theory were applied to the findings did not identify any significant areas which contradicted the theoretical

model. For example: issues of context and history were raised directly by participants in the interviews and these mapped specifically and directly onto core theoretical concepts of complexity theory. More esoteric concepts such as non-linearity were also identified by those interviewed – for example: in their descriptions of disproportionality of impact, although, as might be expected, the specific language of complexity theory was not commonly used in this context.

However, no application of a theory is without challenge and the contested nature of complexity theory as a rigorous theoretical perspective (Davis, Sumara and Luce-Kaplar 2007; Lissak 1999) is well documented and summarised in Chapter 3. Perhaps the main theoretical challenge to these findings is the potential for complexity theory to mask deficiencies in understanding (Kaehne 2016). For example: non linearity is difficult to ‘prove’ as it could simply be a delayed but ultimately linear response; or a causal relationship may not have been established as a result of the methods used or the people interviewed. For example: because of the challenges to the timing of the interviews, the collaborative commissioning pilot was only observed from the perspective of the system change project staff; it cannot therefore be ruled out that a less complex explanation might have been possible had a more detailed observation of the initiative taken place. While, however, the theoretical challenge articulated above cannot be entirely ruled out in this research, it is strongly countered by the frequency with which causal complexity (including non-linearity) were explicitly or evidently articulated by those interviewed.

Equally importantly, as indicated by Stacey, Griffin and Shaw (2000), one of the strengths of complexity theory is in the way it resonates with lived experience and assists those tasked with managing change in making sense of and responding to that experience. As indicated throughout this chapter, there was a close and often direct relationship between how those interviewed described their experiences of the system change project and the precepts and models of change of complexity theory. Complexity theory, here, then was not metaphorical but a congruent reflection of their experience. This underlines the importance of the discussion in the following chapter which critically examines what the application of the theory means for the feasibility and desirability of the fundamental objective of the project of a managed programme of transformational, beneficial and sustainable system change.

## 9. Chapter 9: System change and PIE - a complexity informed critical evaluation

### 9.1. Introduction

One of the expressed aims of the research was to offer a complexity informed, critical evaluation of the experience of implementing a programme of system change and, more specifically, the objective of promoting the implementation of PIE in partner organisations. It further sought to critique the positioning of PIE as a complex response.

Evaluating the empirical findings via the lens of complexity theory as I did in the previous chapter has raised a number of challenges to the expressed aspiration of the project to create, via a managed programme, transformational, beneficial and sustainable system change for adults with multiple and complex needs.

Of course, the idea of a 'system' as an entity with a clear boundary and shared definition has been shown throughout this research to be problematical. This in and of itself presents a fundamental challenge to the project. However, this was not the only challenge. In common with many such initiatives, there was an expectation in the project that change would be not just transformational and beneficial but also sustainable. The empirical experience of this research and the conclusions drawn from the application of complexity theory to the findings suggest that these three aims (and the implicit understanding that such change can be managed), may be more contentious than they may first appear.

### 9.2. Challenges to transformational system change

#### 9.2.1. Differential understanding of transformational system change

Fundamental to the idea of a managed programme of transformational system change is that there is a clearly defined and widely agreed definition of 'system' that is to be transformed. This is challenged by the differential understandings of system and transformational system change which I explored in the previous chapter. As we saw there, the very notion of system was antithetical to the operational staff interviewed and thus initiatives such as system change were, for them, necessarily in conflict with

the person-centred care they saw as central to their work with people with multiple and complex needs. This negatively impacted on their interest in, and consequent, awareness of the project and what it aimed to do. Strategic partners also were sometimes cynical about what the project could hope to achieve – for example where their idea of transformational system change was of major structural change or as requiring investment upstream in early years provision. This impacted on how feasible they felt the project to be and also the extent to which it could ever be seen as ‘successful’ – an undoubted factor in the difficulties in engaging some partners. Given that any system change project necessarily requires change in multiple organisations and at multiple levels, such perceptions are highly significant.

The point here is not that such differences are unexpected, rather that they are important (and often unsurfaced) determinants of how the system change project emerges. If, as suggested by complexity theory and supported by this research, the system is an artificial (if pragmatic) concept, the construction of boundaries, necessarily include some things and exclude others, which has an ethical dimension (see Section 9.7). While this may be a necessary part of managing and focusing resources and a pragmatic device, the provisionality and lack of consensus needs to be explicit and point to the importance of participatory approaches and an openness to understanding this difference (Preiser and Cilliers 2010).

The risk identified in this research is that framing the system in a particular way (without understanding the inevitable differences in understanding), and without consideration of the ethical dimensions of such choices, can conflict with the mental models of those involved. This impacts on their engagement and the way they judge the success or relevance of the project. Neglecting to surface these different views risks disengagement which further means that the diversity of viewpoints is not fully articulated or included. Failure to understand and engage with this difference, or preferring rather to seek coherence and harmonisation around an idealised objective is identified as prevalent in system change projects (Mowles, van der Gaag and Fox 2010). Within complexity theory such attempts are considered neither feasible (as such difference is likely to remain just unexpressed) nor desirable (as they reduce diversity and the capacity for productive innovation (Grobman 2005; Mowles, Stacey and Griffin 2008)).

### 9.2.2. Transformational system change as a linear trajectory

There are a number of indications within the findings of an assumption of a linear trajectory to transformation which, as we saw in the previous chapter, was contrary, not just to complexity informed understanding of change but also to the experience of those involved. This I will argue has had the impact of devaluing some of the key achievements of the project.

By way of example, the main impact of the system change element of the project was commonly identified as raising awareness and understanding of multiple and complex needs within the city. Although there was acknowledgement that this was important, and indeed could be a precursor to transformative system change it was not considered sufficient, in and of itself, to constitute such a definition. The findings here were congruent with the programme's articulation of system change and other research and evaluation within the field of system change for multiple and complex needs which described achievements such as these as a pre-condition of system change, rather than system change itself (Hough 2017).

Implicit within this conceptualisation of pre-conditions, I would argue, is an element of linearity and predictability which is at odds with the theoretical perspective of complexity as supported by the findings examined in the previous chapter. The versions of complexity theory which have influenced this research, for example, reject ideas of a knowable future state which often implicitly underpins system change (Stacey, Griffin and Shaw 2000; Stacey and Mowles 2016). The idea of pre-conditions to system change as articulated here carry with them an implication that it would be possible to know in advance what the particular conditions which would lead to system change would be. While a greater level of awareness and understanding will inevitably change the way that organisations and individuals act, complexity theory alongside the findings of this research, would suggest that this will be mediated via their own history, relationships, cognitive representations and contexts. Thus, there can be no guarantee that what would result from this increased awareness (or any other pre-condition) would be, predictably or positively, system change.



Applying complexity theory to the findings of this research suggests that what emerges may not be predictable (and could have negative/unintended consequences as well as positive ones) and thus the conceptualisation of a linear process, for example, whereby increased awareness is a pre-condition which leads to the kind of system change envisaged by the programme appears flawed. Taking the example of PIE, increasing awareness and providing training did not significantly impact on the organisation in the embedded case study. Indeed, amongst operational staff here, there was little awareness of the system change project at all and there was no evidence that the project's intention of learning cascading from senior levels represented in the system change board had, at the time of the interviews, had much effect at this level.

That is not to say that the learning and increased awareness at the strategic level cannot have (or indeed is not having) an impact on the way that organisations within the system are operating. The participants in the research were clear that this contribution had changed the context in a significant way. Viewing this impact as a precondition, with the implication that this is inferior to, or less than, system change may therefore serve to underestimate and undermine the project's impact. While complexity theory would suggest that the impact (like any other) might be unpredictable and the causation not uniquely down to the project, the perception in this research is of a significant increased awareness of the issue of multiple and complex needs - at least at senior levels within the partner organisations. Meadows (2009) makes the argument that changes in attitudes and values is the most effective way of achieving systemic change and that this is achieved, in large part, by open debate and improved understanding and awareness. Thus, within this theoretical perspective, improving understanding and awareness is important in its own right, and not just as a stepping-stone to 'real' transformative change, often associated with more obvious, for example, structural changes.

### 9.2.3. Depth vs breadth in transformational system change

The requirement for transformational change to be deep (i.e. embedded within all levels of an organisation) and broad (i.e. taking place in a number of different organisations) was articulated both in the programme documentation and the interviews. The findings for this research challenge this in two ways. The first is that it

is possible at all to manage such change and this is discussed in Section 9.5 below. Secondly, I would argue that the focus on transformation and the need to demonstrate (and often quantify) success privileges breadth of change over depth and significantly underestimates the complexity of achieving change within the project. Taking the example of PIE and the attempts to embed this within partner organisations. Staff within this research (unsurprisingly) identified that it was not possible for them to know or be in control over what happened within organisations as a result of the training they had attended. They thus expressed concerns about the capacity for engagement to be somewhat superficial or, indeed, to misunderstand the core principles of PIE. While they were able to measure and assess the numbers of people who had attended training (breadth), they acknowledged that the understanding of the depth of this change was limited. The example of the embedded case study indeed suggested that the impact of the training had not significantly altered either the practices, or attitudes of staff within the organisation. Within a complex system such as multiple and complex needs it is likely to be difficult to ascertain depth of change whereas breadth – e.g. numbers of organisation/people trained is more easily measurable and thus becomes a proxy for transformation despite potentially being more superficial.

Similarly, there may be a delay between action and impact as the intervention cascades through the system so not only is causation complex, ‘systemic and synergistic’ (Boulton, Allen and Bowman 2015, p. 131) it also may be temporally distant. All of this points to the idea that system change is a journey and, as such, does not necessarily lend itself to projects in the traditional sense (Haynes 2015). This is not to say that there is no awareness of this at the programme level – it is designed (and was perceived to be) encouraging of learning and understanding that things do not necessarily turn out in the way planned. I would argue, however, that the implicit assumptions within the concept of transformational system change have the effect of reinforcing a concentration on more fixed, quantifiable outcomes to the detriment of the desired focus on learning and the understanding of system change as a journey rather than a destination.

#### 9.2.4. The place of service provision in transformational system change

The final challenge to transformational system change is encapsulated in the conflict between the provision of a service to support multiple and complex needs and the system change element of the project. Although, as we saw in the Findings chapters, the project team moved towards an acceptance of the need for such a service, there was still a sense that this was less than (or even antithetical to) transformational system change.

The shift itself is indicative of the project confronting the real complexity of transformational system change and their ability to manage and control what happens in agencies not directly part of the project (i.e., other than and, even including, the lead agency). The particular complexity of multiple and complex needs which spans multiple agencies and policy areas and involves 'universal' services within which people with multiple and complex needs form a minority is a singularly challenging and complex environment. The provision of a service for people with multiple and complex needs was initially theorised as a temporary solution pending systemic change. The idea of the outcome of the system change project being a specific service was described by the project team as having been resisted (and this attitude was still apparent amongst some partners). However, as the project team confronted the reality of the complexity of achieving system change as defined by the programme, they described an increasing awareness of the infeasibility of their original thinking. Such thinking was described as being predicated on there being levers which could be manipulated to create a specific, planned outcome for multiple and complex needs without disrupting services for others. The reality of the complexity of such an undertaking had led to a shift in their thinking and in the later interviews, the project team indicated a change in their attitudes to service provision and its relationship to system change. As a result, the provision of a multiple and complex needs service was seen, at least by the project team, as being an important legacy of the system change project rather than a stopgap measure or a stepping-stone to transformation.

If, as complexity theory would suggest, the very concept of managed, transformational change is flawed, then the provision of such a service would seem to be a valid and pragmatic response to the issue of multiple and complex needs in these circumstances. Further, there is some evidence in the findings that the provision of such a service was

part of the shift towards a greater understanding of multiple and complex needs and thus there is likely to be a wider (though ultimately unpredictable) systemic impact. Of course the continuing provision of such a service requires a direct source of funding which may not be available beyond the life of such a time limited project and this was a significant factor in the initial conceptualisation of the theory of change. An evaluation of the impact of the service delivery element is beyond the remit of this research which focused specifically on system change (and PIE), however, the challenges of implementing system change congruent with the theoretical perspective of complexity raise questions about the feasibility of transformational system change in such a context. It perhaps echoes Cornes, Whiteford and Manthorpe (2015)'s findings, in their evaluation of a similar project, that incremental change might be an effective approach. As a result, this necessarily raises the question of whether such service provision may be a more fruitful approach than a focus on system transformation.

### 9.3. Challenges to beneficial system change

As indicated above, in addition to transformational, there is an explicit requirement within the programme documentation for changes to be 'beneficial'. This recognises the potential for changes to impact negatively as well as positively. However, I would argue that it contains some implicit assumptions which are challenged by complexity theory. The first of these is that it implies that the project has it within its power to ensure that any changes it makes are beneficial. This was explicitly contested by the experience of participants who identified potential, and actual, unintended and undesirable outcomes: for example, in the gaming of outcome targets set by commissioners, and in the capacity for PIE to be subverted into something more cynical and superficial as it was implemented within organisations.

Of course, I am not suggesting that to achieve beneficial change is an unworthy objective, nor would I seek to imply that such an aim is not laudable or indeed necessary. Rather, the findings of this research raise specific questions about the precise meaning of beneficial and what constitutes beneficial system change. In the context of objectives for this project it implies some level of consensus about what constitutes beneficial system change. Throughout I have explored the differential

understanding of the core concepts of the system and system change and identified a distinct lack of consensus at the most basic level of what might be the most appropriate focus for beneficial system change. Taking the more specific example of PIE, there was broad agreement at the system change board level about the essentially beneficial nature of it as an objective but no clear idea of what it actually was. More significantly, at the detailed level of operation, it was sometimes seen as distinctly unbeneficial, for example in coming, not from a desire to improve services for beneficiaries but from a more cynical and superficial motivation to look good to commissioners or as a means of reducing investment. Further, some staff questioned whether elastic tolerance of the kind suggested within PIE was in fact beneficial to service users who had to engage with an external world which did not work in such a way. The point here is not to make judgements about what is 'correct' but to identify that what appears to be beneficial to some may not be to others. Beneficial, then is potentially, more contentious and contested than it may first appear. This echoes findings in findings from similar projects discussed in the literature (Cornes, Whiteford and Manthorpe 2015) where, for example, transfer of good practice was challenged by a lack of consensus about what constituted it between different professional groups.

There is a further related issue in that 'beneficial' could imply homogeneity in the experience of people with multiple and complex needs. In this case, what might be beneficial for one person, may not be for another. We saw in the literature review that the interaction of needs is different for different individuals and their responses to apparently similar situations are not necessarily the same (Rankin and Regan 2004a). This was supported by the operational staff whose perceptions of the complex and unique circumstances of their service users was sometimes associated with unease about initiatives (such as PIE) which they felt suggested an ideal and thus more standardised way of working. The literature review explored some of the challenges of the transfer of best practice both within the complexity theory literature and that of multiple and complex needs/PIE (see for example: Soubhi et al 2010; Cornes et al 2014; Maguire 2015, cited in Phipps 2016). The systemic nature of the issue of multiple and complex needs and the consequent difficulties in identifying best practice or clear evidence of what works as a result of the heterogeneity of the experience and the complexity and uncertainty of individual trajectories similarly challenges concepts of

'beneficial'. Although one of the core principles of PIE is that it inherently recognises and responds to the complexity of this experience, as demonstrated in the embedded case study and discussed in the following section, this does not necessarily carry through into its implementation.

Clearly and uncontentionally, the aim of the project is to achieve beneficial changes in the lives of people experiencing multiple and complex needs. However, as we have seen within the findings, achieving such an aim within a complex network of partners requires concerted and synchronised efforts across a multitude of organisations. Organisations' willingness to engage with the project was identified in the findings as compromised by a number of factors: perceptions that the impact on them may be negative; that it might conflict with their nationally set priorities or other initiatives; that the benefits of their efforts to change might be accrued elsewhere; or that the real benefit could only be seen by improvements upstream not included within the project, for example in early years provision. In a 'system' as diverse as the one for multiple and complex need there are interdependencies, but also individual goals and priorities and, in some cases, competition for resources. The focus on building a common purpose and objectives is thus necessarily challenged by the individual and collective complexity of the network of organisations involved (Van Tulder and Keen 2018). This is, of course, particularly significant for people with multiple and complex needs, support for whom requires a multiplicity of agencies and which are perceived as coming together only at an individual level. In such an environment it is even more difficult to define a solution which is optimal or beneficial for all parties. This inevitably influences agencies' willingness to take action/engage with the project, which itself impacts on the extent to which system change for people with multiple and complex needs is achieved.

Clearly, seeking beneficial outcomes for people with multiple and complex needs is desirable and uncontentional. There is no attempt here to suggest that this should not be a key consideration of such projects. It is rather to identify that, within complex systems, what is beneficial may be more contested than first appears and assumptions about levels of consensus and shared cognitive representations may be flawed. This points to the need to pay more attention to, and to create space and time within projects to explore and surface these differential understandings, rather than rushing

to create a fixed consensus which may not be upheld in the complex reality of the network of organisations and individuals delivering services.

#### 9.4. Challenges to sustainable system change

Discussions about sustainability were at a very early stage within the project at the time of the interviews and thus, the challenge to this particular aspect, while present, is less well-developed than the previous two concepts. Sustainability within the project was linked to the debate about the role of a multiple and complex needs service and its relationship with system change which as we saw in the findings chapters was characterised by a multiplicity of views and inextricably linked (along with the development unit) about securing ongoing funding. The importance of a legacy of service user involvement and an awareness both of the scale and nature of multiple and complex needs within the area were also seen by the project team as important facets of sustainability though less commonly identified amongst partners.

Complex systems are seen as being in a constant state of adaptation and thus solutions are unlikely to remain in a stable form. The issue of sustainability is therefore typically theoretically linked to adaptability, and as an emergent property rather than a fixed outcome (Gear, Koziol-McClain and Eppel 2018). Adaptability within complex systems tends to be considered to be the result of distributed leadership, and shared accountability and, as the findings show, this remained challenging. The findings chapters indicate that, amongst the partners, there was a theoretical understanding of the project as a partnership or network. This, however, did not tend to translate into a sense of shared responsibility for implementation of the objectives of the project and, throughout, the project team were identified as having the primary responsibilities for driving and delivering change. Although the issues of sustainability were only just beginning to be discussed at the time of the interviews, the application of complexity theory suggests that without this shared sense of accountability and responsibility, such adaptability would be challenging.

Conceptualising sustainability in terms of fixed outcomes rather than adaptability is therefore problematical. The language of sustainability within the findings from this research changed between the two versions of the system change plan – the first report used language of ‘hard wiring’ change which suggests a somewhat fixed

outcome but, as with other aspects (see above), there was a perceptible shift towards a more nuanced and complex understanding of the term in the interviews. There is a danger epitomised by the early versions of the system change plan that sustainability becomes associated with fixed and easily measurable outcomes, and a focus on structural and measurable impacts. The less obviously quantifiable changes made by the project such as changes in understanding and awareness while significant consequently run the risk of being underestimated. There is a potential danger in the conceptualisation of sustainability as resilience to changes. Most notably, it carries implications of permanence in the face of environmental change which as the findings for this project demonstrate practically and complexity theory demonstrates theoretically is unlikely to be feasible. This is something that the project staff themselves identified as part of their own learning in the project – not least in their responses to the development of the Integrated Care Partnership and the shift in language in the system change plan outlined above. What is clear from the description above, however, is that sustainability within complex systems has particular meanings which may conflict with more traditional views of more fixed outcomes such as the continuation of service funding. That is not to say that this is not important, rather that it may be challenged by environmental impacts in the wider context. This again points to the (often underestimated) importance of the work which the project has done on increasing awareness and understanding and shifting attitudes towards the issue of multiple and complex needs.

This section, then has critiqued the core objectives of transformational, beneficial and sustainable system change. It has explored the implicit assumptions which underlie these objectives and critically evaluated them via the application of the theoretical perspective of complexity to the empirical findings of the research. In the next section I will turn my attention to the fundamental question of the feasibility of managed change in complex systems.

## 9.5. Challenges to a managed process of change

As indicated in Chapter 3, complexity theory critiques traditional managerial approaches to change which envision a desired end state and attribute failure to achieve the vision to a failure in management, or commitment or imagination rather



than the result of the messy reality of operating in complex systems (Mowles, Stacey and Griffin 2008). Complex systems are inherently unstable passing through periods of stability and instability and responding to external perturbations but also as a result of dynamic interactions between actors within the system. As a result complexity theory would suggest significant limitations to any managed process of change (Kernick 2006; Boulton, Allen and Bowman 2015; Mowles, Stacey and Griffin 2008). Change is a constant process of micro-adaptation, there may be sudden shifts (perhaps driven by perturbations outside the system) but these are largely beyond the control of project managers and are likely to be unpredictable; change is not the fixed endpoint - i.e. from A to B - it is what happens between A and B and is in a state of constant flux at the micro level as individuals adapt and are adapted by local interactions (Tsoukas and Chia 2002). This might tip over into a more radical change, but this is not within the control of managers. In this project, this latter is perhaps most clearly seen in the radical change identified by the project team staff as a result of the Covid-19 pandemic.

Within this research, the issues of control and the challenges of a managed approach to change were directly raised by participants at all levels of the case study. These challenges fell into three broad categories: a tension between an inherent understanding of complexity which conflicted with a need to establish and demonstrate control; contextual challenges which limited their ability to effect change; and questions about the feasibility of changing long-held mindsets.

Taking the first of these – the tension between complexity and control: the project team characterised their management of the project as being based on flexibility and responsiveness to changing contexts. They directly acknowledged the provisionality of plans demonstrated by the inclusion of a number of initiatives which emerged during the lifespan of the project (for example the ICP or PIE itself). There were, however, indications of some conflict here between the way that they described their ways of working and some of the techniques they used. This was exemplified in the appointment of a change manager and the setting of SMART targets and objectives in response to the funder's greater focus on system change. Staff explicitly acknowledged a shift in their thinking about system change as an essentially linear process as they became more attuned to the complexity of what they were trying to

do. However, they felt that some kind of clear plan was necessary for them to retain focus on the system change element of the project. This tension between managing (and being seen to be managing) the project and their lived experience of the complexity and consequent limitations of their control was very evident. It was demonstrated in a number of ways. For example: they felt the need to set a target in terms of the number of organisations to become PIE despite acknowledging the limitations of control over external agencies. This itself had a number of consequences. It led, for example to what was generally perceived as a more internal focus by concentrating their efforts on the lead agency. This was not necessarily viewed as problematical – indeed it had benefits in demonstrating that the project practised what it preached. However, concerns were raised as to the extent to which this could be considered to constitute system change since they intended to implement PIE anyway. More significantly, issues were also raised in relation to a potential for the lead agency to be seen to have a competitive advantage as a result. Further, the setting of targets led the project team more generally to focus on pushing on open doors - i.e. those organisations which were perceived as being the most likely to enable them to meet their targets rather than the ones which might be in most need of more radical change.

Of course, it is entirely understandable that project staff felt a need to establish some level of planning and a focus on targets – not least because of the historical prevalence of such approaches. There is a common misunderstanding that, in recognising the tension between acknowledging complexity, complexity theorists eschew planning. This is not generally the case, rather they suggest that targets and plans need to explicitly recognise their inherent reductionism, the unpredictability of complex systems and thus the partiality and provisionality of such activities (Boulton, Allen and Bowman 2015; Cilliers 2000; Stacey, Griffin and Shaw 2000). However, as we have seen in this research, this acknowledgement may not be sufficient. The programme explicitly promotes the importance of learning and tolerance (and need) for adaptation which superficially sound informed by a complex model of change. However, this messaging was subtly undermined by the language of transformation, and the pressure on projects to set and report on clear targets alongside, a historical context of more prescriptive approaches to planning and target setting.

The second issue – that of the impact of contextual factors on their ability to effect change were evident at all levels of the research. staff within the project team and the embedded case study directly pointed to the many and disparate influences on the lives of those with multiple and complex needs. Some of these, for example, the influence of wider societal attitudes and friends and families were outside of the remit of the project or beyond the reach of the support worker, limiting the scope for effecting and managing change at the system or the individual level.

Even in areas which were theoretically within the remit of the project – for example, the implementation of PIE in partner agencies – there was a strong perception that much of what happened in these organisations was beyond the control of the project. A further example was in the failure of the complex commissioning approach which was seen as due to a complex interaction of internal and external factors which dissipated and ultimately thwarted the initiative. Similarly, at the level of the embedded case study, managers themselves identified significant limitations to their control in relation to their attempts to implement PIE, citing contextual issues such as commissioning arrangements and the impact of austerity. There are similarities here to Trenholm's (2012) study of resurgent TB in London, where even where medical consultants were seen almost universally as being the dominant parties in managing the TB control system, they were found to have limited power and influence within it. In this context, it is particularly interesting that some of the literature on PIE suggests that it is the role of managers to protect staff from conflicting pressures in their wider environment and to be responsible for inspiring and delivering changes in practice. These all imply a level of managerial control which both complexity theory (Mowles, Stacey and Griffin 2008; Stacey, Griffin and Shaw 2000) and the findings for this research, suggest is unrealistic. While managers felt they could have some influence, this was experienced as being attenuated by the wider contextual issues such as a lack of available services and their power to influence both horizontally within the wider environment and vertically within the hierarchy of their organisations.

Equally important was the final challenge – managers' ability to change deeply held and (sometimes implicit) mindsets. Of course, this is not to suggest that managers are without influence. The value-based recruitment process determines the kinds of people who are employed within the service. Managers also have formal power and

authority; it is rather that this power is mediated through the individual micro actions and interpretations of staff. Perceptions of staff within the embedded case study, for example were that it was their individual values, history and experiences prior to, and outside of the organisation, which were most influential in their ways of working, rather than organisational or management edicts. This also impacted on their perceptions of the value of training, and some felt that much of what was required to be a PIE - such as reflective practice - was an inherent feature of the individual and could not be externally mandated or taught. This has parallels with other research which identified the dynamic interaction between personal values and those of the organisation, finding that the influence of personal values exerted significant influence on their practice than those of the organisation (Paarlberg and Perry 2007; Haynes 2018; Cochran-Smith et al 2014; Burton et al 2019).

This perhaps encapsulates neatly the tension described by Stacey, Griffin and Shaw (2000) whereby managers are expected to be able to effect change but find their ability to do this inhibited by the complex processes of change described above. That is not to absolve managers of responsibility or to recommend eschewing planning altogether as some critics of complexity theory suggest. Rather it suggests a greater focus on accountability for action and the decisions taking rather than for the achievement of specific outcomes and highlights the importance of ethical considerations (discussed in the final section).

## 9.6. Challenges to PIE as a complex response

The application of complexity theory to the findings for this research has not just raised issues relating to the feasibility of managed, transformational, beneficial and sustainable system change. It has also presented challenges to the positioning of PIE as a complex response to a complex problem. As indicated in the introduction to this thesis, the design for this research used the objective of PIE not just as an example of a system change objective and thus a means of enabling an examination of different levels of the system change project, but also of the extent to which it represents a complex response. The choice of PIE as the means of doing this was not accidental, rather it is informed by an emerging literature which theorised PIE as a well-adapted

complex adaptive system, offering a complex response to a complex problem (Cockersell 2018b).

The challenges to PIE as a complex response identified in this research fall into three main themes which will be discussed in this section: firstly, the association of PIE with system change may be unhelpful, given the views of operational staff on the existence of a delineated 'system'; secondly the differential understanding of what PIE actually is, went beyond locally responsive adaptation to omit key principles; thirdly, despite PIE's theoretical linkages to complexity theory via Cockersell's conceptualisation of it as a complex adaptive system, some of the core principles of complexity informed change were overlooked in the journey towards implementation.

Broadly, the contention that PIE represents a complex response hinges on its holism, and its responsiveness to the inherent complexity of multiple and complex needs, for example by nature of its flexibility, its focus on reflection and learning and its engagement with wider issues of environment and context (Cockersell 2018b).

Particularly significant in the context of the findings for this research, inherent within PIE is an understanding that it is only at the point of the individual at which complex needs come together. As such, these needs and, what arises from them, is necessarily unique and unpredictable. This has direct echoes with the findings for this research and the issues raised in previous chapters in relation to the concept of a clearly delineated and shared system. While most of the strategic staff recognised the artificiality of a system boundary but were comfortable with this as a pragmatic device, the widely held perception amongst operational staff was that there was no such thing as a system for multiple and complex needs. For these staff, the services and other elements such as friends and families which were involved in an individual's care and support only came together only at the point of that individual. This has interesting implications for the place of PIE as an objective of the system change project.

Operational staff's perception of the system is of an unrealistic and artificial concept which conflicts with their own experiences of providing person centred care and support for people with multiple and complex needs. Equating PIE with the system change project thus has the potential to increase the risk (identified in this research) that PIE is not the holistic, person centred and individually responsive concept it

purports to be. This necessarily impacts on staff's commitment to exploring and engaging more deeply with PIE and its core principles.

As indicated in both the findings and the previous chapter, the empirical findings for this research suggest that there is, in reality, a continuum of approaches which are described as PIE, some of which may challenge its claims to complexity. What PIE is understood to be was found to be filtered through individuals' own experiences, knowledge and values, as well as their organisational context, resulting in a range of interpretations. These go beyond the required sensitivity to local context to a more fundamental level of, for example, the association of PIE with the physical environment and omitting some of those aspects of PIE most congruent with complexity such as reflective practice. Conceptualising PIE as a complex response therefore may ignore the variety of implementations and the extent to which some of these do not really engage with the intended core principles – that is to say that it is theoretically a complex response but one which the continuum of approaches identified in this research may suggest is not necessarily the case in practice.

Perhaps most significantly in this research is the journey towards implementation of PIE, the extent to which this is congruent with a complexity informed model of change and the consequences of this. PIE is clear about the individual nature of multiple and complex needs and the ways in which these interact at the level of the individual to create the particular and unique issues people with such needs face. However, I would argue, based on this research, that the process of implementing PIE within an organisation is similarly complex. Failure to recognise this complexity necessarily impacts on how PIE is received, the extent to which there is deep engagement with it and challenge its contention as a complex responsive approach.

As indicated in the previous chapter, it is the combination of personal beliefs, mental models, personal and contextual history which interact with each other to determine how PIE is received within the organisation. Interestingly from the perspective of PIE as a complex response, staff (particularly those with a long history within the sector) saw PIE as another managerialist approach whose assumptions contradicted their experience as practitioners. The perception of PIE as a theoretical approach, divorced from the complexity of the real lives of those with whom they work, was identified as in part being influenced by a long history of initiatives within the sector which had not

delivered the desired impact, or that historically failed to understand this complexity. The sector is characterised by a decade of austerity and the need to do more for less, an even longer history of new public managerialism (NPM) which is associated with a lack of appreciation for the complexity of the experience of people with multiple and complex needs and other vulnerable groups (Hood 2014). Importantly, Trenholm and Ferlie (2013) found that NPM itself was a strong factor in suppressing the positive, creative potential of complex systems. The consequences of this were, in large part, a level of cynicism and a lack of deep engagement with the core principles of PIE. Importantly, we saw in the previous section (9.5) the challenges managers face in trying to change these deeply held mindsets and values.

Of course, these barriers to implementation were not just at an individual or organisational level. An important barrier in the embedded case study was the lack of available services to which staff could refer their service users. While the staff within the organisation may have been able to take a holistic view of their service users' needs, their ability to respond to these in the same holistic way was severely impacted by an absence or shortage of appropriate services. Similarly, staff identified a lack of psychologically informed practices in wider society which led them to question the benefit of operating in a psychologically informed way themselves. This they felt could potentially set their service users up to fail by not preparing them adequately for what they would face on leaving the service.

This research, then, suggested a complex interplay of factors which determined what happened as the objective of PIE was implemented within the embedded case study organisation. It is important to recognise that PIE is intended to evolve as part of a locally constituted journey of exploration and reflection (Breedvelt 2016). This explicitly recognises the inherent unpredictability and non-linearity as well as its co-evolution and is congruent with most complexity informed models of change. However, the experience of this research was that this was impacted and challenged by a number of issues. For example: positioning PIE as an objective of the system change project (particularly where this involved accreditation) increased the sense of PIE as a destination rather than an ongoing journey. Even the Pizazz tool - itself conceived as a way of supporting learning - had the potential to be seen negatively and as another form of unrealistic outcome measurement which misunderstood the

complexity of the client group. This is clearly the opposite of what it was intended to achieve. However, the point here is that the history, environment and context in which PIE is being introduced will interact in ways which may inadvertently subvert PIE's core messages. Of course, if PIE is implemented as a locally emerging context-sensitive approach, then the relational issues, paradoxes and conflicts can be surfaced as part of the reflexive process of implementation (supported on an ongoing basis by the Pizazz framework which is also designed to be used in such a way). The issue then is not with the theoretical basis but by the way that is mediated by implementation on the ground. Some of the literature on becoming PIE (discussed in Section 2.4.3) places a lot of responsibility on managers to overcome these barriers. However, the findings for this research, supported by the theoretical framework of complexity theory suggest may be unrealistic. Further, a focus on operating in a way which supports such reflection requires particular skills. These may not already exist within the organisation not least because they fundamentally conflict with commonly held management practices (Stacey and Mowles 2016; Stacey, Griffin and Shaw 2000). Equally importantly, they require a significant amount of time and space which is not commonly available within organisations working under the pressures which services involved with supporting people with multiple and complex needs most often are. Although this is acknowledged within the literature (See for example: Turley, Payne and Webster 2013; Birmingham Changing Futures Together 2019b), PIE was sometimes positioned as requiring little in the way of extra resources as a means of encouraging take-up but, in the findings for this research, this positioning was associated by staff with a lack of organisational commitment.

Such reflective practice also requires staff to feel safe and to have high levels of trust of their managers and the organisation. Trust is a complex and relational issue and, as we saw in the embedded case study, even where it is high at a departmental or organisational level, can be impacted by perceptions and experiences of the wider environment – for example: the regulatory bodies or commissioning organisations. Trust then emerges from a long history of authentic and consistent relationships, mediated by, as well as impacting on, external contexts and internal mental models. As such it can neither be instrumentally created, consistently maintained in the same state, nor easily assessed or measured. While this might seem obvious, it is often



overlooked within guidance on implementing PIE where there seems to be an assumption that staff will feel safe enough to undertake the necessary reflective processes or that such an environment can readily be created by managers. The research also shows how this can be undermined by attempts to implement accreditation, and even by frameworks designed to assist in implementation. While the Pizazz framework is clearly designed in such a way as to promote the idea of PIE as a journey and a process of ongoing learning, the experience of this research suggests that used in a wider context and history of performance management, it is not necessarily understood in this way by staff which may work against its core aim.

PIE, then, as articulated by Cockersell (2018b), in theory, represents a complexity informed response to the issue of multiple and complex needs. Indeed, as indicated in Chapter 2, its principles are closely aligned with those of complexity theory, supporting its claims to represent a complex response. However, the experience of this research is that such a conceptualisation may be challenged at the level of implementation. What PIE is understood to be comes from a complex combination of personal histories, experiences and values. This combines with issues in the wider context of the organisation, for example, commissioning arrangements, the impact of austerity on workloads and availability of additional support services. The consequence of this is a significant impact on understanding of, commitment to, and engagement with those core principles which make PIE a complex response. While this is recognised in much of the guidance and evaluation literature on PIE, this often underestimates the complex processes of change, overestimates the ability of managers to bring about the necessary changes in the external context.

## 9.7. The place of ethics and values

The points raised in the previous sections point to some of the challenges in managing a transformational, beneficial and sustainable programme of change within a complex system. They further indicate the issues which challenge PIE's ability to offer a complex response. I indicated throughout the need for programmes to actively engage with these challenges, and the importance of accepting and surfacing the diversity of viewpoints and perspectives, alongside an understanding of the limitations of control. One of the most significant implications of such positioning identified in

this research is the importance of values and a consideration of the ethical positions of those involved in both system change and PIE. The theoretical position and findings for this research support the view that engagement with such concepts is rarely explicit in programmes in the way that elements such as transformation, benefit and sustainability are. If, as complexity theory suggests, we can neither fully describe a complex system nor predict the outcomes within it, then there are no fixed rules which can be used to resolve and guide our actions. This, therefore, requires an explicit engagement with the ethical implications of the choices that we make (Heylighen, Cilliers and Gershenson 2006), including, in this case, what we consider to be the boundaries of the system change project and therefore what is included and what is left out of the system change project.

If the complexity of the system means that our understanding of it is partial then we cannot fully know the impact of such decisions (Preiser and Cilliers 2010). Thus, this complexity further requires that we actively engage with and recognise the limitations of our understanding (Woermann, Human and Preiser 2018; Richardson, Cilliers and Lissack 2001). Choices which are made in the present moment without certainty or predictability as regards their outcome therefore demand an active articulation of, and reflection on the ethical dimensions of both the scope and content of the project and the underpinning values of those involved in delivering it. It further points to the need for a humility about the limitations of our control (Boulton, Allen and Bowman 2015).

Of course, this lack of overall control is not intended as a reason for not acting at all which itself would have implications for what happens within a system (Preiser and Cilliers 2010). Neither does it offer an absolution from responsibility but rather indicates the need for a focus on accountability for actions, decisions and practice (Lowe 2017; Mowles, Stacey and Griffin 2008; Cilliers 2000). Lowe (2017) additionally makes the case for a different kind of accountability: because understanding accountability for actions requires an appreciation of the circumstances at a level of detail, this in turn requires a greater level of shared or collective (rather than individual) accountability.

There is a strong argument therefore (supported by this research) that an engagement with system change as a complex system necessarily requires a transparent and open engagement with issues of ethics as part of a framework which focuses on

accountability for decisions rather than outcomes. Indeed, this is perhaps a more productive and theoretically congruent element of system change than exhortation for it to be transformational and beneficial, for example. Similarly, such an approach is arguably more likely to ensure that PIE, as implemented, retains its theoretical positioning as a complex response.

The importance of values was explicitly articulated within the empirical findings in relation to PIE, most notably within the embedded case study. They were repeatedly identified within here as the single most important factor in their practice. There is a limited amount of research which explores this aspect of complexity theory but, interestingly, recent research by Burton et al (2019) also explored this issue in relation to service-learning practices. In common with this research, their study found that values were established prior to the service-learning activity, resistant to relational influences but played an important part in determining the nature of the system. They also identified their importance of shared values in the creation and maintenance of the service-learning partnership. Further, just as with PIE, the values of service learning (including reciprocity, openness, adaptation and reflexivity) were considered to align closely with those of complexity theory.

These issues also have implications for complexity theory. As we saw in Chapter 3, one of the criticisms of complexity theory is that it does not engage with issues of ethics and values and this is often viewed as being as a result of their origins within the natural sciences (Burton et al 2019; Hetherington 2012; Heylighen, Cilliers and Gershenson 2006). The findings for this research support this challenge to complexity theory. They point to the importance of recognising and actively exploring the assumptions about ethics and values not just within the system change project but also as an important part of the theory itself.

## 9.8. The balance between diversity and redundancy

Versions of complexity theory which tend towards the restricted approaches place more direct importance on diversity and redundancy than do many (though by no means all) of the more general transformative approaches. While concepts of diversity and redundancy are implicit within considerations of the relational nature of complex systems (Preiser 2019) they did not explicitly form part of my original model of

complex change articulated in Chapter 3. Within complexity theory the two concepts of diversity and redundancy indicate that there needs to be sufficient diversity for the agents within the system to encounter difference but this needs to be balanced by a level of similarity (redundancy) to allow for meaningful interactions to take place (Davis and Sumara 2006). This balance is required to ensure that systems can manage the competing pressures of being able to operate in the present and be sufficiently adaptive to respond to new challenges (Levin et al 2013). Although this was not as explicitly identified in my original model as other concepts, there are indications within the findings that this may be an important addition to the model I articulated. For example: the system change board could be considered a diverse system – involving as it does a variety of partners from different backgrounds and organisations, as well as people with lived experience. However, in common with most such boards there is rarely, if any organisational ‘redundancy’. That is to say, the pressures on partners mean that having more than one representative on such a board is considered to be too time consuming – indeed many partners struggle to attend themselves. As a result, relationships are prone to breaking down in the event that someone leaves their role. All of this served to reduce the actual levels of diverse attendance at the system change board meetings and participation more generally. It should be noted here that the central inclusion of people with lived experience within the system change board and their involvement in system change activities has been critically important to the diversity of the board and the project and it is not the intention of this research to underestimate or downplay the importance of that. The focus of the research, however, is the organisational experience. The findings identified a tension between practically being able to achieve a level of change (and thereby meeting the objectives of the funder) and engaging a diverse range of partners which led, for example in the case of PIE, to a focus on implementing activities within the lead agency, rather than more widely across the partnership. Although this was also, in large part, a means of exemplifying good practice, such practices were also identified as being potentially problematical in being seen as giving the agency a competitive advantage.

As well as focusing on the lead agency, system change project team members also described a process of pushing on open doors which may also serve to limit the

diversity of engagement. This is clearly not driven by a desire to exclude and the team were constantly striving to achieve a greater diversity of engagement, the difficulty they experienced here is perhaps a symptom of a wider lack of redundancy in the system. As Trenholm and Ferlie (2013) identify, decades of new public managerialism (and a more recent but still longstanding austerity programme) have constantly sought greater efficiencies, eliminating any redundancy within the agencies involved in the partnership. The findings identified this as part of a culture of retrenchment and looking inwards. Importantly from the perspective of complexity theory, this had the impact of reducing the interconnectedness of the system and thus reducing the capacity of the system to adapt and innovate. This context was also perceived as having reduced diversity in terms of the activities undertaken, prompting organisations to stick with known (and perceivedly) less risky undertakings.

This was also seen within the embedded case study and this, together with frequent staff changes in partner agencies impeded the formation of interconnected relationships. This lack of capacity within the organisation also threatens one of the most fundamental parts of PIE – the time and space for reflection. Further, the lack of connectedness with other services reduces the innovative and adaptive potential of the service. This is in addition to the impact of this context on developing more cynical attitudes which was identified in the embedded case study.

## 9.9. Concluding comments

Taken together, these last two chapters, then, have analysed the empirical findings via complexity theory and found a high level of congruence with the complex model of change articulated in the Chapter 3. This analysis revealed some fundamental challenges to the core concepts of transformational, beneficial and sustainable system change, suggesting that these may be more contentious objectives than they first appear. The linearity implicit within such concepts, which ran counter to the experience of those involved, I would argue, devalued some of the project's achievements and impacted on the engagement of partners. The focus on measurable achievements, despite participants' expressed experience of the limitations of their control over these led to a focus on breadth over depth, and on those organisations who were already more willing to engage. It further ran counter to the programme's

professed focus on reflection and learning. PIE as a complex adaptive response was challenged by the differential understanding of it which went beyond locally responsive adaptation to omit key principles. Additionally some of the core principles of complexity informed change were overlooked in the journey towards implementation.

In applying a defined model of complexity theory to a piece of qualitative research in the area of system change for people with multiple and complex needs, these two chapters represent a novel theoretical contribution. They have additionally provided empirical support to the growing body of theoretical research which suggests: the importance of accountability for decisions rather than outcomes in complex systems and the consequent consideration of ethical dimensions (Lowe 2017; Mowles, Stacey and Griffin 2008; Cilliers 2000); the need for flexibility, an open and transparent surfacing of the differences in understanding of core principles, an acceptance of unpredictability, and a greater level of humility about what can be achieved (Boulton, Allen and Bowman 2015; Cilliers 2000; Mowles, Stacey and Griffin 2008). This latter should not be considered as a lack of ambition for change, rather it recognises that unrealistic expectations (e.g. of transformation) which run counter to the lived experience of the complexity of managing change in complex systems can lead to disengagement, boosterism and a focus on what is measurable rather than what is important. This, alongside the research's specific contribution to system change for multiple and complex needs is explored in the next, and final, chapter.

## 10. Chapter 10: Conclusion

This research has examined, by means of a case study, the experience of implementing a system change project for multiple and complex needs, with a specific focus on the objective of promoting PIE. An embedded case study has examined the implementation of PIE within a partner organisation. It applied the theoretical perspective of complexity theory as a means of exploring and theorising this experience. The research has responded to gaps in the literature in relation to: the paucity of theoretically based research into system change for adults with multiple and complex needs; the absence of empirical research into PIE's positioning as a complex response and the limited amount of research which empirically applies complexity theory.

Of course, a research project such as this, can only make a small contribution to such issues and applying the theory was not without its challenges both from a practical and theoretical perspective. As detailed in Chapter 4, the practical issues of doing real world research in contexts such as this are manifold and exacerbated by the unexpected and devastating impacts of the Covid-19 pandemic.

Perhaps one of the major theoretical challenges concerned the pragmatic necessity of reducing some of the complexity of the theory in order to progress the research. This was discussed within Chapter 4 in relation to the design of the research, in Chapter 3 in relation to the selection of the core concepts of complexity theory operationalised for this research. This further extended to the application of the theory in Chapter 8. The decision to take each aspect of complexity theory as a theme and explore the findings in relation to each theoretical theme required an element of simplification and separating out each element of the theory in this way is inevitably somewhat artificial as the elements themselves interact and overlap. There is a danger therefore that elucidating them in this way understates the holistic nature of the theory. The application of the theory to empirical findings and the presentation of this in a way which is both true to the theory and organised in such a way as to be meaningful and clear was a constant challenge but one with which anyone using complexity theory empirically would need to grapple.

There is an acknowledged gap in the literature for research which tests the theory against others (Thompson et al 2016) and this could be considered to be a limitation within this research. However, all research necessarily has limitations, and requires a pragmatism about what can be achieved within the time and resources available. The very breadth of complexity theory required an extensive engagement with a wide range of different literature and positions in order to develop the model used which limited the time (and space) available for a detailed comparison with alternative theories. Such exhortations are also perhaps indicative of a more positivist position, seeking a single 'provable' explanation which would be more applicable to research in the restricted approaches to complexity theory. Notwithstanding these challenges and limitations, the research makes contributions both at the level of theory and practice and these are discussed in the following sections.

### 10.1. Theoretical contributions of the research

There is no consensus about the specific elements of complexity theory and how these can be applied empirically. While this is sometimes seen as a strength (denoting flexibility), it confounds consolidation of the body of research (Wallis 2008). One particular issue identified was the lack of detail or precise articulation of the concepts used (Paley and Eva 2010) and the absence of studies which apply the theory (Houchin and Maclean 2005; Lowell 2016). One important theoretical contribution this research makes, therefore, is to provide a worked, empirical example of applying a clearly defined model of complexity theory within the real-world context of a system change project.

Not only is there a dearth of empirical studies which apply complexity theory, but, to my knowledge, this is the first research to apply the theory in the field of system change for multiple and complex needs. Its theoretical contribution, therefore, is not limited to complexity theory but also extends to offering theoretically based insights into systemic approaches to addressing multiple and complex needs – a growing area of policy interest but one which is currently mainly defined by evaluation and practice-based literature.

One example of this dual contribution is seen in the discussion in Chapter 9 and throughout the findings chapters in the tensions in relation to accountability for



outcomes and the limitations of control. This is an important debate within applied complexity theory which critiques accountability focused on outcomes and results (see, for example: French et al 2023; Lowe 2017; Mowles, Stacey and Griffin 2008, Cilliers 2000). Academics in the field have begun to develop alternative models which balance the democratic need for accountability with an understanding of the implications of complex systems on such accountability (Lowe 2017, French et al 2023). This research provides further empirical evidence of these tensions in the context of a complex system change project.

The lead agency, as a voluntary sector organisation, had little leverage over other organisations within the project. Staff, for example, identified significant limitations to their control in both the main and embedded case studies<sup>41</sup>. They further articulated the perceived necessity of setting SMART targets as a means of establishing a level of control over outcomes while simultaneously articulating the risks associated with so doing<sup>42</sup>. Thus, the research also contributes a theoretically based understanding of some of the issues faced in delivering a system change project for people with multiple and complex needs. It is hoped that, alongside the growing recognition of the complexities of undertaking such projects (see for example, Moreton et al 2022), such debates can begin to inform the design of system change projects (explored in the next section 10.2).

Within Chapter 9, I discussed what the findings suggested about a need for a greater appreciation of the place of values and ethical considerations. The specific importance of values has been little explored within complexity theory, not least as a result of the aforementioned paucity of empirical research which applies the theory. However, this research supports the work of Burton et al (2019) and, in so doing contributes to the development of understanding of the impact and importance of that particular facet of the theory. It also has practical implications for both the implementation of system change and PIE which are discussed in Section 10.2.

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<sup>41</sup> See Chapter 5, Section 5.4.3; Chapter 6, Section 6.6.1 and Chapter 7, Section 7.5.5.

<sup>42</sup> For example of 'gaming' (See Section 5.4.2); of focusing on what was measurable (see Section 9.2.3) and on the extent to which the programme fostered a learning approach (See Section 5.4.3).

More fundamentally, this research has critiqued the use of the terms transformational, sustainable and beneficial system change. This is, in part, because of the myriad interpretations of these terms, the practical implications of which are explored throughout this thesis. However, a further contribution is in the theoretical significance of these terms in the areas of system change and multiple and complex needs. They additionally speak to current debates within applied complexity theory.

By way of example, the issues identified in this research spanned all three terms: 'transformation', with its suggestions of linearity and predictability; 'beneficial' with its implications of homogeneity both in the lives of those with multiple and complex needs and the priorities of partner agencies; and 'sustainable' in systems which are dynamically changing and in a constant state of adaptation. The findings in this research thus problematise the continued, and seemingly unquestioning, ubiquity of such terms in the disciplines of system change and multiple and complex needs. This includes the evaluation of the Fulfilling Lives programme (Moreton et al 2022) and the subsequent Changing Futures programme (Ministry of Housing, Communities and Local Government 2020). This aspect of the research also provides empirical support for the calls amongst complexity theorists for a level of humility (Boulton, Allen and Bowman 2015; Cilliers 2000; Mowles, Stacey and Griffin 2008). It further speaks to a significant question in applying complexity theory: the need to, and difficulties of, achieving a balance between ambition and overoptimism alongside the role (and benefits of) smaller scale change and experimental approaches (French et al 2023).

We saw in Section 9.8, that the balance between diversity and redundancy became more significant than had been originally expected, a further contribution to the development of an empirically informed theoretical model. From the perspective of system change for multiple and complex needs, the evaluation of the Fulfilling Lives programme, as did this research, identifies, for example, the pervasive issue of relying on key individuals to drive change (Moreton et al 2022) and the difficulties created as people move on or change roles. Trenholm and Ferlie (2013) identified the impact of decades of new public managerialism and, at that point, the beginning of, austerity on eliminating redundancy within partnerships in the health service. A further decade of austerity has exacerbated this and, the findings of this research show, resulted in partners finding difficulty in engaging with the system change project, reducing

diversity in the partnership and impacting on the activities undertaken. The lack of time and space for reflection in organisations attempting to implement PIE, again a function of underfunding and having to do more for less, also impacted on the abilities of staff to engage fully with all aspects of PIE. While these challenges are already well articulated in the literature and throughout the evaluations of the Fulfilling Lives programme<sup>43</sup>, this research offers a theoretical basis for understanding this issue. It provides further evidence of the need for a balance between diversity and redundancy to manage the competing pressures of operating and being able to adapt and respond to new and dynamically changing challenges (Levin et al 2013).

In its critique of PIE's conceptualisation as a complex adaptive system (Cockersell 2018a), the research makes a contribution both to the field of psychologically informed approaches and complexity theory. In relation to the latter, the potential overlap between complexity theory and PIE critiqued in this research provides a small contribution to debates about the tension inherent in applying the theory to abstract concepts raised, for example, by Paley and Eva (2010) and Cilliers (2010) and discussed in Chapter 2. Its contribution to psychologically informed approaches responds to the increasing recognition of the need for complex responses to complex problems (Cockersell 2018d). As indicated in Chapter 2, while there is overlap between the concepts of PIE and those of complex adaptive systems, PIE needs to be considered, not in the abstract, but in the ways in which it is understood and implemented on the ground. This, as we saw throughout the thesis, can challenge its positioning as a complex adaptive system. This is demonstrated in the significant differences in understanding of the concepts and, for example, in opinions about its role in system change. A further example is seen in the context of austerity in which PIE operated within the embedded case study - limiting time and resources available to provide holistic support. Although such factors have previously been identified in the evaluative literature explored in Chapter 2<sup>44</sup>, and in more recent studies within the Fulfilling Lives programme (see, for example Tickle 2022), they have not specifically been applied to the conceptualisation of PIE as a complex adaptive system. The

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<sup>43</sup> Discussed further in Chapter 2.

<sup>44</sup> See for example Boobis 2016; Rayner 2012

experiences of implementing PIE as part of a system change project also offers insights for practitioners and academics into the complex process of change involved in such implementation and these are discussed in the next section.

## 10.2. Practical contributions of the research

As I began to explore in the previous section, the findings, and in particular, the application of complexity theory to these is not just of theoretical interest. They offer a practical contribution for policy makers and those tasked with designing, commissioning and delivering system change for people with multiple and complex needs.

There is increasing acknowledgement of: the complexities of system change for people with multiple and complex needs; the need for such programmes to be seen as a journey rather than a destination; and the importance of learning (see, for example, Moreton et al 2022). Notwithstanding this, some of the terminology (for example, of transformation) which was found to be problematical in this research remains pervasive. By way of example, the development of the Changing Futures programme, while purportedly a systemic approach, sensitive to local context and focused on learning, strongly identifies a need for an 'outcomes-focused approach' (p.8) and an evaluation design which assesses these outcomes against a counterfactual comparison group (Ministry of Housing, Communities and Local Government 2020). While acknowledging the limitations of the research on which this thesis is based as a time-limited case study in a single project, the findings here support, and are supported by, a growing body of literature which challenges the appropriateness of such approaches in complex systems. The findings from this thesis would caution against this indiscriminate use of the language of transformation given the differential understandings that such terms are likely to evoke and the possible impact of this, for example in devaluing what projects achieve, impeding learning and focusing attention on what is measurable rather than what is important (See Chapter 9). Importantly, the lessons from applying complexity theory to this project also indicate the need for a radically different approach to the measurement of impact from policy makers and funders of such programmes, more aligned with current debates in applied complexity theory. These debates suggest a focus on accountability for actions, decisions and

practice rather than for outcomes and highlight the importance of qualitative and experiential insights and evidence (French et al 2023; Lowe 2017; Mowles, Stacey and Griffin 2008; Cilliers 2000).

In Section 9.2.4, I tentatively suggest that, in the light of the challenges identified in delivering a managed programme of transformational, sustainable and beneficial change in a complex system, that a focus on service delivery might be a better use of limited resources. I have no wish to downplay the importance of, and need for, structural, systemic changes more effectively to address and reduce severe and multiple disadvantage. However, the findings from this research, have led me to question the feasibility of such an aim within the project as configured (for example: operating within the operational constraints of time, funding and with limited structural power/influence). At the very least, it indicates the need for a greater level of appreciation by funders of the role of such service delivery.

I discussed above and in Chapter 9, the theoretical imperative for an appropriate balance between diversity and redundancy within complex systems and the impact of austerity on this. The negative impact of austerity was a pervasive finding at all levels of the case study<sup>45</sup>. The prolonged and ongoing impact of austerity has, of course, also been a significant contributor to the amount and severity of disadvantage and inequality (Hernandez 2021) thus further exacerbating the problem the system change projects are set up to address. Despite this, there remains, within system change programmes for people with multiple and complex needs, an expectation that flexible and dynamic systemic change, underpinned by collaborative and joined up working is possible even where austerity measures have removed any level of system redundancy thereby reducing the interconnectedness of the system and its capacity to adapt and innovate (Trenholm 2012; Levin et al 2013). Of course, as we saw throughout the thesis, the project worked hard to circumvent such challenges, taking on responsibility for delivery and making greater use of the lead agency. However, this thesis offers a theoretically based challenge to programme designers, commissioners and funders as to the feasibility of effective partnership delivery while such a context of austerity

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<sup>45</sup> See Chapters 5, Section 5.5.2; 6, Section 6.6.2; 7, Section 7.5.3

persists. It also indicates the need to take proper account of these challenges when making judgements on the success of the projects in delivering collectively.

For those tasked with delivering such projects, the research has highlighted some areas which may assist in this and which are less commonly reported in the literature. We saw throughout that mental models, in particular surrounding definitions of system, system change and PIE, were significant in how partners engaged with and judged the success of the project. This was particularly marked in the case of operational staff, most of whom did not relate at all to the concept of a system for people with multiple and complex needs; and for those who saw the system as being wider than the boundaries which the project placed around it. The point here is not that such differences are unexpected. Rather, as highlighted in Section 9.2.1, it indicates the need to pay attention to the complex interplay of these and allow time and space for such differences to surface as well as considering the ethical dimensions of decisions about what is in and out of the scope of the 'system'.

Linked to this is the importance placed on the intrinsic values of staff. These were, for example, seen as the most important factor in how staff worked and, consequently, in their responses to PIE. The value-based recruitment used by the organisation in the embedded case study meant that their values were largely perceived to be consistent with the principles of PIE. However, this clearly may not be the case in all organisations. This indicates the need to create time and space to explore intrinsic values and beliefs and thus links to the importance of reflective practices in PIE. As we saw, this can be problematical in the context of austerity and points to the need for organisations thinking of implementing PIE to take account of the resource implications of such activities.

Such considerations are particularly important for commissioners of services. If the services they commission are to operate in a psychologically informed way, then there is a need for the resources required in so doing to be reflected in the funding of such services. This research also points to the potential for processes of evaluation and accreditation of PIE to conflict with its inherent value as a complex response. It demonstrates the capacity of such processes to undermine the trust which is

important in implementation<sup>46</sup>. Again, this highlights the potential for radically different approaches to measurement and accountability discussed in the previous section.

The research had some interesting findings in relation to PIE as part of a system change project which, although particular to this case study, might offer some guidance in similar circumstances. While consistency is antithetical to PIE, when considering its dissemination as part of a system change implementation, care needs to be taken that it does not become so diluted that it loses the essence of what it is designed to do. In addition to losing some of its inherent sensitivity as a complex solution in these circumstances, it can also create a sense of cynicism and suppress interest and further engagement.

Of course, this research is broad in its scope and complexity theory is a new theoretical approach in the context of system change for multiple and complex needs. Thus while this research has begun to make both theoretical and practical contributions there is undeniably a need for further research in such contexts to build on the potential for complexity theory to offer radical challenges and insights into the processes of change. There are a number of indications, from this research, of areas where this might prove particularly fruitful. The complex relationships between partners in such programmes, the complex and sometimes contested relationship between system change and service delivery and, importantly, the experiences of the complexity of the system from the perspective of those with multiple and complex needs. Nonetheless, the application of complexity theory in this context has revealed a range of interesting and practical findings, and has elucidated and applied a complexity theory informed model of change upon which future research can build.

### 10.3. Final reflections on the research

As discussed in Chapter 4, my interest in complexity theory began, in part, as a recognition of the challenges I had faced in my career as a consultant and manager, neatly encapsulated in the quote from Chapter 3:

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<sup>46</sup> See Chapter 7, Section 7.5.2.

‘Managers are supposed to be in charge yet they find it difficult to be in control. The future is recognizable when it arrives but in many important respects not predictable before it does.’ ( Stacey, Griffin and Shaw 2000, p.8)

A later career, evaluating criminal justice policy initiatives led me to question further the idea that implementation of such policies, was as linear and predictable process as the many theories of change and outcome measurement tools I encountered would suggest. Complexity theory seemed to offer a degree of congruence with my own experience, while conversely, conflicting with much of my formal management training and informal mentoring and learning. This conflicted position has been both challenging and helpful. Challenging in that it required a constant examination of my, often unsurfaced, beliefs and practices and helpful in that it helped me to retain a degree of critical distance while developing my own model of the theory. This was a crucially important part of the research given the multiplicity of theoretical positions encompassed within complexity theory.

While there is congruence between the theory and these findings, the application of complexity theory raised a persistent concern– that is that the theory could seem to be somewhat laissez-faire, or worse, represent a counsel of despair. That is to say that the challenges which complexity theory makes to transformational system change for people with multiple and complex needs mean that there is little point in such initiatives. Nothing could be further from the conclusions of this research. Rather it points to the difficulties which those attempting to deliver such change face. In particular, the ways in which the language of system change can unhelpfully shift focus away from more incremental approaches and simultaneously devalue what projects achieve in this complex environment. Neither am I naïve about the challenges that applying complexity theories represent in current policy environments. However, engagement with the real complexity of system change seems imperative if we are to realistically and practically address the systemic issues which create and reinforce the multiple and complex needs which the participants in this research, and more importantly, those experiencing them, confront every day.



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# Appendix 1: Interview schedules and observation proforma

## System change board interviews

The interview schedule is a semi structured interview schedule. It will be used flexibly to allow participants to discuss their views, perceptions, attitudes and experiences in an open way. The topics will be introduced and explored with each interviewee. The amount of time spent on different themes will vary in response to the answers given by participants. There is potential overlap between questions within the sections, so some questions will be omitted depending on answers given.

- Introduce self and purposes of research
- Review contents of information sheet with participant. Ensure interviewees have read and understood it.
  - Explain confidentiality, limitations of this, and how data will be used.
  - Remind participants of voluntary nature of their involvement.
  - Remind participants that they are free to terminate the interview at any point without giving a reason and they don't have to answer any questions that they do not want to.
  - Explain purpose of audio recording and confirm that they are happy to have the interview audio recorded.
- Answer any questions that the participant may have.
- Ensure participant and researcher have signed both copies of the consent form
- Seek verbal consent to begin the interview.

Text in italics within the guide denotes instructions to the researcher.

### 1. Background and introductions

*This section aims to get to know a little about you and the organisation you work for and your role in the systems change programme*

- a) What organisation do you work for and what is your role in the organisation?
- b) How long have you been in your current role? How long have you worked for this organisation?
- c) What do you see as your role within the systems change programme? *Probe for level of involvement and awareness of the programme*

### 2. Context: System and system change

- a) What do you think constitutes the system of support for adults with multiple and complex needs?

- b) What (if any) do you see as your organisation's role within this?
- c) What is the nature of your work with adults with multiple and complex needs?
- d) How (if at all) has your work with adults with multiple and complex needs changed since the [Name of Project] began?
- e) To what extent do you see adults with multiple and complex needs as being a significant part of what your organisation does? Why do you say this?
- f) What do you see as the main issues for adults with multiple and complex needs?
- g) Which other organisations do you work with in your work with adults with multiple and complex needs? How effective are these relationships? Why do you say this?
- h) What are the main things that influence how you/your organisation work with adults with multiple and complex needs?

### **3. Development of the programme**

- a) To what extent (if at all) were you involved with the development of the system change plan? In what ways?
- b) How familiar are you with how the systems change plan developed? Who (else) was involved in developing the plan? *Probe for any level of involvement, knowledge of rationale; internal and external influences; any differences between development of different objectives*
- c) How has the plan changed over the time that you have been involved? What, if any, was your involvement in the new systems change plan? *Probe for reasons for any changes*
- d) How do you feel about the way the systems change plan was developed? *Probe for involvement of appropriate mix of people/organisations;*
- e) To what extent do you think that there were different viewpoints/perspectives on the systems change plan as it was being developed? What was the impact of this?
- f) What do you understand system change to mean in the context of the programme?
- g) What do you see as the most important aim of the systems change plan? And the least important? To what extent do you think these are the 'right' systems change priorities?

### **4. Implementation of the programme**

- a) What do you see as your/your organisation's role in implementing the systems change plan? Do you foresee any changes to this over the next 6-12 months?
- b) How do you see the change envisaged by the systems change plan coming about?
- c) What do you see as the role of the systems change board?
- d) Who or what do you see as responsible for leading the implementation of the systems change programme? *Probe for impact of this*
- e) To what extent do you think the organisations involved in the systems change programme are the 'right' organisations?
- f) How effective do you think the relationships between the different organisations involved in delivering these services are?

- g) How have these relationships impacted on the development or the implementation of the systems change plan?
- h) To what extent have unexpected /unforeseen things happened during the implementation of the systems change programme so far?
- i) What do you see as the main barriers to achieving the systems change plan as designed?
- j) And what might be the main enablers of the change?
- k) Do you foresee any changes to the objectives or implementation of the systems change plan more generally over the next 6 months? In the longer term?

## 5. Psychologically Informed Environments

- a) Thinking now specifically about the objective of the systems change plan which relates to the creation of psychologically informed environments, what, if any, do you see your organisation's role in implementing this objective?
- b) What do you think PIE is?
- c) Why did you decide to implement/decide not to implement this objective (PIE)? *If not implementing PIE omit questions d to j*
- d) Can you tell me a little bit about how the change to PIE is being implemented ?
- e) Who, if anyone is leading the change?
- f) What do you think have been the main things that have enabled the change to PIE?
- g) And what have been the barriers? How are you addressing these?
- h) To what extent do you think this represents a major change for the organisation?
- i) To what extent is this similar to/different from other change projects your organisation has implemented? Why?
- j) What has been the impact of the change to PIE – in your organisation? For beneficiaries? More widely?
- k) To what extent do you think implementing PIE is a valid aim of the systems change programme?
- l) To what extent do you think that creating psychologically informed environments will lead to systems change for adults with multiple and complex needs? How do you see any such change happening?

## 6. Impact of the change

- a) What do you think the impact has been of the systems change plan so far?
- b) What do you expect the effect of the systems change plan to be over the next 6 months? In the longer term? *Probe for effects on own organisation; partner organisations, other (non-partner) organisations, beneficiaries and overall system*
- c) How do you envisage that this will be achieved?
- d) How will you know when the change has been achieved? What will this look like? *Probe for perspectives of organisation themselves and beneficiaries.*
- e) To what extent do you think you will be able to measure whether the change has occurred?
- f) How do envisage that any changes are sustained across the wider system?

- g) What impact do you think achieving the systems change plan's objectives will have on the overall system of support for adults with multiple and complex needs? Why do you say this?

## **7. Other systems change programmes**

- a) Can you tell me about any other systems change programmes or projects you might have been involved in?
- b) In what ways were these similar to/different from the [Name of Project] programme?
- c) To what extent were they successful? Why do you think this was?

## **8. The future**

- a) Is there anything that you can foresee happening which might affect the implementation of the systems change plan in the future? *Probe for internal and external impacts in near (next 6 months) and more long-term future.* What makes you think this?

## **9. Conclusion**

- a) Is there anything that we haven't covered that you would like to add?
- b) Do you have any questions for me about the research now that we have finished the interview?

***Thank the interviewee for their time/contribution; hand them the debrief sheet.***

## Project team staff interviews

### Project team staff interviews: time point 1

The interview schedule is a semi structured interview schedule. It will be used flexibly to allow participants to discuss their views, perceptions, attitudes and experiences in an open way. The topics will be introduced and explored with each interviewee. The amount of time spent on different themes will vary in response to the answers given by participants. There is potential overlap between questions within the sections, so some questions will be omitted depending on answers given.

- Introduce self and purposes of research
- Review contents of information sheet with participant. Ensure interviewees have read and understood it.
  - Explain confidentiality, limitations of this, and how data will be used.
  - Remind participants of voluntary nature of their involvement.
  - Remind participants that they are free to terminate the interview at any point without giving a reason and they don't have to answer any questions that they do not want to.
  - Explain purpose of audio recording and confirm that they are happy to have the interview audio recorded.
- Answer any questions that the participant may have.
- Ensure participant and researcher have signed both copies of the consent form
- Seek verbal consent to begin the interview.

Text in italics within the guide denotes instructions to the researcher.

### 10. Background and introduction

- a. Can you tell me what your role is in the organisation?
- b. How long have you been in your current role? How long have you worked for this organisation?
- c. What is your role in the systems change programme? Have there been any changes to how you have been involved?

### 11. Context: System and system change

- i) What do you think constitutes the system of support for adults with multiple and complex needs?
- j) What (if any) do you see as your organisation's role within this?
- k) What do you see as the main issues for adults with multiple and complex needs?
- l) Which organisations do you think have the most influence on the way the system works with adults with multiple and complex needs? Why?

## 12. Development of the wider programme

- a. What does the term system change mean to you?
- b. Thinking about the systems change programme as a whole, would you be able to tell me a little bit about what you see as the aims and objectives of the programme?
- c. How was the systems change plan developed? Who (else) was involved in developing the plan? To what extent were these the 'right' people?
- d. How has the plan changed over the time that you have been involved?  
*Probe for reasons for any changes*
- e. What do you see as the most important elements of the system change plan? And the least?

## 13. Development of PIE

- a. Looking in a little more detail about one element of the programme – the objective to create psychologically informed environments, what do you see as the aims and objectives of this particular element of the systems change plan?
- b. Thinking specifically about this objective (i.e. to create psychologically informed services,) how did this come about?
- c. Who was involved in developing this particular part of the systems change plan? To what extent were they the 'right' people/organisations?
- d. To what extent, and in what ways does PIE relate to other elements of the plan?
- e. To what extent do you think that implementing psychologically informed environments is a valid aim of the systems change programme? Why do you say this?

## 14. Implementation of the wider programme

- a. How would you describe your organisation's role in the implementation of the system change plan? Has there been any change in this over time?
- b. How would you describe the approach to implementation of the wider system change plan? How do you see the necessary changes coming about?
- c. To what extent (if at all) have any unexpected /unforeseen things happened during the implementation of the systems change programme so far
- d. What do you think have been the main barriers to implementing the system change plan?
- e. And what have been the main enablers?
- f. Do you foresee any changes to your implementation of the plan?

## 15. Implementation of PIE

- a. How would you describe your organisation's role in the implementation of psychologically informed environments? Has this changed over time?

- b. How do you see the change to psychologically informed environments coming about?
- c. How do you envisage that achieving psychologically informed environments within individual organisations will lead to overall systemic change?
- d. Which organisations are (or will be) implementing psychologically informed environments? How was this determined? Why are these particular organisations involved?
- e. What kind of changes do you think these organisations will need to make in order to deliver psychologically informed environments?
- f. To what extent do you think that this represents a major change for the organisations involved? Why is this?
- g. Has anything unexpected happened during the implementation of this element of the system change programme?
- h. What do you see as the main barriers to achieving the change to psychologically informed environments?
- i. And what might be the main enablers of the change to PIE?
- j. Do you foresee any changes to the objectives or implementation of PIE?

## **16. Impact of the change**

- a. What do you think the impact has been of the systems change plan so far?
- b. What systemic changes do you expect to see as a result of implementing PIE over the next 6 months? In the longer term?
- c. How will you know when system change has been achieved? What will this look like?
- d. How will you know when the specific objective of PIE has been achieved? What will this look like?
- e. To what extent do you think you will be able to measure the extent to which these changes have occurred?
- f. How do you plan to ensure that the changes are sustained?

## **17. The future**

- a. Is there anything that you can foresee happening which might affect the implementation of the systems change plan in the future?
- b. Is there anything that you can foresee happening which might affect the implementation of PIE in the future?

## **18. Conclusion**

- a. Is there anything that we haven't covered that you would like to add?
- b. Do you have any questions for me about the research now that we have finished the interview?

***Thank the interviewee for their time/contribution; check willingness for follow up interview; hand them the debrief sheet.***



## Embedded case study interviews

### Embedded case study interviews: Time Point 1

The interview schedule is a semi structured interview schedule. It will be used flexibly to allow participants to discuss their views, perceptions, attitudes and experiences in an open way. The wording (e.g. tense) of the questions will be adapted to reflect the stage of implementation at the time of the interview. The amount of time spent on different questions will vary in response to the answers given by participant. There is potential overlap between questions within the sections so some questions will be omitted depending on answers given.

- Introduce self and purposes of research
- Review contents of information sheet with participant. Ensure interviewees have read and understood it.
  - Explain confidentiality, limitations of this, and how data will be used.
  - Remind participants of voluntary nature of their involvement.
  - Remind participants that they are free to terminate the interview at any point without giving a reason and they don't have to answer any questions that they do not want to.
  - Explain purpose of audio recording and confirm that they are happy to have the interview audio recorded.
- Answer any questions that the participant may have.
- Ensure participant and researcher have signed both copies of the consent form
- Seek verbal consent to begin the interview.

Text in italics within the guide denotes instructions to the researcher.

### 1. Background and introductions

*Purpose: contextual information; establishing rapport*

- a. What organisation do you work and what is your role in the organisation?
- b. How long have you been in your current role? And how long for this organisation? *Probe for professional background/orientation; length of time working within the field?*
- c. Can you tell me a little bit about the support your organisation provides? *Probe type of support and to whom/how it is delivered probe for extent to which adults with multiple and complex needs are core/mainstream clients for this agency*

## **2. Understanding of the wider context of the system/system change programme**

- a. To what extent do you think there a 'system' for people with multiple and complex needs? What does the system look like/consist of?
- b. Can you tell me what you think systems change might involve for people with multiple and complex needs?
- c. What, if anything, do you know about the [Name of Project] systems change programme? *Probe for understanding of the overall aims and objectives of the programme? If there is no involvement/knowledge of the programme move to section 3*
- d. To what extent do you feel you/your organisation have been involved in the [Name of Project] systems change programme? In what ways? *Probe for levels and type of strategic and/or operational involvement;*
- e. How long have you/your organisation been involved? Has this changed/developed over time? *Probe for perceptions of appropriateness of level of involvement*

## **3. Characteristics of PIE**

- a. What do you think PIE is?
- b. What specific elements of PIE are you implementing within your service?
- c. To what extent do you think these are the right areas of focus for your service? Why?
- d. To what extent, if at all, has your view of what PIE is changed since you began implementing it?

## **4. What is involved in the change to psychologically informed environments?**

- a. Can you tell me a little bit about how you work with beneficiaries / service users at the moment?
- b. Can you tell me a little bit about the kind of support you get in your work?
- c. Thinking back over any changes since you began to implement PIE, can you tell me a little bit about what has been involved? *Probe for differences e.g. in ways of working with beneficiaries, support etc*
- d. Have there been any other changes / initiatives / activities (besides PIE) going on at the same time as you have been implementing PIE? *Probe for any impact of these*
- e. What (or who ) do you think has been the main influence on the way you work with beneficiaries / service users? (How) has this changed since your organisation began to implement PIE?
- f. What training and support have you had in relation to PIE? How effective has this been?
- g. To what extent do you think that implementing PIE is a valid aim for your organisation? Why do you say this?

- h. To what extent do you think that implementing PIE represents a change for you and for your organisation? Why do you say this?
- i. How do you think PIE fits with other priorities in your organisation?

## **5. Making the decision to implement PIE**

- a. Why do you think your organisation decided to implement PIE?
- b. To what extent were you involved in making this decision? Who else was involved? How do you feel about this?
- c. To what extent do you think that any different viewpoints/perspectives of those affected by the implementation of PIE taken into account? What has been the impact of this?
- d. Do you think it was the right decision? Why do you say this?
- e. Typically, how are decisions like this made within your organisation? Does the decision to implement PIE feel any different? *Probe for reasons for any difference*

## **6. How is the change to delivering PIE being managed and implemented?**

- a. How did you learn about PIE in the first place?
- b. Before you started the process of implementing PIE, what did you think it was? What did you think would happen / what would be involved?
- c. To what extent has this panned out as you expected? Why
- d. Who or what do you see as being the impetus for this change to PIE? Is any one person (or organisation) leading or driving this?
- e. What kinds of things do you feel are encouraging you to make the change to deliver PIE?
- f. And what kinds of things are stopping/discouraging you from making the change to delivering PIE?
- g. Did you/the organisation have a vision for how the change to delivering PIE will be achieved? To what extent is this panning out as you expected?
- h. How do you personally feel about this change?
- i. To what extent do you think that other staff within your organisation are receptive to this change? Why?
- j. Has anything surprised you during the implementation of PIE so far?
- k. What kind of changes do you think you and your organisation still need to make in order to deliver PIE?

## **7. Relationships and interconnections**

- a. What are the main organisations which your beneficiaries/service users are involved with? Are there any relationships which are particularly strong or particularly weak? Why is this

- b. To what extent, if any, has implementation of PIE had an impact on your relationships with external organisations? And internally with other departments?
- c. Have these relationships had any impact on how you or your organisation is approaching/implementing PIE?
- d. To what extent do you think other individuals/organisations you work with affect/be affected by your implementation of PIE? In what ways?

**8. What is the organisational context in which the psychologically informed environment is being implemented?**

- a. To what extent do you feel your organisation has experienced/is experiencing a lot of change in the time that you have been working here?
- b. How would you describe the way that your organisation typically responds to change such as this? In what ways have previous change programmes felt similar to/different from this one?
- c. How would you describe the levels of trust between you and staff / managers within the service? Within the wider organisation?
- d. How would you describe the attitude of the service / organisation to innovation and trying new ideas?
- e. How much autonomy do you feel you have in your work? How do you feel about this?
- f. To what extent do you feel supported in reflecting and learning as part of your role?

**9. What is the impact of the change to delivering PIE?**

- a. Before you started implementing PIE, what did you expect the impact of implementing it to be? *Explore impact on the interviewee, on the organisation, colleagues, on beneficiaries and on other organisations*
- b. To what extent has this happened as you expected? Why is this?
- c. To what extent do you think you will be able to measure the extent to which your organisation is operating as a PIE? Why?
- d. What impact do you think achieving PIE will have on the overall system of support for adults with multiple and complex needs? Why do you say this?
- e. How do you plan to ensure that the changes are sustained?
- f. To what extent do you think the development of PIE fits within a wider system change programme? Why do you say this?

**10. The future**

- a. Where do you expect your organisation to be in respect of implementing PIE in 12 months time?
- b. When I return in 12 months, what do you think might have changed? *Probe for changes in the way they work with beneficiaries / service users, the way*

*the organisation operates, relationships within and outside the organisation?*

- c. Is there anything that you can foresee happening which might affect the implementation of PIE in your organisation? *Probe for internal and external events.* What makes you think this?

## **11. Conclusion**

- a. Is there anything that we haven't covered that you would like to add?
- b. Do you have any questions for me about the research now that we have finished the interview?

***Thank the interviewee for their time/contribution; check willingness for follow up interview; hand them the debrief sheet.***

## Embedded case study interviews: Time Point 2

The interview schedule is a semi structured interview schedule. It will be used flexibly to allow participants to discuss their views, perceptions, attitudes and experiences in an open way. The wording (e.g. tense) of the questions will be adapted to reflect the stage of implementation at the time of the interview. The amount of time spent on different questions will vary in response to the answers given by participant. There is potential overlap between questions within the sections so some questions will be omitted depending on answers given.

- Introduce self and purposes of research
- Review contents of information sheet with participant. Ensure interviewees have read and understood it.
  - Explain confidentiality, limitations of this, and how data will be used.
  - Remind participants of voluntary nature of their involvement.
  - Remind participants that they are free to terminate the interview at any point without giving a reason and they don't have to answer any questions that they do not want to.
  - Explain purpose of audio recording and confirm that they are happy to have the interview audio recorded.
- Answer any questions that the participant may have.
- Ensure participant and researcher have signed both copies of the consent form
- Seek verbal consent to begin the interview.

Text in italics within the guide denotes instructions to the researcher.

### 12. Background and introductions

- a. Has there been any change in your role since we last met? *Remind them of timescale of previous interview*
- b. Have there been any changes what your organisation does since we last met?

### 13. Understanding of the wider context of the system /system change programme

- a. What is your understanding of the [name of system change programme] currently? *Summarise previous interview reflections on the programme and ask them to reflect on any change*
- b. Would you say that your view of the system or systems change for adults with multiple and complex needs has changed since we last spoke? Why is this? What has prompted any change? *Prompt as needed*

## **14.Characteristics of PIE**

*Reflect summary of previous interview responses as appropriate*

- a. What do you think PIE is now? To what extent has your understanding/perception of what PIE is changed over the course of the last year?
- b. What specific elements of PIE are you implementing within your service? To what extent do you think these are different from a year ago?

## **15.Implementing PIE**

- a. What activities have you/ the organisation undertaken to progress PIE since we last spoke?
- b. What has worked well? What has not worked so well?
- c. What stage would you say you are at now on the journey to becoming PIE?
- d. To what extent is this where you expected to be at this point? What has impacted on that? What still needs to be done?
- e. What kinds of things do you feel are encouraging you to make the change to deliver PIE?
- f. And what kinds of things are stopping/discouraging you from making the change to delivering PIE?
- g. To what extent do you think that other staff within your organisation are receptive to this change? Why?
- h. To what extent has anything surprised you during the implementation of PIE?
- i. To what extent do you think there has been any change to what influences you in your work with beneficiaries since we last spoke?
- j. Has there been any change in the vision of PIE within the service/organisation since we last spoke?
- k. How do you feel about the services' decision to implement PIE now?

## **16.Relationships and interconnections**

- a. Have there been any changes over the last year to the organisations which your beneficiaries/service users are involved with? Or the relationships with these organisations?
- b. To what extent, if any, has implementation of PIE had an impact on your relationships with external organisations? And internally with other departments?
- c. Have these relationships had any impact on how you or your organisation is approaching/implementing PIE?
- d. To what extent do you think other individuals/organisations you work with affect/be affected by your implementation of PIE? In what ways?

**17. What is the organisational context in which the psychologically informed environment is being implemented?**

- a. Have there been other change initiatives happening over the course of the last year? To what extent have these had an impact on your implementation of PIE?
- b. To what extent has there been any major changes in the organisational culture or the way it operates over the course of the last year? To what extent has this had an impact on PIE?

**18. What is the impact of the change to delivering PIE?**

- a. To what extent do you think that PIE has been a major change for you? For your organisation? Has this changed since we last spoke?
- b. To what extent do you think becoming PIE has been the right decision?
- c. How important do you think becoming PIE is for you? For the service? For the organisation
- d. To what extent is PIE having the impact you expected? Why do you say this? *Probe for impact on staff, organisation, service user and wider system*
- e. Do you think it is possible to measure your progress to becoming PIE? How are you doing this? What are the advantages/disadvantages of measuring your progress in this way?
- f. How do you plan to ensure that the changes are sustained?
- g. To what extent do you think the development of PIE fits within a wider systems change programme? Why do you say this?

**19. Conclusion**

- a. Is there anything that we haven't covered that you would like to add?
- b. Do you have any questions for me about the research now that we have finished the interview?

***Thank the interviewee for their time/contribution; hand them the debrief sheet.***



## Observation proforma

**Introduce self and research. Ensure that all attendees have read and understood the information sheet, have had the opportunity to ask questions and are agreeable to the meeting being observed.**

**Notes will be taken during the meeting. The headings below are intended to be indicative of areas of interest to the research questions rather than exhaustive/prescriptive and notes will be taken freely throughout and not constrained by these headings.**

### **About the meeting**

- What is the purpose of the meeting?
- Which type of organisations are involved in the meeting?
- Which organisations have sent apologies to the meeting?
- Who is chairing the meeting?
- How long does the meeting last?
- Do any participants leave before the end of the meeting?

### **The discussion**

- What are the areas discussed?
- What is agreed/what actions are taken/proposed?
- To what extent are actions agreed upon followed up (based on discussion of actions from previous meeting)?

### **Roles and relationships**

*To be considered generally and with specific reference to PIE (where this forms part of the discussion).*

- What is the relationship of the meeting/group to other parts of the system (e.g. is it a subgroup; (how) does it link to other groups)
- What are the relationships between the different participants? Do some seem to be closer to each other than others? What is the impact of this on the group/the discussion?
- Are there any obvious tensions within the group? How are disagreements handled?
- Does information appear to be exchanged freely/shared between participants where needed?
- Does any participant/group of participants seem more or less powerful/influential?

- To what extent do participants consider impact of any proposals on organisations/individuals other than themselves?
- Does the decision making appear to be transparent; are there examples of things being agreed outside the meetings?
- Does any individual/group of individuals dominate the discussion?
- Does any one organisation/individual seem to be leading the change? What is the role of other individuals/organisations?
- How are actions allocated? E.g. assigned/volunteered?

### **Implementation and impact - general**

- What is the approach to 'managing' change? Are there explicit or implicit references to models of change e.g. to theories of change?
- What appears to be the understanding of system change amongst group members? To what extent is there disagreement? How is this handled?
- Are there any examples of formal/informal/underlying rules? What is the impact of these?
- How receptive are members of the group to actions/initiatives which require change in their organisations? Why/what reasons are given?
- Are there any examples of innovation/new ideas introduced at the meeting? Who by? How are these articulated and received?
- Is there any monitoring of system change plan? What form does this take? Who is involved?
- What impacts have there been?

### **Implementation and impact - PIE**

- What is the specific approach to managing the objective of PIE? Does this differ from other objectives?
- What appears to be the understanding of PIE amongst group members? To what extent is there disagreement? How is this handled?
- What has been achieved against this objective?
- Who is seen as leading the implementation of the objective? Which other organisations are involved?
- How receptive are members of the group to implementing the objective in their organisations? Why?
- To what extent do members seem supportive/opposed to the objective of PIE?
- What impacts have there been in relation to the objective of PIE?

### **Constraints and enablers - general**

- What kinds of things are emerging as constraining the implementation of the plan?
- What kinds of things are emerging as enabling the implementation of the plan?

### **Constraints and enablers - PIE**

- What kinds of things are emerging as constraining the implementation of PIE?
- What kinds of things are emerging as enabling the implementation of PIE?

**Hand out a copy of the debrief sheet to all group members.**

## Appendix 2: Information Sheets

### System change board information sheet



### **Understanding system change through complexity theory: a case study in delivering a programme for adults with multiple needs**

#### **Information Sheet**

I am a research student at Nottingham Trent University. As part of my studies I am undertaking some research with the help of [Name of Project]. The research is trying to understand more about the system which supports adults with multiple and complex needs. I hope that what I find out from the research will inform the ways in which [Name of Project] are implementing their systems change plan to improve the system of support for adults with multiple needs.

You have been given this information sheet because I would like to invite you to take part in an interview for this research. It is important for me to understand the perspective of a range of people from organisations which work with people with multiple and complex needs. Before you decide whether or not you would like to take part, it is important that you understand the reasons for the research and what will be involved.

I would be grateful if you would take the time to read the following information carefully. Please do not hesitate to contact me if you need more information or if any of the information is unclear.

Thank you very much for your help

Linda Meadows - PhD Research Student, Nottingham Trent University Doctoral School,  
50 Shakespeare Street, Nottingham NG1 4FQ.  
Email: [linda.meadows2017@my.ntu.ac.uk](mailto:linda.meadows2017@my.ntu.ac.uk)

My Director of Studies is Dr Graham Bowpitt. His contact details are:

School of Social Sciences, Nottingham Trent University, 50 Shakespeare Street  
Nottingham NG1 4FQ  
Tel: +44(0)115 8485610  
Email: [graham.bowpitt@ntu.ac.uk](mailto:graham.bowpitt@ntu.ac.uk)

### **What is involved in taking part in this research?**

I would like to carry out an interview with you. Each interview will last around 45 minutes to an hour. During the interviews I will ask you about how your organisation works with adults with multiple and complex needs, and any experience you may have had of the [Name of Project] systems change programme. If relevant to you, this will also include your views on one of their specific objectives – the implementation of Psychologically Informed Environments. I will ask to record the interview so that I can be sure I correctly capture everything you tell me. If you prefer to not be recorded, that is fine and I will take notes instead.

### **Do I have to say 'yes' to taking part?**

You have been invited to take part in an interview because you or your organisation is represented in the [Name of Project] systems change programme. It is completely up to you whether you decide to take part. You are completely free to say no if you would prefer not to participate. If you do decide to take part, you can choose not to answer any questions you don't want to, or stop the interview at any time. If you change your mind about your interview after you have taken part, you can ask to have it deleted from my records by contacting me within one month of the date of the interview (using the contact details on the front sheet).

### **How will you protect the information I share with you?**

I will treat your personal information as strictly confidential. Any references to personal information which could identify you will be stored on a password protected device or in a locked filing cabinet.

My research will be written up for my PhD thesis and is part of the external evaluation of [Name of Project]. I might also publish the results of my research in other publications. I might use direct quotes of things that you have said but I will not use your name or the name of your organisation. All data I collect will be anonymised and participants or their organisations will not be named in any report or publication that I produce. I will take every care to remove from any report references (e.g. to your job title, or the geographical location of the project) which might allow someone to identify you or your organisation but I may need to include contextual information (e.g. the type of service your organisation provides; the type of role you have – e.g. strategic, operational).

The research is supervised by Dr Graham Bowpitt, Dr Elaine Arnull and Dr Craig Lundy, who are all bound by the same ethical standards and restrictions as described in this information sheet.

### **How will you keep my information safe and secure?**

All electronic information and recordings will be kept on password protected equipment and the University's secure computers. Paper copies of consent forms will be kept in a locked cabinet. Your name or anything else that identifies you will not be kept with any notes or recordings. All information will be kept in accordance with relevant data protection legislation.



## **Understanding system change through complexity theory: a case study in delivering a programme for adults with multiple needs**

I am a research student at Nottingham Trent University. As part of my studies I am undertaking some research with the help of [Name of Project]. The research is trying to understand more about the [Name of Project] systems change programme and how change occurs both generally and via one of its specific change objectives - the creation of Psychologically Informed Environments. I hope that what I find out from the research will inform the ways in which [Name of Project] are implementing their systems change plan to improve the system of support for adults with multiple needs.

You have been given this information sheet because I would like to invite you to take part in an interview for this research. It is important for me to understand the perspective of a range of people from organisations directly involved in developing and implementing the systems change programme. Before you decide whether or not you would like to take part, it is important that you understand the reasons for the research and what will be involved.

I would be grateful if you would take the time to read the following information carefully. Please do not hesitate to contact me if you need more information or if any of the information is unclear.

Thank you very much for your help

Linda Meadows - PhD Research Student, Nottingham Trent University Doctoral School, 50 Shakespeare Street, Nottingham NG1 4FQ.

Email: [linda.meadows2017@my.ntu.ac.uk](mailto:linda.meadows2017@my.ntu.ac.uk)

My Director of Studies is Dr Graham Bowpitt. His contact details are:

School of Social Sciences, Nottingham Trent University, 50 Shakespeare Street  
Nottingham NG1 4FQ

Tel: +44(0)115 8485610

Email: [graham.bowpitt@ntu.ac.uk](mailto:graham.bowpitt@ntu.ac.uk)

### **What is involved in taking part in this research?**

I would like to carry out two interviews with you. Each interview will last around an hour. The interviews will take place approximately 12 months apart so that I can see what has changed between the two interviews. During the interviews I will ask you about your experiences of being involved in the [Name of Project] systems change programme. I will ask to record the interview so that I can be sure I correctly capture everything you tell me. If you prefer to not be recorded, that is fine and I will take notes instead.

### **Do I have to say 'yes' to taking part?**

You have been invited to take part in an interview because you work for [Name of Project] or one of its partner organisations. It is completely up to you whether you decide to take part. You are completely free to say no if you would prefer not to participate. If you do decide to take part, you can choose not to answer any questions you don't want to, or stop the interview at any time. If you change your mind about your interview after you have taken part, you can ask to have it deleted from my records by contacting me within one month of the date of the interview (using the contact details on the front sheet).

### **How will you protect the information I share with you?**

I will treat your personal information as strictly confidential. Any references to personal information which could identify you will be stored on a password protected device or in a locked filing cabinet.

My research will be written up for my PhD thesis and is part of the external evaluation of [Name of Project]. I might also publish the results of my research in other publications. I might use direct quotes of things that you have said but I will not use your name or the name of your organisation. All data I collect will be anonymised and participants or their organisations will not be named in any report or publication that I produce. I will take every care to remove from any report references (e.g. to your job title, or the geographical location of the project) which might allow someone to identify you or your organisation but I may need to include contextual information (e.g. the type of service your organisation provides; the type of role you have – e.g. strategic, operational).

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### **How will you keep my information safe and secure?**

All electronic information and recordings will be kept on password protected equipment and the University's secure computers. Paper copies of consent forms will be kept in a locked cabinet. Your name or anything else that identifies you will not be kept with any



notes or recordings. All information will be kept in accordance with relevant data protection legislation.

## Project team staff information sheet: time point 2

### **What is involved in taking part in this research?**

I undertook an interview with you last year to explore your experiences and perceptions of the system change programme. At the end of that interview I asked if you would be prepared to be invited to participate in a second interview and I am now inviting you to participate in the second of these interviews. The interview will last approximately an hour. During the interviews I will ask you about your experiences of being involved in the [Name of Project] systems change programme. I will ask to record the interview so that I can be sure I correctly capture everything you tell me. If you prefer to not be recorded, that is fine and I will take notes instead.

### **Do I have to say 'yes' to taking part?**

You have been invited to take part in an interview because you work for [Name of Project] or one of its partner organisations. It is completely up to you whether you decide to take part. You are completely free to say no if you would prefer not to participate. If you do decide to take part, you can choose not to answer any questions you don't want to, or stop the interview at any time. If you change your mind about your interview after you have taken part, you can ask to have it deleted from my records by contacting me within one month of the date of the interview (using the contact details on the front sheet).

### **How will you protect the information I share with you?**

I will treat your personal information as strictly confidential. Any references to personal information which could identify you will be stored on a password protected device or in a locked filing cabinet.

My research will be written up for my PhD thesis and is part of the external evaluation of [Name of Project]. I might also publish the results of my research in other publications. I might use direct quotes of things that you have said but I will not use your name or the name of your organisation. All data I collect will be anonymised and participants or their organisations will not be named in any report or publication that I produce. I will take every care to remove from any report references (e.g. to your job title, or the geographical location of the project) which might allow someone to identify you or your organisation but I may need to include contextual information (e.g. the type of service your organisation provides; the type of role you have – e.g. strategic, operational).

The research is supervised by Dr Graham Bowpitt, Dr Elaine Arnull and Dr Craig Lundy, who are all bound by the same ethical standards and restrictions as described in this information sheet.

### **How will you keep my information safe and secure?**

All electronic information and recordings will be kept on password protected equipment and the University's secure computers. Paper copies of consent forms will be kept in a

locked cabinet. Your name or anything else that identifies you will not be kept with any notes or recordings. All information will be kept in accordance with relevant data protection legislation.



## **Understanding system change through complexity theory: a case study in delivering a programme for adults with multiple needs**

I am a research student at Nottingham Trent University. As part of my studies I am undertaking some research with the help of [Name of Project]. The research is trying to understand more about one of [Name of Project]'s systems change objectives - the creation of Psychologically Informed Environments. The research aims to understand the process of implementing a Psychologically Informed Environment within your organisation and your experiences of this. I hope that what I find out from the research will inform the ways in which [Name of Project] are implementing this aspect of their systems change plan to improve the system of support for adults with multiple needs.

You have been given this information sheet because I would like to invite you to take part in an interview for this research. It is important for me to understand the perspective of a range of operational and strategic staff from organisations directly involved in implementing the changes described above. Before you decide whether or not you would like to take part, it is important that you understand the reasons for the research and what will be involved.

I would be grateful if you would take the time to read the following information carefully. Please do not hesitate to contact me if you need more information or if any of the information is unclear.

Thank you very much for your help

Linda Meadows - PhD Research Student, Nottingham Trent University Doctoral School, 50 Shakespeare Street, Nottingham NG1 4FQ.

Email: [linda.meadows2017@my.ntu.ac.uk](mailto:linda.meadows2017@my.ntu.ac.uk)

My Director of Studies is Dr Graham Bowpitt. His contact details are:

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Tel: +44(0)115 8485610

Email: [graham.bowpitt@ntu.ac.uk](mailto:graham.bowpitt@ntu.ac.uk)

### **What is involved in taking part in this research?**

I would like to carry out two interviews with you. Each interview will last around an hour. The interviews will take place approximately 12 months apart so that I can see what has changed between the two interviews. During the interviews I will ask you about your experiences of being involved in an organisation which is moving towards becoming a Psychologically Informed Environment. I will ask to record the interview so that I can be sure I correctly capture everything you tell me. If you prefer to not be recorded, that is fine and I will take notes instead.

### **Do I have to say 'yes' to taking part?**

You have been invited to take part in an interview because you work for [Name of Project] or one of its partner organisations. It is completely up to you whether you decide to take part. You are completely free to say no if you would prefer not to participate. If you do decide to take part, you can choose not to answer any questions you don't want to, or stop the interview at any time. If you change your mind about your interview after you have taken part, you can ask to have it deleted from my records by contacting me within one month of the date of the interview (using the contact details on the front sheet).

### **How will you protect the information I share with you?**

I will treat your personal information as strictly confidential. Any references to personal information which could identify you will be stored on a password protected device or in a locked filing cabinet.

My research will be written up for my PhD thesis and is part of the external evaluation of [Name of Project]. I might also publish the results of my research in other publications. I might use direct quotes of things that you have said but I will not use your name or the name of your organisation. All data I collect will be anonymised and participants or their organisations will not be named in any report or publication that I produce. I will take every care to remove from any report references (e.g. to your job title, or the geographical location of the project) which might allow someone to identify you or your organisation but I may need to include contextual information (e.g. the type of service your organisation provides; the type of role you have – e.g. strategic, operational).

The research is supervised by Dr Graham Bowpitt, Dr Elaine Arnall and Dr Craig Lundy, who are all bound by the same ethical standards and restrictions as described in this information sheet.

### **How will you keep my information safe and secure?**

All electronic information and recordings will be kept on password protected equipment and the University's secure computers. Paper copies of consent forms will be kept in a locked cabinet. Your name or anything else that identifies you will not be kept with any

notes or recordings. All information will be kept in accordance with relevant data protection legislation.

## Embedded case study staff information sheet: timepoint 2

### **What is involved in taking part in this research?**

I undertook an interview with you early in 2019 to explore your experiences of being involved in an organisation which is moving towards becoming a Psychologically Informed Environment (PIE). At the end of the interview I asked if you would be prepared to be invited to participate in a second interview some months later. I am now inviting you to participate in the second of these interviews. The interview will last approximately an hour. During the interview I will ask you some questions about what has happened since the last interview and will ask you a little bit more about your experiences and opinions about PIE and how your organisation is implementing it. I will ask to record the interview so that I can be sure I correctly capture everything you tell me. If you prefer to not be recorded, that is fine and I will take notes instead.

### **Do I have to say 'yes' to taking part?**

You have been invited to take part in an interview because you work for one of the partner organisations of [Name of Project] which is implementing PIE. It is completely up to you whether you decide to take part. You are completely free to say no if you would prefer not to participate in the interview. If you do decide to take part, you can choose not to answer any questions you don't want to, or stop the interview at any time. If you change your mind about your interview after you have taken part, you can ask to have it deleted from my records by contacting me within one month of the date of the interview (using the contact details on the front sheet).

### **How will you protect the information I share with you?**

I will treat your personal information as strictly confidential. Any references to personal information which could identify you will be stored on a password protected device or in a locked filing cabinet. My research will be written up for my PhD thesis and is part of the external evaluation of [Name of Project]. I might also publish the results of my research in other publications. I might use direct quotes of things that you have said but I will not use your name or the name of your organisation.

All data I collect will be anonymised and participants or their organisations will not be named in any report or publication that I produce. I will take every care to remove from any report references (e.g. to your job title, or the geographical location of the project) which might allow someone to identify you or your organisation but I may need to include contextual information (e.g. the type of service your organisation provides; the type of role you have – e.g. strategic, operational).

The research is supervised by Dr Graham Bowpitt, Dr Elaine Arnall and Dr Craig Lundy, who are all bound by the same ethical standards and restrictions as described in this information sheet.

### **How will you keep my information safe and secure?**

All electronic information and recordings will be kept on password protected equipment and the University's secure computers. Paper copies of consent forms will be kept in a locked cabinet. Your name or anything else that identifies you will not be kept with any notes or recordings. All information will be kept in accordance with relevant data protection legislation.



**Understanding system change through complexity theory: a case study in delivering a programme for adults with multiple needs**

I am a research student at Nottingham Trent University. As part of my studies I am undertaking some research with the help of [Name of Project]. The research is trying to understand more about the [Name of Project] system change programme both generally and via one of its specific change objectives - the creation of Psychologically Informed Environments. The research aims to examine the both the general approach to systems change and the specific approach to implementing psychologically informed environments.

To help me to do this research, I would like to observe a number of the Systems Change meetings which will be held during 2019/20. The purpose of this is to help me to understand more about how the organisations involved are developing and implementing the systems change programme. I hope that what I find out from the research will inform the ways in which [Name of Project] are implementing their system change plan to improve the system of support for adults with multiple needs.

You have been sent this information sheet because you attend the systems change meetings which I would like to observe. Before you decide whether or not you would be happy for me to do this, it is important that you understand the reasons for the research and what will be involved. I would be grateful if you would take the time to read the following information carefully. Please do not hesitate to contact me using the details below if you need more information or if any of the information is unclear. Thank you very much for your help

Linda Meadows (PhD Research Student), Nottingham Trent University Doctoral School, 50 Shakespeare Street, Nottingham NG1 4FQ.

Email: linda.meadows2017@my.ntu.ac.uk

My Director of Studies is Dr Graham Bowpitt. His contact details are:

School of Social Sciences, Nottingham Trent University, 50 Shakespeare Street, Nottingham NG1 4FQ

Tel: 0115 8485610

Email: graham.bowpitt@ntu.ac.uk

### **What is involved in taking part in the observation?**

I am seeking to understand how organisations involved in the systems change programme are approaching and delivering the programme generally as well as to understand how the change to Psychologically Informed Environments is happening. To help me to do this, I would like to observe a number of the systems change meetings as detailed above. I will attend the meeting but I will not participate in the discussion. I will not record any of the meeting but I will take notes on what is discussed at the meeting and the interactions between those who attend.

### **Do I have to say 'yes' to the observation?**

It is completely up to you and the other people attending the meeting whether to let me observe it. If you or anyone else attending would rather that I did not observe it, then I will not do so. If, during the meeting, you or anyone else attending would prefer me to leave for all or part of the meeting, I will do so immediately. There is no need to give a reason. If you would prefer me not to observe the meeting, you will need to let me know by contacting me directly using the contact details above. Alternatively, if you prefer, you can contact Graham Bowpitt by email [graham.bowpitt@ntu.ac.uk](mailto:graham.bowpitt@ntu.ac.uk). Again, there is no need to give a reason.

After the meeting has taken place it will not be possible to withdraw your consent, this is because I will not be able to separate your contribution from that of others in the meeting. Therefore, please make sure that you are happy to proceed. If you are not, or if you have any questions or concerns, please do not hesitate to contact me.

### **How will you protect the information I share with you?**

I will treat your personal information as strictly confidential. Any references to personal information which could identify you will be stored on a password protected device or in a locked filing cabinet.

My observations will be used to inform my thesis and I might also publish the results of my research in other publications. All data collected during the observation will be anonymised and participants or their organisations will not be named in any report or publication that I produce. I will take every care to remove from any report references (e.g. to your job title, or the geographical location of the project) which might allow someone to identify you or your organisation but I may need to include contextual information (e.g. the type of service your organisation provides; the type of role – e.g. strategic, operational).

The research is supervised by Dr Graham Bowpitt, Dr Elaine Arnull and Dr Craig Lundy, who are all bound by the same ethical standards and restrictions as described in this information sheet.

### **How will you keep my information safe and secure?**

Notes that I make during the meeting will be typed up and anonymised, after which handwritten notes will be confidentially destroyed. Anything which identifies individuals or organisations will be removed from the records I keep of the meeting. All electronic information will be kept on password protected equipment and the University's secure computers. Paper copies of consent forms will be kept in a locked cabinet. Your name/organisation name will not be kept with any notes.

## Appendix 3: Consent form

### Consent Form (Participant Copy)

**Understanding system change through complexity theory: a case study in delivering a programme for adults with multiple needs**

**If you have questions or need more information at any time, please contact Linda Meadows by email: [linda.meadows2017@my.ntu.ac.uk](mailto:linda.meadows2017@my.ntu.ac.uk) or post: Doctoral School, Nottingham Trent University, 50 Shakespeare Street, Nottingham NG1 4FQ**

*Please answer the following questions by ticking YES or NO*

	YES	NO
I have read and understand the Information Sheet for this research		
I have had the chance to ask questions about the research. I understand that I can ask more questions at any time.		
I understand that I can stop the interview at any time or choose not to answer particular questions without giving a reason.		
I understand that I can withdraw my data from the research within one month of the date I sign this form. I understand that I can do this by contacting Linda Meadows using the details above.		
I understand that my personal data will be treated as confidential and that data will be anonymised in any publications. I am aware of any limitations on this as outlined in the Information Sheet		
I agree that anonymous quotes can be used in the research.		
I agree to the interview being audio recorded		
I agree to take part in this research		
Participant Name	Participant Signature	Date
Researcher Name	Researcher Signature	Date

## Consent Form (Researcher Copy)

**Understanding system change through complexity theory: a case study in delivering a programme for adults with multiple needs**

**If you have questions or need more information at any time, please contact Linda Meadows by email: [linda.meadows2017@my.ntu.ac.uk](mailto:linda.meadows2017@my.ntu.ac.uk) or post: Doctoral School, Nottingham Trent University, 50 Shakespeare Street, Nottingham NG1 4FQ**

*Please answer the following questions by ticking YES or NO*

		YES	NO
I have read and understand the Information Sheet for this research			
I have had the chance to ask questions about the research. I understand that I can ask more questions at any time.			
I understand that I can stop the interview at any time or choose not to answer particular questions without giving a reason.			
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I understand that my personal data will be treated as confidential and that data will be anonymised in any publications. I am aware of any limitations on this as outlined in the Information Sheet			
I agree that anonymous quotes can be used in the research.			
I agree to the interview being audio recorded			
I agree to take part in this research			
Participant Name	Participant Signature	Date	
Researcher Name	Researcher Signature	Date	

## Appendix 4: Debrief sheets

### Interviews

#### **Understanding system change through complexity theory: a case study in delivering a programme for adults with multiple needs**

Thank you very much for taking part in this research project. Your contribution to the research is much appreciated.

Just to remind you that your personal data will be stored in accordance with the Data Protection Act (1998), General Data Protection Regulations (2018) and the ethical guidelines set out by Nottingham Trent University and the Social Research Association. If you would like more information about how your data will be stored and used, please contact me using the contact details below.

You can ask for data from your interview to be removed from the study within one month of the date you signed your consent form. To do this, please contact me using the details below. As indicated in the information sheet and consent form you were given prior to the research, data collected during meeting observations cannot be removed from the study.

If you have any concerns, comments or questions, please do not hesitate to contact me using the details below.

Linda Meadows

Email: [linda.meadows2017@my.ntu.ac.uk](mailto:linda.meadows2017@my.ntu.ac.uk)

Post: Doctoral School  
Nottingham Trent University,  
Chaucer Building,  
50 Shakespeare Street,  
Nottingham NG1 4FQ

If you have comments, concerns or complaints about how I conducted the research you can contact my Director of Studies, Dr Graham Bowpitt by email to: [graham.bowpitt@ntu.ac.uk](mailto:graham.bowpitt@ntu.ac.uk); by telephone on: 0115 848 5610 or by post to: the School of Social Work and Health, Nottingham Trent University, Chaucer Building, 50 Shakespeare Street, Nottingham NG1 4FQ.

## Observations

### **Understanding system change through complexity theory: a case study in delivering a programme for adults with multiple needs**

Thank you very much for taking part in this research project. Your contribution to the research is much appreciated.

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If you have any concerns, comments or questions, please do not hesitate to contact me using the details below.

Linda Meadows

Email: [linda.meadows2017@my.ntu.ac.uk](mailto:linda.meadows2017@my.ntu.ac.uk)

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