Recovery, Relationships, and Identity: a mixed methods process evaluation of the formation of a therapeutic community

Martin Anderson, MA (hons), PgDip, MSc, MPH.

Submitted in fulfilment of the requirements for the degree of Doctor of Philosophy at the University of Glasgow

MRC/CSO Social and Public Health Sciences Unit, University of Glasgow

2022

Abstract

Background: Scotland has the highest rate of drug-related deaths in Europe. Since 2008, the concept of 'recovery' has had an important role in Scottish drug policy. Central to this is the proposed development of community resources to help people overcome addictions. This project evaluated the early establishment of a new residential rehabilitation project called River Garden, opened in 2018, which used a training and social enterprise model to support people into abstinent recovery. The project was inspired by the San Patrignano recovery community and was an attempt to transfer the principles of that model to a new international setting.

Methods: This longitudinal mixed-methods process evaluation was based on data from residents, staff, and trustees of River Garden, gathered through participant observation, surveys, social network ('egonet') interviews, and theory-testing interviews. Twenty-seven interviews were conducted with seventeen people (nine residents, four staff, and four trustees). Analysis involved the development of programme theories, informed by principles of realist evaluation.

Findings: This intervention worked better for some individuals than others, despite exhaustive screening before entry. The work-based challenges of the social enterprise model were less effective for people requiring greater relational support, resulting in high levels of attrition and relapse. The key mechanisms were trust, respect, and motivation (as responses to instrumental and relational resources). The project was adapted in several ways to increase stability, such as restricted intake of new residents and reduced integration with external recovery communities. Differences of opinion about the necessity of adaptions led to significant attrition from the Board of Trustees.

Conclusion: The extent to which necessary adaptions to the San Patrignano model for a successful transfer to a new context could be foreseen was limited. After three years River Garden is best considered as a social integration model that can

support the next steps of recovery once an individual is sufficiently stable and motivated. It should not be considered as an intervention that could reduce drug-related deaths, because of its limited capacity to manage the highest levels of risk. Whether this limitation is specific to early community formation or fundamental to the model will be a key question as the programme expands.

Table of contents

List of Tables

List of Figures

Acknowledgements

I would like to express my sincere thanks to all the study participants from River Garden. This study would not have been possible without your willingness to welcome me into the community and share your experiences. Particular thanks to Mark Bitel and Mikael Heddelin for your help with the practical facilitation of the research. The research benefitted greatly from your support, particularly the very privileged level of access to the project.

I would like to thank my research supervisors, Professor Danny Wight, Dr Mark McCann, and Dr Lucy Pickering. I am grateful for the faith you showed in me and the ways that you continually supported and challenged me to improve as a researcher. I am also grateful to the members of my research advisory group – Mark Bitel, Mikael Heddelin, Joyce Nicholson, Emma Hamilton, Austin Smith, Dr Alison Devlin – for help and advice in steering the project.

Thank you to my funders, the Medical Research Council (MRC). The research studentship that funded this thesis has been a lifechanging opportunity. I would like to thank staff and students in the Social and Public Health Sciences Unit (SPHSU). Conducting the PhD in a research environment of this quality was vital to the design and execution of the project, which benefitted from proximity to cutting edge research, methodological expertise, and considerate feedback. Particular thanks to Professor Marion Henderson and Dr Kathryn Skivington for feedback provided as part of my first year progression review, which helped sharpen my approach to key issues.

I am grateful to my family for their support and encouragement – my mother, Gillian Anderson, and my siblings, Laura, Rosie, and Lucy Anderson. To Rebecca, who is also part of my family now, thank you for being with me throughout this.

This thesis is dedicated to my late father, Graham Anderson, to whom I owe everything.

Author's Declaration

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

Martin Anderson

1 Chapter One – Introduction

Problem alcohol and other drug (AOD) use is a high profile public health concern in Scotland. Scotland has an estimated 55,788-58,857 problem drug users, where problem use is defined as the routine and prolonged use of opioids and benzodiazepines; the estimate rises to 85,726-94,029 if the definition is expanded to include cocaine, amphetamines, and cannabis (ISD Scotland, 2020). In 2020, there were 1,339 drug-related deaths (DRDs), a rate of 318 per million population. This is 3.5 times the rate of the rest of the UK and the highest reported rate of any European country (National Records of Scotland, 2021b). In 93% of deaths, more than one drug was found to be present in the body, with most deaths involving opioids (89%), benzodiazepines (73%), gabapentinoids (37%) and cocaine (34%) (National Records of Scotland, 2021b).

The Scottish Crime and Justice Survey (SCJS) found the self-reported prevalence of drug use increased from 9.5% to 13.5% between 2017/18 and 2018/20, a measure that includes a wider range of substances including novel psychoactive substances (NPS), empathogens, and hallucinogens (Scottish Government, 2021d). While opioids are most commonly associated with general acute hospital stays, 51% of psychiatric inpatient stays involved 'multiple/other' drug use, indicating significant psychiatric harms are linked to psychoactive polydrug use (Public Health Scotland, 2021).

Alcohol is also the cause of significant mortality in Scotland, with 1,190 alcohol-specific deaths registered in 2020, a 17% increase on the previous year (National Records of Scotland, 2021a). Alcohol-specific deaths are not directly comparable to drug-related deaths, since alcohol-specific deaths include a variety of conditions that result from the intrinsic harms of long-term alcohol consumption, such as alcoholic liver disease (National Records of Scotland, 2021a). Drug-related deaths record drug poisoning deaths involving controlled substances (National Records of Scotland, 2021b). In other words, each drug-related death records a single preventable event.

There are also differences in the association between drug and alcohol deaths and socioeconomic deprivation. People in the most deprived areas 18 times more likely to have a drug related death than those in the least deprived areas (National Records of Scotland, 2021b). For alcohol-specific deaths, the death rate in the most deprived areas is 4.3 times the rate in the least deprived areas (National Records of Scotland, 2021a). The proposed policy solutions also differ, with a policy of Minimum Unit Pricing introduced to reduce population-level consumption alcohol (Richardson and Giles, 2021) and a national mission to reduce drug deaths by expanding residential rehabilitation provision and harm-reduction interventions such as medication assisted treatment (MAT).

1.1 Background: 'The new recovery movement and the strategy of residential rehabilitation'

From the 1980s (when heroin use became widespread in working class communities) until the mid-2000s, drug treatment in Scotland and the rest of the UK prioritised the reduction of drug-related harms, particularly HIV in the 1980s and drug-related crime in the 1990s. This was achieved by implementing community drug teams, injecting equipment provision (IEP), and the prescription of methadone as an opioid substitution treatment (OST) (Kalk *et al.*, 2018). While these measures were highly effective in limiting the spread of blood borne viruses (BBVs) and reducing crime, in the 2000s the treatment system began to be criticised for the very low proportion of treatment seekers who exited treatment drug free (Ashton, 2008). A major Scottish observational study, the Drug Outcome Research in Scotland (DORIS) study, found an 8% abstinent rate at 33-month post-treatment follow up (McKeganey *et al.*, 2006). New discourses of abstinence and recovery gained momentum and presented a direct challenge to the principles of harm reduction, proposing that freedom from dependence was a more desirable outcome than harm-reduction or crime-reduction (Duke, 2012). Fundamental components of the harm-reduction strategy such as retention in OST were not considered as being drug free (McKeganey, 2012).

A grassroots recovery advocacy movement gained significant purchase, viewing addiction as a consequence of systemic social and relational breakdown in families and communities, and proposing a reconnection of specialist treatment infrastructure to family and community resources (White, 2009). This 'new recovery' movement first developed in the United States and also gained prominence in the UK and Australia (Fomiatti, Moore and Fraser, 2018). An influential definition of recovery was developed around this time, defining sobriety, health, and citizenship as key components of recovery (Betty Ford Instutute Consensus Panel, 2007).

In Scotland, new recovery has been signified by the development of new recovery communities, recovery cafés, and public recovery events such as an annual recovery walk, with the goal of celebrating recovery, challenging stigma, and bringing together a variety of recovery stakeholders (Best and Lubman, 2012). The grassroots recovery movement was closely bound with a focus on recovery in government policy, and successive drug strategies since 2008 have emphasised the concept of recovery. The initial policy shift from harm reduction to recovery came in *The Road to Recovery* (2008) strategy, which called for integration of treatment with activities that allow individuals to move towards employment, community integration, and citizenship (Scottish Government, 2008). A decade later, *Rights, Respect and Recovery* (2018) continued to emphasise recovery, although it also brought some emphasis back to harm reduction in response to rising drug deaths (Scottish Government, 2018).

In 2021, the drugs policy was updated with a new national mission that aimed to stem continually increasing DRDs by reinvesting an additional £250 million in the treatment system over the next five years. The mission had key objectives of establishing safe consumption facilities, retaining more people in medication assisted treatment (MAT), and a substantial expansion of residential rehabilitation capacity to ensure that residential rehab is available to everyone who wants it, at the time they ask for it, as long as it is deemed clinically appropriate (Sturgeon, 2021).

The main impact of new recovery movement in Scotland was the implementation of Recovery Oriented Systems of Care (ROSC) intended to address broader factors that may contribute to recovery, such as education, training, housing, and an increased emphasis on peer-to-peer services, self-help, and support groups (Laudet and Humphreys, 2013). Residential rehab is the treatment modality most closely associated with the recovery movement, due to its intended outcomes of supporting abstinent recovery and assertive linkage of individuals into community-based recovery groups for aftercare support (Fomiatti, Moore and Fraser, 2018). A Scottish Government Working Group has identified three key characteristics of residential rehabs: 1) they aim to support individuals to attain an alcohol and drug-free lifestyle and be re-integrated into society, 2) they provide intensive psychosocial support and a structured programme of daily activities, 3) they may be suitable for individuals who have significant physical, mental health or social problems (Scottish Government, 2020).

As early as 2013, well prior to the more recent influx of residential rehab funding, a group of stakeholders had already seized on the momentum of the recovery movement to establish plans for a new residential rehabilitation project in Scotland. In a report to the Peter Gibson Memorial Fund, a vision was put forth of a residential rehabilitation model that used social enterprise activities to give people in recovery meaning and purpose, inspired by the San Patrignano community in Italy (Bitel, 2013). An idea central to this was that people often relapse due to a lack of meaningful activity to fill their time. Importantly, this model was proposed as an alternative to the existing treatment and rehabilitation infrastructure, critiquing the medical model for failing to prevent and even contributing to drug-related deaths (DRDs). Instead, it eschewed professional treatments or support workers and aimed to create a holistic approach to living a drug-free life, through communal living and enterprise activities.

A charity was founded, named Independence from Drugs and Alcohol Scotland (IFDAS), to transfer the San Patrignano model to Scotland. A 48-acre walled garden site was purchased in 2017 and the project, located on the banks of the River Ayr, was named River Garden (https://www.rivergarden.scot/).

Three key pieces of research have already been published by the Social and Public Health Sciences Unit (SPHSU), University of Glasgow about the transfer of the San Patrignano model to Scotland. Two of these were qualitative studies of San Patrignano stakeholders in Italy (Devlin and Wight, 2020) and IFDAS stakeholders in Scotland (Devlin and Wight, 2021). These investigated the key underlying mechanisms of the model and whether these mechanisms could be transferred or adapted for the Scottish context. The third study was the pilot for this thesis, a mixed-methods social network analysis of a peer worker project that shared some key stakeholders with River Garden (Anderson *et al.*, 2021).

1.2 Aims of the Study

This study is an evaluation of the formation of the River Garden community, with a particular focus on how the principles of the San Patrignano model were transferred and adapted, how transferability was affected by the context of the new setting, and how contextual factors influenced how the programme worked (its mechanisms). In particular, the aim was to observe the outcomes of *proactive* adaptions that were made by implementers and observe any further *reactive* adaptions made in response to outcomes, to develop an understanding of the critical contextual factors that caused further adaption. Understanding of these factors could then contribute to guidance for the transferability of this model to other settings and general principles about the transferability of complex interventions.

1.3 Research Questions

1) What contextual factors were critical for the transferability of the San Patrignano recovery model to a substantially different international setting?

The extent to which the vision of the model could be transferred to a new setting would depend on the characteristics of the new setting, such as the policy and

governance infrastructure, or the characteristics of the local target population. These could potentially be very different in Scotland and Italy. The main research question was to identify which of the many potential contextual differences had a critical influence on how (or whether) the programme worked. This was of particular interest because occasions when it did not work (unintended outcomes) would be the main cause of additional adaptions and would generally be influenced by wider contextual factors.

2) What aspects of the programme worked and who were they most likely to work for, under what circumstances, and why?

This can be considered an extension of the first research question. River Garden began as a project with many envisioned components and strategies. Stakeholders understood that the early stages of community formation would be a process of adaptive learning, depending on the response of the local target population. I was interested in what programme components worked in practice. For example, how individuals responded to the separation from their social network, the work-based programme, or integration with local recovery communities. If some residents responded better to specific components, could this be explained by some characteristic of the residents or other factors external to the programme? These questions were informed by the principles of realist evaluation (Pawson and Tilley, 1997).

3) What are the implications for national and international drug policy, specifically the policy of reducing drug-related harms by delivering interventions to support abstinent recovery?

The River Garden project proposed a radical alternative to established substance use treatment, some of which was informed by a critique of the established medical model of treatment. Indeed, its difference from existing treatment is one of its defining factors. Whether the project works, how well it works, and who it works for are all relevant for drug policy. Does this radical, ambitious approach work for the segment of the population who would be otherwise unlikely

to achieve abstinence, or be likely to die from drug poisoning? Does it work for people who have suffered from other acute harms, such as drug-related psychiatric illness? Can it reach individuals with the most severe and complex problems, or with the highest indicators of socioeconomic marginalisation? Does it sustain recovery in those who otherwise would have relapsed? In what was does River Garden embody the strengths and limitations of the wider recovery movement, and what recommendations can be made for drug treatment policy?

1.4 Terminology

Throughout the thesis I will refer to the concepts of addiction and recovery using a variety of terms. These are contested terms with debated definitions. For example, the term 'addiction' may imply agreement with its conceptualisation as a brain disease. This may be contested by those who believe that substance use is a natural human behaviour that becomes harmful due to prohibition. Where possible, I will refer to the phenomenon at hand as 'problem alcohol or other drug use', shortened to 'problem AOD use' or substituted as 'problem substance use'. I will avoid terms that heavily imply a medical aetiology, such as 'substance use disorder'. It is not possible to completely avoid terms such as 'addiction', because participants themselves sometimes described their experiences in this language. Furthermore, one of the surveys used for data collection uses the term 'addiction', the Addiction Beliefs Inventory (Luke *et al.*, 2002).

The term 'recovery' is also highly debated and means different things to different stakeholders (Berridge, 2012) but will be used frequently due to its centrality to this project and ubiquity in the field. The key is to unpack the meanings of these terms for participants. Several participants in this study had experienced criminalisation and incarceration, which I will refer to as 'justice system involvement'. To refer to participants who had a history of injecting drug use, I will use the phrase 'people who inject drugs', shorted to PWID.

River Garden itself is a tricky project to define. It mixes together different components and elements of other interventions to create something that is quite

unique in the UK. One description may be a 'residential recovery community', a term used in earlier River Garden research (Devlin and Wight, 2021) and used in contrast to a 'non-residential recovery community' (Anderson *et al.*, 2021: 477) where similar activities take place in a community setting. However, this phrase is not generally used in the wider literature. River Garden is essentially a specific model of 'residential rehabilitation'. It is identified as one of the 18 residential rehab facilities in Scotland in a Scottish Government survey of current rehab provision (Scottish Government, 2020). However, it may not quite meet the definition of providing intensive psychosocial support and structured daily activities (Scottish Government, 2020: 1) because the model deliberately eschews psychosocial treatment in favour of a radical work-based strategy.

It more closely meets the definition of a 'Therapeutic Community' (TC), a 'mutual self-help alternative to mainstream treatments' (De Leon, 2010: 104) that uses the relationships and activities of a purposefully designed environment to promote behaviour change (EMCDDA, 2014: 9). River Garden also fits a definition that has been applied to San Patrignano of 'recovery enterprise', which describes recovery-focused community projects that include supportive accommodation, peer support, recovery cafes, social activities, social enterprises and employment schemes (Webster, 2017).

For the purposes of this thesis, I will generally refer to River Garden as a therapeutic community (TC), noting that this also falls within the broader category of residential rehab. These are the most widely used definitions and have a large body of evidence that can inform the evaluation of River Garden.

Given the stakeholder aim to create a radical community rather than a treatment service, I deliberated over whether to refer to River Garden as a 'programme/intervention' or 'community'. I have alternated between these terms depending on context. I did not discard the concept of it being a programme since the evaluation methodology involved developing 'programme theories' that are used to make sense of 'complex interventions', a descriptor for programmes

that interact with the wider environment in unpredictable ways (Wight *et al.*, 2015).

Throughout the thesis I refer to the terms 'social networks' and 'ego networks', since the methodology employed a social network analysis (SNA) approach as part of a mixed methods strategy. 'Social networks' refer to the patterns of connections and interactions between a plurality of social actors. 'Ego networks' (or 'egonets') refer to the network that forms around a particular actor. In this study, that is the network that forms around each individual study participant (Crossley *et al.*, 2015).

1.5 Thesis Chapter Plan

The next chapter, Chapter Two, presents a review of the relevant literature. The goal of the literature review is to develop a theoretical and empirical context for the River Garden research project. The key topics critically evaluated are 1) medical and social models of addiction and recovery, including a critique of the social models most relevant for this research, 2) a critical theoretical discussion of the new recovery movement, citing the arguments of its proponents and critics, 3) the role of social network composition and structure in addiction and recovery, including the evidence for social network interventions, 4) a summary of the evidence base for TCs specifically and residential rehab more generally, the theoretical mechanisms of TCs, and how River Garden fits into the existing provision landscape, 5) a summary of the key ideas about the transferability of interventions to new settings, and their relevance for River Garden.

Chapter Three presents the methodological approaches that were used to answer the research questions. The chapter outlines the overarching evaluation framework and the rationale for the variety of mixed-methods that were used within this framework. Details are provided of the research design, sampling, recruitment, quantitative and qualitative measures, data analysis, and the integration and synthesis of diverse methods into a cohesive framework. This

chapter also offers some reflections on the methodology and the overall validity, reliability, and quality of the data gathered.

Chapters Four to Six present the study findings. Chapter Four provides a descriptive history of the first three years of River Garden, from early 2018 to late 2021. The aim of this chapter is to describe all the key events that occurred over this term, telling the story of River Garden in a chronological manner. This involved condensing observational fieldnotes into a readable narrative, including a limited analytic commentary that reflects the real-time development of my analytic thinking.

Chapter Five presents the results relating mainly to the baseline characteristics and social network transitions experienced by River Garden residents. These include the results of surveys completed by participants, which measured their addiction beliefs (e.g., did they believe addiction was a disease or a social condition) and the reasons that residents had decided to enter a residential rehab. Chapter Five also includes analysis of participant egonet data, measuring the structure and composition of their social networks at different stages of residence (and pre- and post-residence).

Chapter Six is a more analytical exploration of the individual and community perspectives, which come from interviews with residents, staff, and trustees, and fieldnotes recorded during and after observational site visits. In this chapter, findings are organised within a realist evaluation framework, drawing out the critical contextual factors that influenced programme mechanisms, identifying, unpacking, and illustrating the most important mechanisms that led to differential resident outcomes.

In Chapter Seven, these findings are discussed in relation to the literature and the original research questions, particularly those relating to transferability and adaption, the literature on social models of addiction and recovery, and to contribute to a critical understanding of identity models of recovery. Implications of findings for the current policy environment are also discussed.

Chapter Eight concludes the thesis by summarising the main conclusions and relating these back to the original study aims, directly answering the original research questions. The strengths and weakness of the research are summarised, and the thesis concludes with recommendations for policy and future research.

2 Chapter Two – Literature Review

2.1 Aims of the Literature Review

The aim of the literature review is to critically examine the wider context that gave rise to the new recovery movement, the River Garden project, and the specific research questions of this study. The literature on addiction and recovery is substantial, so this is a selective review of the theory and evidence that is most relevant for the study aims: social models of addiction and recovery, the role of social networks in substance use, the new recovery movement, and the evidence for therapeutic communities and other forms of residential rehab, and key issues for the transferability of interventions.

2.2 Literature Review Search Strategies

The literature reviewed in this study was searched for using a variety of keywords in the Glasgow University library, Google Scholar, PubMed, Science Direct, Web of Science, and JSTOR. I also referred to a large personal collection of articles gathered through previous taught courses in alcohol and drug studies, which helped identify the key thematic areas to conduct further searches for more up to date literature. For example, I was aware of the literature on addiction recovery as a process of identity transition (McIntosh and McKeganey, 2001) but a search for 'addiction recovery and social networks' identified "*'Is it me or should my friends take the credit': The role of social networks and social identity in recovery from addiction*" (Bathish *et al.*, 2017). This led to a further search on 'social identity and addiction recovery', identifying literature on the Social Identity Model of Recovery (Best, Beckwith, *et al.*, 2016), which became an important theoretical perspective for the study (I became interested in the identity transitions associated with social network transitions).

Similarly, searches were conducted for other topics relevant to this project, including various combinations of the following key words: recovery, identity,

social networks, network interventions, recovery capital, medical and social models, recovery movement, recovery capital, recovery cafés, therapeutic communities, residential rehabilitation, social enterprise. Literature suggestions from supervisors and advisory group members also helped identify key papers, most notably a suggestion to read an unpublished thesis with the title "*Hope, Choice and the Improvable Self: A critical analysis of 'new recovery' in Australia*" (Fomiatti, 2017). I have cited several articles published from this thesis, which offer a counterpoint to the theoretical basis for the new recovery movement (Fomiatti, Moore and Fraser, 2017). Another important article suggested by an advisory group member was '*Rediscovering Fire: Small Interventions, Large Effects*' (Miller, 2000).

These techniques do not constitute a formal systematic review of the literature, as this would have required a more predefined search strategy, rigorous inclusion and exclusion criteria, making it clearly replicable by other researchers (Dewey and Drahota, 2016). The actual approach was much more adaptive, including more informal recommendations, elements of reference list searching (searching for the citations in existing articles), and drawing on a collection of literature collected over a number of years. However, the variety of broad and targeted strategies, including searches of relevant keywords in a number of academic databases, made for a sufficiently thorough review of the literature most relevant for an evaluation of River Garden.

2.3 Models of addiction and recovery

The literature review will begin with a survey of the main ways that addiction and recovery are conceptualised, the medical and social models. River Garden takes a particularly social approach to recovery by focusing on aspects felt to be overlooked by statutory treatment systems, such as community, relationships, housing, and employment (Devlin and Wight, 2021). Indeed, the original report that proposed River Garden critiques the medical model for failing to help people move on from substitute prescriptions, commenting that the prevalence of methadone (a form of OST) in nearly half of Scottish DRDs meant that 'the

medicine prescribed to help people contribute[d] to their deaths' (Bitel, 2013). River Garden can therefore be located within wider debates about whether addiction is a medical or social phenomenon and the different solutions proposed from these perspectives.

2.3.1 Integrating the medical and social

The medical model defines addiction as a chronic relapsing brain disease that results from the effects of the drugs on the brain, characterised by compulsive drug-seeking that continues even after experiencing negative health and social consequences (Leshner, 1997). The effects of the drugs on the 'mesolimbic reward system' are identified as 'a common element in what keeps drug users taking drugs' (Leshner, 1997: 46). The chronically-relapsing disorder is composed of three stages: binge/intoxication, withdrawal/negative affect, and preoccupation/anticipation. Brain imaging studies can identify discrete circuits that mediate each of these stages, suggesting that vulnerability to addiction is rooted in molecular, genetic, and neuropharmacological neuroadaptations (Koob and Volkow, 2010). Consequently, treatment must aim to reverse or compensate for those brain changes through either medications or behavioural treatments (Leshner, 1997).

The medical approach has two key benefits. Firstly, it has informed the development of highly effective pharmacological treatments. Common forms of OST, methadone and buprenorphine, are considered by the World Health Organisation (WHO) as essential medications due to the robust evidence that they reduce drug use, crime, and drug-related mortality (WHO, 2020). Second, viewing addiction as a brain disease can reduce stigma by considering the afflicted individual as somebody with a chronic condition and deserving of treatment, rather than morally weak or a bad person (Leshner, 1997). The concept of addiction-as-disease can play a functional role by providing a narrative that allows the individual to simultaneously own and disown acts committed during addiction, forming the basis for self-help groups where these narratives are learned and shared, such as the 12-step movement (Reinarman, 2005).

On the other hand, addiction-as-disease can also be used to justify harmful prohibition and a war against drugs (including incarceration of drug users) to protect them from drugs 'for their own good' (Reinarman, 2005: 317). Disease models that characterise people as out of control and not responsible for their behaviour can increase stigma and contribute to societal desire for punitive controls (Szalavitz, 2017).

Where medical models locate the problem in the interaction between substance and individual, social models focus on relational matters such as family, community, culture, and identity (Adams, 2016). Addiction can be viewed as a particularly intense connection to alcohol or other drugs (AOD) at the expense of other relationships and identities. Therefore, recovery requires the strengthening of other relationships (Adams, 2016: 88). Individualised treatments such as medication and therapy are critiqued for failing to address the wider social context, and alternatives such as peer support networks are proposed (Adams, 2016).

There are a variety of social models of addiction, all of which focus on different aspects of social context. For example, Alexander (2000) proposes that the global spread of addiction as a social problem is caused by the spread of the free-market society, which dislocates people from traditional sources of psychological, social, and spiritual support. This dislocation leads to people developing substitute lifestyles to achieve some form of psychosocial integration, and it is attachment to these lifestyles that is described as 'addiction' (Alexander, 2000: 503).

Often the social is linked back to biological processes. For example, one of the most influential social models locates the roots of addiction in childhood trauma (relational interactions with caregivers), asserting that childhood adversity causes changes to neural functioning that increase susceptibility to addiction later in life, due to an altered stress-response mechanism and greater need to self-soothe with drugs (Maté, 2012).

Many of the problems caused by drugs result from economic inequality and the policy of criminalising drug use. Certainly, there is a strong association between addiction (and harms such as DRDs) and poverty. Increases in drug-related mortality have predominantly occurred in the most economically deprived areas of Scotland (Parkinson *et al.*, 2018). Drug-related deaths are twenty-three times higher in the most deprived areas than the least deprived areas (McPhee, Sheridan and O'Rawe, 2018). Many of the harms are caused by the requirement for drug users to source drugs through an illegal unregulated market, leading to the consumption of drugs with inconsistent quality and strength (along with inflated expense). Critics of prohibition point out that humans have used a variety of mind-altering substances for many thousands of years and it is possible to do so much more safely with a regulated, decriminalised safe supply (Levine, 2002).

Although this means that a substantial amount of drug-related harm has *social* determinants (poverty, policy) it also means that one of the most efficient ways to minimise these harms is through a system of *medical* treatment, by providing a safe supply of drugs (and safe methods of consumption) to individuals who are most harmed by these social systems and least able to stop using drugs despite these socially-constructed harms (Stevens, 2019). In essence, the medical model can be used for its ability to generate social as well as medical benefits. Apart from the main outcome of reduced mortality, many of the important outcomes of substitute prescribing are fundamentally social, such as the ability to desist from acquisitive crime, or freedom from reliance on illicit drug markets (McKeganey *et al.*, 2006).

I would propose that the medical and social can be bridged not just by recognising the social influences on brain function, but by recognising the social effects of using medical systems to bypass socially-constructed harms. In the socioecological model of health, interventions such as medical prescribing of opioids can be considered *upstream* interventions to modify the structural causes of harm. Upstream measures tend to require less individual effort from individual recipients and consequently have the greatest population-level impact. In comparison, interventions at the *downstream* level (individual/relational) that require

voluntary uptake are more likely to exacerbate health inequalities (Wight *et al.*, 2015).

2.3.2 Recovery capital

The previous paragraph should not dissuade an exploration of the key social models of addiction and recovery. Especially so, since River Garden offers a model of training and enterprise which seems to offer some solutions to the deeper structural factors associated with addiction, particularly if it is successfully in lifting people out of poverty by providing routes to employment through social enterprise.

At the heart of the new recovery movement is a strategy of reconnecting specialist treatment to the wider community resources that can sustain recovery. Viewing problem AOD use as a consequence of systemic social and relational breakdown in families and communities, the proposed solution is to build personal, family, and community 'recovery capital' (White, 2009). Central to this is the creation of new recovery community organisations (RCOs), cultural institutions that can provide enduring recovery-supportive relationships and collectively advocate for greater societal changes to 'benefit those seeking or in recovery' (White, 2009: 155).

The theoretical justification for the new recovery movement can be found in the influential theory of recovery capital, commonly defined as the internal and external resources that be drawn upon to initiate and sustain recovery from problem AOD use (Laudet and White, 2008). Factors identified as constitutive of recovery capital include social capital (family and community), physical capital (housing and employment), human capital (health and wellbeing), and cultural capital (identity and values) (Cloud and Granfield, 2008). In other words, an individual may be less likely to recover if they are socially isolated, unemployed, in poor health, and have developed adaptive behaviour patterns to cope with these oppressive conditions that undermine their ability to function effectively in conventional society and overcome their substance misuse (Cloud and Granfield,

2008: 1974-5). The concept of gratitude has been proposed as a positive attitudinal trait that contributes to recovery capital (Chen, 2017).

The theory of recovery capital was formed through a series of qualitative studies. Two of these recruited participants who had stopped their substance use without treatment or self-help groups, were from middle-class backgrounds, had mostly completed high school, and many of whom had higher education degrees. A third study recruited participants who were undergoing treatment in a public treatment facility and participating in 12-step meetings, all of whom were African American, from inner city neighbourhoods, had no healthcare insurance, and many of whom had not completed high school and had poor employment prospects (Cloud and Granfield, 2008: 1973). Recovery capital was conceptualised to explain the differences in capacity and prospects that people may have for overcoming substance misuse related problems (Cloud and Granfield, 2008: 1973). The ability for middle-class addicts to initiate and sustain 'natural' (untreated) recovery was they could draw on important resources, including education and stable home environments (Granfield and Cloud, 1996).

Recovery capital is therefore a reformulation of the idea that the outcomes of addiction are patterned by social class, which is true of most health outcomes (Whitehead and Dahlgren, 1991). In fact, within the socioecological model, each of the four elements of recovery capital (social, physical, human, and cultural) can be categorised into different levels of the model. Physical capital represents social class (structural inequality) which flows through and its replicated at the downstream community, relational, and individual levels (social, human, and cultural capital). This raises a theoretical question, why a fundamentally structural conceptualisation of the problem is so closely associated with relational solutions, such as peer support communities. This has been addressed by Best et al (2016) who noted the importance of (and limited access to) factors such as housing and employment meant that the UK recovery movement had struggled to translate early recovery into stable recovery, proposing a social enterprise model that included recovery housing, meaningful activity, social support, and work/education (Best, Beswick, *et al.*, 2016).

Following the socioecological model, the capacity of recovery-focused interventions to modify the deeper structural factors will be key to their capacity to reduce structural inequality (Wight *et al.*, 2015). That said, structural economic inequality sets people on divergent life courses from an early age and certain outcomes (e.g., the effects of trauma) may not be reversible by providing housing and employment, particularly when access to these resources is contingent on desire or ability to sustain abstinence.

Several validated survey instruments have been developed for measuring recovery capital, such as the *Assessment of Recovery Capital* (ARC) scales (Groshkova, Best and White, 2013) which measures a number of domains constitutive of overall recovery capital, such as health, social support, meaningful activity, and housing. The ARC scale is suggested as a measure of the effectiveness of rehabilitation provision and aftercare, as it measuring the growth of positive strengths and providing a positive focus for peer and therapeutic interventions that focus on meaningful gains rather than simply reducing drug harms (Groshkova, Best and White, 2013). The idea is that the measure of recovery capital can be operationalised, used to assess the amount and intensity of support required to help people into recovery, identify disparities in capital, and inform the creation of appropriate supports that will build capital (Hennessy, 2017: 358).

However, the association between recovery capital and outcomes does not necessarily mean that a strategy of increasing recovery capital will be effective. It could equally simply indicate that individuals with more baseline recovery capital are the most likely to recover, since the markers of recovery capital being measured are less accessible to people who are highly vulnerable and marginalised (Fomiatti, Moore and Fraser, 2018: 6). These issues are of particular relevance for River Garden, which aims to help its residents build recovery capital through the provision of housing, work, and social support (Devlin and Wight, 2021).

2.3.3 Recovery and identity

The other main theoretical justification for the new recovery movement is the Social Identity Model of Recovery (SIMOR), which conceptualises recovery as a process of identity transition that is related to changes in social connections, such as friendship networks and group memberships (Best, Beckwith, *et al.*, 2016). This is a more recent development in a longer history of conceptualising recovery as a process of identity change (not necessarily explicitly linked to social networks) which starts with the concept of 'natural recovery' (Waldorf and Biernacki, 1979). Waldorf (1983) interviewed individuals who had recovered from opiate addiction without treatment, finding that once people were sufficiently motivated to quit, they would 'leave the scene, break all ties with opiate users and create new interests, new social networks, new social identities' (Waldorf, 1983: 237).

Biernacki (1986) built on the concept of natural recovery by exploring the identity processes involved and identifying pathways through which individuals transitioned from an addict to a non-addict identity. Essentially, motivation to stop using substances was theorised to stem from conflict between the addict identity and competing identities (e.g., as a parent) leading to efforts to transform the addict identity by three processes: identity reversion (restoring a previous identity), identity extension (extending part of their current identity), and identity emergence (developing a new identity) (Biernacki, 1986).

The centrality of identity transition was expanded with an exploration of the narrative processes involved in identity construction. McIntosh and McKeganey (2000) identified 'narratives of recovery' as a mechanism by which addicts may be able to construct a non-addict identity. This would involve 1) reinterpreting their drug using lifestyle in a negative light, as a form of distancing oneself from it, 2) reconstructing a sense of self by differentiating between their actions and who they really are 'at heart' (Mcintosh and Mckeganey, 2000: 1505), and 3) providing explanations for recovery, the ability to cite a powerful explanation (e.g., birth of a child) giving their reason more credibility and increasing its acceptance by others. The authors make an important shift from understanding

natural recovery to considering the implications for addiction *treatment*, suggesting that these issues of identity and narrative construction could be addressed by staff in drug treatment services (Mcintosh and Mckeganey, 2000: 1509).

In a subsequent article, they identified that the two important factors for a successful recovery attempt were 1) motivation to stop based on a desire to repair a spoiled identity, 2) a sense that a new future is achievable (McIntosh and McKeganey, 2001). The proposed solution was to increase people's capacity to secure paid employment, through the development of assisted employment schemes, because 'paid employment is likely to be of particular importance in the process of social rehabilitation' (McIntosh and McKeganey, 2001: 58). This linked the process of identity transition to the solution of employment, an important strategy in River Garden.

The conceptualisation of identity thus far has mainly involved the cognitive and narrative mechanisms involved in identity transition. Generally, these are rooted in the symbolic interactionist tradition of sociology, with a focus on culturally transmitted meaning (Weinberg, 2002). While this approach provides valuable insights into social processes, it offers limited explanation for the propensity of former heroin users to relapse when their rational thoughts are overwhelmed by powerful drug cravings. Viewing identity as a *cognitive* process cannot explain the cycles of abstinence and relapse resulting from powerful visceral cravings, which can override stated desires to abstain' (Weinberg, 2002: 11). Cravings are felt in the body as much as the mind. As an alternative to this 'disembodied cognitivist rationalism' Weinberg (2002: 14) proposes that the culturally transmitted meanings inherent in drug use and craving are 'pre-reflective, non-symbolic, and embodied rather than interpretive, symbolic and disembodied' (Weinberg, 2002: 14).

In practice, this means that addiction is not a conflict between addict and non-addict identities, but when a 'practical reliance on a drug for coping in one area of their lives negatively impacts upon that or other areas' (Weinberg, 2002: 15).

This awareness does not lead to cessation because the urge to use drugs is not a cognitive decision but a compulsion informed by the more immediate practical demands (Weinberg, 2002: 15), such as a need to ease the physical pain of withdrawal or emotional shame.

Shifting from cognitive/narrative to an embodied processes of identity transition can inform a deeper exploration of the embodied aspects of recovery. Nettleton et al (2011) conducted a qualitative study of individuals in recovery from heroin addiction, distinguishing between the different forms of habituated action for using bodies and recovering bodies. Essentially, using bodies are engaged in routine and repetitive modes of action centred around procuring and using drugs, only becoming aware of their bodies when experiencing the pain of withdrawal. The cause of the problem (lack of drugs) and the solution (to procure drugs) are relatively clear in comparison to the more 'complex, long-term and fragmented' routines that must be learned in recovery (Nettleton, Neale and Pickering, 2011: 347). In recovery, multiple forms of body discomfort must be managed, including problematic sleeping patterns, boredom, emotions, dental pain, cravings, eating and drinking, hygiene, and dress. Any attempt to acquire new bodily practices and habits is closely related to identity, since these embodied habits, gestures, interactions, and actions must be acquired within new social contexts (Nettleton, Neale and Pickering, 2011: 353).

Furthermore, individuals who have acquired a stock of embodied resources prior to their drug problems may be able to draw upon more or less embodied capital depending on their previous life experiences (Nettleton, Neale and Pickering, 2011: 353). This brings us back to the core issue of social class, because habitual action is shaped by peoples background and the chances they have had in life, and some people may have less embodied capital than others they can draw upon to alter their modes of habitual action (Nettleton, Neale and Pickering, 2011: 354).

These points are of particular relevance to River Garden, whose strategy of using structured routines to build embodied capital could potentially benefit those with a greater stock of pre-existing resources. It is also of interest how the social

context influences the acquisition of embodied habits, such as the culture around healthy lifestyles, how residents help each other to manage pain, boredom, or difficulty sleeping, or how challenging emotions are dealt with as a group. In essence, the forms of culture that develop around embodied practice.

2.3.4 Social identity models of recovery

The most recent development in recovery identity theory is closely associated with the new recovery movement. The social identity model of recovery (SIMOR, Best, Beckwith, *et al.*, 2016) proposes that the identity transition in recovery is 'best understood as a personal journey of socially negotiated identity transition that occurs through changes in social networks and related meaningful activities' (Best, Beckwith, *et al.*, 2016: 111). The *mechanism* of recovery is theorised to be a social identity change that occurs when individuals transition from a social group whose norms and values revolve around substance use, to a new group where the norms and values encourage recovery, until the individual embodies the norms, values, beliefs and language of recovery-oriented groups (Best, Beckwith, *et al.*, 2016: 113). In this model, relapse in early recovery occurs when there has not yet been a fundamental shift in group membership, values, and goals, and this shift is best sustained by actively participating in recovery group activities (Best, Beckwith, *et al.*, 2016: 116).

A key claim is made that the process involves social influence, a 'transmission' of recovery oriented norms and values from the group to the individual (Best, Beckwith, *et al.*, 2016: 120). The evidence for these processes is retrospectively drawn from studies of Alcoholics Anonymous (AA, a 12-step mutual aid organisation). Two key claims are made, 1) that the association between AA participation and abstinence is evidence of its efficacy, and 2) the mechanism underpinning its efficacy is that it offers a 'positive recovery-based social identity' (Best, Beckwith, *et al.*, 2016: 118). This raises the question of how the causal mechanisms of social influence can be inferred from evidence of an association.

Conceptually, the idea of recovery as a *social* identity change takes us full circle to early theories on natural recovery (Waldorf, 1983). The SIMOR adjusts this somewhat by associating it more explicitly with recovery-oriented groups (as opposed to a wider range of natural recovery options) and suggesting a mechanistic role of social influence (rather than intrinsic motivation leading people to seek out new lifestyles).

The SIMOR model is closely associated with residential TC models of treatment, with much of the evidence for an association between social identity and recovery coming from TC studies. For example, Beckwith *et al.*, (2015) measured identity transition in a TC setting at baseline and two weeks into treatment, finding that reduced identification with AOD-using groups was associated with improved treatment retention. Dingle, Cruwys and Frings, (2015) conducted qualitative interviews with individuals residing in a TC and identified two distinct identity pathways involved in recovery. People whose addiction had involved a loss of valued identities during addiction aimed to renew these pre-addiction identities, whereas those who had gained a social identity through addiction (e.g., a group of AOD-using peers) 'aimed to build aspirational new identities involving study, work, or family roles' (Dingle, Cruwys and Frings, 2015).

By locating the solution to addiction firmly in relational factors (and relational influence) the SIMOR encourages 'breaking ties' (Dingle *et al.*, 2015: 236) with substance using social groups, due to the findings from another prospective TC study showing that that transition from a 'user' identity to a 'recovery' identity was associated with reduced substance use and improved well-being (Dingle *et al.*, 2015). The importance of breaking ties was also found in my pilot study (Anderson *et al.*, 2021) although with the additional finding that breaking ties often led to social isolation, ambivalence over the loss of valued ties, and poor quality of life until new networks were built up.

The SIMOR theory has been supported by some large survey-based studies of people in recovery, such as Bathish *et al.*, (2017) indicating that the transition from addiction to recovery was characterised by a shift from relative social

isolation to social connectedness and changes in social network composition that led to the emergence of a recovery identity. The findings also showed that 'wellbeing in recovery was better when people engaged with a diverse range of social groups rather than just with other people in recovery' (Bathish *et al.*, 2017: 42). Consequently, authors emphasise the importance of supporting individuals to develop more diverse social connections, beyond those solely associated with recovery (Bathish *et al.*, 2017: 45). They also suggest an increased focus amongst recovery researchers on the long-term mapping of group membership and network composition, a methodology piloted for (and used in) this study (Anderson *et al.*, 2021).

River Garden was designed to integrate residents with external recovery-focused groups and a wider range of non-recovery social networks, such as those related to hobbies, activities, training, and work. It was of interest to map out these connections and assess the extent that residents integrated with social groups not specifically recovery-focused, particularly as pilot study found that participants, who were all in long-term recovery, had networks largely composed of other recovery peers (Anderson *et al.*, 2021).

2.3.5 Critique

In this final section about models of addiction and recovery, I will present some critiques of the new recovery movement. On the surface, one may wonder how it is possible to critique a movement that is based around fundamentally positive efforts to help people recover from harmful use of substances, empowering families and communities through the development of new community resources (White, 2009). In fact, most critical interpretations welcome the development of grassroots recovery movements but critique how the concept of recovery is used in drug policy.

Critiques tend to focus on factors such as how recovery is defined and measured, the theoretical validity of its key supporting theories (some of which I have addressed), the efficacy and adverse effects of recovery-focused treatment, and

the implications of a community-based approach for the funding and delivery of specialist treatment. Running through the critiques is a central point regarding whether the problem and its solutions are located in structural or relational matters.

Starting with definitions, it has been argued that the new recovery movement lacks conceptual clarity. In particular, Berridge (2012) noted that the term 'recovery' has a history that can be traced from the 19th Century temperance movement through to the 20th Century medical model, always closely associated with efforts to 'cure' people from addiction through abstinence-focused rehabilitation. The resurgence of recovery in the UK after a twenty year harm reduction consensus may then indicate a resurgence of historical abstinence movements, in conflict with the principles of harm reduction, rather than a complementary development. How it differs from past recovery movements would depend on the 'political and professional interests who negotiate to establish its meaning in policy and in practice' (Berridge, 2012: 23).

Best *et al.*, (2017) identify four key areas where the recovery movement has brought benefits to the treatment delivery systems in the UK: 1) increased emphasis on aftercare, housing, employment, and wider issues of quality of life, 2) increased attention on families and environments that are supportive of positive change, 3) the transition to a strengths-based model that affords greater hope that long-term change is possible, 4) increased attention on the wellbeing of workers in the addictions field. However, they do accept that there is the risk that these positive developments may also be accompanied by some less desirable trends, such as an emphasis on a self-help, reduced government funding, and cutbacks in specialist treatment services (Best *et al.*, 2017: 109). Furthermore, they also acknowledge the concern that recovery is part of a larger moral crusade around temperance (Best *et al.*, 2017: 109). Authors conclude that the former is the more valid concern, but fears over the dominance of the 12-step model are regarded as 'scaremongering' (Best *et al.*, 2017: 109) and a disservice to advocates of alternative recovery pathways, such as TCs, natural recovery, SMART recovery, medication-assisted and specialist treatment pathways.

That said, the recovery movement in Scotland has led to a particularly strong policy focus on abstinence-based residential rehabilitation, with Scottish Government Good Practice Principles including that 'service users should be facilitated as a matter of course to link with mutual aid organisations such as Narcotics Anonymous, Cocaine Anonymous, Alcoholics Anonymous and SMART Recovery groups' (Scottish Government, 2021a: 10). This does seem to indicate an alignment of treatment policy with the 12-step movement.

As to the risk of cuts to specialist treatment, Roy and Buchanan (2016) argue that adoption of recovery by governments as a central policy objective has led to it being used in this manner. They claim that recovery informed *policy* is paradoxical to the original aims of activists to develop local cultures of recovery, shifting from a grassroots challenge to the system to being led by government. Where activists may envisage rehabilitation, social integration, and citizenship, 'in a prolonged period of austerity, the government's notion of recovery can easily appear focused upon cost cutting, abstinence and responsibilisation' (Roy and Buchanan, 2016). This could influence how treatment services are funded, as funding decisions may overlook the structural and systemic context of problematic drug use and instead prioritize a responsibilisation of drug users, and emphasise immediate abstinence as the desired outcome of treatment (Roy and Buchanan, 2016: 409).

Indeed, McPhee and Sheridan's (2020) critical analysis of Scottish drug and alcohol service funding found a £73.8 million reduction in annual funding for services between 2007/8 and 2016-17, from £114 million to £53 million annually. The 'welcome development of recovery communities' was said to occur alongside a 'de-professionalisation' of addiction services, due to funding cuts, centralisation, and decommissioning (McPhee and Sheridan, 2020: 318). The system then relies more on unpaid volunteers in recovery cafes and recovery communities, who may be unable to match the expertise and experience lost when funding cuts closed independent community-based services (McPhee and Sheridan, 2020: 318). Therefore, it should be acknowledged that funding cuts (justified by a shift to recovery) are responsible for increasing the risk factors contributing to DRD in Scotland (McPhee and Sheridan, 2020: 320).

Certainly, DRDs have risen greatly since the concept of recovery was made central to government policy with the *Road to Recovery* (Scottish Government, 2008). However, advocates of recovery may suggest this is due to the failures of the harm reduction system (McKeganey, 2012) or because improper implementation of recovery policy meaning not enough radical change had taken place (Best, Alwis and Burdett, 2017).

Monaghan and Yeomans (2016) see the policy emphasis on recovery as part of a broader neoliberal effort to manage the behaviour and lifestyles of an apparently problematic underclass subgroup, arguing that the decline of harm reduction and the elevation of abstinence as the goal of treatment was accompanied by the development abstinence conditions within the welfare and criminal justice systems (Monaghan and Yeomans, 2016). Duke (2012) also associates recovery with neoliberal endeavours to reduce treatment funding and argues that 'advantaged, middle class communities with high levels of social capital' will benefit more from approaches around community empowerment than 'deprived communities that do not have access to such forms of capital' (Duke, 2012: 13).

There have also been concerns that recovery-oriented treatment can prompt heroin users prematurely into detox and abstinence programmes. Neale, Nettleton and Pickering's (2013) qualitative study of individuals recruited from community and residential treatment settings in England found that recovery-oriented treatment led to a desire amongst treatment seekers to detoxify quickly, sometimes reducing dosage faster than prescribers recommended. Individuals who detoxified very quickly were the most prone to cross-addiction and relapse. Authors suggest that this resulted from people in treatment internalising the recovery agenda, and accepting contemporary critiques of methadone, to the extent that they rejected medical advice in order to pursue, as quickly as possible, what they believed would make them 'normal' (Neale, Nettleton and Pickering, 2013: 168).

The focus of the new recovery movement on the importance of transforming relationships and identities is critiqued by Fomiatti, Moore and Fraser (2017) as locating the problem (and its solutions) within the influence of social

relationships, rather than the deeper structural and material conditions that make drug use problematic, such as 'poverty, homelessness, trauma, inequality, stigmatisation and gendered violence' (Fomiatti, Moore and Fraser, 2017). The social identity model of recovery is critiqued on three levels: 1) that it considers that addiction is caused by disordered individual behaviour (compulsive, chaotic, diseased etc.) but simultaneously in control of these disorders (which is necessary for recovery to be possible), 2) a primary emphasis on the surveillance and management of social relationships, which can increase stigma towards drug using networks and obscure the social and political forces that can impede creation of new social connections, 3) its treatment solutions (e.g., residential rehab) enact a particular model of social context, a disciplined, controlled, and *separated* social context where residents are provided with structured challenges that do not replicate the more complex and unpredictable challenges of social life found outside residential treatment settings (Fomiatti, Moore and Fraser, 2017: 180). Relapse immediately after leaving treatment is common, because the threats to recovery are more complex, diffuse and rarely manageable through recourse to the skills acquired in treatment (Fomiatti, Moore and Fraser, 2017: 181).

In Scotland specifically, research has also shown that recovery-oriented practice may fail to meet the needs of individuals who have been affected by trauma and require support with a wider range of holistic issues including mental health, social inclusion, housing, employment, and child-protection concerns (Tweed, Miller, Matheson, 2018). Furthermore, there were concerns that both women and men may be vulnerable to exploitation, coercive or abusive relationships, or stalking, within recovery settings, due to the fact that recovery processes often involve discussing personal experiences and information' (Tweed, Miller, Matheson, 2018: 46).

2.4 Social Networks

In the previous section, I presented a number of critiques to the idea that addiction is best treated through interventions that address relational and identity factors to get people into abstinent recovery. One of the key critiques was that

intervening at the relational level can overlook important structural factors that underpin relationships. However, there is a large body of research on the importance of social network factors on health outcomes, including addiction and recovery. A social networks approach can also consider the relationship between the macro-level structural conditions and the mezzo-level social network structures, meaning that the structural considerations are not absent from the analysis (Berkman *et al.*, 2000). River Garden and other forms of residential rehab use a strategy of altering the social network to influence behaviour change, separating the individual from their past network, and placing them into a new one. There is substantial literature on 'network interventions' (Valente, 2012) of this nature that can also provide some background for the River Garden project.

A key principle of social network analysis is that individual behaviour and attitudes are informed largely by the *structure* and *function* of their social network, because this structure shapes 'the flow of resources which determine access to opportunities and constraints on behaviour' (Due *et al.*, 1999: 845). Theoretically, two individuals could have identical individual characteristics, but one may be more likely to recover from addiction if they had a more diverse set of social relations that afforded greater opportunity to socialise outside of their drug using peer group. The defining feature of social network analysis is this introduction of the connections between people ('ties') as a unit of analysis (Valente, Gallaher and Mouttapa, 2004).

In network studies of substance use (including tobacco smoking and alcohol use) it has been found that individuals with similar substance use habits group into network clusters. The key question is whether this involves social influence or social selection (Valente, Gallaher and Mouttapa, 2004). The relative importance of influence and selection are particularly relevant for the recovery-focused interventions that draw on community resources, because much of theory assumes that exposure to recovery groups can spread recovery, by mechanisms of social influence (e.g., Best, Beckwith, *et al.*, 2016). If the clustering of abstinent individuals into recovery communities was better explained by self-selection into these groups by people looking for peers with similar attributes, then there is less

evidence of that exposure to these groups would be able to act as a causal mechanism of behaviour change. Network research suggests there may be a role for both influence and selection (Valente, Gallaher and Mouttapa, 2004).

2.4.1 Network structure and composition

Due *et al.*, (1999) provide a useful conceptual framework to think about social networks in terms of structure and function. By structure, they refer to factors such as the number and type of social relations an individual has, the diversity of characteristics amongst network members, and the proportion of network members who have connections to each other. By function, they refer to the content of the relationships, such as the forms of support network members can offer, whether the relationship is characterised by relational strain, or offers a form of social integration. More commonly in the networks literature, these two aspects of social networks are referred to as network structure and composition (e.g., Wagner *et al.*, 2013; Panebianco *et al.*, 2016).

To provide a very simple example of network structure, there is evidence from one study that people who sustained abstinence after leaving residential treatment had larger networks that those who relapsed back into drug use (Panebianco *et al.*, 2016). Network size is perhaps the most basic measure of structure. A similarly easy to understand example of composition is that people who relapsed after residential treatment were more likely to have social networks containing active drug users than those who remained abstinent (Hawkins and Fraser, 1987).

Studies of network composition generally measure the proportion of network members who use substances (or are supportive of substance use) and the proportion who are abstinent (or supportive of abstinence). Numerous studies have shown that substance use is associated with having close ties with other people who use substances. For example, Meisel *et al.*, (2015) found robust associations in the frequencies of gambling, smoking, drinking, and cannabis use amongst university undergraduate students. Network members with ‘moderate-

to-high' co-occurring addictive behaviours tended to cluster together into distinct groups (Meisel *et al.*, 2015: 72). Furthermore, the non-medical use of prescription drugs in the same sample could be predicted by the number of close friends in their network who also used prescription drugs for non-medical purposes (Meisel and Goodie, 2015).

In a study that captured social network data from individuals during and after treatment in a residential therapeutic community, Hawkins and Fraser (1987) found that people who relapsed after treatment had networks that contained 'greater social influence toward drug use' and more 'regular users of drugs' than those who remained abstinent (Hawkins and Fraser, 1987: 343). In the pilot study for this River Garden project, participants often described how difficult it was to sustain abstinence (even when highly motivated) while they had active substance users in their networks (Anderson *et al.*, 2021).

The majority of the studies that are cited in support of abstinence-based recovery communities focus on network composition, specifically the association between participation in abstinence-focused groups and sustained abstinence or improved quality of life. For example, Best *et al.*, (2015) conducted a quantitative study of individuals who self-described as being in recovery and individuals who were in alcohol and drug treatment. Those in recovery had networks composed of more people in recovery (partly due to participation in formal recovery support groups) and fewer people who actively used substances. It is suggested that 'supportive social networks and recovery group participation are two key mechanisms through which recovery capital and quality of life gains can be made' (Best *et al.*, 2015: 280).

Best *et al.*, (2012) earlier conducted a mixed-methods study of one group of individuals in recovery from alcohol and another group in recovery from heroin use, finding that better quality of life was associated with having a greater number of network members in abstinent recovery. Additionally, quality of life was associated with more engagement in meaningful activities, such as training, work, child-care, and volunteering. These associations are presented as support for

'models promoting the development of peer networks immersed in local communities' (Best *et al.*, 2012: 334). Studies of alcoholics anonymous (AA) have also found that involvement in AA groups is associated with abstinence from alcohol, compared to getting support from non-AA based-support (Kaskutas *et al.*, 2002).

Furthermore, the role of network composition may be more important for users of illegal drugs than alcohol users. Best *et al.* (2010) examined the substance using career trajectories of problem alcohol users, heroin users, and people who used both. Findings indicated that the alcohol users were the most likely to rely on partner support, whereas heroin users were more likely to report peer support and emphasise the need to move away from substance using friends. This may indicate that social network transition is more important for people who have been enmeshed in social networks where illegal drugs were used.

There is a body of evidence showing an association between network composition and substance use (or abstinence). The key question from a networks perspective is whether this association is indicative of social influence or selection. There are several studies indicating that mechanisms of social influence are at least potentially involved. Christakis and Fowler (2008) studied data from a densely connected social network of over 12,000 people assessed repeatedly from 1971 to 2003, as part of the Framingham Heart Study. Statistical modelling demonstrated that tobacco smoking cessation by spouses, siblings, and co-workers significantly decreased an individual's chance of smoking. Authors concluded that smoking behaviour spreads through close and distant social ties, leading groups of interconnected people to all jointly stop smoking (Christakis and Fowler, 2008: 2249). Of course, tobacco smoking may not be directly comparable to the use of alcohol and other mind altering drugs. Tobacco smoking was also decreasing in the overall population being studied, whereas problem drug use in Scotland is stable (ISD Scotland, 2020) and overall drug use is increasing (Scottish Government, 2021d). However, there is substantial observational and experimental evidence from several longitudinal datasets, providing robust evidence that social contagion can influence a wide range of health and social

issues, including obesity, smoking, alcohol use, other drug use, health screening, depression (Christakis and Fowler, 2013). Not all health behaviours spread via social influence, but many do, and behaviour can spread via different mechanisms. For example, by the imitation of specific behaviours, or by the adoption of a social norm that leads to overall change in related behaviours. These processes could explain the efficacy of peer-led recovery communities in helping people sustain abstinence (Best, Beckwith, *et al.*, 2016), by purposefully transforming their social network composition to contain people with behaviours and norms that influence continued cessation. The presence of these social contagion processes underpins the utility of social network interventions (Valente, 2012) and supports the value of using social network analysis methods to explore the ways that social influence may promote behaviour change in River Garden.

For alcohol, Stout *et al.* (2012) evaluated the causal role of network influence using data from project MATCH, a study where problem drinkers were randomly assigned to treatments and followed up at three-month intervals. An increase in the number of 'pro-drinkers' in the network was found to predict worse drinking outcomes six months and thirty months later, specifically a low percentage of days abstinent and a higher number of drinks per drinking day. The conclusion was that network composition is a 'plausibly causal predictor of alcohol outcome' (Stout *et al.*, 2012: 489).

Reifman, Watson and Mccourt (2006) used a three-wave longitudinal panel design to test for social influence and selection in the social networks of heavy drinking college students. They found evidence for both social influence (a greater presence of 'drinking buddies' in the network predicted individual drinking levels) and social selection (changes in network level drinking were mainly a result of network members with different drinking levels leaving or joining the networks).

Social network structures are also important for understanding problem substance use and/or recovery. An individual's network size is closely associated with a range of health outcomes. The absence of social relationships (i.e., social isolation) has been recognised as a significant risk factor for broad-based

morbidity and mortality, and can impair executive functioning, sleep, and physical and mental wellbeing (Cacioppo and Cacioppo, 2014). Data from one large epidemiological study in the USA indicated that problem drug use (referred to as 'drug use disorder') onset and persistence were associated with smaller personal social networks (Mowbray and Scott, 2015). However, individuals who recovered from problems drug use ('remission') had social networks similar to individuals who had never had a drug problem. Therefore, it seems that by decreasing drug use, personal social networks may be increased. It is unclear whether a small network was cause or a consequence of problem drug use.

In one study by Best, Manning and Strang (2007) heroin users were asked to retrospectively recall their peer networks at the time of their initiation into heroin use. The general trend was that initiation into heroin use fragmented their social networks into separate groups of those who continued to use and those who did not. For those who continued to use, there was a more gradual loosening of social bonds outside of family and close friends. As heroin using careers progressed, users became even more socially isolated and likely to use alone or with a partner. These trajectories indicate that the social isolation was caused by heroin use, rather than the heroin use being caused by isolation.

Network structure can also be understood in terms of the patterns and strength of connections between network members. An individual whose social world consists of a single highly interconnected group operates in a different social context to somebody whose network consists of multiple loosely connected groups. Similarly, someone whose network consists mainly of close ties (e.g., family, close friends) will have different opportunities to somebody whose network contains lots of weak ties (e.g., professional acquaintances). The different types of network structure are conceptually linked to specific forms of social capital. Granovetter (1983) makes the case that weak ties (to people outside of one's immediate social circle) indicate social integration and 'individuals with few weak ties will be deprived of information … and be confined to the provincial news and views of their close friends' (Granovetter, 1983: 202).

However, close ties do have more motivation to provide support and are easier to access.

The concept of close and weak ties is conceptually related to Burt's (2000) analysis of the different types of social capital that differently structured networks can provide. In a network that contains separate disconnected groups (the gaps between these groups referred to as 'structural holes') social capital results from occupying a key position between these groups. In a network where everybody is connected, social capital is created by the strong within group connections (referred to as 'network closure'). Networks with lots of interconnected close ties provide 'bonding capital', characterised by trust, co-operation, mutual support, effective sanctions on behaviour, and robust behavioural norms within the group. Networks with more weak and loosely connected ties afford individuals with 'bridging capital', characterised by more freedom of access to a greater variety of information and resources, with fewer of the behavioural constraints that would be found in a more tight-knit group (Putnam, 2000). It seems feasible that both forms of capital could be useful at different stages of addiction and recovery.

Since behaviour and identity are most influenced by close ties, the effectiveness of recovery peer groups would seem to depend on these groups being characterised by close social bonds. In the non-residential recovery community pilot study, participant recovery networks did consist largely of close ties to peers in recovery who were also closely connected to each other (Anderson *et al.*, 2021). I theorised that the behavioural constraints and social support offered by bonding capital may be particularly useful for people in recovery to prevent relapse.

Despite the large body of research on network composition and substance use, there have been far fewer studies on the structural aspects of recovery networks. In one, Hawkins and Fraser's (1987) social network analysis of the pre-treatment and post-treatment networks of entrants to residential treatment centres found that people who relapsed after treatment had networks that were more densely connected than those who remained abstinent. In a more recent study,

Panebianco *et al*. (2016) studied the personal support networks of former clients of a large therapeutic community, comparing the networks of people who remained drug-free to those who relapsed. Again, findings showed that people who remained abstinent had networks that were less dense and less constrained than those who relapsed, noting that 'drug free respondents tended to have more brokerage [bridging] social capital than relapsed respondents' (Panebianco *et al.*, 2016: 150).

2.4.2 Network interventions

Network interventions are purposeful efforts to use social networks to generate social influence, accelerate behaviour change, and achieve desirable outcomes among individuals, communities, and populations (Valente, 2012). By this definition, River Garden is a network intervention. Network interventions can range from identifying key individuals in influential network positions to diffuse information throughout the network, to deliberately altering the network by adding or removing network members. River Garden uses a substantial network alteration, by removing people from their past network and placing them into a new (and geographically separate) environment.

There is evidence that network alteration interventions can be effective. For example, Litt *et al*. (2007) randomly assigned alcohol-dependent participants to a 'network support' treatment condition or a control group. In the network support condition, they were given support to change their social network and encouraged to attend alcoholics anonymous. Drinking outcomes in the treatment groups were better than in the control group, indicating that social networks can be changed by a treatment specifically designed to do so and can contribute to improved drinking outcomes. A systematic review by Hunter *et al*. (2017) of network interventions for health behaviour change found strong evidence demonstrating a significant intervention effect for alteration approaches, which may contribute to an understanding of 'non-communicable conditions as being socially transmitted' (Hunter *et al.*, 2017: 47).

2.5 Therapeutic Communities

River Garden can be categorised as a Therapeutic Community (TC) model of residential rehabilitation. The TC approach is a community-based strategy to help rehabilitate people from addiction by using the relationships and activities of a purposefully designed social environment. The community itself should help facilitate social and psychological change in the individual. The environment, peers, and staff act as guides in the recovery process (De Leon, 1995).

The TC approach is founded on a quite specific view of what addiction is, in terms of the roots of the problem and its solutions. It is regarded as a 'disorder of the whole person' (De Leon, 1995: 1606) involving: cognitive, behavioural, and mood disturbances; unrealistic or disorganised thinking; confused, non-existent, or antisocial values; deficits in verbal, reading, writing, and marketable skills; and moral shortcomings, poor impulse control, and problems with emotional regulation. In theory, the community should integrate people under a 'common perspective and purpose' (De Leon, 1995: 1611) and help them to learn responsibility, personal growth, self-reliance, accountability (and so on) leading to a drug-free lifestyle.

In light of the literature reviewed prior to this point, some questions may be asked about this model. Addiction is framed much as a set of individual flaws, which does not fit well with the idea that (e.g.,) drug harms are caused by structural factors such as deprivation and criminalisation (Fomiatti, Moore and Fraser, 2018). In fact, many of the shortcomings listed by De Leon (1995) could also be consequences of a deeper structural inequality rather than the causes of addiction, per se.

Bloor, McKeganey and Fonkert (1988) argue that the wide range of different styles of therapeutic communities all share (and are defined by) a common process. That is, the TC is a source for *transformative redefinitions* whereby all of the mundane events and activities in the community are open to redefinition as therapeutic or counter-therapeutic. For example, simple acts like cleaning the

toilets or mending a sink are invested with new meaning and held up as relevant to the individual's recovery. Depending on the redefinition, close bonds between subgroups of residents could be defined as either mutually supportive (therapeutic) or a splitting of the community into exclusive cliques (counter-therapeutic).

Bloor, McKeganey and Fonkert's (1988) work contains some useful conceptual definitions that can help make sense of the River Garden project. One is their definition of two main forms of TC: 'reality confronting' and 'instrumental' communities. In reality confronting communities, behaviour change is achieved through staff and peers repeatedly reflecting their view of a residents conduct back to them (for example, in group therapy). In instrumental communities, behaviour change is achieved through the design of the social environment and providing didactic instructions on how to navigate the environment until new patterns of behaviour are mastered (simply by repeatedly performing tasks in that environment). Most TCs will contain a combination of both approaches, but may be weighted towards one or the other.

River Garden was quite unique in the sense that it was explicitly defined by the absence of any kind of group work, in favour of a holistic and vocational approach to recovery (Bitel, 2013). It is important to consider the implications of the absence of a component that is so central to the TC model, other models of residential rehabilitation, and non-residential models such as 12-step groups. Groupwork for addictions treatment traditionally involves using psychotherapeutic models to provide support, help people develop insight, and support them in personal development, in a group setting, which allows interaction, informality, and builds group cohesion (White-Campbell, Luketic and MacDonald, 2014). Groupwork is the central strategy that allows for the delivery of any kind of shared programme of recovery, the disciplines and practices that constitute a given model of recovery, such as the spiritual practices undertaken in the groups settings of alcoholics anonymous (Dossett, 2017). Because following the programme of recovery is a collective effort, this can overcome individual limitations. Although River Garden retained an emphasis on peer support, it

replaces a programme of groupwork with a programme of vocational work, which may have implications for how the peer support mechanisms are utilised. Furthermore, residents would individually have the freedom to attend external recovery groups that do use groupwork processes, however this would be individual choice (Devlin and Wight, 2021). Therefore, groupwork may not necessarily contribute to community cohesion amongst River Garden residents.

Another useful concept is that of resident resistance to the TC programme, which can include attempt to conceal themselves from staff to limit surveillance of their activities, non-cooperation in structured activities, physical escape from the setting, and 'collective ideological dissent' whereby there develops an 'articulated counter culture opposed in principle and practice to the staff project' (Bloor, McKeganey and Fonkert, 1988: 145).

That these types of issue are known to exist in TC models suggests there are some serious issues to be navigated by programmes that use the 'community as method' approach (De Leon, 1995). One qualitative study of peer relationships in residential treatment, by Neale, Tompkins and Strang (2017) found that that supportive peer bonding was less common than interpersonal differences, negative behaviours, including isolation, loneliness, bullying, tension, and conflict (Neale, Tompkins and Strang, 2017: 1).

2.5.1 The TC evidence base

Theoretical points aside, perhaps the most useful assessment of recovery-focused treatment (the rehab/TC model specifically) can be found by appraising the evidence base for these approaches. Furthermore, this can be compared to the evidence for harm-reduction interventions. This comparison is apt because of recovery approaches have been proposed as alternative or supplementary to the harm reduction.

There are a variety of styles of residential rehab, of which the TC model is just one (others include 12-step and cognitive-behavioural models). The European

Monitoring Centre for Drugs and Drug Addiction (EMCDDA) report that the TC approach is the most widely applied residential rehab approach in Europe (EMCDDA, 2014a) and that all of these residential approaches have some evidence indicating their effectiveness. However, the *strength* of the evidence is the main dividing line between those who believe residential TCs are an evidence-based intervention and those who do not. The former refer to the evidence from observational studies and the latter to the paucity of experimental studies. Another dividing line is whether the approach can be justified by the association between retention and outcomes or is undermined by low rates of retention.

There are very few randomised controlled trials (RCTs) of TC efficacy. An EMCDDA (2014b) review of the effectiveness of TCs that included controlled studies (randomised and non-randomised) and observational studies found that all controlled studies were conducted in the USA and only observational research had been conducted in Europe. Evidence from the controlled studies suggests that there was some evidence for the effectiveness of the TC model, in terms of reduced substance use and criminal activity (EMCDDA, 2014b: 53). However, there was no evidence that it would reduce mortality, which was not chosen as a primary outcome in any of the experimental studies. TCs also had much lower completion rates than comparable residential treatments and were considered 'overall less effective than other interventions with respect to treatment retention' (EMCDDA, 2014b). Substantial rates of drop out were observed in the early phases of treatment in particular, and long-term programmes had very low completion rates. The high levels of attrition also affected randomisation processes and weakened the validity of the studies (Smith, Gates and Foxcroft, 2006).

To pick out one example, a systematic review by Malivert, Fatseas and Denis (2012) found that completion rates varied from 9% to 56%, with most people leaving within the first 15-30 days. Furthermore, between 21% and 100% had relapsed by follow-up, and between 20% and 33% were back in treatment. The main evidence in favour of TCs effectiveness was a consistent association between retention and abstinence, meaning that people who did stay in treatment had better abstinence outcomes than those who left.

This consistent association between retention and outcomes is also the main finding from European observational studies (EMCDDA, 2014b). De Leon (2010) argues that the TC model can be considered evidence-based due to the strength of this association. For example, findings showing that a much larger proportion of TC completers have improved (compared to baseline levels) than people who drop out of treatment. The EMCDDA, (2014b) are more critical of this observational evidence, noting that the quality of studies is often poor due to high attrition, small samples, and 'significant differences between treatment groups on important pre-treatment characteristics such as problem severity, treatment motivation, criminal history, and social environment' (EMCDDA, 2014b: 54). They also point out that an observational design means changes in substances use cannot necessarily be attributed to the receipt of treatment, as opposed to processes of natural recovery. This is important since rates of natural recovery (sometimes known as 'spontaneous remission') are shown to be fairly high, with epidemiological data suggesting that most people suffering from addictive disorders eventually do quit (Heilig *et al.*, 2021: 1717).

However, De Leon (2010) argues that the self-selection of motivated individuals into TC treatment does not undermine claims to efficacy if this self-selection is understood as a requisite for treatment effectiveness. For example, if TCs are viewed less as a medical treatment and more as a form of education on how to live a drug-free life, then the selective intake does not undermine the quality and value of this education (much like a university education is not undermined by selecting the most able students). Evidence for TCs also looks better when viewed from a 'recovery-oriented perspective' (Vanderplasschen *et al.*, 2013). Looking past abstinence outcomes to a broader view on improvements in criminal involvement, employment, psychological wellbeing, and family and social relations, there is some evidence for TC effectiveness, although still dependent on the same association between retention and outcomes.

In the United Kingdom, there are a few main observational studies that form most of our evidence base. I have mentioned the Scottish DORIS study, a longitudinal study of people who inject drugs (PWID) recruited from a variety of treatment

settings (e.g., OST, counselling, rehab). Rates of abstinent outcomes were highest amongst the participants who received residential rehabilitation, 29.4% of whom could report a 90-day drug-free period nearly three years after entering treatment (McKeganey *et al.*, 2006). Alcohol and tobacco use still allowed participants to be categorised as abstinent, but not cannabis or prescribed substitute medication.

The limitations of observational research apply here and Ashton (2008) critiques the idea that this implies diverting more patients to residential rehabilitation would improve national abstinence outcomes. Rather, the scarcity of residential rehab combined with the rigorous funding and admission requirements would likely mean that these higher abstinence rates were a result of screening out the people on whom this investment was most likely to be wasted (Ashton, 2008: 8). Therefore, it would be 'unsafe to assume that patients who would otherwise have started on methadone would do well if diverted to residential care' (Ashton, 2008: 8-9).

Similar results were found in a large UK study, the National Treatment Outcomes Research Study (NTORS) (Gossop *et al.*, 2003). NTORS found that 38% of patients from residential programmes were abstinent from illicit drugs after 5 years. However, there was a high continuing mortality rate (six times higher than the general population) and many patients who were drinking heavily at intake and had not reduced at follow-up (Gossop, 2015). In both NTORS and DORIS, significant numbers of the patients who received residential rehab went back into methadone treatment after relapsing (over half in DORIS and a third in NTORS) (Gossop, 2015).

2.5.2 The harm reduction evidence base

The evidence base for harm reduction interventions is more robust, particularly in relation to protection against mortality. Kalk *et al.* (2018) note that OST is particularly effective in reducing DRDs when patients are engaged in treatment but that less than half of overdose deaths in Scotland occur in people who are in contact with treatment. I will provide a brief overview of the findings from three

recent studies on the effectiveness of medication-assisted harm-reduction. Ma *et al*. (2019) conducted a systematic review and meta-analysis to assess the effects of MAT on mortality, comparing people with 'opioid use disorder' who were on MAT (methadone, buprenorphine etc) against comparison groups who were discharged from MAT or not treated with MAT at all. The risk of overdose death amongst untreated patients was slightly over eight times that of patients receiving MAT.

Morgan *et al*. (2020) compared the effectiveness of outpatient treatment with medication against a variety of inpatient treatments (including detox and 'supported living environments'). Data for comparison were extracted from a medical insurance claims dataset in the USA. The lowest rates of opioid-related overdose in the following year were amongst those receiving outpatient medication treatment.

Finally, Wakeman *et al*. (2020) conducted a similar comparative effectiveness study of medical insurance data, comparing no treatment, OST (buprenorphine or methadone), behavioural health interventions, and naltrexone (an opioid blocker). They found that only treatment with methadone or buprenorphine was associated with a reduced risk of fatal and non-fatal overdose, a 76% reduction at three months and 59% reduction at twelve months (compared to no treatment). There were no statistically significant reductions for inpatient treatments or residential services. Authors therefore suggest outpatient medication treatment as the 'first-line' (Wakeman *et al.*, 2020: 1) treatment to reduce overdose in people who use opioids.

In Scotland, support for the recovery movement has been associated with critiques of medication-assisted treatments. Most notably, McKeganey (2012) argued that rising drug related deaths (and rising deaths involving methadone) indicated a failure of harm reduction and incentive for a greater focus on abstinence. As noted previously, this could also be explained by low rates of treatment retention and methadone being diverted from prescriptions and used along with other substances (Kalk *et al.*, 2018).

Furthermore, there are indications that risk of overdose could be increased amongst people who leave residential rehab. Physical tolerance to opiates drops when people become abstinent in residential settings such as prisons, hospitals, and rehabs. If they then relapse after exiting the setting, they are more likely to experience an overdose. Keen *et al*. (2021) studied health insurance data and found that release from prison or hospital was a heightened risk period for non-fatal overdose. This has implications for drug-deaths, because non-fatal overdoses are a significant risk factor for subsequent fatal overdose among people who inject drugs, particularly if an individual has experienced multiple near-fatal overdoses (Caudarella *et al.*, 2016).

The risk of overdose following a residential setting is usually discussed in relation to prisons and hospitals (e.g., Horsburgh and Mcauley, 2017) but there is also evidence of this risk with residential addictions treatment. For example, Strang *et al*. (2003) found there were clusters of overdoses amongst individuals who completed a detox and 28 day inpatient treatment programme. There were no comparable overdoses amongst people who did not complete detox or remain in the setting long enough for tolerance to drop, leading to the conclusion that the clustering of deaths 'derives from loss of tolerance and consequent unpredictability of resumed heroin use' (Strang *et al.*, 2003: 960).

In light of this brief review of the treatment evidence, the capacity for a project like River Garden to reduce drug-related deaths may seem quite limited. Following the evidence, it could be expected that rates of retention may be fairly low, and rates of abstinence at follow-up may also be low. However, it could also be expected that the outcomes of people who remain in River Garden will be significantly better than those who leave, due to the association between treatment duration and improved outcomes. The problem then would be to disentangle treatment effects from processes of natural recovery. In turn, this takes us back to questions of whether residents who succeed do so because they are self-selecting into the setting or because they are influenced by relationships within.

2.6 Transferability of interventions

River Garden is an effort to transfer and adapt the principles of the San Patrignano rehab model to a new international setting (Devlin and Wight, 2021). In this final section of the literature review, I will summarise a few key ideas about the transferability of interventions. These will act as structuring ideas for thinking about the transfer and adaption of River Garden.

The Medical Research Council (MRC) guidance on evaluation complex interventions notes that they usually have to be tailored to the specific context in which they are being implemented (Moore *et al.*, 2014). The transferability of an intervention to a new setting is therefore sensitive to contextual factors, including the social, cultural, political, and organisational systems of the society the programme is being transferred to. All of these factors can influence the extent to which the effectiveness of an intervention can be achieved in a new setting. Contextual factors affecting transferability (of particular relevance for River Garden) may include the local capacity to implement the intervention, or differences in baseline population characteristics or problem prevalence (Wang, Moss and Hiller, 2005).

For example, the suitability of River Garden could be influenced by the specific national problem of polydrug use (mixing opioid, benzodiazepines, stimulants etc.) and very high rates of drug-related deaths (National Records of Scotland, 2021b). In Italy, there is a lower prevalence of the type of high risk substance use and polydrug use that fuel drug-induced deaths. In 2019 there were 373 DRDs in Italy, compared to 1,264 in Scotland the same year (EMCDDA, 2021).

Transferability also involves adapting the intervention for the new setting. A key task for this study will be to observe how the programme is delivered in practice and distinguish between adaptions that help River Garden operate effectively in its specific Scottish context and changes that undermine the fidelity of its core ideas (Moore *et al.*, 2014). River Garden stakeholders wanted to transfer the core

principles of San Patrignano to Scotland, particularly the centrality of social enterprise activity and the support of peers with lived experience of recovery. However, they made several key proactive adaptions that were intended to make the project more suitable for the new context. This included extending abstinence to include alcohol, the creation of a much smaller community (a maximum 40 residents in comparison to over 1,000 in San Patrignano), and semi-permeable boundaries affording integration with the local community, instead of the closed boundaries of San Patrignano. These measures were to avoid institutionalisation of residents and make the project appropriate for the new legal and cultural context (Devlin and Wight, 2021). San Patrignano was a large self-contained community, similar to a small town, which contained a well-developed infrastructure to provide its residents with employability training, healthcare, and education. As such, its residents did not need to leave the community to access these resources. In River Garden, these types of resource had to be accessed externally, which stakeholders recognised carried a mix of opportunities and risks. Furthermore, in San Patrignano, domestic tasks were centralised into specific work sectors, such as laundry and catering, meaning residents only had to focus on their specific work roles rather than learning to become completely self-sufficient. Stakeholders involved in planning and implementing River Garden wanted to avoid the potential institutionalisation that this could cause amongst its residents, as well as noting that a smaller resident population made it easier to obtain planning permission for the site. Adaptions were also based in cultural differences. For, there was a decision to avoid the dormitory style resident accommodation of San Patrignano, designed to make sure residents are never alone, because of a perception that Scottish people would be too resistant to this, as well as to avoid issues with Scottish housing regulations which may prohibit this style of accommodation (Devlin and Wight, 2021). Taken together, a combination of practical, regulatory, and cultural factors led to the San Patrignano model being adapted into something quite different, yet aiming to transfer some key principles about the role of vocational opportunity and peer support in supporting people into recovery.

2.7 Conclusions

In this literature review I have outlined some of the key models of addiction and recovery, particularly those that are relevant for River Garden. I have tried to integrate the medical and social models, rather than presenting the social model as an alternative to the medical. I have provided a critical appraisal of the new recovery movement and the theories most likely to underpin River Garden, that propose relational and identity processes to help people recover. I have emphasised a tension between theories that locate the problem and solutions at the relational level and theories that take a more structural position. The role of social networks in substance use and recovery have been addressed in terms of network composition and structure. For the former, I have shown that it is difficult to untangle processes of social influence and selection, although there is evidence that social influence can be an effective mechanism in network interventions. In the latter, I have discussed how factors such as the size and density of an individual's social network may be associated with recovery outcomes.

Finally, I have reviewed the evidence for TCs and comparable forms of residential rehabilitation. In doing so, I have highlighted a tension between different conceptions of what constitutes evidence of effectiveness (between controlled and observational studies) and suggested that River Garden can be expected to experience low rates of retention and high rates of relapse but a strong association between retention and positive outcomes. I completed the review with a short summary of the key issues of interest when studying intervention transferability, highlighting the different characteristics of problem drug use in Scotland and Italy. As a final recap, the aim of this research is to evaluate the formative years of the River Garden community, with an interest in how the San Patrignano model was transferred and adapted for the Scottish context. The research aims to answer three key research questions:

1) What contextual factors were critical for the transferability of the San Patrignano recovery model to a substantially different international setting?

2) What aspects of the programme worked and who were they most likely to work for, under what circumstances, and why?

3) What are the implications for national and international drug policy, specifically the policy of reducing drug-related harms by delivering interventions to support abstinent recovery?

3 Chapter Three – Methods

3.1 Introduction

To answer the research questions, an evaluation study design was used. In this chapter, I will describe and rationalise the overarching evaluation framework and the variety of methods used within that framework. I will provide the theoretical basis for each of the methods, the process of recruitment and data collection, and the analysis and integration of multiple forms of data. Issues of research ethics and reflexivity will not be covered in this chapter, as these will be more useful after the findings have been presented. Instead, ethics and reflexivity will be part of the discussion (Chapter Seven).

3.2 Approach

3.2.1 Overview of methodological Approach

This research could be broadly described as a process evaluation, an effort to understand how an intervention works in practice and the processes that lead to its outcomes (Moore *et al.*, 2015). It could also be described as a realist evaluation, a specific form of theory-driven evaluation with an emphasis on testing and refining theories about how the programme works and who it works for (Pawson and Tilley, 1997). In practice, these are not distinct evaluation methodologies and many of the principles of realist evaluation are represented in the Medical Research Council (MRC) guidance on conducting a process evaluation, particularly the emphasis on how programme mechanisms are influenced by wider contextual factors (matters external to the intervention).

The study design was originally based on the MRC process evaluation guidance and adapted to include some more explicitly realist-informed components, particularly the synthesis of findings into programme theories that were organised as context-mechanism-outcome configurations (Pawson and Tilley, 1997) and a set

of ‘realist interviews’ (Manzano, 2016) with trustees and staff to test these theories. Within a process evaluation, a wide variety of social scientific methods can be employed with a range of programme stakeholders (Moore *et al.*, 2015). Accordingly, I designed a mixed-methods study that included qualitative and quantitative methods. These methods were employed with residents, staff, and trustees of River Garden.

This was a prospective longitudinal observational study that used repeated measures at staged timepoints, along with repeated site visits, over an extended period (approx. three years overall, with eighteen months of formal data collection). The use of a mixed-methods longitudinal approach was useful to understand how the intervention worked in practice compared to its theoretical design, with insight into the how the implementation developed over time (Moore *et al.*, 2015).

River Garden residents were prospectively recruited early after they arrived in the community. When recruited, they were asked to complete two surveys (about their addiction beliefs and their reasons for entering residential treatment) and take part in a qualitative social network (‘egonet’) interview. The interview involved an exercise where they were asked to map out their social network on a template and discuss the ways that people in the network influenced their substance use or recovery. This technique was tested in the pilot study (Anderson *et al.*, 2021) and very much informed by Herz, Peters and Truschkat's (2015) concept of ‘qualitative structural analysis’, as well as Hogan, Carrasco and Wellman's (2007) guidance on collecting network data with ‘participant-aided sociograms’. The measures were repeated when a resident had been in the community for approximately six months and again at twelve months. Measures were also repeated with residents who left River Garden. During the first wave of data collection, three staff members also took part in these measures (this allowed for comparison of staff and resident networks).

Participant observation was conducted throughout the data collection period and particularly in a focused three month period which involved regular (weekly)

overnight visits. This was useful to develop more of an insider view of the community culture (Hammersley, 2006) and how the intervention was delivered in practice compared to how it was designed in theory.

Interviews with trustees and staff were conducted at the very end of the fieldwork. These interviews were used as an opportunity to validate and refine theories (Manzano, 2016) that I had developed throughout the fieldwork about the main contextual factors that were critical in how River Garden worked. I also had access to routinely collected resident admissions and review data collected by the programme, which provided insight into key implementation issues such as the sociodemographic reach of the programme (Moore *et al.*, 2015).

3.2.2 Evaluation framework

3.2.2.1 Medical Research Council Guidance for Evaluating Complex Interventions

River Garden is a complex intervention. Complex interventions are defined by their non-linear functioning and how they interact with the wider environment in unpredictable ways, leading to uncertain and emergent outcomes. When attempting to understand a complex intervention, it is important understand the nature of actual as opposed to idealised relationships within the intervention (Glouberman and Zimmerman, 2002). For example, the concept of River Garden suggests an idealised view of supportive peer relations, whereas the reality may be more nuanced. Complex interventions should also be understood not just as interactions within the programme but as complex interactions with the wider context (Fletcher *et al.*, 2016). River Garden was designed to be well-integrated with its wider context in comparison to San Patrignano, which would seem to expand the potential for complex interactions and increase unpredictability.

The MRC guidance describes process evaluation as an essential part of designing and testing complex interventions. Rather than simply measuring outcomes, process evaluation is a theory-driven endeavour to understand the causal

assumptions underpinning the intervention and how it works in practice. Key points of enquiry are how the programme is implemented, its change mechanisms (*how* it produces change), and contextual factors that affect its mechanisms and outcomes (Moore *et al.*, 2015). Two concepts from the guidance that were useful for this evaluation were fidelity and reach. Fidelity captures whether the intervention was delivered as intended and the consistency of its delivery. Reach is about whether the intended audience comes into contact with the intervention or there were (for example) socioeconomic biases in who benefited from it. Contextual factors are anything external to the intervention that may act as a barrier or facilitator to its implementation or effects. Mechanisms are the causal pathways through which the intervention helps people change.

All of these concepts can be tested with a variety of social science methods. Furthermore, specific methods are particularly well suited to provide insight into specific concepts. For example, studying routinely collected data is useful for implementation issues such as reach. Observation is useful to understand fidelity and contextual factors. Qualitative interviews can be used to identity mechanisms (Moore *et al.*, 2015). In my evaluation of River Garden, routinely collected admissions data proved useful for understanding the sociodemographic backgrounds of residents and outcome patterns related to these. Qualitative interviews and observation were useful in identifying the important mechanisms that caused people to progress or leave the community. Participant observation was particularly useful for understanding fidelity, the actual delivery of the intervention in practice in comparison to the theorised model.

My evaluation approach was also influenced by the six steps in quality intervention development (6SQuID) model (Wight *et al.*, 2015). The 6SQuID model breaks down the process of designing an intervention into the six key steps of: 1) defining the problem and its causes, 2) identifying which causal or contextual factors are modifiable and which of these are most worth modifying, 3) identifying the mechanisms of change, 4) clarifying how these mechanisms will be delivered, 5) testing and adapting the intervention, 6) collecting sufficient evidence of effectiveness to proceed to a rigorous evaluation. River Garden implementers

have already defined the problem (problem substance use) and its causes (social marginalisation). The questions of context, causality, and change mechanisms are less clearly defined and therefore a key issue for this evaluation. The evaluation also aimed to understand how the programme was delivered and adapted, generating some key questions for a larger scale evaluation.

3.2.2.3 Realist Evaluation

During the course of the research, I began to draw more explicitly on the principles of realist evaluation. I have already stated that the principles of realist evaluation are well represented in the MRC guidance on process evaluation of complex interventions, particularly the aim of understanding what causes outcomes by exploring the contextual influences on programme mechanisms. A more explicitly realist approach was taken in some respects, such as the way the data was organised into programme theories and how these theories were tested with a specific fieldwork component.

Realist evaluation is a specifically theory-driven form of evaluation, with some key differences from evaluation frameworks that focused on theories of change. While all evaluation tests underlying theories about how a programme works, realist evaluation is concerned more with *testing* and *refining* programme theories. Realist evaluation addresses the complexity of interventions by guiding evaluation according to a well-known mantra of 'what works, for whom, in what circumstances and in what respects, and how (Pawson and Tilley, 2004). It involves a recognition that programmes consist of multiple theories of change and are embedded within wider systems of social relationships. As such, successful outcomes depend on the social circumstances of the individual. It also recognises that programme effects are produced by and require active engagement by the intervention recipients. Finally, realist evaluation recognises that programmes are open systems, and their implementation and delivery can be influenced by various external factors.

3.2.2.5 Programme Theory

Programme theories are essential causal models that link programme inputs to a chain of intended or observed outcomes. They can help make sense of complex interventions, which involve unpredictable patterns of behaviour, changes in the wider environment, and emergent outcomes (Rogers, 2008). At the heart of the realist programme theory lies the context-mechanism-outcome configuration (CMOC). 'Context' refers to the external factors that can influence how the programme works, such as the broader social and economic conditions of the environment in which the programme is implemented. These can have a direct influence on 'mechanisms', which describe what it is about the intervention that brings about any effects. Pawson and Tilley (2004: 7) describe the mechanism as the ways that a specific component of the intervention may 'permeate into the reasoning of the subjects'. Variations in context and mechanisms will result in mixed patterns of outcomes, which are simply the intended and unintended consequences of the programme.

The purpose of developing CMOCs is to understand these outcome variations and describe the specific configuration of programme components necessary to produce its intended outcomes. A CMOC is essential a single programme theory. Multiple single CMOCs can be synthesised into an overall programme theory (Dalkin *et al.*, 2015). In this research I developed around a dozen CMOCs to create the overall programme theory, which is presented in the findings.

Within the CMOC, I have employed a very precise definition of 'mechanism' developed by Dalkin *et al.* (2015) as a reconceptualisation of Pawson and Tilley's (2004) definition. Dalkin *et al.* (2015) note that the formulation of CMOC often makes it difficult to distinguish between contextual factors and mechanisms (outcomes are much easier to identify). Pawson and Tilley (2004) defined a mechanism as consisting of two components: the resources offered by the programme, and the reasoning of the programme recipient. However, researchers would often overlook he importance of these distinct components and emphasise one over the other under the banner of mechanism. This leads to the conflation

of the programme strategy with its mechanisms. This can be seen in earlier research on River Garden, where the *strategy* of peer support is described as a mechanism (Devlin and Wight, 2021) without incorporating how recipients may be expected to *respond* to peer support.

To make this distinction clearer, Dalkin *et al*. (2015) offer a reformulation of the CMOCs as: Mechanism (Resources) + Context -> Mechanism (Reasoning) = Outcome. More simply, this disaggregates resource and reasoning by placing context between them. The resources are delivered in a specific context, and it is this context that shapes the reasoning of the recipients (e.g., the cultural norms of the local area). Since the reasoning informs how people respond to the intervention, I have generally used the terms resource and response in my analysis. This definition of a mechanism as a combination of resource and response was central to how I developed programme theories. In practice, I simplified the variety of resources into two main categories and often referred to the response as a form of shorthand for the mechanism.

The process of testing and refining programme theories was adaptively introduced into the research design as an additional component. A well-developed set of procedures for conducting a realist evaluation can be found in Gilmore *et al*. (2019). The evaluation should begin with the development of an Initial Programme Theory (IPT). This is a model of how the programme should be expected to work, which can be based on programme documentation, protocols, and informal discussion with programme implementers. The IPTs inform the rest of the study design. Data collection and analysis can then provide evidence with which to test and refine the IPT and develop a programme theory that describes the reality of the programme. The IPT is central to analysis and forms the foundation of the qualitative coding strategy, whereby each IPT becomes a 'node' and CMOCs identified in the data are used to support, refute, or refine these nodes.

Because I introduced the idea of realist theory-testing after I had already begun fieldwork, my procedures lacked the development of an IPT. I can look at early drafts of my literature review and see that I certainly had some initial theories

about how River Garden might work, but these were not formalised to this extent. However, I did code all of my data in to CMOCs then conduct a final set of theory-testing interviews with key stakeholders to test and refine these. This style of theory testing is described in Nurjono *et al's.* (2018) protocol for a mixed methods realist study. The final theory-testing interviews were conducted with trustees and staff members using a particular style of interview, where programme theories were shared with participants and each question was designed to test a specific programme theory (Manzano, 2016).

3.2.3 Social Network Analysis

Within the realist evaluation framework, I used a mixed-methods, longitudinal social network analysis (SNA) approach to data collection. The purpose of SNA is to study how the patterns of social relations between individuals influence social behaviour. Behavioural causation is not simply found in individual attributes (e.g., socioeconomic background) but in network structure or position. As covered in the literature review, differently structured networks are associated with different opportunities and constraints on behaviour, which can facilitate or impede behaviour change (Due *et al.*, 1999). Using SNA, it is possible to measure how networks are structured and composed and make theoretical propositions about behaviour. The basic components of the network are 'nodes' (people), 'ties' (connections), and 'attributes' (characteristics of the people). Mixed-methods SNA combines quantitative measures of how networks are structured with qualitative interviews and observations that provide more insight into the processes underpinning network structures (Edwards, 2010).

SNA is a way of modelling complex relational systems and therefore it can be useful in the evaluation of complex interventions. For example, Durland and Fredericks (2005) show how networks approaches can be used to measure network characteristics before and after the delivery of an intervention, measuring the ways the intervention has influenced the network structure or composition. I collected mixed-methods network data from participants at several timepoints to assess how their network composition and structure changed over time. In

keeping with the overarching realist evaluation, I used the data to inform the development of CMOCs. For example, I could measure how integrated a resident was with the wider community (family, support groups etc.) outside of River Garden, a key contextual factor that could influence how they responded to the resources offered within River Garden.

3.2.3.1 Ego-Networks

I collected a specific form of social network data from River Garden residents, known as 'ego network' data. Ego networks are the personal network that surround a specific individual. This individual is referred to as the 'ego' (the Latin word for 'I'). The individual takes part in a survey to collect data on the people who they share a certain type of relation with (e.g., people they see frequently, or people they can rely on for support). These people are referred to as 'alters' (Latin for "other"). Further data is captured about the connections between the ego and each alter, such as how close they are, and the connections between all of the alters (Gaëlle, 2016). This creates an overall picture of the personal network, the opportunities and constraints offered by its structure, the forms of influence and support available. For example, an egonet where all of the alters are connected to each other will likely constrain behaviour to a greater extent than one where most alters are not connected. In the latter, the ego can behave differently with different groups (Burt, 2000).

The three stages of egonet data collection are known as the 'name generator', 'name interpreter', and 'alter-alter ties'. The name generator is a prompt for the participant to produce a list of names of alters who constitute their network. Different prompts will produce different names. For example, participants may be asked to list people who they 'know well', or who occupy a 'significant role' in their lives, or who they interact with 'most frequently' (Marin and Hampton, 2007). Alternatively, they could be asked to name supportive alters, such as 'someone who could babysit your children' (Hogan, Carrasco and Wellman, 2007). I was interested in residents routine interaction networks, so asked them about people they had interacted with in the past week to get a sense of their daily lives

(if I had asked about, for example, people they know well, it might bias new residents towards listing alters outside of River Garden).

The 'name interpreter' questions capture additional information about the people in the network. This can include information about how the respondents knows them, the strength and closeness of their relationship, and demographic information about the alter (Eagle and Proeschold-Bell, 2015). For example, I was interested in what proportion of resident networks were composed of people who were abstinent from substance use or involved in recovery communities, so asked for this information about the alters. I also asked whether each alter was considered a positive or negative influence on the respondents own recovery.

The final step is to measure the connections between the alters, by asking about all the possible alter pairs between the individuals listed ('alter-alter ties'). This takes the form of a question such as 'are alters A and B close?' (Hogan, Carrasco and Wellman, 2007). Asking whether they are 'close' would lead to a different set of alter connections than asking if they simply 'know each other' (Chua, Madej and Wellman, 2009). Therefore, different alter-alter prompts have varying sensitivity to identify connections and the choice of prompt will inform how the network is modelled. Because River Garden residents were all in a residential setting it could be assumed they would all know each other and asking such would lead to all resident alters being connected. I asked participants to connect people who they considered to be 'close', to get a better insight into relationship patterns such as the formation of subgroups.

In 'whole network' studies, there are defined boundaries around who can be nominated as an alter (e.g., studies of classrooms or workplaces where the network is confined to the patterns of relations within that setting). Ego networks do not have boundaries. Each participant can nominate a unique set of names in response to the survey prompt. Accordingly, each egonet can be assumed to be independent of the next and the network characteristics can be treated as individual-level attributes and used as variables in attribute-based analysis techniques such as linear regression (Crossley *et al.*, 2015). This means that

network attributes such as the average size or density of networks can be compared between different groups or the same group at different timepoints. This technique was used in the pilot study to compare the past and present networks of people in long-term recovery (Anderson *et al.*, 2021). In River Garden, I compared network characteristics at multiple timepoints as residents progressed through the programme.

The main limitation of the egonet approach is that the network data depends on the perspective of one person (the ego) to report on the alter relationships and characteristics. These may be inaccurately reported. There can also be a tendency to underestimate the number of alters or to overrepresent strong ties in comparison to weak ties, due to recall effects. This is especially important when factors such as network size or the balance of strong and weak ties are used to make inference about the diversity of resources available to the ego (Gaëlle, 2016). I have accepted these limitations and treated the network data as an imprecise yet valuable modelling of the network, that can still provide useful insights into the network transitions involved in River Garden residence.

3.2.3.2 Participant Aided Sociograms

Mixed-methods egonet data was collected in this study by incorporating the survey procedures detailed above into a participatory mapping exercise within a qualitative interview. Participatory mapping is an interactive approach to interviewing that includes visual methods. Participants are encouraged to use marker pens, sticky notes and so on to create a visual mapping of their knowledge, understanding, and interpretation of the research topic. The visual map provides a tangible artefact that can provide a focal point for the traditional verbal interview, allowing the participant to focus on particular features of the map to unfold a process of description, elaboration, and theorisation (Emmel, 2008).

In this study, participatory mapping was used to ask participants to create a ‘network map’ of their ego network during a qualitative interview. The technique was closely informed by Hogan, Carrasco and Wellman's (2007) guidance on

working with ‘participant aided sociograms’. Essentially, all of the stages of egonet survey data collection (name generator, name interpreter, alter ties) are captured through a mapping exercise, where the structure and composition of the network are drawn directly onto a template provided to the participant. The creation of the network map during the interview allows the participant to see their social network visualised in real time (instead of the researcher creating a graph later) and acts as a conversation guide (Hogan, Carrasco and Wellman, 2007).

The basic template provided to participants was a ‘sociogram’ consisting of four concentric circles (Appendix 4). For the name generator, participants were asked to write the initials of people in their network (alters) in sticky notes and place them onto the circles. Alters the had the closest relationship with were placed in the centre circle and least close alters were placed in the outermost circle, the four circles affording four potential levels of closeness. For the name interpreter, participants were able to use marker pens to circle alters with specific characteristics (e.g., circle every alter who is a positive influence). Alter-alter ties were captured by asking them to draw lines between all the alters who had a close connection to each other. This method of egonet data collection was mainly based on Hogan, Carrasco and Wellman (2007) and a similar procedure described by Herz, Peters and Truschkat (2015) who also offer guidance for a combined ‘qualitative structural analysis’ of the network map and interview data. Essentially, the method captures the ‘personal community’ of the individual, the microsocial world of relationships in which people are embedded (Pahl and Spencer, 2010).

Collecting egonet data in this manner is more rewarding for participants, who may find it enjoyable and insightful to create and discuss a visual representation of their social network. The network structures created by this method are reliable, particularly because participants can place alters on the template in relation to each other and move them around. It is also quicker and a more efficient use of time than going through multiple surveys and can collect a lot of information within a short timeframe. Some challenges are created by the use of props and

need for space (Hogan, Carrasco and Wellman, 2007). However, in River Garden there was plenty of space to conduct these types of interviews. Transforming the analogue data into a digital dataset for analysis was also a quite meticulous and time consuming process, compared to collecting data directly into a network analysis software package.

Because the creation of the network map takes place within a qualitative interview, the qualitative data (interview transcripts) complements the structural network data and adds an awareness of network processes, change, content, and context, providing a deeper insight than can be found in a purely quantitative measurement. Using this mixed methods approach allows for the exploration of issues relating to the construction, reproduction, variability, and dynamics of network ties, and the meaning that ties have for those involved (Edwards, 2010). The qualitative aspects were useful for the realist approach of developing CMOCs, as when participants expanded on the dynamics underpinning network structures this was often useful in identifying the contextual factors and mechanisms that led to structures developing as they did.

3.2.4 Survey data

A range of survey data were also used in this evaluation. These included two Likert scale surveys that were completed by participants immediately prior to taking part in research interviews. These were the Addiction Beliefs Inventory (ABI, Luke *et al.*, 2002) and the Circumstances, Motivation and Readiness Scales (CMRS, De Leon *et al.*, 1994). They also included data that were collected by River Garden as part of its own resident admissions and review procedures. In keeping with the process/realist evaluation framework, the purpose of these was to gain a better insight into evaluation questions such as how contextual factors influence mechanisms. For example, resident beliefs about addiction could be considered a contextual factor that may influence how the interact with the resources offered (e.g., their willingness to attend certain forms of external support group).

Routinely collected data can provide insight into issues such as the sociodemographic patterning of programme entrants (Moore *et al.*, 2015). Data like this can be useful for assessing the fidelity and reach of a programme (Williams *et al.*, 2016). Because the data has already been collected, it is one of the most effective ways to collect data with limited resources (Wight *et al.*, 2015).

3.2.4.1 Addiction Beliefs Inventory

The ABI is a validated instrument designed to assess personal beliefs about addiction. One of the key reasons for measuring addiction beliefs is to understand whether treatment clients adopt the belief system promoted during treatment. The eight subscales of the ABI measure participant belief in a range of conceptualisation of addiction such as whether addiction is a disease or involves free will, whether it is caused by trauma, the role of personal responsibility, whether abstinence is required or controlled use is possible, and whether it is possible to recover without treatment and support. The scale has shown sufficient validity and reliability with diverse populations of individuals with substance use problems (Luke *et al.*, 2002).

River Garden does not provide a specific therapeutic approach, other than the value of work and peer support. It does not promote a specific view of addiction, beyond the core idea that addiction has social determinants, is associated with marginalisation, and can be addressed by providing opportunities for purposeful activity. Otherwise, its stakeholders suggested that residents would have the freedom to pursue individualised recovery plans that span outside of the River Garden setting (e.g., some may go to support groups, other may not). I was interested in the extent of variation in addiction beliefs amongst residents and whether these beliefs converge or diverged from the beliefs of programme implementers. The specific models of addiction that were believed (and disbelieved) would provide insight into the River Garden culture.

3.2.4.2 Circumstances, Motivation, and Readiness Scales

The Circumstances, Motivation, and Readiness (CRM) scales use a 5-point Likert scale to assess the suitability of residential treatment for addictions and predict treatment retention (De Leon *et al.*, 1994). The 'circumstances' domain measures external reasons that influence people to seek treatment, such as family problems, fear of violence, health risks, legal issues, or loss of employment. These factors may act as a pressure to enter treatment or a pressure to leave treatment.

The 'motivation' domain refers to inner reasons for change. These can include positive motivations such as the desire for a new lifestyle and better relationships, or negative motivations such as guilt and self-hatred associated with a drug using lifestyle. These are intrinsic motivations rooted in the perception of the individual that they themselves are the problem (rather than the drugs or their life circumstances) and acceptance that they must change rather than expecting the world to change (De Leon, 1995).

The 'readiness' domain measures the individual's perceived need for residential treatment specifically, as opposed to other pathways to self-change, such as willpower, friend and family support, or moving away geographically. The scale will measure somebody as ready for treatment when they have rejected all other options for change and perceive residential treatment as the only way (De Leon, 1995).

The scales have been demonstrated to be reliable and valid, with a linear relationship between CMR scores and early treatment retention (De Leon *et al.*, 1994). High predictive validity has also been found for long-term treatment retention (Soyez *et al.*, 2006). I was mainly interested in whether there were any differences in CRM scores between retention and attrition groups in River Garden. In practice, the CRM provided fairly limited evaluation insights. Richer data about the individual circumstances that led to residents entering or leaving were found through the qualitative interviews and participant observation.

3.2.4.3 Routinely Collected Data

Routinely collected data is data collected by the programme as part of its usual procedures. As stated, it is a particularly efficient way to collect data relevant to key process evaluation questions about key process evaluation questions (Wight *et al.*, 2015). I was granted access to three main forms of routinely collected data, as long as individual participants consented to their data being accessed (via a consent form option).

The first was the resident application and admissions forms, which captured information on demographic background, criminal justice involvement, physical and mental health, history of substance use, history of treatment and support, motivations for applying, and the skills and assets they could bring to the community. This proved especially useful for an insight into resident backgrounds that they did not otherwise disclose during the qualitative research. Accordingly, it provided a valuable insight into the reach of the intervention, in terms of sociodemographic factors, severity of addiction and mental health problems, or markers of social exclusion such as homelessness. I could even see which prescribed medications were permittable for resident entry, which occasionally led me to consider why opioid substitute medications were excluded while other medications were permitted.

The second was the resident progress review forms, that were completed once a resident had been in the community around three months. The purpose of these reviews was to assess and record whether the resident would progress to become a permanent resident for the full three years. This was a more qualitative process and the review forms contained free-text responses written by the reviewing staff member, summarising how the resident had responded to various questions about the positive and negative aspects of their first three months. Afterward, a 'progress tracking tool' was used to measure ongoing progress. These did not seem to be present in the files of every resident. I was able to access the three month review for three residents and a progress tracker for two residents. These provided some insight into the attributes that were felt desirable by staff for a

resident to progress. However, given the incompleteness of the data these have not been included in the analysis. The qualitative research provided a much stronger insight into resident progression.

Finally, I was granted access to an appointments diary that was used by staff to record resident appointments with external agencies. Because there was no internal healthcare infrastructure, residents were supported by staff to attend external appointment to GPs, dentists, psychiatrists and so on. They may also attend unplanned emergency appointments if they have an injury or health crisis. These unplanned appointments were recorded on incident reports, which I also had access to. I recorded appointments/incidents for a twelve-month period, from July 2018 to July 2019. These data were useful to see the high volume and frequency of medical appointments for a very small group of residents (approx. 73 appointments for 6 residents, an average of 12 per resident). This provided insight into the extent of accumulated and untreated health issues which needed addressed in early recovery, and the significant use of staff resources necessary to facilitate these.

3.2.5 Participant Observation

I have described thus far a variety of research methods that involve engaging participants in some kind of exercise or activity (e.g., a survey or interview) that would not normally be part of their daily activities. Although these methods are useful for answering specific questions, they all structure the potential responses in certain ways. For example, asking a person to complete a survey about addiction beliefs will by definition produce data about addiction beliefs. These are *deductive* methods, that begin with some theory or framework and collect evidence around these. Qualitative interviewing is more *inductive*, building frameworks out of the data (because participants can raise issues that were not theorised in advance) but still involves preconceived questions.

To strengthen the validity of the research, I also conducted participant observation so I could see how people interacted in the natural context of River

Garden. The ability to collect data without creating an artificial research environment gives the observations a greater validity than, for example, interviews (Plummer *et al.*, 2004). Participant observation is an ethnographic method. It involves studying first-hand what people say and do in a particular context, which requires fairly lengthy contact with participants in that context. By becoming a part of the community (insofar as this is possible), the ethnographic researcher aims to understand the perspectives of the people being studied while also developing analytical understandings that are likely to differ from how participants themselves see the world, that is, 'emic' (within group) and 'etic' (outside) perspectives (Hammersley, 2006). Direct and sustained contact with participants is written up in rich detail in an effort to understand their social experience and the culture of the community (Willis and Trondman, 2000).

In River Garden, there were so many groups of stakeholders with different perspectives that my efforts to combine these into an overarching programme theory led to a different perspective than either of these groups will have held individually (e.g., I may be more focused on contextual factors whereas they focus on individual outcomes). I was also informed by the principles of 'peopled' ethnography, in that the true interest of study is the social system and how people are positioned within it, rather than the specific individuals being observed (Fine, 2003).

Ethnographic research can range from a deep, long-term immersion in a community to a more part-time participation in community activities. Anthropologists may live round-the-clock in a community for a year or more, whereas sociologists may conduct a part-time observation in a particular social institution only during its times of operation, perhaps over a few months (Hammersley, 2006). My approach was somewhat mixed. In terms of timescale, I recorded observational fieldnotes over a period of around eighteen months, from April 2019 to Nov 2020. The majority of these were from single-day visits, often on days that I visited to conduct research interviews. Around three months of longer and more regular visits were conducted from Dec 2019 to March 2020, where I stayed on site for 24-48 hours most weeks. This was planned to last for

six months but cut short by COVID-19 lockdown. There was a clear value to these longer visits, from being treated as an occasional visitor to becoming more a part of the community and gaining an insider perspective.

I have used ethnographic methods in a very applied sense, as part of a broader effort to answer evaluation questions. Becker *et al*. (2004) notes that ethnography is particularly useful in developing and evaluating social policy, as it is where researchers come closest to the people being studied and the implications of policy on individuals can be seen. The ethnographic approach was especially useful in measuring the process evaluation concept of intervention fidelity. This was because ethnography has a unique ability to present located aspects of the human condition from the inside and understand how lived outcomes may differ from discourses and ideologies (Willis and Trondman, 2000). In the context of the evaluation, this meant to understand the difference between the programme model on paper and in reality. It was also useful for understanding programme mechanisms, particularly more embodied, pre-cognitive resource-responses that occur before a situation is cognitively rationalised (e.g., anger, boredom).

The insight into the behind-the-scenes community culture was vital to properly evaluate how the programme worked. I have drawn upon a definition of culture offered by Douglas (2007) where culture is conceptualised as a way of thinking that justifies a way of living. It is the joint production of collective meaning. For example, a culture of apathy can develop when people perceive there is no way out of a situation, or networks of connection have broken down, or when trust has been betrayed and hope gives way to disappointment. As a framework for thinking about the culture of River Garden, this was useful to think about the key facets of the developing early culture (which would be likely to provide a basis for the long-term culture as the community expands). For example, the culture of beliefs around why relapse may influence the willingness to expend energy to support people who do. Beliefs on the value of supervision and best way to promote self-reliance may influence how seriously programme strategies such as ‘buddying’ are taken. What staff and residents *think* about key issues will affect what they *do* in the programme delivery.

3.2.6 Theory testing and refinement

As I collected and analysed the data from surveys, egonet interviews, and participant observation, I began to formulate CMOCs. These individual CMOCs were the building blocks of the programme theory. Although I had employed a variety of methods and collected a lot of data, I was not entirely confident about the accuracy of all of these theories. Also, throughout the fieldwork I became aware of importance of the role of River Garden trustees yet had not conducted interviews with any trustees (the original idea was to focus on residents and staff). I decided to conduct a final set of interviews with trustees and staff, for the purposes of testing and refining programme theories, and to compare how the reality of River Garden compared to their original ideas. In process evaluation, these types of stakeholder interviews are considered useful for understanding intervention fidelity and developing programme theories (Moore *et al.*, 2015).

In line with the broader framework, I employed a specifically realist approach by using stakeholder interview to test and refine programme theories. A semi-structured interview schedule was developed based on the Manzano (2016) guide to the craft of the realist interview. Each question was designed to test a specific programme theory. There was a 'teacher-learner' cycle whereby the questions were designed to teach the participant about my programme theories and their response (validation/refutation) helped me learn more about their accuracy, allowing theories to be refined.

These interviews were conducted with trustees and staff members who had been closely involved in the River Garden implementation. Individual stakeholders often had specific situated perspectives that led to differences of opinion. For example, the same CMOC might be validated by one stakeholder but refuted by another. However, these stakeholders had generally had a much longer and more substantial immersion in the project than I had as a researcher, so their expertise was helpful in making sure the programme theories were robust.

3.3 Data Collection and Analysis

3.3.1 Exploratory phase of the research: pilot study

The pilot study was conducted before this PhD project commenced, as part of a Master of Public Health dissertation, and has been published separately (Anderson *et al.*, 2021). It involved a purposive sample of ten male participants from a non-residential recovery community in the same geographic region as River Garden. This was one of the more ubiquitous new recovery communities that have been developed in Scotland over the past decade. The social network interview was the only method piloted, where participants were asked to complete a mapping exercise to collect egonet data within a qualitative interview.

The pilot demonstrated that participants would engage productively with the technique and that useful, good quality data could be collected. In the pilot, people were asked to map their past and current network, for an insight into how their network had changed in recovery. This showed that the method was useful for studying network change. The fundamental quantitative and qualitative analysis techniques later used in the PhD were initially worked out with this data, as well as the theoretical approach (e.g., theoretical inference about the forms of social capital associated with recovery).

The PhD largely expanded these methods by 1) recruiting a prospective sample, 2) longitudinal rather than retrospective measures, 3) comparing network change over a greater number of timepoints, 4) the introduction of a wider variety of methods, such as participant observation, 5) the use of an overarching evaluation framework. As such, most of the PhD methods were not piloted (and could not be, given the practical constraints of a small project).

3.3.1.1 Reflections and Learning from the Pilot Study

All participants in the pilot study were in stable long-term recovery and provided uniformly positive accounts of the recovery community. This was most likely due

to the limitations of a purposeful sampling strategy and reliance on gatekeepers to facilitate interviews with selected community members. I was determined that the PhD study would capture a more realistic variation in experiences and learn more about unintended mechanisms and outcomes.

The pilot did produce some useful findings about how recovery networks were characterised by fairly homogenous groups of close ties, which I theorised provided bonding capital necessary to sustain behaviour change (Anderson *et al.*, 2021). I was interested to see whether this was also the case in River Garden or if residents had more diverse networks with a greater number of weak ties. The plan for River Garden to be well-integrated with the wider community would have suggested this would be likely. It would also be interesting to see whether entry to River Garden led to an increase or decrease in bridging/bonding capital in comparison to the pre-entry network.

3.3.2 Main study

3.3.2.1 Ethics

An ethics application was submitted to the College of Social Sciences Ethics Committee at the University of Glasgow on 19th December 2018. Ethical approval was granted on 21st March 2019 (application number 400180111).

A minor ethics amendment was approved on 9th April 2019. This added some additional questions to the social network interview schedule. A more substantial amendment was approved on 27th April 2020, a switch to remote research because COVID-19 lockdown had led to face-to-face research being suspended. Finally, an amendment was approved on 18th August 2020. This final amendment added an additional fieldwork component, theory-testing interviews with key stakeholders.

3.3.2.2 Researching vulnerable populations

Many of the participants in this study could be categorised as belonging to a vulnerable research population, who may require special protections and additional safeguards. The main concerns are that people who use drugs may lack the capacity to provide informed consent due to intoxication, that providing financial incentives may place them at additional risk, and that the research processes may re-traumatise and re-victimise them. There are additional concerns about protecting participant privacy and confidentiality, since drug use is illegal. An associated concern is whether researchers have a duty to report illegal activity to authorities (Bell and Salmon, 2012).

Because this study involved participants in an abstinent recovery setting, the problem of impaired capacity for consent was less relevant. However, it is also possible that people in early recovery could struggle with long-term effects of their drug use, such as reduced concentration. Research shows that failure to recall consent information is consistent across all research populations and people who use drugs generally affirm their capacity to provide consent (Bell and Salmon, 2012).

Most participants were not paid for research participation, only those who had left the project and were recruited for follow-up interviews in an external setting. The rationale was that people who left River Garden would be far less likely to take part in the research, without a financial incentive (£20 cash in this case). Research has shown that while payments do increase retention, they do not increase drug use and may reduce harm by reducing the necessity to make money in more hazardous ways (Bell and Salmon, 2012).

Concerns that the research would traumatise participants were alleviated during the pilot study, where people seemed to enjoy taking part in the interviews. In the PhD study, the prospective recruitment meant that participants were in much earlier stages of recovery and traumatic past events could be more recent. That said, Bell and Salmon's (2012) review of the empirical research on this topic

indicates that even in studies where participants had uniformly experienced trauma, only a small number become upset or felt it was a negative experience. Even then, the level of distress is not necessarily greater than they might experience in their day-to-day lives and talking about trauma may be cathartic and beneficial (Bell and Salmon, 2012).

Because people who left the project may have relapsed, this raised the issue of conducting research with people who are intoxicated. Aldridge and Charles (2008) argue that intoxication should not necessarily lead to exclusion from research because, the prevalence of substance use in society means it is not possible to completely avoid the intoxicated. Intoxication itself is just one of many altered states, yet comparable states such as stress or heightened emotion do not rule people out of research. Furthermore, it is problematic for researchers to have to assess intoxication through observation alone. The main thing a researcher can do it to extend the timeframe for withdrawal of consent and exclude the most obviously intoxicated who can be easily reliably visually identified, by markers such as slurred speech or glazed eyes (Aldridge and Charles, 2008).

People who use (or have used) drugs have a right to be included in research that reflects their concerns as well as to benefit from the results of such research (Bell and Salmon, 2012). The main voices that have been presented in previous research on River Garden have been those of high level implementers, such as members of the Board of Trustees. To really understand how (and if) it worked in practice for the people it was designed to benefit, it was essential to include them in the research process. Furthermore, it was vital that equal weight was given to the voices of residents who did not benefit from the programme, particularly those who left.

3.3.2.3 Developing a disclosure protocol

A specific issue from the literature on vulnerable populations was how to protect their confidentiality and if or when issues should be reported to authorities. River Garden is an abstinent community with a policy on alcohol and drug use that all

residents, staff, and visitors must abide by. This included a zero tolerance policy towards the use of alcohol or other drugs on the River Garden grounds. Employees were permitted to use alcohol on their days off but not within 24 hours of a shift. Smoking of tobacco was allowed in certain designated areas at certain times but not within working hours or in front of members of the public. Sanctions ranged from warnings to removal from the community.

From a research perspective, I had to consider what to do if I became aware of these rules being broken, either through observation or participant disclosure. I developed a standard operating procedure (SOP) for how to deal with potential harm to participants (Appendix 1). University of Glasgow ethics procedures involve informing participants that their confidentiality may not be protected if there are compelling reasons, such as evidence of wrongdoing or potential harm. It was agreed with key gatekeepers that blanket reporting was not required but there should be a protocol based on perceived risk of harm.

The standard operating procedure (SOP) developed for how to deal with potential harm to participants included a 'traffic light' system for scenarios where either: 1) nothing would be reported (green), 2) it would be reported to university supervisors (amber), or 3) reported to River Garden staff (red). The protocol also included other forms of harm, such as violence or emotional distress. The draft was refined after consultation with two River Garden residents and (separately) two peer researchers from a separate third sector organisation. Feedback was mixed between those who favoured a very strict reporting system and those who felt that only specifically high risk issues should be disclosed, but overall led to a stricter reporting system than had been originally drafted. Several items that had been in the 'green' category were moved to 'amber', and several 'amber' moved to 'red' (Appendix 1).

3.3.2.4 Sampling

A prospective cohort sampling strategy was employed. River Garden residents were recruited into the study shortly after arriving then followed-up with repeat

measures at six month intervals or after the left the community. This type of longitudinal observational design shows the chronological sequence of events and can help with distinguishing cause from effect. However, they do have issues with loss of subjects to follow up. Also, there are problems with confounding variables (Mann, 2003). As discussed in the literature review, this means it is difficult to differentiate between treatment effects and other processes such as natural recovery. The design is fairly similar (if far smaller) than prospective outcome studies such as DORIS, which recruit participants at treatment entry and follow them up (McKeganey *et al.*, 2006).

I set a recruitment window of April 2019 to April 2020. An effort was made to recruit any individual who was resident in River Garden between these dates. The April 2020 cut off was selected because each resident could potentially be followed up for another twelve months, which with this cut off would be six months before my submission date. River Garden had been open for approximately a year when recruitment began and participants who had taken up residence beforehand were also recruited, as opposed to only recruiting people who entered during the recruitment window. Consequently, some residents provided data at six or twelve months without providing data for earlier stages. A total of ten residents lived in River Garden at any given time between these dates, nine of whom were recruited into the study (a 90% participation rate).

3.3.2.5 Recruitment

People who use alcohol and other drugs are sometimes considered a hard-to-reach group, who it can be difficult for researchers to access (Bonevski *et al.*, 2014). The difficulties were increased by the fact that participants were not recruited separately from the wider community but from a residential programme, access to which required the cooperation and goodwill of trustees and staff. Well placed gatekeepers who facilitate access can help or hinder research depending on their personal thoughts about the value of the research or their approach to the welfare of the people for whom they are responsible. As such, it is important to establish

rapport with key individuals. These can be formal gatekeepers such as programme leaders or informal such as operational staff (Reeves, 2010).

I was fortunate that my access was supported by a trustee and a staff member, both of whom were on my research advisory group. They actively facilitated access to participants, ethnographic visits, and access to routinely collected data. Before recruiting anybody, I made an initial introductory visit to discuss the project with residents and give them a chance to think about taking part. The dates and times of individual interviews were then arranged by staff members. I always made sure residents understood participation was voluntary and would not affect their status in the programme.

3.3.2.6 Procedures

At the beginning of each interview, I explained the key aims of the research, issues of confidentiality, what would happen with the data, the voluntary nature of the research and the right of the participant to withdraw. Participants were asked to read the information sheet (Appendix 2) then asked to sign the consent form (Appendix 3). Audio recording was started after consent was provided. The research steps were different depending on whether a resident was being interviewed for the first time or in a follow-up interview, it was a staff social network interview, or it was one of the staff/trustee theory-testing interviews.

For resident interviews, they were always asked to complete the surveys first (the ABI in all interviews, the CMRS only in the initial interview). They were then provided with the two blank concentric circles templates (Appendix 4) that were used to map out their social network. They were asked to write on stick notes the initials of 'people they have interacted with over the past week', an interaction-based name generator designed to capture a mix of close and weak ties (Burt *et al.*, 2012). The first time a resident was interviewed, they were also asked to retrospectively map out their past network.

Next, they were asked to place the sticky notes on the template, placing people they felt closest to at the centre and least close at the edge. They were prompted to look at how they had placed alters in relation to each other and move them around until it felt accurate. At this point, I removed the sticky notes and wrote the initials directly onto the template.

Residents were then asked to use coloured marker pens to circle each set of initials, with a green circle indicating a positive health influence and red indicating a negative health influence. They were advised they could also leave initials un-circled if the person was neither positive nor negative. Additional information on alters was captured using a separate name interpreter survey (Appendix 5).

Finally, alter-alter ties were captured by asking them to draw a line between people in their network who have 'a close relationship'. They were encouraged to talk about their network and a series of prompts were used, such as asking how a specific alter has influenced their recovery. All procedures were followed from a procedures guide (Appendix 6). These procedures were replicated in one-off interviews with programme staff, with the exception of the CMRS scales which did not apply to staff.

During COVID-19 lockdown, procedures were adapted for remote research. A digital consent form was emailed to participants in advance (Appendix 7) along with a digital version of the standard information sheet. The ABI and CMRS surveys were distributed in advance using the Online Surveys platform (https://www.onlinesurveys.ac.uk/). Participants were sent a meeting invite on Microsoft Teams and it was arranged with staff that they would have access to the office computer at that time. On one occasion, a resident used his mobile phone to take part from an outdoor location instead. For the network mapping procedures, I screenshared the VennMaker software package and constructed the sociogram according to verbal instructions from the participant.

The theory-testing interviews with staff and trustees were all conducted remotely. Again, this involved sending a digital consent form and survey link in advance along with study information, then conducting the interview using Microsoft Teams. The ABI tool was used but the CMRS was not. I conducted the interviews by following a new interview schedule that I had developed for this component of the research (Appendix 8).

3.3.3 Characteristics of the sample

Information on resident characteristics was taken from resident admissions forms. I aimed to prospectively recruit every resident who entered River Garden, so there was no effort to be selective about any other characteristics. The age of participants ranged from 20 to 47 years old, with a median age of 35.

Amongst the nine residents recruited, most used more than one substance. Five residents reported a problem with opiates, making this the most common drug of choice. The use of additional substances such as benzodiazepines, alcohol, and cocaine were also prevalent amongst those for whom opiates were their main substance. Two residents reported that their main drug of dependence was alcohol, with one of these also reporting recreational use of additional substances. One resident reported their main problem was with cocaine, also accompanied by general polydrug use including cannabis and ecstasy. One resident reported general chaotic polydrug use including benzodiazepines, alcohol, and NPS but not opiates.

All residents were unemployed when they came to River Garden. However, they often had good qualifications and work histories prior to that point. One resident had a master's degree and employment history in the public sector. Another had a career in retail management. One was a trained chef. Another was a stonemason and master builder. One had worked as a mechanic and had a forklift license. One had dropped out of university for an apprenticeship as an electrician but had put that on hold to come to River Garden. One had previously held

employment as a telecommunications engineer. Two residents had work experience in gardening and forestry roles.

Criminal justice involvement was also commonplace. Five residents had been in prison. Notably, these were the same five who had used opiates. Two of these had been in prison once, while three had been in prison multiple times. The offences involved were a combination of violent crimes (assault, carrying weapons, robbery) and drug charges. One resident came to River Garden directly on license from a long-term prison sentence. Another resident had never been to prison but was serving a community payback order for assault. One had been cautioned for possession of cannabis but had no other offences. Two residents reported no criminal justice involvement at all.

The physical and mental health of residents was varied. Three residents reported good physical health, usually expressed in terms of physical fitness and absence of physical disability. Three residents specifically reported poor physical health, which ranged from serious injuries suffered during assaults (e.g., a lung injury from being stabbed) to just being in poor physical fitness. Information on physical health was not captured on every admissions form, but the other three did not appear to have any major physical health issues.

Mental health problems were more prevalent. Only one resident reported good mental health, while eight residents reported mental health issues. Depression and anxiety were the most common, reported by six residents. Less common issues included paranoia, panic attacks, self-harm and suicide attempts. For example, two residents reported suicide attempts in the past. Two reported self-harm. Two had been in a psychiatric hospital at some point. One reported drug-related flashbacks.

3.3.4 Analysis of quantitative data

All of the quantitative analysis was conducted using R Studio. Other software packages were used depending on the specific dataset being analysed. For

survey data, the source data was entered into Microsoft Excel before being loaded into R Studio. For networks data, the SNA software VennMaker was used to construct the dataset initially before being exported into Excel then loaded into R Studio. An analysis plan including pre-registered hypotheses was written in advance and uploaded to Open Science Framework (https://osf.io/3hdfu/). Analysis code can also be found in this OSF repository.

3.3.4.1 Analysis of Survey Data

The ABI and CRMS data were first compiled into excel spreadsheets. Each row contained the data for a separate participant and each column contained a numeric value representing their answer to a question. For example, the first question of the ABI scale asks if they agree that 'an addicted person can control their use'. If a participant strongly disagreed, this cell would show a numeric value of '1', and if they strongly agreed it would be '5'. The average scores of distinct groups of questions were then calculated to get subscale scores. For example, the 'inability to control' subscale of the ABI is the average score of its first four questions. I then created a data frame that held the subscale score for each participant and added additional variables to group the participants (e.g., a variable indicating whether a resident had completed the survey at three, six, or twelve months). Next, I calculated the mean subscale scores for each group. Finally, I conducted a Kruskal-Wallis test and created a boxplot for each subscale.

3.2.3.5 Analysis of Network Data

Network data was mainly captured on paper and pen sociograms (prior to the remote research). The first step was to code the analogue data into digital format, by precisely reconstructing the hand-drawn sociogram in VennMaker. Alters were placed in the same position, coded with the same attributes, and the same alter-alter ties were drawn. The VennMaker data export function was then used to export the network data as a set of .csv files. These files were loaded in RStudio for analysis and visualisation.

At this stage, it was possible to calculate measures of network structure. I calculated the following network measures: proportion of alters circled as a positive influence, proportion of alters circled as a negative influence, proportion of alters with 'lots' of AOD use, proportion of alters who had 'stopped' AOD use, network size, constraint, transitivity, average closeness of alters to ego, homophily of alter groupings by role, and homophily of alter groupings by AOD use status.

Aside from the basic counts and proportions, the measures may require further explanation. 'Constraint' essentially measures whether a network is characterised by network closure or structural holes (Burt, 2001). Smaller, more densely connected networks will have high constraint. Larger, sparsely connected networks containing disconnected groups will have low constraint. In the literature review, I explained how these structures can indicate bridging or bonding capital. 'Transitivity' measures the level of connectedness within distinct groups (by measuring only at triadic closure, the proportion of potential groups-of-three that are fully connected). It is possible then that an egonet can have low constraint due to the ego being the only point of overlap between several unconnected groups, but high transitivity because each of these groups is itself densely connected (Crossley *et al.*, 2015).

The homophily of subgroups was calculated using Krackhardt and Stern's (1988) external-internal (EI) index. The EI index measures the relative density of connections between alters with a specific characteristic compared to the density of their connections to people without this characteristic (e.g., do people who have stopped using substances have a greater proportion of connections to others who have also stopped). A negative score indicates more internal connections, and a positive score indicates more external connections, with a limit range of -1 to 1.

'Ego-alter' closeness was calculate by assigning a closeness rank of 1-4 to each alter, based on which concentric circle they were placed in, then calculating the

mean. A high value (3-4) indicated a greater balance of close ties, while a low value 1-2 indicated a network characterised by weak ties.

These measures of the egonet structure were converted into individual-level variables and treated in the analysis as an attribute of the individual. As Crossley *et al.* (2015) advise, when properties of the egonet are attributed to the ego this allows them to be used in standard statistical analysis such as regression. I was interested in how attributes such as the length of time somebody had been in River Garden affected their network attributes.

The network attributes for all participants were compiled in a data frame, with each participant in a separate row and the columns holding the attributes. For categorical variables (e.g., number of alters circled as positive) I conducted a Chi-Square Goodness of Fit Test. For continuous variables (e.g., constraint) I used a Kruskal-Wallis Test or Independent Samples *t* Test. Network graphs were created using the graphlayouts package to plot the nodes onto a concentric circles template, in the same positions they were originally placed in by participants.

3.3.5 Analysis of qualitative data

3.3.5.1 Thematic Analysis of Interviews and fieldnotes with NVivo

There were three forms of qualitative data to analyse: fieldnotes recorded during ethnographic fieldwork, transcripts of the qualitative interviews, and descriptive memos that I wrote about the network maps. These were all loaded into NVivo 12 to be coded. There were several rounds of coding, firstly to generate a set of codes and then to merge and refine codes into a more manageable number. On the first round of coding, I selected three transcripts (one resident, one staff, one trustee) and began creating the codes. Because there was a significant amount of unstructured observational data and I wanted to build theories from the data, my approach to coding was very inductive, rooted in the language used by participant. These codes were then used to code the fully data set, gradually merging thematically similar codes as patterns became clearer.

Codes were then categorised under four key headings: context, mechanism-resource, mechanisms-response, and outcomes. The main conceptual issue at this stage was deciding which category any given code should go into. For example, the code of 'motivation' could operate at all levels. Baseline motivations for coming to River Garden could be a contextual factor, whether somebody responded to the resources in a motivated manner could be mechanism-response, and sustained motivation to remain abstinent could be an outcome. The way that these themes did not neatly fit into a discrete segment of the CMOC made it particularly difficult to separate mechanisms and outcomes, with codes such as 'respect', 'responsibility', and 'gratitude' all possibly fitting into either.

Generally I was guided by the realist principle that mechanism-responses occur within the 'reasoning' of the individual (Dalkin *et al.*, 2015) whereas outcomes may involve more observable/measurable behaviours. An individual performing responsible behaviours was an outcome, but the respect for their peers that led to this behaviour was a mechanism.

Throughout the first draft of the qualitative findings chapter, I continued to merge codes or shift them around within the CMOC framework as further insights occurred during the writing. Notably, I realised that all the resources could be grouped into two main categories and all of the responses into three main categories, with these six potential resource-response combinations constituting the six key mechanisms of River Garden.

3.2.3.4 Qualitative Structural Analysis

Qualitative Structural Analysis (QSA, Herz, Peters and Truschkat, 2015) is an analysis technique that facilitates an integrated analysis of network map structures and data from the qualitative interview in which the network map was created. To conduct QSA, I first wrote a descriptive memo about each network map. These memos were written as a series of descriptions of the networks: structure-focused, actor-focused, and tie-focused descriptions. A structure focused description may describe whether there are structural holes between

different groups, an actor-focused description could describe which alters seem to be in key positions or who is circled positive/negative. Tie-focused descriptions were less relevant because they would refer to different types or directions of ties, and my tie data was much simpler.

Writing these memos transforms the structure of the network into a narrative, meaning its analysis can be integrated with the analysis of the accompanying interview. I found that the process of writing memos forced an additional attention to the finer details of how networks were structured. I began to notice more minor issues that may not have immediately stood out, such as one resident being placed slightly less close than all the others.

3.3.6 Integrating quantitative and qualitative analysis

This was a mixed methods study. Losada and Blanco-villasen (2018) make a case that the main difference between mixed methods and multimethod studies is that mixed methods have a greater requirement for integration of analysis. I have already described how the realist CMOC framework provided an invaluable technique for bringing diverse data into a cohesive whole. Furthermore, I did use findings from one component to sensitise data from another. For example, when the ABI surveys showed that River Garden was characterised by a strong belief in responsibility, this helped me realise the importance of this theme in the qualitative data. Subsequently, when I was merging codes, I made sure to retain responsibility as a main code and subsume other codes into it.

Furthermore, there were occasions when I had a sense from participant observation that a resident was not settling in well in River Garden, but it was not until the network map exercise that I got a true sense of how disconnected they felt from their peers. Each method that I used provided a different angle or emphasis that could help clarify the overall picture in a different way.

3.3.7 Validity, reliability, and quality

The main advantage of using a mixed methods approach is to gain a greater breadth and depths of understanding and corroboration than would be possible with a single method (Pluye *et al.*, 2009). I feel as if this approach paid off and by the end of the study, I was confident in my findings. The ability to corroborate across different methods was helpful and in particular the theory-final testing interviews with key implementers provided useful validation. The longitudinal approach strengthened insights into causal mechanisms. The main limitation was that the observational design made it difficult to separate the effects of River Garden from other factors that might be causing outcomes.

Internal validity describes the extent to which the observed results represent the truth in the population of study (Patino and Ferreira, 2018). Noble and Smith (2015) propose a roughly analogous concept for qualitative research of *truth value*. That is, to recognise that multiple perspectives exist, that my personal perspectives may introduce bias, and that the research clearly and accurately presents participant perspectives. I feel any participant who reads this will recognise an honest and fair attempt to represent all viewpoints.

Reliability is about the consistency and replicability of the procedures. This study was concerned more with making sense of a complex and evolving community at a very specific point of its development, therefore could not necessarily be replicated with the same results elsewhere or at a different time. Noble and Smith (2015) argue that in qualitative studies the concept of reliability can be broadly substituted with the concept of *consistency*, whether procedures have been followed in a clear and transparent manner and that another researcher should be able to arrive at comparable findings. Again, I feel this study was methodological rigorous and the use of NVivo and R Studio has left a transparent trail of analytical procedures, including replicable code for the quantitative analysis.

3.3.8 Ethics, Reflexivity, Positionality

There were several issues relating to research ethics, reflexivity, and positionality. I have opted to reserve these details until the discussion, so that they come after the presentation of the findings. For a detailed account of these issues, please refer to Chapter Seven, section 7.6. I will, however, provide a brief overview of these issues as part of this methodological chapter. First, I began the research identifying as a 'lived-experience' researcher, and was very positive about the River Garden model, as it seemed to offer people a chance at holistic, vocational routes to recovery that were similar to my own. Over time, I became less positive about the model, mainly due to observing poor outcomes. Many of the critiques of recovery focused policy/treatment seemed to offer an appropriate framework to interpret these outcomes. For example, there were outcome inequalities, the benefits of the project seemed less accessible to people with higher levels of social marginalisation, and there were harms associated with high levels of attrition and rapid relapse. There were clear limits to central strategies, such as the importance of lived-experience peer support, which was undermined by greater differences in background, experiences, and attitudes. The resultant thesis was more critical of the model than I had expected, and I had to balance this with a desire not to be critical towards trustees, staff, and residents, who I liked and respected. I had also expected the main ethical issues to be about the balance between participant anonymity and safeguarding. For example, I had developed a protocol about how to respond if a resident disclosed substance use. However, the main ethical issues related to organisational conflict between groups of trustees and staff, about how the project should be run. I had to think about my role within the situation, remaining neutral, sustaining good relationships with all groups, and conduct interviews with many of the people involved. It was challenging to make sure that no single perspective dominated the findings. Ultimately, my general feelings towards the project will have influenced the overall tone of the thesis, and this perhaps most represents the voices of residents for whom this project did not work. As a final point, I have used the findings to critique recovery focused policy, theoretical perspectives, and the government strategy of using residential rehabilitation to reduce drug related deaths.

However, I must also acknowledge that River Garden is a very specific work-based model which lacks almost all of the therapeutic components usually present in recovery focused interventions.

3.4 Conclusion

This chapter has described and evaluated the methodological approach taken to answer the key research questions. This study used an evaluation design that could be broadly described as a process evaluation, with some specifically realist methods to data collection and analysis. It was prospective, longitudinal, iterative, and observational. I have described the rationale for the variety of methods used and justified their value in making sense of River Garden. In the next three chapters I will present the study findings. Chapter Four is a narrative of the story of River Garden so far, Chapter Five present quantitative findings, and Chapter Six present qualitative findings within a realist framework to make sense of the important contextual factors and mechanisms.

4 Chapter Four – Descriptive history of implementation

4.1 Introduction

These findings come from three years of engagement with the River Garden community, beginning prior to its official opening and continuing until the end of its third year. There were so many notable occurrences during this time that prior to analysing events on a thematic level in future chapters it is helpful to first provide a descriptive, chronological context. I have separated the implementation into six key segments, covering the initial vision for the project, observations from some early familiarisation visits, the divergent outcomes of the original cohort of residents, a period of stabilisation and collective regrouping after several residents left, the expansion and regrowth of the project, and the effect of the COVID-19 lockdown on project development.

This chapter therefore sets out the history of River Garden's first three years in six stages. The chapter was written entirely with reference to my fieldnotes and was an effort to condense these into a chronological narrative. Because the fieldnotes also contained analytical notes, this chapter also included the chronological development of some of my analytical thinking and is not purely descriptive. The findings range from individual resident experiences to programme-level matters of implementation and transferability, particularly the extent of integration with the wider recovery movement, the role of the Board of Trustees in day-to-day operations, and the development of the project vision. I have included photographs for illustration that were all taken from the River Garden website (https://www.rivergarden.scot/).

Image 1: Opening ceremony plaque, showing support by Scottish Government and the *San Patrignano* community

4.2 Initial vision for River Garden

My main insight into the original vision for River Garden came from discussions with its founder during the early stages of my PhD, along with a visit to an Annual General Meeting (AGM) in 2017. I gathered that the goal was to transfer to Scotland the principles of three international programmes that use social enterprise activities to help people into long-term recovery, with the main inspiration being the San Patrignano community in Italy. The Basta community in Sweden and Delancey Street community in the USA were also important influences. The finer details were to be adapted to work in Scotland and these adaptions would be shaped by the contextual features of the new locale.

I gathered that residents would live on site for three years each, progressing through stages of increasing freedom and responsibility and becoming employed as peer workers to support new residents after one year. The location was a large 48-acre walled garden that formed part of an 18th Century country estate and had fallen into disrepair since its previous use by an agricultural college. A capacity of forty residents was planned, with a plan to increase the number by ten residents each year, meaning ten in 2018, twenty in 2019, thirty in 2020, forty in 2021.

A core idea was that skills development combined with peer support, delivered over three years in a residential setting, could address some of the deeper structural barriers to long term recovery and avoid the high relapse rates associated with shorter term residential rehabilitation. This would be because the vocational training would help people gain employment (and therefore would not relapse due to a lack of purposeful activity) and the three year programme was long enough for behaviour change to be fully established. There was also a sense that work and structure would be good for people in and of itself, helping residents forge positive identities, become healthy, and develop discipline.

The social enterprise profits were to eventually self-fund the community and residents had to cease claiming government benefits after three months, at which point they committed to a full three years in the community. They would receive a small allowance instead (around £30 per month). The rationale for this was to encourage residents not to be dependent on benefits and learn to live a more simple, less consumerist lifestyle and learn the value of money (with all their accommodation and food needs provided, they would not need much spending money).

Furthermore, there would be a great focus on holistic health: residents would eat healthy food, be encouraged to use caffeine responsibly, and would even have to stop smoking (in the early stages, it was a no-smoking community and residents were encouraged to switch to nicotine patches). Residents would only have limited and supervised access to their mobile phones at first, with fewer restrictions after they had been there for six months. The concept of progressive

responsibility was central, with residents being afforded greater freedom and responsibility after three months, more after six months, and becoming staff members between twelve and fifteen months.

The core of the programme was the structured workday, rather than the standard therapeutic approaches delivered in most residential rehabilitation. Residents were to gain a sense of self-worth by creating the highest quality goods and services in their social enterprises. This concept of quality was central to the original vision. Additionally, a high degree of integration with local recovery groups was anticipated, even the idea that the community could host its own Narcotics Anonymous (NA) meetings.

Image 2: Aerial photograph of River Garden site

4.3 Familiarisation

For most of the first year of River Garden, there was capacity for two residents, who could share a single three-bed room with one staff member. The programme

founder and various trustees who had been appointed to the IFDAS board were closely involved in community life, mingling with staff, volunteers, and a single resident. When I met the first resident, Brian, shortly after he arrived, he was initially experiencing the symptoms of opioid withdrawals, seeming disorientated and vulnerable. He informed me that had rapidly tapered off a methadone prescription to meet the requirement of abstinence and despite the side effects he was approaching his task in a determined manner, keen to emphasise that a place at River Garden had motivated him to cease methadone more effectively than any efforts from his treatment providers. He was also being supported in smoking cessation, to meet the no smoking policy that was in place at the time.

The physical location felt impressive to me, and Brian expressed that the opportunity to live there had provided a powerful motivation to become abstinent. At first, there was a notable contrast between the natural beauty of the site and the troubled condition of its first resident. Within a month, he appeared to have significantly improved in health, appearing at the opening ceremony in March 2018 to charm the audience with a self-penned poem about his recovery.

I attended the opening ceremony as a volunteer, donning a high-visibility vest and helping direct visitor cars to parking spaces. The aim was to integrate myself in a behind-the-scenes role as early as possible. My fellow volunteers were peer workers from a local Alcohol and Drug Partnership (ADP), some of whom I would later interview for my pilot study. I was struck by the camaraderie between the volunteers, observing a real sense of community cohesion. The presence of these volunteers suggested that River Garden would be well integrated with the local recovery movement.

There was talk that one of the large polytunnels would be reserved for use by a local recovery community, suggesting free and informal access to the site. I learned that the connection was facilitated mainly by one River Garden trustee who was also a co-founder of the local recovery community, essentially occupying a key bridging position between the two organisations. Integration with the local

recovery movement seemed to be an important feature of the implementation design.

By August 2018, Brian had been joined by a second resident. The project was still in very early development, with capacity still limited to two residents. The main social enterprise was an unmanned vegetable stall with a donation box. Residents were mainly occupied with the physical restoration of the site, such as refurbishing a storage room to store produce for an organic chocolate company. From this, residents were to fulfil online orders and gain experience of administrative work.

The first two residents were keen to restore the storeroom to a high standard and positive about the business opportunity. Both were already skilled in building work, Brian a qualified stonemason, the newer resident a joiner. I realised that residents were being selected for skills that could build the community and provide training to future residents. They worked effectively with minimal supervision, a staff member checking their progress throughout the day. However, I quickly realised this level of freedom was affording ample opportunity to circumvent the no smoking policy, which they both did regularly.

At this stage, I could see that integration with the local recovery community included volunteers taking an active role in supporting residents. In one example, Brian was driven to a healthcare appointment by a female volunteer who had been granted responsibility for supervising him to external appointments and recovery meetings. Brian confided to me that they had begun a romantic relationship, an early indication that these more informal support networks created potential for safeguarding issues.

I sensed that the 12-step fellowship movement would have a strong influence on the culture of River Garden. For example, Brian had become involved in the local fellowship scene and had developed an understanding of his addiction as a ‘spiritual malady’, which he was keen to explain to me and promoted in turn to the new resident. This showed how integration with external networks could

potentially influence the culture of River Garden. Every Friday night, staff and residents attended a local recovery café.

In general, these were positive beginnings. That said, at six months since the official opening, the infrastructure still felt very underdeveloped in terms of accommodation, social enterprises, and resident numbers. After this familiarisation period, it would be eight months before I returned to begin interviewing residents.

Image 3: Vegetable stall with donation box

4.4 The first cohort

When I returned to the community in April 2019, there were seven residents and a new social enterprise, a pop-up café, which was open to visitors at the weekend.

Brian had been joined by three residents who had been there for around six months (Eric, Ian, Keith) and another three who were still within their first three months (Kyle, Kevin, Thomas). They were a lively bunch and there seemed to be a good community spirit. During the first round of interviews, residents spoke positively about the programme, although there were some common complaints. These were mainly about having to stop claiming benefits and live off the low monetary allowance provided by River Garden (Kyle, Keith). Other complaints were that the gardening work felt menial, and the work routines were too intense (Kyle) or, conversely, the programme was too unstructured due to the lack of real social enterprises (Ian).

I observed a high level of energy drink consumption among some residents (Kevin, Kyle), who seemed to be exploiting the loophole that caffeine was not technically against the rules while circumventing the general spirit of healthy consumption. The smoking policy was widely flouted, and it seemed the sheer size of the location and relative freedom for residents meant rule enforcement would be challenging. I realised that residents will not always accept the programme as delivered but push back against aspects they do not like, perhaps sensing that the boundaries were malleable as the details were being worked out.

Over several visits in spring/summer of 2019 to conduct interviews, I began to notice some disharmony among residents. Notably, Brian had progressed into a peer worker role but seemed to be struggling to have his role respected by residents such as Kevin and Kyle, who would argue with him frequently. The emerging culture was somewhat rowdy, with lots of loud banter and arguing back and forth between residents and staff. I became aware of problems with community cohesion and residents separating into distinct groups, particularly the newer residents Kevin, Kyle, and Thomas on one side and more established residents Eric, Keith, and Ian on the other.

These issues became clearer over repeated visits and what had seemed like a culture of robust verbal back-and-forth at first started to indicate serious ruptures in the community. A staff member, Trevor, informally confided that he was

considering quitting due to the level of rule breaking and conflict that had occurred when trying to enforce the rules. Issues included illicit use of mobile phones by residents who had not yet gained this freedom, residents stealing juice from the café, and residents continuing to claim benefits after their three month progression.

I gathered that attempts to enforce rules had led to collective resistance by the group residents comprised of Kevin, Kyle, and Thomas, who banded together to outgun staff in arguments. Staff were also hampered by a lack of established protocols for discipline. There was a general air of drama and disorder around the community and the reality of life in River Garden in the summer of 2019 differed significantly from the idealised vision.

In June 2019, the group of Kevin, Kyle, and Thomas all left the community. Thomas left first, following several weeks of disengagement from the basic routines, with staff later suggesting he would have been asked to leave after three months anyway due to his lack of engagement. A week later, Kevin and Kyle were suspected to be under the influence of drugs, shortly after receiving a package in the mail that was subsequently found to contain sleeping pills, when staff removed the packaging from the bin for a closer look. Staff suspected this had been posted in by Thomas, who was still in contact with Kevin and Kyle via social media.

While this was going on, a problem with a building permit had led to residents being separated into makeshift accommodation around the site, allowing Kevin and Kyle to lock themselves away from staff. They left the community the next day, both quickly relapsing and ending up hospitalised due to heroin overdoses, only surviving due to peer and medical intervention with naloxone. A discourse developed amongst the staff and remaining residents that Kevin had been the main ringleader, manipulating more vulnerable residents to collectively destabilise the community in its fragile early stages. This narrative was partially confirmed by an interview with one leaver, Kyle. However, the heart of the resistance seemed to be more deeply underpinned by a dissatisfaction that the expected training opportunities were not delivered by River Garden.

Among the remaining residents, Brian, Eric, Ian, and Keith, there was a palpable sense of relief that what they perceived to be the source of the disharmony had gone. In July/August 2019, the entire atmosphere felt calmer and lighter. Residents were focusing on their opportunities for the future, finding their own roles and identities in the community, branching out into training and education in the wider community, and developing diverse hobbies and interests. A new resident, Paul, arrived in August and fitted in well with the group.

In September 2019, Brian also left the community after eighteen months residence and promotion to a staff role. He had returned from off-site leave under the influence of alcohol, refused to take a breathalyser, then (as reported by staff) left and continued on a cocaine and alcohol relapse. This relapse was described by Brian himself as a culmination of various factors, including mental ill health, a general unhappiness with life in River Garden, and a relationship breakup with someone from a 12-step group. In a follow up interview, he asserted that his main problem had been worsening mental health, largely due to the pressures of becoming a member of staff and balancing multiple roles, which River Garden did not adequately support.

A significant outcome of these events was the emerging idea, in the summer of 2019, that the management of the community should be a grassroots affair, rather than directed by the Board of Trustees. One of the main reasons provided by staff was that, when they had wanted to remove residents for rule breaking, trustees had intervened to prevent this happening. Some trustees began to have less involvement everyday community life and operational decisions. During all of this, a CEO was appointed but swiftly removed from the position by trustees within weeks, suggesting a level of organisational difficulty was also occurring at the higher levels. I began to consider whether reduced trustee influence would lead to deviation from the original vision, to transfer the principles of San Patrignano.

Image 4: Pop up café terrace

4.5 Stabilisation

In August 2019, River Garden was back down to four residents: Eric, Ian, Keith, and Paul. From this point, the community entered a period of stabilisation, with no new residents coming in until February 2020. I gathered from staff that their strategy at this point was to slow down, take stock, and focus on building a strong community culture around the four residents who remained, all of whom were motivated, responsible, and stable. Keeping the resident population low would allow them to form a cohesive community, work out their interests, and build up an infrastructure of social enterprises based around these interests. The resident numbers could start to increase when there was a solid culture and infrastructure in which to absorb new residents.

This staff-led strategy was a response to the collective trauma that the community had experienced and a way to avoid the risk of repeated destabilisation. A more trustee-led initiative called *River Garden Way* was also introduced around this time, bringing trustees, staff, and residents together to develop a more formalised River Garden programme (e.g., setting out its rules, intended culture, and expectations for resident progression).

In October 2019, I began to conduct participant observation. Although there were only four residents, this was an opportunity to study the community culture that was being developed around this core group. There was a lot of positivity in the community at this point. For example, Eric was thriving, throwing himself enthusiastically into a running club, college course, and peer worker placement. Success stories like this were now able to shine, having perhaps flown under the radar in the more chaotic earlier stages. The whole culture seemed warmer. People were greeting each other with 12-step style hugging, a new development. People interacted in more respectful tones. There was still lots of banter, but it felt good natured rather than sharp edged.

Additions to the staff team also contributed to the sense of positivity. A new member of staff joined the community, Donny, whose role was to manage the garden development. She was respected by residents and very organised, bringing increased focus to the restoration of the gardens. Work efforts were concentrated into cohesive projects such as the planting of a new orchard which seemed to provide a sense of meaning and purpose to the gardening work for residents.

Each resident seemed to have carved out their own unique role in the community. Eric was working in the gardens and had the main responsibility for groundskeeping. Keith oversaw the *River Garden Café* enterprise and had responsibility for catering daily meals to the community. Ian was developing a woodworking workshop and was receiving external training in tree surgery, supported closely by Trevor (staff). This was to be the foundation of a new enterprise, *River Garden Wood*, selling items crafted from the abundant natural supplies of wood in the gardens. Paul had found a desk-based role, video editing

and social media management, spending a lot of time in the office and seeming close with the staff. He would then develop *River Garden Events*, hosting catered meetings for local organisations in an events room he had renovated himself. As Eric, Keith, and Ian all reached the end of their first year in December, each had freedom to develop unique individualised pathways to recovery.

Towards the end of River Garden's second year, in 2019, things were going well with developing the social enterprise model. Keith and Ian attended an international social enterprise conference in Madrid and were enthusiastic about how well River Garden was received. River Garden then won a Scottish Edge social enterprise competition, receiving a £40,000 financial award for development of *River Garden Café* and *River Garden Wood*. In October 2019, the community hosted a successful 'Apple Day' event, drawing in hundreds of visitors from local communities. There was a general agreement that earlier problems had come from taking in too many new residents at once, and the solid core they had developed should be much more resilient and capable of supporting people with more serious problems.

By the last quarter of 2019, trustees were far less present in everyday community life and had become more of an external presence. A new CEO had joined, Quentin, and was welcomed by the residents and staff as a conduit between the board of trustees and the daily operations, acting as a buffer of sorts for the instructions of the board. As board members were less involved (and some completely stepped back) there were fewer connections between River Garden and local recovery communities and staff stopped regularly taking residents to the local recovery café.

From Dec 2019-March 2020, I came to realise that the main issue that staff and residents were preoccupied with was the role of the Board of Trustees. In particular, they felt that their continued influence on operational decisions was unhelpful and often very stressful, perceived as interference rather than guidance. This was perhaps because residents were all now in longer term

recovery, less occupied with the challenges of early recovery (their own or others' since there were no new residents) and more focused on the project development.

In one example of tension, staff and residents decided they no longer wanted to work for the chocolate company that earlier residents had restored the storeroom for. Quentin (CEO) successfully petitioned the board to have this work ended, against the wishes of some trustees. Residents felt the work was not valuable and they were just providing labour for an external company, rather than a genuine social enterprise developed by themselves. This was the first time I saw overt resistance by residents to ideas that had been implemented by the board and a formal assertion of autonomy through organisational structures. As time passed, resistance would develop to almost any form of board intervention in operational issues, resulting in conflict between factions of the board who were happy to cede this autonomy (e.g., Neville) and those who felt that management was deviating too far from the original vision (e.g., Nick, Lindsey).

Image 5: Growing for the future

4.6 Expansion

The resident population remained at four residents from Aug 2019 to Jan 2020. At the very end of January, the numbers increased to five residents with the arrival of Stuart. The original plan had been to have twenty residents by this stage yet work on the planned additional accommodation had not yet commenced, almost two years since the opening ceremony. Even taking this into account, the project was operating at below capacity because it could still have accommodated seven residents at this point.

Stuart was considered a good test of the robustness of the River Garden culture, as he appeared to carry a certain bearing that was described by Trevor (staff) as a bit rougher than the current residents and a bit more of a 'Glasgow guy'

(Fieldnotes, 25th Jan 2020). Stuart described himself to me as someone who had been 'ducking and diving' his whole life and was now ready to make amends to his family. He seemed to settle in well and was, at first, receptive to peer support. Keith and Paul were most proactive in engaging with him and the peer support was delivered during gardening work and tea breaks, consisting of a mix of recovery advice and general life advice. For example, I observed Paul counsel Stuart on the idea that self-development should be gradual and sustainable, rather than a continuation of impatient 'addict' thinking of trying to achieve everything at once. This advice was given during a quick 'vape break' behind the polytunnels, out of sight of any staff who might be watching from the office window.

Stuart seemed receptive at first but quickly came to present problems for the community. I gathered that he was having difficulties settling in, which were underpinned by factors such as his mental health. This manifested in behaviours that were difficult for the community to manage. In one particularly angry outburst, Paul had attempted to provide supervision on a relatively minor housekeeping issue (asking Stuart not to remove a mattress from another bedroom) and been met with intense resistance, including shouting and slamming doors. I realised that a shared experience of addiction alone would not always immediately lead to respect and connection. Furthermore, the person providing the support would often have their own vulnerabilities and peer support was a challenging role.

The one outlet for collective discussion of these types of issue were the Monday Night Meetings, a weekly group meeting to check in on resident issues. This was the only component of River Garden that resembled a more traditional group session. It was usually used for more practical issues (e.g., planning weekly workloads) but included opportunities for residents to raise other issues. In one, Stuart apologised to the group for his behaviour and was reassured by everybody that they wanted to collectively help him work through his issues. Trevor (staff) contributed a valuable perspective, that having more serious issue to deal with had given the community a renewed sense of purpose. He felt that after many

months of stabilisation they had perhaps lost sight of their purpose of helping people in early recovery.

However, for the rest of Stuart's residence there were recurrent issues with anger, boundaries, breaking rules, and isolating himself from the community. He also seemed to actively develop a conflict with Keith, targeting him with repeated accusations of being lazy. Although the community culture was robust enough to avoid destabilisation and other residents were not drawn into bad behaviour as had happened in the first cohort, this was not sufficient to properly integrate him into the community and change his behaviour.

By this time, early 2020, residents had completely stopped attending the local recovery café. Occasionally instructions would come down from the board level to encourage more resident involvement. One time, this led to them attending the opening of a new recovery café in another nearby town, although only Keith was enthusiastic about this, with Eric, Paul, and Ian grumbling a little but seeming to enjoy themselves when they got there (although much of the conversation was about the frustrations of dealing with board members). Residents also attended a Scottish Recovery Consortium (SRC) *Rights in Recovery* course and seemed generally enthusiastic about this, indicating ongoing connection with more policy-level recovery networks.

During this time, the early part of River Garden's third year in 2020, trustees still appeared to have some influence to encourage these broader recovery-focused activities. However, resistance to trustee involvement continued to intensify. I learned in Feb 2020 that the founder had been asked to step back from involvement in a letter written by staff and signed by residents, the culmination of resistance that had been developing since the previous summer. The main consensus amongst staff and long-term residents was that the role of the board should be high levels issues, such as funding, and everything else should be decided autonomously at the operational level.

Some of the conflict played out through the *River Garden Way* initiative meetings, which in practice involved trustees consulting staff and residents on a document that a trustee (Lindsey) had developed. The meetings themselves were a collaborative exercise that trustees, staff, and residents all engaged with productively, resulting in an agreed upon document setting out key programme stages and expectations for resident development. However, there was some pushback from staff and residents against the suggestion by Lindsey (trustee) of greater role for external recovery peers and some contention between Nick (trustee) and Quentin (CEO) about whether residents could be allowed to claim housing benefit, which Nick (trustee) felt was against the original principle of self-sufficiency through social enterprise.

There seemed to be a deeper disconnect around whether River Garden should prioritise a vision of recovery that valued a 'recovery' identity and engagement in wider recovery circles. This was resisted by staff and residents who felt River Garden should emphasise personal achievements in training and enterprise, with more explicit 'recovery' discourses being minimised.

Behind the scenes, resistance to board intervention was more explicit, and there was a general feeling that even having trustees visiting made everyone feel uncomfortable, stressed, and anxious. Staff and residents increasingly came to see themselves as a community with a shared concept of what River Garden should be and came to perceive the trustees as outsiders with differing views. There was a great contrast to the early stages when trustees seemed more like staff (and were involved in many staff-like roles such as resident support).

There was particular resistance to any suggestions about how social enterprises should be developed. In this area, residents were increasingly autonomous and empowered to develop projects they personally felt to be valuable. There was a real sense of focus around the small number of projects that were being prioritised, such as the completion of the new orchard, which received positive coverage in a regional newspaper. The orchard development was accompanied by related activities, such as a former teacher from the agricultural college

delivering gardening workshops for residents and volunteers. These types of structured activities really brought the project to life, in contrast to the quieter stabilisation period.

Several points of resistance occurred when ideas for social enterprise development came from trustees. For example, one idea proposed was that Eric could expand his groundskeeping work into a business, providing services to other organisations in the area. Another was that Keith could expand his catering to supply business lunches to these same organisations. These ideas were considered impractical, given the existing demands on the low number of residents. Perhaps more fundamentally, a strong belief had developed that these types of idea should develop from the grassroots level and resistance was as much to the source of the ideas as their content. These specific issues were battlegrounds for a more systemic schism around the amount of influence the board should have over the running of the community.

Another new resident, Neil, arrived towards the end of February 2020 and raised the resident population back up to six. In contrast to Stuart, he was generally perceived to be someone who would fit in well, due to his calm demeanour. The only slight concern, raised by Trevor (staff), was that because he lived in the local area, it might be too easy for him to just walk out. The contrast in demeanour between Neil and Stuart seemed to reflect a contrast in background. Neil's problem involved solitary use of alcohol rather than involvement with illegal drug networks and he had an impressive employment history in retail management. Initially he seemed well suited for the community and keen to develop social enterprise ideas.

There was another potential resident due to arrive in early March 2020, who had visited overnight during February on release from a prison sentence. He was enthusiastic about coming to River Garden when he was shortly released. During the three weeks between his overnight visit (10th Feb) and his planned moving in date (3rd March), he passed away. This was most likely due to an opioid overdose.

For me, this raised some issues about the risk of mortality in the River Garden demographic, where responsibility lies for the safety of prospective residents.

This is not to place blame with River Garden, who invested a lot of effort in engaging with this individual as he prepared for release from prison. With this target population, mortality is always a risk, and can happen whether or not an individual is engaged in treatment. However, it did reinforce that there is a significant responsibility involved when a project becomes part of the treatment landscape, positioning itself as an alternative to statutory services. I began to consider how the proposed solution of relationships and work may overlook the potentially life-threatening medical nature of the problem.

My last visit before the COVID lockdown was from 12-14th March 2020. The niggling conflict between Stuart and Keith continued to develop, but otherwise there was a real sense of community and good atmosphere. As I gained increasing insider status, I learned more about some of the messy interpersonal events of the previous summer. It became clearer why involvement in local recovery communities was no longer seen as desirable. There had, at one point, been a tangled web of romantic involvements between early River Garden residents and individuals from a local recovery community, which was considered by staff to have contributed to Brian's relapse. With the two new residents bringing the population up to six, there was a sense that things were moving forward.

Image 6: The gardens were empty of visitors in lockdown

4.7 Lockdown

In March, there was a national lockdown caused by the COVID-19 global pandemic, with significant effects on River Garden. When lockdown occurred, there were unresolved issues around the role of the board, social enterprise development, integration with wider networks, and the overall culture and philosophy of the community. The immediate effect of lockdown was a transition from permeable to closed boundaries. Strict boundaries were a feature of San Patrignano that River Garden implementers had consciously adapted to avoid cutting people off from society and becoming over institutionalised.

I gathered through remote interviews that lockdown was considered by staff and long term residents to be a positive development, forcing the community to spend

more time together and bond while affording some time and space to build up social enterprises and restore the site. Some trustees (Nick, Lindsey) felt this was an indication of the community become more insular, using lockdown to accelerate simmering tendencies towards separation from the wider community and the influence of the board. Others (Neville) seemed happier to defer to the autonomy of the staff and residents to take ownership over the project. It seemed that the planned level of integration with local communities had been found unhelpful by the residents in practice, indicating a detachment between the original vision of the implementation and the realities of the local context. I wondered if the response to closed boundaries as a positive development would potentially indicate more permanent adaption of these boundaries.

Although lockdown was welcomed by the long-term residents and staff, the two new residents, Stuart and Neil, did not cope as well and both left the community over the summer of 2020. Stuart continued to have problems with anger and began to isolate himself within the community over time, leaving as soon as he had to commit to ending his external tenancy and benefits. Neil was struggling with being apart from his partner and relapsed on alcohol he purchased when out for an unsupervised walk. His leaving was not preceded by the same type of conflict as Stuart, but he did report being somewhat isolated and bored, particularly as lockdown prevented visits from nearby family. The more self-contained version of River Garden did not appear to meet the needs of individuals in early recovery as well as it did those in long term recovery, perhaps because the former needed more social support while the latter were more focused on enterprise development.

Certainly, the enterprise development progress was impressive, and by August 2020 there was a much more professional infrastructure. This included the development of online stores for *River Garden Wood* and the development of another new enterprise, *River Garden Produce,* selling bags of vegetables grown in the gardens to members of the public. A discourse emerged about the need to 'professionalise' River Garden, a term which was used to call for both a more professional set of social enterprises and a more professional organisational

structure, particularly a formal agreement that trustees should not be involved in operations or have direct contact with community residents. This again raised the question of whether the initial design led to too many competing pressures on residents, and the closed design forced by lockdown had led to a simpler model that actually worked better.

The final fieldwork component involved interviews with key programme implementers, conducted September-November 2020. These were a mix of staff members, trustees, and ex-trustees. The purpose of these interviews was to test and refine the theories I had developed through my earlier fieldwork. During this round of interviews, I gathered that the tensions between operations and board had developed into an outright conflict. Furthermore, the conflict involved different factions of the board itself, leading to a power struggle with votes of no confidence being raised against board members on both sides.

Nick (trustee) and Lindsey (trustee) felt control of the project had been captured by people who didn't believe in the original vision, who had capitalised on lockdown to turn the project into more of a traditional service, averse to the risks involved in realising a more radical vision. They were concerned that social enterprise development and construction of new resident accommodation had not happened as planned, leading to a situation where, towards the end of year three, there were still only half a dozen residents. Furthermore, there were no social enterprises of a scale that could create a genuine work environment for new residents or raise enough income to allow financial independence for the project.

The desire of Quentin (CEO) and the staff team to allow residents to claim housing benefit was seen as an abandonment of the principle that this should be a social enterprise led model, independent of government funding. The role of the CEO was singled out as the main problem, due to not facilitating the construction of additional resident accommodation, the development of the café, or the progression of residents into paid roles after twelve months. These were issues that were beyond the control of staff and residents. The separation from the wider recovery movement and local community was perceived by one group of

trustees as the project becoming more insular and by the other as letting the residents guide the community practices.

Several board members resigned. The board members who remained were those who agreed with a higher level of autonomy for residents to adapt the project, emphasising the importance of flexibility, instead of sticking to a predefined plan. They insisted they had not deviated from the original vision but were adapting for the local context, rather than doggedly sticking to theoretical ideas that were not working in practice.

At the close of fieldwork, November 2020, this had all settled down and the remaining residents, staff, and trustees all spoke positively about their hopes for the future of the project. I empathised with the disappointment of some implementers that an idea had not developed in the manner envisioned. At the same time, I recognised that it was important for the community to find its own character and their achievements in weathering numerous difficulties, each of which had led to adaptions that should increase the resilience of the project going forward.

Image 7: the new café, completed April 2021

4.8 Conclusion

In the early days of River Garden, there was a sense of hope that something special was happening, drawing momentum from being part of a broader recovery movement and the great level of public interest in the project. There was also a solid theoretical idea of how it was expected to work and a hands-on approach by implementers from the board of trustees, who were closely involved in the daily practices of the community. Perhaps there was an underestimation of the challenges that could be presented by a cohort of residents in early recovery from serious substance use problems, which led to significant problems in the early stages, to which there were not always ready solutions. These experiences should not drown out the powerful success stories that were developing even at the most difficult times, which would provide a strong foundation for continued development.

The main stabilising adaptions were a slowing down of the development plan and the community becoming more autonomous and resident-led, with less influence from the board of trustees and less integration with local recovery communities than first expected. A rift developed between factions of the board, between those who felt the project had deviated too far from its vision, and those who felt the changes were reasonable adaptions, demonstrating necessary flexibility. There are likely to be more points of agreement than each side would realise and in analysis I will attempt to synthesise the perspectives in a manner that is useful for all implementers.

Lockdown was welcomed by most remaining residents and staff as an opportunity to build community cohesion and focus on project development, but this was felt by some trustees to be another indicator of deviation from the original vision of community integration. Residents who arrived immediately prior to lockdown also struggled with this lack of integration. Conflict resulting from these issues led to several trustees stepping down from the board, particularly those who felt the original vision had been lost. At the very end of the third year, the small group of residents, staff, and trustees who remained were positive about the future of

the project. The characteristics and beliefs of these individuals were central to the project that River Garden would become and will be further explored in following chapters.

In this chapter I have told a very qualitative story. The next chapter, Chapter Five, will present all of the quantitative findings from surveys and social network map exercises completed by residents. This quantitative overview of the key network transitions, addiction beliefs, and reasons that residents came to River Garden will provide a foundation for a return to a more analytical qualitative analysis in Chapter Six.

5 Chapter Five – Recovery Capital and Networks

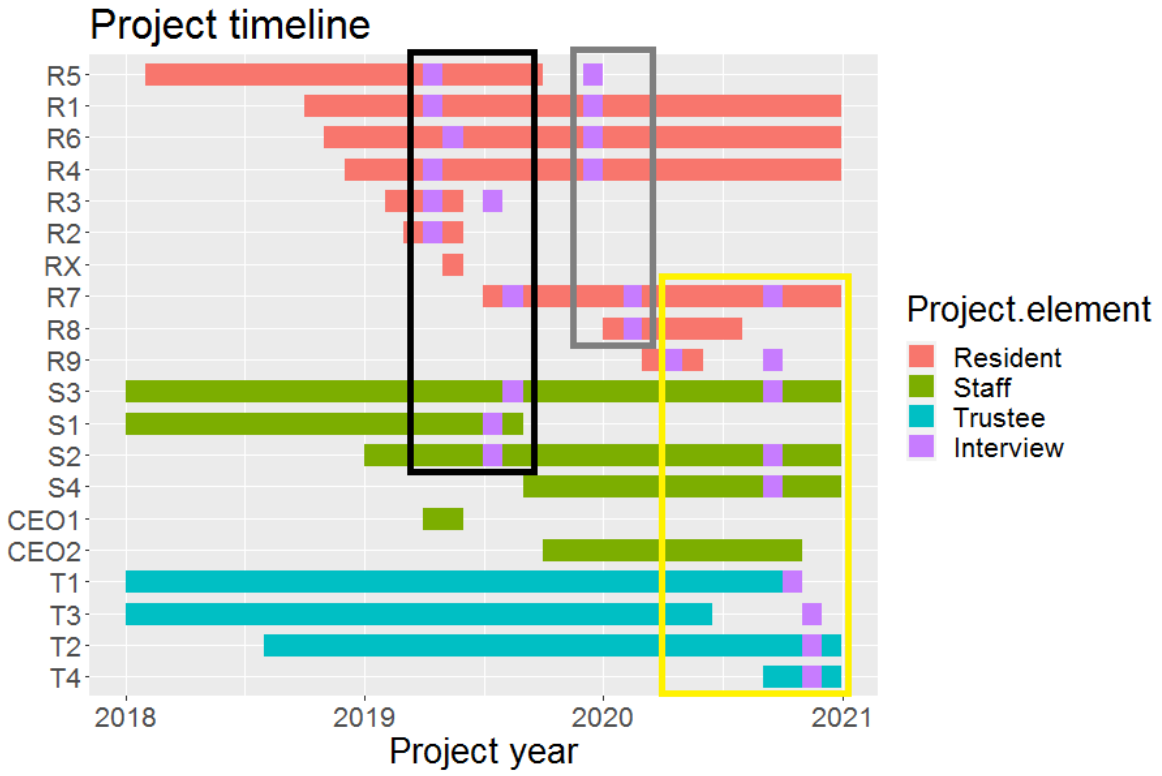
5.1 Introduction

In this mixed methods study, a significant volume of data was gathered about participant attributes and social network characteristics. This involved administering surveys prior to qualitative interviews, collecting social network data during interviews, and accessing data routinely collected by the River Garden admissions and review processes. This was a longitudinal design involving multiple waves of data from the same participants. In this chapter, the results of the analysis of these data will be presented, visualised, and interpreted, although more detailed interpretation will be reserved for the discussion. The data presented here provide an overview of the community responses to surveys about their addiction beliefs and reasons for coming to River Garden, as well as social network composition, structure, and transitions.

5.2 Data collection overview

Figure 1 shows an overview of the data collection, where the prefixes ‘T’, ‘S’, and ‘R’ identify trustees, staff, and residents, respectively, and the horizontal lines show the length of their involvement. The notches indicate the month they were interviewed. For example, R7 arrived summer 2019, was interviewed shortly after, then again in early 2020, and finally in Autumn 2020.

Figure 1 – Project timeline with black, grey, and yellow boxes showing three waves of data collection



From the project timeline, it can also be observed that data collected occurred in three waves. The first wave was from April-August 2019, a first round of resident and staff interviews. The second wave was from December 2019-February 2020, follow-up interviews and first interviews with new residents. The third wave was post-lockdown, April-September 2020. Within this third wave, theory-testing interviews with staff and trustees were conducted from September-November 2020.

Although the study was designed to measure the progression of residents through specific programme milestones (e.g., what happens to a residents' social network between three and twelve months) there was also value in observing programme-level changes, since the project development (and adaption) could mean that the experiences of a resident in 2019 differed from that of a resident at the same stage in 2020, even without the impact of the Covid-19 pandemic.

5.3 Addiction belief inventory

The Addiction Belief Inventory (ABI) scale measures eight addiction belief constructs: 1) an addicted person is unable to ever control their use, 2) addiction is a chronic disease that requires lifelong abstinence, 3) it is not possible for an addict to solve their own problems without experts, 4) addicts are not responsible for actions committed during addiction, 5) addicts are responsible for their own recovery, 6) there is a genetic basis to addiction, 7) addiction stems from efforts to cope with personal problems, 8) addiction is a moral weakness.

Each participant was asked to complete an ABI before their interview. It was the only quantitative measure completed by residents, staff, and trustees. Resident ABI scores were analysed according to programme stage of the resident, at three, six, or twelve months, or having left the community. There were two waves of staff interviews, in 2019 and 2020. There was one wave of trustee interviews.

The aim was to gather a descriptive overview of the types of belief that characterise the River Garden culture, and whether beliefs changed over time, differences between residents, staff, and trustees, and any convergence between different groups over time. In practice, the number of participants was very small (nine residents, four staff, three trustees) and even smaller when broken down into waves (e.g., five residents at three months, four at six months). As such, there was insufficient statistical power to identify group differences. Due to this limitation, the analysis that was conducted to test for statistically significant differences between groups has not been presented in this thesis. Instead, a simple descriptive analysis will be provided to summarise some basic trends in the survey responses .

In general, the greatest agreement with any of the ABI questions was with those that stated that people were responsible for their own recovery. For example, 58% strongly agreed and 35% agreed with the statement that ‘only the alcoholic/addict themselves can decide when to stop drinking/using drugs’, making this the ABI statement with the greatest proportion of strongly agreed

responses. Similarly, 42% strongly agreed and 50% agreed that 'alcoholics/addicts are responsible for their recovery'. There was also a majority agreement that people use substances to cope with problems, with 65% agreeing and 19% strongly agreeing that 'people use substances to lessen their depression'.

Conversely, the greatest amount of disagreement was with statements suggesting that problem substance use is a personal weakness, with 42% strongly disagreeing and 46% disagreeing with 'abusing alcohol/drugs is a sign of personal weakness'. There was also majority disagreement with the statement that 'an addicted person can control their use', which 35% strongly disagreed with and 38% disagreed with. At the same time, there was disagreement with the concept of addiction having a genetic basis, with 19% strongly disagreeing and 62% disagreeing that 'some people are alcoholics/addicts from birth'.

The most neutral responses were made in response to the statements asserting that people with addictions are not responsible for actions committed during their addiction. For example, 46% gave a neutral response to 'it is not an addicts fault they drink/use'. More mixed responses were received with regards to statements that addiction is a chronic disease. For example, there were similar levels of agreement and disagreement with the statement 'a drinking/drug problem can only get worse', to which 12% strongly agreed and 27% agreed, while 15% strongly disagreed and 35% disagreed.

Taken together, these figures suggest that the concept of personal responsibility was integral to the River Garden model. Overall, the addiction beliefs of the River Garden community suggest a culture that most strongly emphasises personal responsibility for one's own recovery, along with the idea that addiction is likely to be a way of coping with personal circumstances. The community was mixed on whether addiction is a chronic disease, indicating the disease model was not completely rejected, but there was also a lack of the cohesive agreement that would be required for this to become an integral part of the model. There was agreement that people may face lifelong difficulties with controlling substance use, but rather than genetic factors, this was more about learning to take

responsibility and amending the life circumstances that caused substance use to become problematic.

5.4 Circumstances, Motivation and Readiness Scales

The circumstances, Motivation and Readiness Scales (CMRS) measure some of the reasons that could bring someone to residential treatment. The 'circumstances' subscale measures whether someone agrees their external situation has led them to seek treatment, such as legal, financial, and family pressures. The 'motivation' subscale measures how motivated they are to change. The 'readiness' scale is about how ready they are to enter residential treatment and accept support, in contrast to feeling they could manage without treatment.

The aim was to measure any variation in the reasons people were coming to River Garden and any patterns associated with different outcomes. All nine residents completed the survey during their first interview. The aim was to conduct a comparison between the baseline CMRS scores of residents who were retained, and those lost to attrition. However, similarly to the ABI scales, the number of responses was too low for any meaningful significance testing of differences in responses between groups. Instead, I will present a basic descriptive summary of the overall scores.

In general, participants all provided responses indicating that they were intrinsically motivated to enter residential treatment, as opposed to being motivated by external pressures such as family or criminal justice involvement. For example, 50% disagreed and 8% strongly disagreed with 'I am sure I would go to jail if I didn't enter treatment'. They also disagreed that external problems, such as pressure from family to leave treatment, would prevent them from completing treatment. In total, 58% disagreed and 33% strongly disagreed that their 'family or relationship would make them try to leave treatment'. However, in practice, there were many instances of residents who faced external pressures to enter River Garden, or to leave. External relationships and circumstances in fact influenced resident motivations in a variety of ways, which will be explored further in Chapter Six.

Residents also gave responses indicating that they were highly motivated to change their behaviour. All of the questions relating to this received majority agreement. For example, 50% agreed and 33% strongly agreed that 'It is more important to me than anything else that I stop using drugs'. Again, in practice, motivational issues were more complex. There were nuances around why people were motivated to come to River Garden specifically, rather than an alternative model, and issues with how motivation was sustained over time.

Finally, responses also suggested high levels of readiness. Residents agreed that they were ready for residential treatment, were willing to do whatever it takes to get better, don't see any other viable options except for treatment, and wanted to enter treatment as soon as possible. For example, 75% agreed and 17% strongly agreed that 'I don't see any other choice for help at this time except some kind of treatment'. On the contrary, 50% disagreed and 42% strongly disagreed with 'I don't really believe that I have to be in treatment to stop using drugs, I can stop anytime I want'. In reality, there were issues with whether residents continued to believe that the River Garden model constituted an effective form of treatment, and indications that people may have applied to escape crisis situations, rather than being truly ready to engage with residential treatment.

Taken together, responses to the CRMS would have indicated that all residents met the desirable profile for a residential treatment application. They would not be influenced to apply by external circumstances, highly intrinsically motivated, and ready to engage with the programme. However, these responses may indicate residents providing the responses they felt were expected of them, as many of their actual circumstances did not match the survey responses.

5.5 Network maps

During each interview, participants completed a 'network map' exercise to collected data about their social networks. Measures of network composition included the characteristics of networks members, for example, their relationship

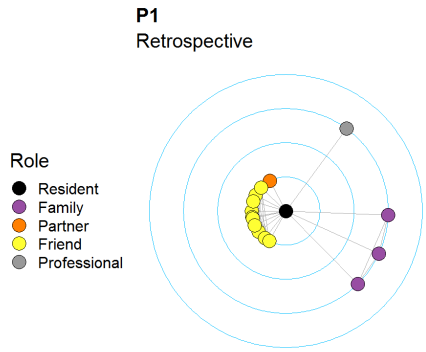
to the participant. Network structures included network size, emotional closeness to each alter, and the patterns of connections between network members. Residents completed the network maps during each interview and also completed a retrospective map of their pre-recovery network.

Hypotheses' were based upon theoretically informed expectations (e.g., that recovery is associated with less dense networks) and the initial theories of how the River Garden programme was expected to work (e.g., that residents would gradually build up connections outside of the community boundaries). Proportions (i.e., counts of alters with specific categorical attributes) were compared with a Chi-Square Goodness of Fit Test. Means (i.e., network attributes measured as continuous variables) were compared using a Kruskal Wallis Test followed by (when appropriate) a Pairwise Wilcoxon Signed Rank Test.

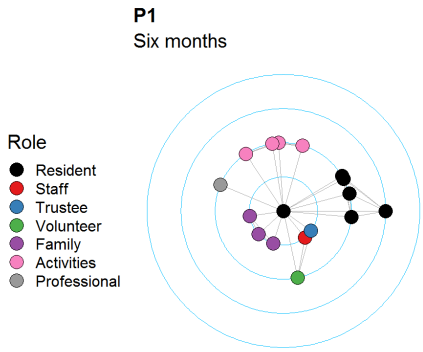
5.5.1 Network sociograms

Participant network maps were coded, digitised, and anonymised. They are presented here as small multiples. It is possible to visually observe some of the patterns of network transition. For example, 1) the similarly structured but altered composition between the retrospective and three-month networks, 2) an increase in network size at six and twelve months, then huge drop in network size in post-residence networks, 3) the increased diversity of alter roles, particularly in the twelve-month networks, and how this mirrors the staff networks, 4) ex-residents interviewed after leaving had very small networks of close ties. Finer, more detailed observations about each individual network map were written out as descriptive memos and thematically analysed.

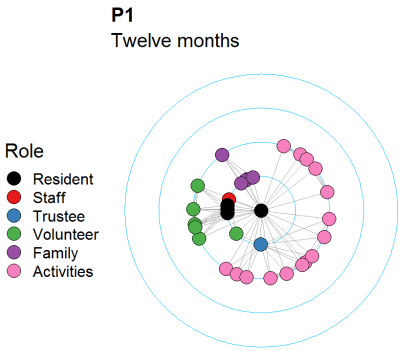
Figure 2 – Network progression of Eric (retrospective, six months, twelve months).



Close friends/partner, weaker ties to family/professional

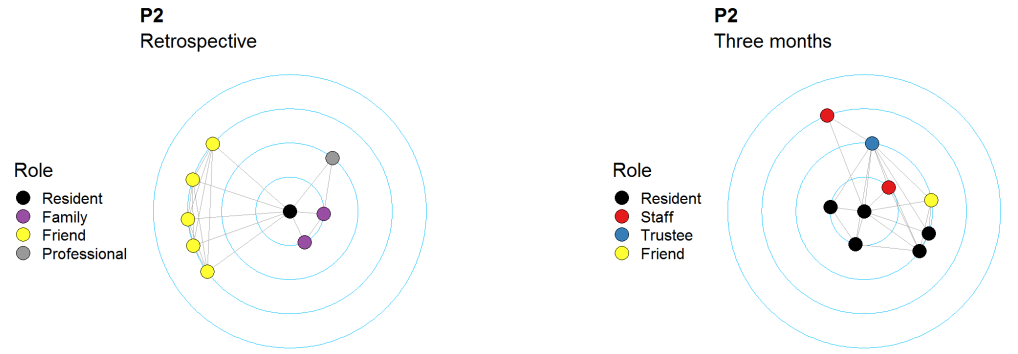


Diverse network with several distinct groups



Lots of activities outside of River Garden

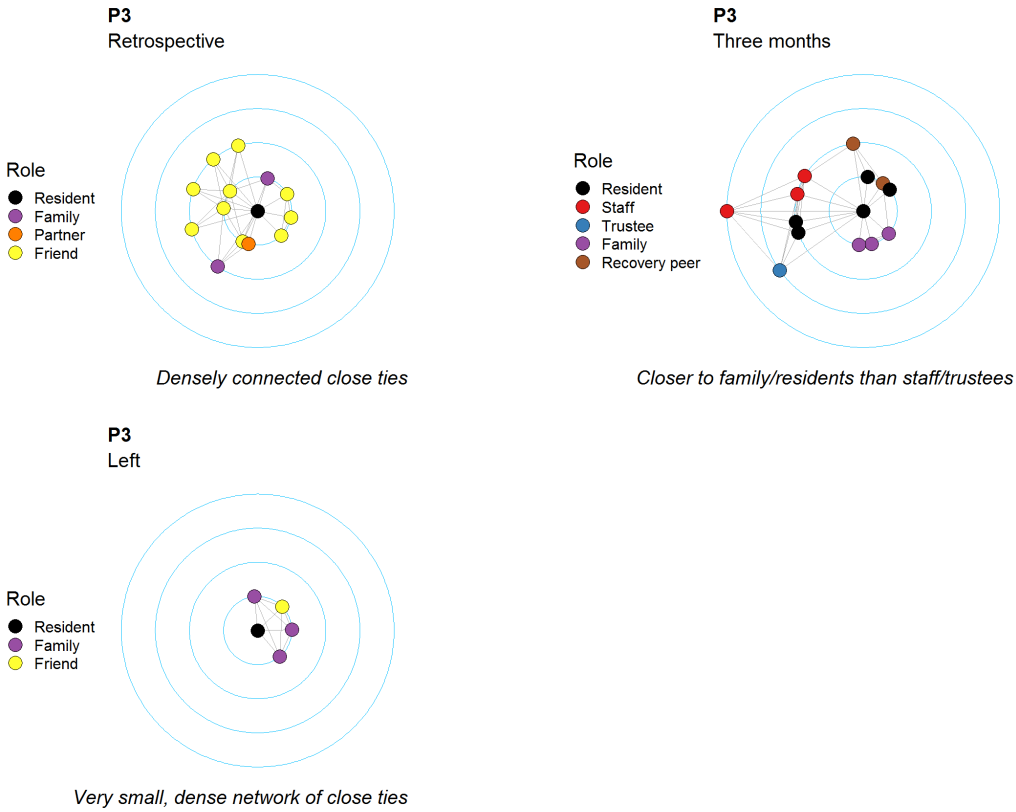
Figure 3 – Network progression of Kevin (retrospective, three months)



Close ties to family/professional, weaker friend ties

Mainly close ties to residents/staff/trustee

Figure 4 – Network progression of Kyle (retrospective, three months, post-residence)

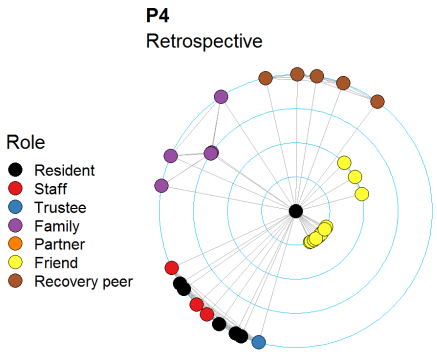


Densely connected close ties

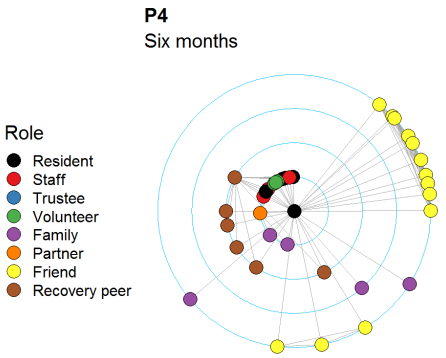
Closer to family/residents than staff/trustees

Very small, dense network of close ties

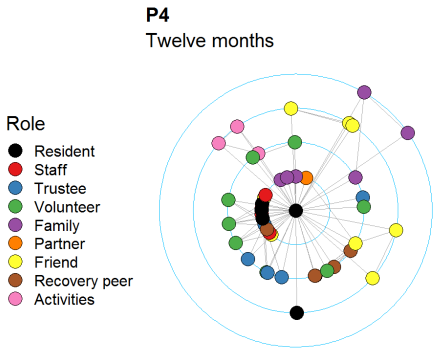
Figure 5 – Network progression of Keith (retrospective, six months, twelve months)



Very large network including recovery influences

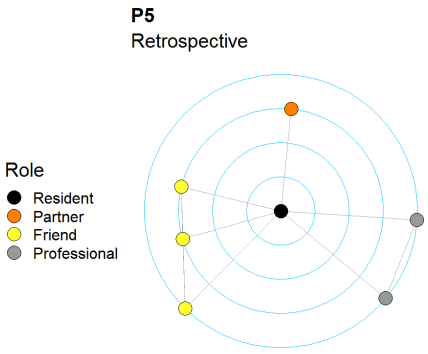


Very large, diverse, mix of close/weak ties

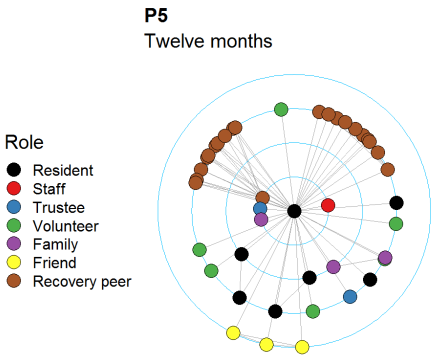


Very large and diverse network of close/weak ties

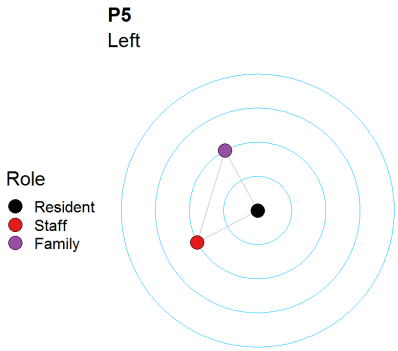
Figure 6 – Network progression of Brian (retrospective, twelve months, left)



Weak ties to friends, partner, professionals

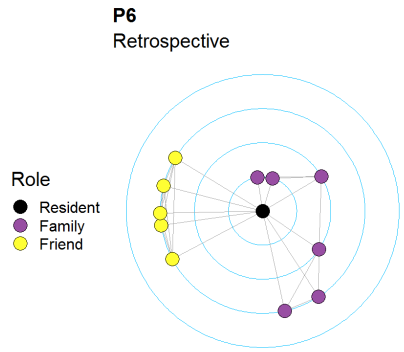


High proportion of external recovery peers

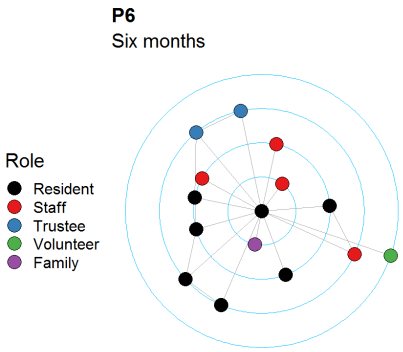


Two connected close ties, no very close ties

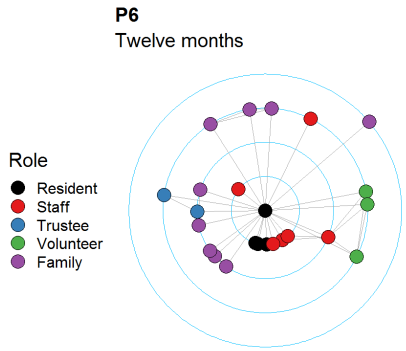
Figure 7 – Network progression of Ian (retrospective, six months, twelve months)



Family/friends form two distinct groups

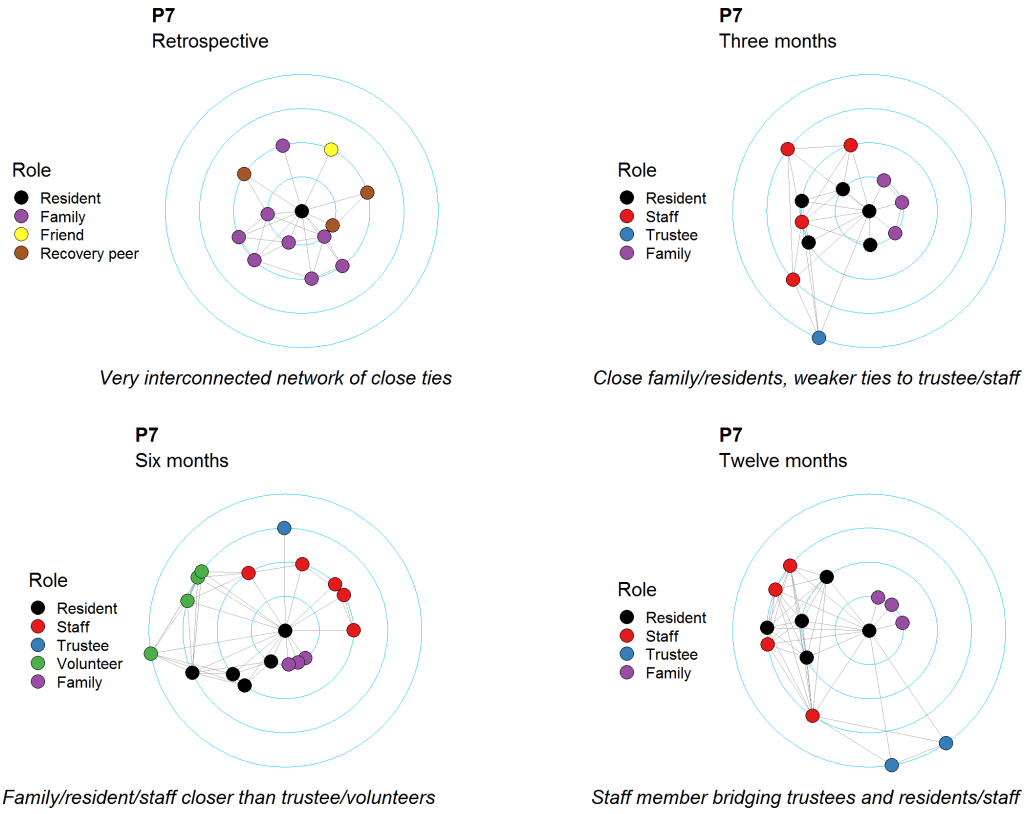


Mix of close/weak ties, limited external network



Network predominantly within programme boundaries

Figure 8 – Network progression of Paul (retrospective, three months, six months, twelve months)



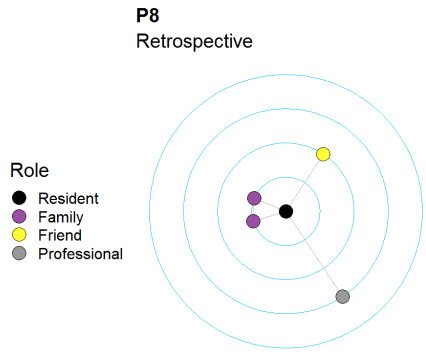
Very interconnected network of close ties

Close family/residents, weaker ties to trustee/staff

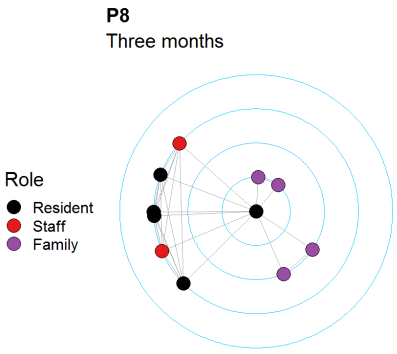
Family/resident/staff closer than trustee/volunteers

Staff member bridging trustees and residents/staff

Figure 9 – Network progression of Stuart (retrospective, three months)

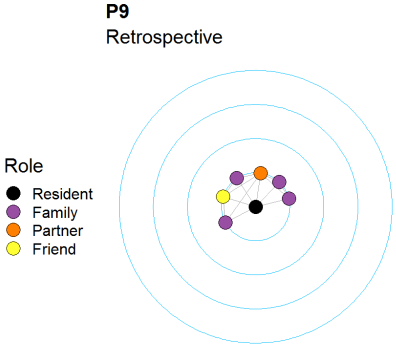


Family/friend close ties, professional weak tie

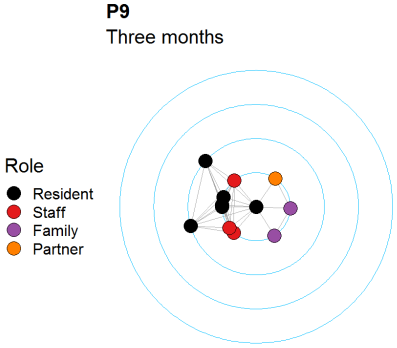


Closest ties are family, weak ties with staff/residents

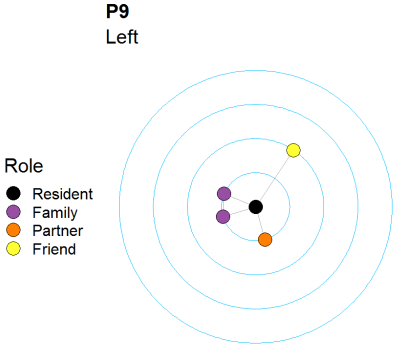
Figure 10 – Network progression of Neil (retrospective, three months, left)



Network consists only of close ties

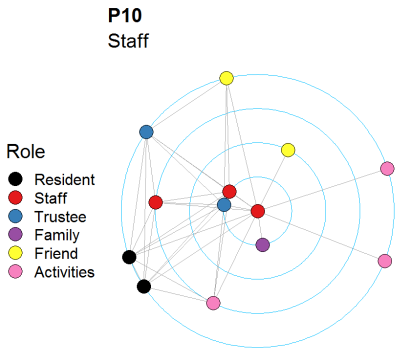


Close ties to staff/residents and family/partner

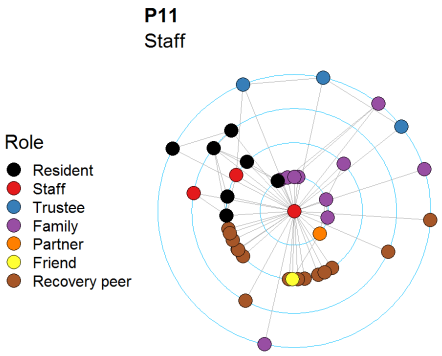


Small network of close ties to family/partner/friend

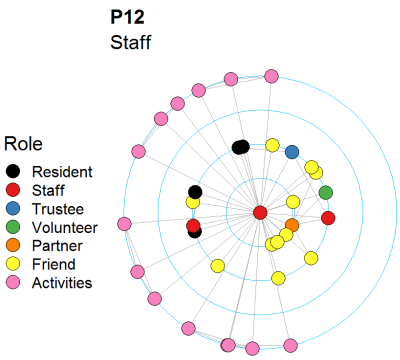
Figure 11 – Staff networks



Mix of strong/weak ties within the programme



Diverse network with many recovery peers

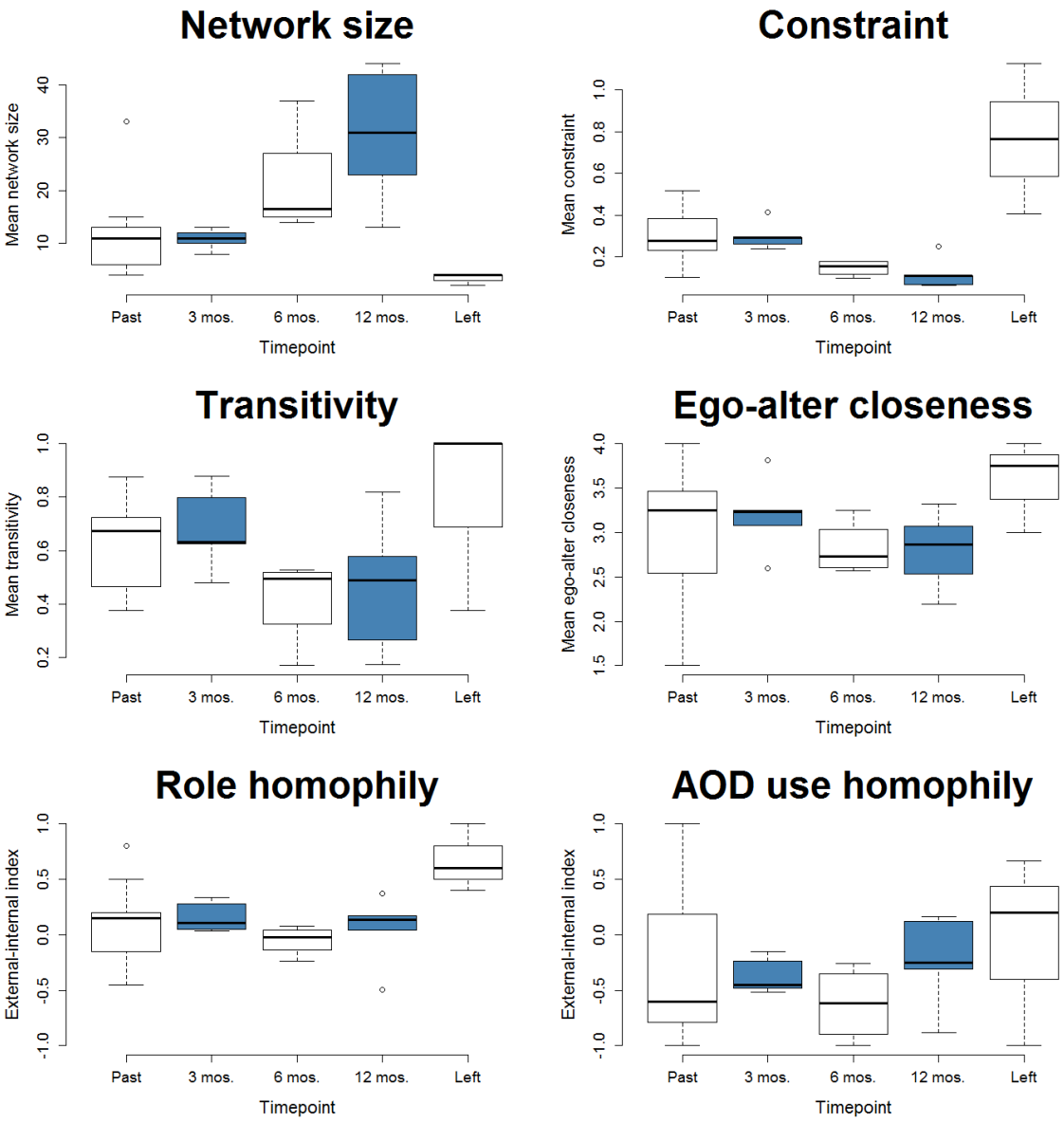


Large, diverse network, many activities

Table 1 – Comparison of network characteristics between residents at different stages of the River Garden programme

	Past	3 Mos.	6 Mos.	12 Mos.	Left	X^2	DF	P Value
Pos. Inf.	40.7%	85.2%	70.2%	78.4%	80.0%	52.5	4	<.001
Neg. Inf.	49.0%	7.4%	0.0%	4.5%	10.0%	122.7	4	<.001
'Lots' AOD	47.2%	0.0%	15.5%	7.2%	20.0%	83.7	4	<.001
'Stopped' AOD	16.7%	72.2%	48.8%	41.2%	10.0%	54.6	4	<.001
Size Mean (SD)	12.0 (8.7)	10.8 (1.9)	21.0 (10.7)	30.6 (13.0)	3.3 (1.2)	16.7	4	.002
Constraint Mean (SD)	0.3 (0.1)	0.3 (0.1)	0.2 (0.0)	0.1 (0.1)	0.8 (0.4)	16.2	4	.003
Transitivity Mean (SD)	0.6 (0.2)	0.7 (0.2)	0.4 (0.2)	0.5 (0.3)	0.8 (0.4)	5.4	4	0.2
Alter Closeness Mean (SD)	3.0 (0.8)	3.2 (0.4)	2.8 (0.3)	2.8 (0.4)	3.6 (0.5)	4.4	4	0.4
Mean Role Homophily (SD)	0.1 (0.4)	0.2 (0.1)	-0.05 (0.1)	0.05 (0.3)	0.7 (0.3)	8.3	4	0.08
Mean AOD Homophily (SD)	-0.3 (0.7)	-0.4 (0.2)	-0.6 (0.3)	-0.2 (0.4)	-0.04 (0.9)	2.0	4	0.7

Figure 12 – Boxplots showing a comparison of mean network statistics between residents at different stages of the River Garden programme



5.5.2 Entry effects

It was hypothesised that entering River Garden would be associated with an increase in the proportion of alters indicated as a positive influence, a decrease in the proportion of alters indicated as a negative influence, and a decrease in the proportion of alters with high levels of AOD use. It was also hypothesised that entry would be associated with a lower network size and higher levels of network

constraint and transitivity. These associations were expected because entry should involve breaking ties with AOD-using peers and entering a smaller, more densely connected network.

Results show that entering River Garden was associated with a significant increase in the proportion of alters indicated as a positive influence, from 40.7% to 85.2% (X^2 = 52.5, DF = 4, p<.001). At the same time, the proportion of alters indicated as a negative influence decreased from 49.0% to 7.4% (X2 = 122.7, DF = 4, p<.001).

Entering River Garden was associated with a significant decrease in the proportion of peers indicated as having 'lots' of AOD use, which decreased from 47.2% to 0.0% (X^2 = 83.7, DF = 4, p<.001). At the same time, proportion of abstinent peers (those who were indicated as having 'stopped' AOD use) increased from 16.7% to 72.2% (X2 = 54.6, DF = 4, p<.001). This suggests a transformation of the network composition.

However, entry was not associated with much change in mean network size, constraint, transitivity, and ego-alter closeness, suggesting that the network structure in River Garden roughly approximated the structure of the pre-recovery network. For example, the mean network constraint was identical in past (M = 0.3, SD = 0.1) and three month (M = 0.3, SD = 0.1) networks (X^2 = 16.2, DF = 4, =.003).

The mean homophily of alters by role and AOD use were also similar between past and present networks, showing that subgroups of 'stopped' and 'lots' AOD use levels had similar levels of separation from the wider network. These patterns were similar to those found in the comparison of pre-recovery and recovery networks in the pilot study of a non-residential community (Anderson *et al.*, 2021)

5.5.3 Progression effects

It was hypothesised that progression from three to six months and again from six to twelve months in River Garden would be associated with an increase in network size, accompanied by decreases in network constraint and transitivity.

The proportion of alters indicated as a positive influence reduced slightly from 85.2% at three months to 70.2% at six months. It then increased at twelve months to 78.4% (X^2 = 52.5, DF = 4, p<0.001). The proportion of alters identified as a negative influence fell from 7.4% at three months to 0.0% at six months, then rose to 4.5% at twelve months (X2 = 122.7, DF = 4, p<.001).

The proportion of abstinent alters dropped from 72.2% at three months to 48.8% at six months. This then fell down to 41.2% at twelve months (X2 = 54.6, DF = 4, p<.001). Likely, this indicated more freedom to develop more diverse networks outside of the River Garden boundaries and shows that the biggest transition in this sense happened between three and six months.

There were no significant differences in closeness, transitivity, or either measure of homophily, suggesting elements of network structure remained stable. However, mean network size doubled from three months (M = 10.8, SD = 1.9) to six months (M = 21.0, SD = 10.7) then increased by another one-third at twelve months (M = 30.6, SD = 13.0) (X^2 = 16.7, DF = 4, p=.002). In parallel, mean constraint reduced by more than half over these same milestones (X^2 = 16.2, DF = 4, p=.003).

This shows that the stages of resident progression were associated with a transition from an early network that was small, constrained, and primarily composed of abstinent alters, to networks that were larger, less constrained, and less abstinence focused. As residents gained freedom to develop more social ties, the proportion that were identified as a positive influence decreased, as they moved from the more contained environment of River Garden to wider social circles and interacted with fewer people who were directly supportive.

5.5.4 Leaving effects

The most pronounced network transition was observed in the post-residence networks of individuals who left the community. The only network feature that remained consistent was that leaver networks continued to contain a high proportion of alters indicated as a positive influence and a low proportion of negative influences. One-fifth of alters in post-River Garden networks were reported as having high levels of AOD use, although one-tenth were abstinent.

The major transformations were in the network structures, which show an association between exiting River Garden and having very small, constrained, densely connected networks that were limited to very close ties (e.g., the small number of family members and close friends who continued to provide support). This indicated an almost complete loss of River Garden connections. It was notable that they are worse in these regards than the pre-recovery networks, suggesting that ex-residents had not reconnected with their past networks. People who left River Garden sometimes suggested that they were remaining isolated in an attempt to sustain abstinence in their communities. In the pilot study this was reported as a common tactic to avoid relapse triggers but was associated with a very poor quality of life (Anderson *et al.*, 2021).

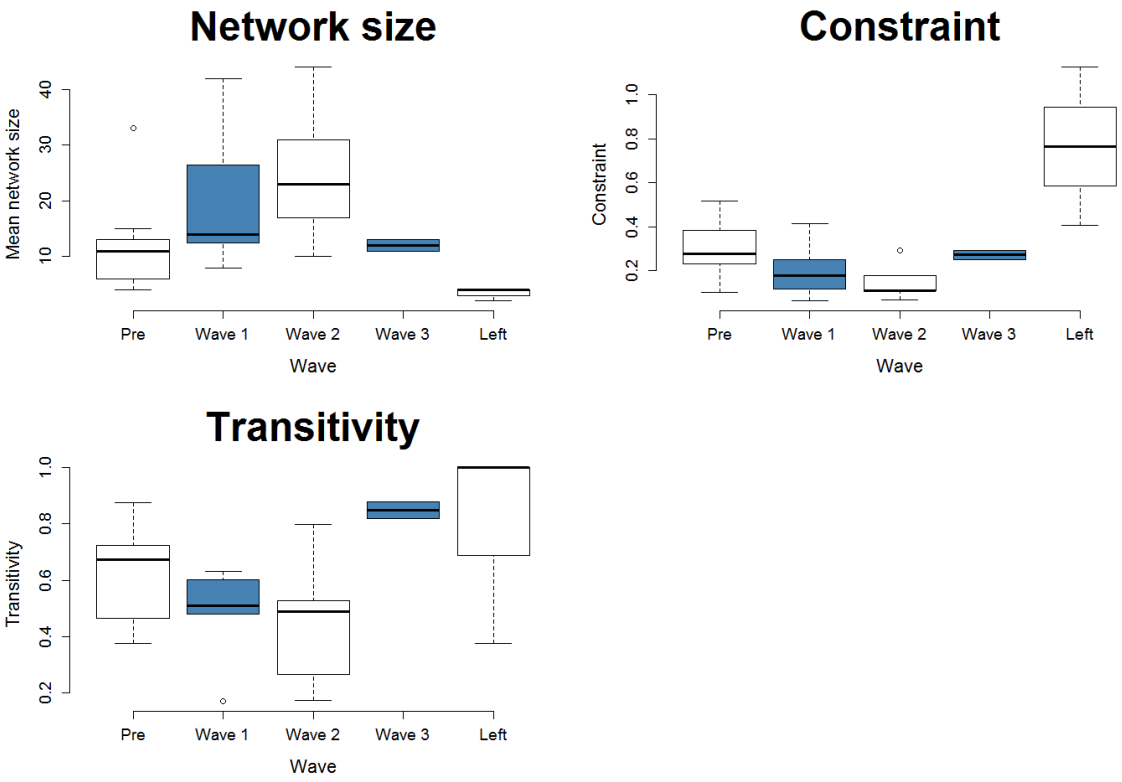
5.5.5 Implementation effects

The main analyses have involved grouping the network characteristics by resident time in the programme. However, a further analysis was conducted to detect general differences in the programme at different points of development.

Table 2 – Comparison of mean network characteristics of all residents at the three waves of fieldwork: April-Aug 2019, Dec 2019-Feb 2020, April-Nov 2020 (programme level effects rather than individual resident progressions)

	Past	Wave 1	Wave 2	Wave 3	Left	X2	DF	P Value
Size Mean (SD)	12 (8.7)	20.3 (13.4)	25.0 (13.1)	12.0 (1.4)	3.3 (1.2)	12.1	4	.002
Constraint Mean (SD)	0.3 (0.1)	0.2 (0.1)	0.2 (0.1)	0.3 (0.0)	0.8 (0.4)	11.0	4	.003
Transitivity Mean (SD)	0.6 (0.2)	0.5 (0.2)	0.5 (0.2)	0.8 (0.0)	0.8 (0.4)	6.8	4	0.1

Figure 13 – Boxplots showing the network structures at three waves of fieldwork (April-Aug 2019, Dec 2019-Feb 2020, April-Nov 2020)



Comparing three measures of network structure between these waves (size, constraint, transitivity) shows that resident networks were generally stable between wave 1 (Spring-Summer 2019) and wave 2 (Winter-Spring 2019-20), becoming slightly larger, with slightly less constraint and transitivity. Wave 3 shows an association between the COVID-19 lockdown and a lower network size, with the mean network size reducing by approximately half from 25.0 (SD = 13.1) to 12.0 (SD = 1.4) (X2 = 12.1, DF = 4, p=.002).

5.5.6 Comparison of baseline (retrospective) networks between retention and attrition groups

The final comparison was to measure any differences in the pre-entry (retrospective) networks of the retention and attrition groups. The rationale for this comparison is to compare whether any baseline network factors were associated with resident outcomes. Since these network factors precede entry to River Garden, they can be considered contextual factors within the realist framework. I have compared a relevant subset of network measures: size, constraint, proportion of positive network influences, and the proportion of network members with high levels ('lots') of AOD use.

Table 3 – Comparison of the retrospective networks of retention and attrition groups (structural measures: size, constraint, and transitivity) using a Wilcox Ranked Sum test

	Retention Mean (SD)	Attrition Mean (SD)	W Value	P Value
Size	17.8 (10.3)	7.4 (3.4)	2	.07
Constraint	0.2 (0.1)	0.4 (0.1)	19	.04
Transitivity	0.7 (0.2)	0.6 (0.2)	7	.5

Table 4 – Comparison of the retrospective networks of retention and attrition groups (compositional measures: alter influence, alter AOD use) using Chi-Squared test

	Retention	Attrition	X^2	DF	P Value
Pos. Inf.	38.0%	54.1%	1.9	1	0.2
'Lots' AOD	39.4%	37.8%	1.0	1	1

Residents who were retained in River Garden had larger baseline networks than those in the attrition groups. There was no significant effect for outcome group, *w* = 2.0, p = .07, despite the retention group (M = 17.8, SD = 10.3) having larger networks than the attrition group (M = 7.4, SD = 3.4).

Residents who were retained in River Garden had lower constraint baseline networks than those in the attrition groups. There was a significant effect for outcome group, *w* = 19.0, p = .04, indicating a significant difference in network constraint in the retention group (M = 0.2, SD = 0.1) compared to the attrition group (M = 0.4, SD = 0.1).

Residents in the retention and attrition groups had similar measures of network transitivity in their baseline networks. There was no significant effect for outcome group, w = 7.0, p = .5, despite the retention group (M = 0.7, SD = 0.2) having slightly higher transitivity than the attrition group (M = 0.6, SD = 0.2).

There were no significant differences in the two measures of baseline network composition compared between retention and attrition groups. The attrition group had a higher proportion of alters identified as positive influences (54.1%) than the retention group (38.0%). However, this was not a significant difference (X^2 = 1.9, DF = 1, p<.2). The retention group also had a similar proportion of peers

with ‘lots’ of AOD use (39.4%) as the attrition group (37.8%) and there was no significant difference (X^2 = 1.0, DF = 1, p = 1).

5.6 Conclusion to recovery capital and networks

The most pronounced differences in the network transitions experienced related to differences in network composition and structure for residents at different stages of the programme (and for the programme overall at different points of implementation, particularly during lockdown). Analysis of the ABI and CMRS surveys gave an insight into the overall culture of the community.

A basic picture of River Garden can be drawn from these results. River Garden was a community set up on the basis of a strong belief in personal responsibility for recovery and the belief that addiction develops out of difficult life events. These views are therefore common across staff, trustees, and residents. The community is neutral on the disease model and disagrees that addiction has a genetic basis. On the other hand, there is a belief in abstinent recovery.

These results suggest a unique River Garden culture, that blends abstinence and personal responsibility, somewhat detached from the wider recovery movement (where perhaps there may be a greater emphasis on collective responsibility and treating addiction as a disease). This could explain why people with a greater severity and complexity of problems, who would possibly benefit more from medical intervention, tended to thrive less than people with the strengths required to apply themselves to the challenge successfully.

The theme of responsibility is central for both proponents and critics of the recovery movement and this theme will be explored further in the following chapter. Residents reported they were highly motivated to seek treatment rather than pressured by external events. However, the following chapter will also explore the ways that residents often did have external pressures.

The network findings tell a story, whereby residents made a fairly clean break from their past network upon entering River Garden, into a network that was structurally similar yet altered to an abstinence-focused composition. They then gradually expanded their networks into larger, more diverse, less constrained formulations that increasingly spanned the boundaries of the residential community. Another clean break was apparent, for residents who left River Garden, which was associated with very isolated, constrained networks, although notably containing fewer substance using peers than their pre-recovery AOD-using networks. Significantly, resident who were retained had lower constraint pre-River Garden networks (this could suggest greater baseline 'bridging capital' was an important contextual characteristic that influenced outcomes).

Finally, measuring networks by wave demonstrated the association between lockdown and the River Garden networks, namely resident networks that were much smaller and more constrained than before the community boundaries were closed. In the final results chapter, we will further explore varying individual and community perspectives whether this sharp restriction of the network boundaries was positive or negative for the formation of the community.

In the next chapter, I will present individual and community perspectives on the experiences of residents, staff, and trustees. These were used to develop programme theories about how River Garden works and who it works for.

6 Chapter Six – Individual and Community Perspectives

The individual and community perspectives come from the analysis of interviews, fieldnotes, and interpretation of network maps. The programme theories developed were tested in a final wave of interviews with key programme implementers, which validated findings or led to their refinement. This chapter will begin by laying out the main contextual factors that shaped the formation and adaption of River Garden as an institution. These were the recovery movement, the wider charity governance structure that required a Board of Trustees, and the characteristics of community residents.

With these factors established, the next section will describe three vital mechanisms and how these mechanisms were influenced by the preceding contextual factors, leading to divergence in outcomes. A mechanism has been defined as a combination of resource and response (Dalkin *et al.*, 2015). The range of resources offered by the programme have been broadly categorised into instrumental and relational resources. For example, the opportunity to work is an instrumental resource and the support provided by a recovery peer is a relational resource. The key responses to these resources were identified as trust, respect, and motivation. Trust and respect were identified as key responses to the relational resources, while motivation was vital for the instrumental resources. Each of these responses was essential for the programme to work and there were cases where instrumental mechanisms were functioning, but relational mechanisms were not, and vice versa.

The final section will describe the intended and unintended outcomes experienced by residents as a result of these mechanisms, comparing the vastly divergent outcomes of retention and attrition groups. Implementers were aware of mixed outcome patterns and made several responsive adaptions to stabilise the remaining community and minimise potential unintended outcomes. These adaptions are conceptualised as programme-level outcomes that essentially

become a contextual factor, forming the context of the next stage of the programme development. The chapter concludes with a written programme theory that synthesises the various configurations of context, mechanism, and outcome.

6.1 Contextual factors

There were three important contextual factors that influenced how the programme worked and the ways it was adapted after implementation. These were broadly categorised into environmental and individual context. The first environmental context was the wider recovery movement. River Garden can be viewed as a product of this contemporary trend towards peer supported abstinent recovery. A high level of integration was planned with local recovery communities, with the semi-permeable design aiming to prevent residents becoming institutionalised and providing an opportunity for residents to participate in wider recovery (and non-recovery) networks.

A more immediate environmental factor was the status of River Garden as a third sector organisation, meaning that implementation was managed by a Board of Trustees, who had to abide by specified governance frameworks. Although the trustees themselves are not a factor external to the intervention and would not be considered a contextual factor, the broader governance structure has been considered a contextual factor in this analysis (one that would substantially differ between Scotland and Italy, influencing how the programme can be implemented and how it works).

The residents the project was designed to support came from a mix of backgrounds and their demographics and characteristics are considered as individual-level contextual factors. Issues such as their family background, health, trauma, and the severity and complexity of their problems all influenced how they responded to the resources that River Garden offered. Each of these contextual factors were to lead to successive reactive adaptions to the original implementation plan. An overarching contextual factor was the early stage of project development. There

was a limited instrumental and relational infrastructure at first, with underdeveloped social enterprises and few residents in long-term recovery.

6.1.1 The recovery movement

In Chapter Four I described how the relationship between River Garden and the recovery movement began with close integration and ended up separate and distant. Indeed, one of several attributes of River Garden's location was that the implementers saw the recovery movement to be particularly strong in that region. There was significant overlap of trustees, staff, and volunteers between Recovery Garden and an established new recovery community in the region. In the first stages, these felt like partner organisations, with a deep level of integration, peers from the recovery community taking an active role in supporting the first River Garden residents. From year one until the summer of year two, it was customary for residents to attend a recovery café every Friday. This was actively encouraged as part of the strategy to link River Garden with surrounding communities.

Ambivalence towards these external networks first developed early in year two, with residents beginning to assert that they did not find visiting the recovery café particularly rewarding, that they might prefer to spend their evenings on site after working all week, and that it brought them into unwanted contact with people who were actively using drugs. After the summer attrition of year two, the majority of remaining residents were uninterested in attending, occasionally being cajoled along by instructions that seemed to come down from trustees via staff. Residents dutifully attended but generally kept to themselves, with the exception of Keith, who seemed to know everyone and greeted people enthusiastically (Fieldnotes, Jan 2020).

The presence of peer worker volunteers from the recovery community also fizzled out over time, and the concept that an external 'responsible person' could support residents did not appear to constitute an active part of the programme by the end of year two. This was at least partly due to issues around safeguarding, with

romantic and sexual relationships developing between a recovery community visitor and at least two residents. This visitor had been granted a significant level of responsibility for supporting the first resident, Brian, driving him to recovery meetings and medical appointments. Early on he disclosed to me that he was developing a romantic relationship with her (Fieldnotes, Aug 2018). Later, I learned that the pursuit of romantic relationships was considered by the staff to be a destabilising factor leading to Brian relapsing. In response, there developed a tighter control over who has responsibility for supporting residents, minimising the role for external recovery peers.

A similar pattern of disintegration occurred in relation to the local 12-step fellowship movement. Again, until year two, it seemed that integration with this broader network would be an important feature of the River Garden culture. Even residents who were not enthusiastic about 12-step fellowships would attend with the residents who were, as an evening activity. Consequently, the culture of the 12-step movement permeated into the culture of River Garden.

For Brian, this involved adherence to, and promotion of, the concept of addiction as a disease, a physical allergy to substances, characterised by uncontrollable cravings, that *'get to such an extent that … it's a progressive illness until my life completely spirals out of control'* (Brian, resident, April 2019). Others were more sceptical of the scientific basis but found value in the spiritual path, power of community, and role models found in the 12-step movement, *'you see somebody that's actually on that fucking positive path … you can sort of feel it off them … they have this fucking inner peace that oozes out'* (Keith, Dec 2019).

Furthermore, there was evidence of social influence, with residents who had no prior experience of 12-step groups developing an interest in that model of recovery. Sometimes residents would attend a few meetings and decide *'it's not for me'* (Eric, resident, April 2019). Others found it rewarding and came to feel that the 12-step movement offered something valuable that River Garden did not.

Kyle (Ex-resident, July 2019): "I didn't actually realise it was a disease at first, but the more I've went to meetings, and listened … I think it'd be better if they actually had the twelve-step, if they brought the twelve-step in."

By the middle of year two, attending 12-step groups became a more minimal aspect of the community culture. This was partly because most residents who had been interested in attending left that summer. Of the remaining core residents, only Keith continued to attend meetings and did so in his own free time. By the beginning of year three, there was no culture of group attendance and encouraging new residents to attend. In any case, neither of the two residents who arrived early in year three expressed any interest, with Stuart actively opposed and Neil more generally disinterested.

An understanding had developed that River Garden was a fundamentally different type of programme, perhaps for people who needed a more instrumental, work-based approach. For example, Paul found the work projects gave him a sense of purpose and '*a reason for getting out of bed*' (Paul, Resident, Aug 2019).

Paul (Resident, Aug 2019): "I'd been through AA, I went to AA all the time. I went to Smart Recovery. I joined Mental Health creative writing groups; I went to every form of recovery under the sun … but I still just couldn't do it … [River Garden] was the last throw of the dice."

By the end of year three, there was an informal consensus amongst staff and residents that no residents should be allowed to attend 12-step groups in the first three months of their residence, as it was more important for them to develop supportive relationships within the community. When COVID-19 lockdown measures moved Keith's 12-step participation to online groups, staff considered it a positive development, pushing him to focus more on his immediate community.

The main effect of a detachment from wider recovery networks was an associated detachment from the beliefs and identities of those networks. There was an ambivalence within the remaining core residents to explicitly recovery-focused social identities, a sense that a recovery identity clashed with the new work-based identities they wanted to construct. For residents such as Eric and Ian, it should be more about *'work, learning skills, getting on with life'* (Fieldnotes, Dec 2019) rather than being defined by their past. These issues flared up most in external spaces, such as social enterprise conferences and awards ceremonies, where residents hoped to be recognised for their business achievements and expressed discomfort at being identified by their status as in recovery.

This tension between the instrumental and relational approaches found resolution through a collective agreement amongst the staff and remaining residents that work-based recovery should be the main focus of River Garden. This mainly occurred through the attrition of residents who were 12-step attendees and retention of residents who were mainly motivated by the social enterprise opportunities. Some connections with the wider recovery movement persisted, through attending national recovery events, such as the annual Recovery Walk. However, there was a significant disconnection from regional peer networks and the broader philosophy of the recovery movement, with River Garden developing an approach to recovery that was far less philosophical, spiritual, or relational, and far more practical.

There was significant tension amongst different groups of stakeholders involved in the implementation, between those who encouraged close integration with local recovery networks, and those who agreed with more separation. The position for separation mainly came from operational staff. First, they felt there was a fundamental incompatibility between the River Garden programme of work and the relational approach of these wider groups, meaning that residents who tried to pursue both found themselves *'between two worlds'* (Nigel, staff, Sept 2020). Second, it would cause residents to lose focus on their own problems and instead *'they tend to focus on newcomers and other people rather than looking at*

themselves … the COVID and lack of them going out to these things has allowed them to look at themselves a bit more' (Trevor, staff, Sept 2020).

Third, there was a feeling that the initial partnership with a local recovery community was actively *'dangerous'* (Trevor, staff, Sept 2020) due to the rarity of sustained abstinent recovery in those networks. Even a trustee who was in favour of high integration with the recovery movement agreed the local recovery café was *'not a recovery café … it's an addiction support café … a food kitchen with side benefits'* (Lindsey, trustee, Nov 2020). Fourth, there was a belief that it was important for residents to build networks beneficial to mainstream social reintegration, rather than networks of people in recovery, and that this was better accomplished through hobbies and activities, *'things that people do when they don't need to worry about recovery and things like that, that they just do as hobbies'* (Donny, staff, Sept 2020). Significantly, the intake process was adapted to select for residents who would most benefit from the instrumental approach:

> *Nigel (Staff, Sept 2020): "This becomes the necessary evil, here is where I eat, and stay, and drink, and I have to work, when I should be going to meetings all the time and sit and talk. And these people, that's the selection process, where we steer them away, because if you need that, you should go there, you should find a place that provides you that."*

This approach was supported by Neville (trustee), who emphasised the importance of flexible adaptions to the intervention and stressed that *'if spending more time at River Garden with their peers and getting involved in the social enterprises is more helpful … maybe they should spend more time in that'* (Neville, trustee, Nov 2020).

The opposing view was that this development weakened River Garden. The first concern was that the separation led to the community becoming too insular and too controlling over the lives of its residents, restricting their choices and therefore their ability to learn how to manage their own lives. Residents should instead be encouraged to find their own support, and strengthen their recovery to

be resilient beyond the limits of the safe residential environment. There was a belief amongst some trustees that the disconnection was led by staff rather than residents, that *'it's been an adaptation that the staff have led in an effort to control people'* (Nick, trustee, Oct 2020).

Another critique was that without the guiding relational, philosophical, and spiritual principles of the established recovery movement, River Garden had become essentially rudderless in terms of providing a robust, evidence-based pathway to recovery. This was a particular concern since in the early stages most residents were in early recovery: *'you don't have enough grown-up recovery, so you need to borrow it from outside'* (Lindsey, trustee, Nov 2020). There was a sense that River Garden had not fully developed nor evaluated its new model of recovery and, as such, would have been stronger if it had drawn on the support of local 12-step groups and eventually grown strong enough that residents could provide reciprocal peer support to people in these communities.

In the end, the trustees who held these positions had stepped back from the board, and operational control of the project was held by staff who supported a more instrumental approach, trustees willing to grant this autonomy, and the remaining residents who thrived in this environment. The COVID-19 lockdown was the final straw, severing the remnants of these local recovery connections.

6.1.2 The Board of Trustees

As a UK Third Sector Organisation (TSO), there was a specific governance structure through which River Garden was created. In Chapter Four, I described how trustees had initially occupied central, influential positions within the social networks of staff and residents until a resistance to trustee involvement began to develop during year two, leading to trustees becoming peripheral or absent from these interaction networks by year three, with limited influence over programme adaptions.

Their position was further weakened by two factors: (1) a lack of cohesion within the board on key matters, leading to the board splintering into distinct factions, and (2) the contested role of Quentin as the CEO. These issues affected the capacity of the board to implement a project vision and enhanced the ability of staff and residents to make adaptions, leading to conflict over implementation fidelity. In this section I will present the role of board members in the community, sources of tension between trustees and operational staff, and the key sites of resistance to board influence.

Throughout year one and the first half of year two, there were a few board members who were actively involved in daily life and had close relationships with residents (although only a minority of the dozen or so total trustees). These relationships included managing resident applications and selection, providing recovery support, and facilitating resident connections to external opportunities for training, education, and activities.

Brian, the first resident, explained that the founder, Nick, had advocated on his behalf to treatment services to have his OST prescription reduced so that he could come to River Garden, and that *'their attitude changed, once he started dealing with them'* (Brian, April 2019). Kevin identified a trustee as his main source of social support, that *'she's on the board but … she's a good help; she guides us and stuff, she talks to us a lot'* (Kevin, resident, April 2019). Eric stated that a trustee had been *'a big part of my recovery … because she was the one that helped me get back into my running'* (Eric, resident, Dec 2019). Trustees even supported residents who left the community, arranging hotel accommodation or paying bus fares back home.

The tension between trustees and staff began to develop in year two. On one occasion, a new resident, Kyle, observed that there had been a big meeting which had left staff looking unhappy: *'a couple of them didn't look happy last night, so I don't know if the higher ones have been busting their balls'* (Kyle, resident, April 2019). At this early stage, it was notable that board members were seen as 'higher' in the structure than the staff. By that summer, several points of

contention and resistance had developed, where the assumed authority of board members was challenged by calls for the autonomy of the operational staff.

The first area of resistance related to the selection and management of residents, with staff feeling impeded in their attempts to discipline rebellious residents due to trustee intervention. One issue was the belief that trustees had selected unsuitable residents and not properly prepared them for the challenges of this type of community, *'maybe [not] making it sound as difficult as it actually was'* (Trevor, staff, July 2019). When staff wanted to remove residents for repeated rule breaking, they complained that board members would intervene, partly because they did not witness the full extent of the behaviours, partly to protect the reputation of the project by minimising attrition.

The result was that the operational staff felt they had lost power to maintain order, because their authority to remove residents was undermined, and *'if I say to you, after five times you're breaking the rules … 'that's it, next time you're out' … and someone comes in and says, 'no we should at least give them another chance' … I look bad because I lose my authority'*. Staff also thought trustees had promoted an unsuitable resident, Brian, into the peer worker role despite a recent relapse and temporary exit from the community, to avoid deviation from the plan that residents should become peer workers after twelve months (Fieldnotes, Oct 2019). Differences of opinion in the board also meant inconsistency depending on which of the two or three regular visitors were on site, for example, some being stricter than others about adherence to the smoking policy.

From these issues, a discourse developed within the staff and residents who lived on site that there was a disconnect between the trustee vision and the reality of what works. The proposed solution from staff was for River Garden to shift from a top-down, trustee-led approach, to a more grassroots, resident-led approach. This would involve slowing down the intake of new residents and working closely with a smaller group of residents, firstly building up a cohesive community, and gradually building the infrastructure of social enterprises around the interests of these residents.

> *Nigel (Staff, August 2019): "Here it's being dropped things, we want you to do this, we want you to do that, and for me that's backwards. You need to build a core from within and then work it outside … it would be better to have, say, six, eight guys here a year, without any businesses, focus on restoring the gardens and getting to know each other … you get an idea of what the guys want to do, and you put businesses in place, because they will take ownership of that."*

Implementation proceeded along these lines and trustees started to become more peripheral in the residents' networks (this can be seen in the network graphs in Chapter Five). Residents started to take more autonomy and felt more empowered to push back against trustee influence, mirroring the views of staff that trustees should not intervene in issues of managing resident behaviour, particularly when the intervention involved being too accepting of disruptive behaviour, *'you can't have things like board members coming in and fucking mollycoddling people … and having this fucking social worker attitude'* (Keith, resident, Dec 2019). Residents also mirrored the feeling that board direction on minor operational matters like smoking was unnecessary, *'why focus on such a small thing like that, let River Garden, the people that are here every day, deal with something like that'* (Ian, resident, Dec 2019).

Into year three, the resistance became far more overt and played out through several sites of resistance. The development of social enterprises became entirely resident-led, and trustees became seen as out of touch on these matters, *'there's a bit of a discrepancy in their idea and what actually is happening on the ground'* (Paul, resident, Feb 2020). The new CEO, Quentin, played a central role in the resistance, being welcomed by staff and residents as a *'very efficient conduit'* between the operations and board levels, affording the freedom to *'get on with things'* (Fieldnotes, Jan 2020).

In one example of resistance, Nick (trustee) had informed ex-resident Brian he could return in a volunteer role, only for the CEO, Quentin, to counter assert that this was not allowed. More fundamental disagreements occurred when an

operational decision was made that residents should be allowed to claim housing benefit, contradicting the vision of independence from state benefits held by founding trustees.

Trustees used the *River Garden Way* initiative in an effort to bring the project back in line with some of their original vision. In practice, this consisted of a document written by Lindsey (trustee) setting out the key stages of resident progress, with staff and residents taking part in a consultation. They collectively pointed out areas where the document did not reflect the reality of community life. For example, a suggestion that residents form at least one external recovery connection in their first three months was contrary to the current culture, where residents were encouraged to focus on their relationships *within* River Garden, and that the project was *'about developing businesses … [not] explicitly about recovery or the recovery movement'* (Fieldnotes, March 2020).

In March of year three, the COVID-19 lockdown reduced the capacity of Trustees to exert their influence on the project. Staff and long-term residents welcomed lockdown as a positive development, because *'the removal of external influences … had allowed [them] to focus on making progress'* with developing the social enterprises (Fieldnotes, Aug 2020). A discourse developed about how lockdown had allowed the project to be professionalised, which (as explained in Chapter Five) meant more professional social enterprises and a more professional organisational structure, notably *'not having that one-on-one contact between board members and residents … what a normal organisation would have in place … You wouldn't have board members ringing individual residents who are in recovery saying, oh, can you do this, can you do that'* (Paul, resident, Sept 2020).

The level of tension affected long-term and newer residents differently, with long-term residents being more invested in the battle for control of the project, feeling that the continued efforts of trustees to exert control was *'a traumatic experience for staff and residents alike'* (Paul, resident, Sept 2020). Newer residents entered into a situation that felt tense and unstable but without the same investment in the issues. For example, Neil complained about the lack of clarity over whether

his partner could visit during lockdown, because a lockdown protocol developed by trustees was undermined by staff, *'making everyone, kind of, second guess what was allowed and what wasn't. Even though we'd been through it with the board'* (Neil, resident, Sept 2020). Because Neil was a newer resident, he would have preferred more boundaries protecting the residents from these issues, and was unwilling to be drawn into conflict with trustees he had never met:

> *Neil (Ex-resident, Sept 2020): "Prime example was, after we had a zoom meeting with everyone, Nigel (staff) came the next day with a letter and said, is this alright by everyone if I send this? And it was like, yeah, fine. I don't know him, but it was basically asking Nick (trustee) to take a back seat, kind of thing. And there was no way that anyone could turn around and go, well, no but at the same time, it's nothing to do with any of us, really."*

Staff were cohesive in their response that it was important for the community to become more autonomous and adaptive, rather than allowing trustees to impose a perceived impractical external vision. This position was supported by Neville (trustee), who encouraged doing what works for the residents who had been successfully retained, *'whatever they are doing, [the most important thing is] if it's working for them as a group and as individuals'* (Neville, trustee, Nov 2020).

The counter argument for continued trustee involvement was that the project had deviated so far from fundamental features of its design and development plan that trustee oversight was still required to resolve these issues. Key issues relating to the fidelity of the instrumental components were a sense that: 1) there had been a loosening of the discipline around work routines, failing to prepare residents for real world employment, 2) a lack of viable social enterprises that could provide this work environment and financially sustain the project, and 3) slowing down the admissions of residents to the extent that the community had become insular, because *'taking in new residents means challenge … and I'm not sure how up for it anybody is at the moment'* (Nick, trustee, Oct 2020).

6.1.3 Resident characteristics

The final contextual factor identified as influencing the programme mechanisms was the characteristics of the residents themselves. While all residents had shared the characteristic of having experienced problem substance use, there was variation in their backgrounds that appeared to be linked with outcome patterns. Important areas of variation included family background and social class, addiction severity, criminal justice involvement, trauma, mental health, and physical health.

The clearest divide between residents who progressed in the programme and those who left was that successful residents uniformly reported they had supportive middle-class family backgrounds and had grown up in positive environments. There was a less clear divide on other factors such as addiction severity, indicating that social background was the fundamental structural difference. As per the literature review, this would indicate that residents who progressed had greater recovery capital prior to entering River Garden.

Family and Social Class

There was evidence of differences in the types of family and social backgrounds residents came from, with residents from more supportive families and middle-class backgrounds experiencing better outcomes. Of all of the aspects of resident background, the characteristic of successful residents that was most universally acknowledged (across residents, staff, and trustees) was that they came from less disadvantaged social backgrounds. Residents who left had a greater tendency to have unstable family backgrounds, such as parental alcoholism (Kyle, Stuart) or spending teenage years living in hostels (Kevin). I mainly gathered these details from resident admissions forms.

Residents who had done well acknowledged that having a supportive family gave them advantages that some of the unsuccessful residents did not have. All four had expressed a clear insight that their family background had provided strengths

that helped them do well in River Garden. I have presented a quote from all four to support this finding.

> *Eric (Resident, Dec 2019): "I just need to remember not everybody's maybe got the same help and background that I've had, where I come from a good family and stuff … You really need to want to change everything about you, but that takes a lot of guts and determination which, I suppose, having that good family and background helps a lot as well. Everybody that's still here now … has got a lot of family and support behind them compared to some of the people that have left."*

> Keith *(Resident, Dec 2019): "I've not come from a fucking hefty rough environment, but I took myself out of that positive environment at a very young age and put myself into a rough environment through my own decisions, you know what I mean, so I've kind of chose that way of life to a certain degree, through things that I valued"*

> *Ian (Resident, Dec 2019): "It's not been too difficult for me … behaviours and things like that, were a bit easier to get out of, you know, isolating, and not having responsibility for myself … my attitude towards stuff. I found that quite easy to change. But someone my age could come in and maybe really struggle, because they've been, you know, institutionalised, or they've had a really rough upbringing. I was very lucky, I have a supportive family, and things like that."*

> *Paul (Resident, Feb 2020): "I'm not from a well to do family, but I'd say I'm reasonably middle class … I've not struggled as much as other people … Whether it's nice to admit it or not, it's probably true."*

Family backgrounds were related to subsequent forms of social marginalisation. The most striking example of this was Kevin, who was on remand from a long-term prison sentence, indicative of a much higher level of criminal justice involvement than most residents. Five of the nine residents had experienced prison (Eric,

Kevin, Kyle, Keith, Brian) but Kevin was the only to come directly to River Garden from a long-term sentence.

> Kevin *(Resident, April 2019): "I ended up taking heroin … That led me into committing all sorts of offences and I ended up … doing an armed robbery and I got ten year in the jail for it – all through drugs. I got the chance to come here … when I was in the jail."*

There was some evidence that behaviours and attitudes associated with prison culture influenced the community, such as the interpretation of one resident that a lack of freedom to spend time off site made River Garden *'like being in the jail'* (Kyle, ex-resident, July 2019). By the end of year two, there was agreement amongst staff and residents that taking people directly from long-term prison sentences was unsuitable because it had been naïve to think that *'growing tomatoes [will] totally change their life'* without accounting *'that jail behaviours are going to fucking come out of the jail and come straight in here'* (Keith, resident, Dec 2019).

The patterning of social class on backgrounds was acknowledged by trustees. For example, the agreement that *'I think probably the residents that have been more successful have come from a more middle class background'* (Nick, trustee, Oct 2020). A staff member saw this as not a division between working class and middle class, but within the working class, between those with serious economic disadvantage and others.

> Trevor *(Staff, Sept 2020): "The people that are here have got a higher social background, a higher social class … they're working class but … Anybody that we've had that has come from a background of, a poorer background, haven't lasted"*

By year three, a different profile of resident was being selected. This was illustrated by Neil's relief that the reality did not match the paperwork, which

'was talking about people coming out of prison and whatnot, I had worries that it would be a bit rough' (Neil, April 2020).

Addiction severity

Residents had all experienced substance problems significant enough for them to seek out residential rehabilitation, including dependent and chaotic use, the loss of jobs and relationships, and multiple relapses. However, an important distinction can be made between opioid and non-opioid drug use. In general, residents who used other drugs such as stimulant and depressant drugs (e.g., Ian who used cocaine, and Paul who used mainly alcohol) tended to thrive and rapidly progress into positions of responsibility. Those with using patterns of opioids, benzodiazepines, crack cocaine, and highly chaotic polydrug use tended to do worse, such as Kevin, Kyle, Brian and Stuart.

The success of Eric and Keith demonstrates that River Garden can support recovery from opioid and benzodiazepine use, but it is notable that two of the four retained residents did not use opioids, in comparison to just one of the five leavers. Residents were aware of the distinction between different levels of addiction, which Keith illustrated by describing the types found at different support groups:

> *Keith (Resident, April 2019): "[Cocaine Anonymous] is more kind of, oh, well I lost a job and I split up with the girlfriend and that, whereas [Narcotics Anonymous] is more like, I've no veins left and I've been feeding the kids dog biscuits, you know [laugh] … I bounce between that two worlds."*

A related issue was the severity of addiction problems specifically when residents entered the community. Some residents had been engaged in very recent dependent and chaotic use, to the extent that their early residence was marked by withdrawals, like Brian and Stuart. Others had already sustained abstinent recovery before entering, notably Eric and Ian, both of whom had managed to sustain abstinence following residential treatment and were ready for the next step in their recovery. The high problem severity experienced by Eric, including

injecting opioid use and near-fatal overdoses, was balanced out by his stability immediately prior to entering River Garden.

> *Eric (Resident, April 2019): "[Previous rehab] just wasn't my type of thing … after four weeks I walked out, but I knew what I had to do to stay clean and sober … I was constantly just trying to figure out something I could do or for a job or where I could move to … came down for a day visit down here, had a look round the place, thoroughly enjoyed it … so all in I was six months clean and sober before I came in."*

Trauma and health

Residents had also experienced high levels of trauma and health problems, both preceding and as a consequence of alcohol and other drug use. Again, there was evidence of some differentiation in the extent that trauma influenced programme mechanisms, as well as the capacity for such an instrumental style of programme to support people with more serious trauma. There was some discourse around the relationship between addiction and trauma, for example ambivalence from Paul about whether his addiction was a response to trauma or *'whether I just enjoyed partying and it went too far',* through too much exposure to the inherent addictive properties of alcohol (Paul, resident, Feb 2020). For Ian, a belief in the influence of trauma had been replaced with an understanding about the role of peer influence.

> *Ian (Resident, May 2019): "For a long time I used to blame my drug use on the passing of my dad when I was very young … I thought maybe that would have some deep down psychological impact on me … just as I came here, I started thinking about my addiction more, and I think it was down to probably peer pressure."*

There was certainly some awareness amongst residents that background trauma could impede some people from thriving in the programme. After the high attrition of year two, Keith reflected that it would take time for the community

to build up enough capacity to support people with high levels of trauma, *'we need to recognise our capabilities … and be honest about what we can do and what we can't do'*, indicating that it may be possible to support people with higher levels of trauma once the community was stronger and had more people with lived experience to provide adequate support (Keith, resident, Dec 2020).

Amongst staff and trustees, there was a general consensus that trauma itself should not exclude residents from benefiting from the programme. However, there were some differences around whether the symptoms of trauma needed to be under control before coming to River Garden or whether trauma could be better supported within River Garden.

> *Neville (Trustee, Nov 2020): "They may have trauma, but … I think the trauma symptoms, they're managing with the help of the structure, the routine, the support and also, you know, they're learning different kind of coping skills … through way of work … If somebody … has got a lot of symptoms for trauma, I think in that case probably it would be better to have some therapy before coming there."*

The opposing view from trustees (those who stepped down) was that the model should have been able to help people manage their trauma by connecting them with external agencies. However, it was also noted that external agencies could take an approach that clashed with the social model of recovery prioritised by River Garden. The recognition that relying on a wider range of agencies came with risks appeared to influence the more careful selection of residents who required less external support.

> *Nick (Trustee, Oct 2020): "Most people that come to a place like River Garden will have trauma in their background … and although the programme itself was never sort of set up to really deal with people's trauma, we had good relationships with other external agencies where people could receive … professional support for their trauma. [However] Brian's second relapse was really due to the fact that the psychiatrist he was seeing put him on*

really heavy medication … so sometimes getting help for trauma can be helpful and sometimes it can actually put people at risk."

Amongst the staff and trustees, there was a consensus that River Garden was *presently* less suitable for people with high problem severity, serious physical or mental health problems, and acutely marginalised backgrounds. The main division between these implementers was between an acceptance that River Garden would *always* be less suitable for people with more challenging problems, versus an aim to increase the capacity to manage these problems, by creating more robust support infrastructure. As well as creating the physical infrastructure of social enterprises, this would involve developing a more robust culture and regimes.

Nick (Trustee, Oct 2020): "I think that at the beginning, there is a more narrow group of people that River Garden is suited for, and maybe they're people with higher levels of recovery capital, but that through time, through … the settling down of a culture and a kind of proper implementation of, you know, work regimes and social regimes and kind of peer led approaches, I think that could widen over time."

The contrasting view was that River Garden was more suited to people with less severe problems, or who had already made progress towards stable abstinence before entering the community, that *'people that are still chaotic are certainly … not for us'* (Trevor, staff, Sept 2020). In the early stages, the requirement for residents to build businesses needed people with certain attributes, such as being *'quite mentally agile and emotionally agile … so that they can adapt to changes'*, then maybe *'fifteen years down the line … and we've got five, six or seven social enterprises that people can slot into … we might be able to take people with … other issues'* (Donny, Sept 2020).

Neville (trustee) felt that River Garden would be for people who were at a more mid-level of problem severity, who had already made some steps towards recovery:

Neville (Trustee, Nov 2020): "There are people who are, like, really chaotic, using lots of different kind of drugs, lots of overdoses. I don't think they will be really suitable … We will have the people who are in the middle, who are at risk of relapse or … using drugs every day but not so chaotically that they wouldn't be able to totally stop … [chaotic people] can seek help in the community first, get on to medication if they need to, work on that, reduce the chaos, then plan and gradually go to River Garden."

There was some variation around these two key positions. One trustee felt that River Garden had initially been promoted as for people for whom other services had failed, '*so we can sell it as a service for the unserviceable'*, but the reality was that '*people with high problem severity … high risk prostitution, serious physical and mental health, and serious addiction, and really, near death's door … they're not set up for the complexity of problem that can come with that'* (Lindsey, trustee, Nov 2020). However, a strong community could potentially facilitate the delivery of shorter term rehabilitation or respite programmes for people with more complex issues, to "*take people in for three months and let them work the land and be part of the community … that would work for different groups, a three month one, or a one month, or a two week respite* (Lindsey, trustee, Nov 2020).

River Garden had always had a highly selective intake process, with the opportunity to select a small number of very suitable residents from a large pool of applications. While residents who were selected usually had skills that could benefit the community, there was also a willingness to select residents who had other significant issues (e.g., very recent relapses). Towards the end of year three, there was a greater emphasis on using the selection process to a choose residents with the attributes required for success.

Nigel (Staff, Sept 2020): "The most important thing is … the selection process, the referral process, and the individual, it needs to be the right individual for this place … it's a specific type of individual that's willing to give up three years of their life out there, disconnect from their former

lifestyle, and be willing to commit. So, I think, commitment, open-minded, and a willingness to recover."

The primary exclusion that would signify somebody was unsuitable was serious trauma or mental health problems, that would not necessarily improve from the structure and purpose offered by a work-based programme. It was not always considered an issue of social class background, *'addiction doesn't care if you're rich or poor"* (Nigel, staff, Sept 2020), but about careful selection of individuals with stable enough mental health, a recognition that River Garden was not equipped to provide specialist mental health care, an acceptance that *'we're better helping the people we can help than trying to help everybody and helping nobody'* (Donny, staff, Sept 2020).

One reason was that peer support may be insufficient for somebody with serious mental health problems, '*we rely on the guys taking care of the guys … so, we can't put the person who would feel really ill … if they don't get the support'* (Nigel, staff, Sept 2020). This was particularly if they were really mental unwell, '*for example has got, like, either diagnosis of bipolar or schizophrenia'* (Neville, trustee, Nov 2020).

6.2 Mechanisms

The reason these contextual factors mattered was their influence on the three key programme mechanisms: trust, respect, and motivation. This was particularly true of the individual level contextual factors, the characteristics of residents, but the environmental context also influenced mechanisms. The mechanisms are simply the combinations of resource and response experienced by residents when interacting with intervention resources. To provide a coherent analysis framework, these resources can be categorised into *instrumental,* the community rules and structure and the work opportunities, and *relational,* the advice and support of peers.

The three vital responses were identified as trust, respect, and motivation. Trust and respect broadly map onto the relational resources, while motivation is of more relevance to the instrumental resources, although there was some overlap. These were not simply individual responses; they were patterns of responses that consequently become the culture of the community. Nor did they simply flow from the intervention to the individual; they had reciprocal properties. Finally, they were not simply present or absent, but could develop and fade on a continuum.

6.2.1 Trust

River Garden employed a highly relational approach to recovery, particularly the strategy of using staff and residents with lived-experience of recovery to provide peer support. The peer support consisted of a combination of advice, guidance, and sharing of personal experiences. The use of lived-experience was a central strategy, assuming that people who had experienced recovery had the most expertise with which to help others, and that people in early recovery would be more likely to *trust* the support and the person providing it. Although it may have been assumed that shared lived-experience would usually lead to more trust, contextual factors such as social background or mental health seemed to influence patterns of trust and the capacity for certain residents to develop trust. It was critical for trust to flow in both directions: residents had to be able to trust the support and opportunities provided by River Garden while staff and trustees also had to trust residents.

Residents usually indicated that they trusted people who they felt most relaxed speaking to, would be most likely to go to if they had a problem, and with whom they had the closest connections. For example, Ian, a resident who was successful in developing close connections within the community indicated on the network maps that his most positive relationships were those who *'I know I can have a laugh with them and … be myself around them … I feel most comfortable and connected with these ones and that's probably who I trust the most as well'* (Ian,

resident, May 2019). This demonstrated a close association between trust and connection.

There was also an association between trust and programme progression, with residents being increasingly trusted by staff to have additional freedom, autonomy, and responsibility within the community, until they were almost treated as equals with staff by being trusted with office keys, IT logins, and the ability to spend time off-site unsupervised. When residents come to River Garden, they initially lose a lot of freedom and then *'a big part of it is progression … the more trust that you earn, you're given more responsibility and things back'* (Eric, resident, Dec 2019).

When residents had proved they could be trusted, staff encouraged their development by continually urging them to take more responsibility, at times gently encouraging them to make their own decisions when they asked for guidance, extending to decisions for the development of their own social enterprises. All four core residents developed these reciprocal trusting relationships and trusted positions within the community.

> *Paul (Resident, Feb 2020): "I've now got a social enterprise that I kind of have started … so I've got my kind of area of focus, as well as all the other day to day stuff … I think because I've worked hard and tried to be dependable, reliable and like trustworthy, that I am relied upon by the staff as well … like even just the FareShare [food donations], Nigel (staff) said, look, here's the app, here's the login … can you sort it out … just organising stuff and being a point of contact … being relied upon."*

Lived-experience alone did not guarantee trust and even successful residents took time to build up trust in others, found it easier to trust some more than others, and would be more likely to trust people with similar backgrounds and experiences. An example of this was the close relationship between Paul and Ian, who came from similarly middle-class backgrounds. Some successful residents acknowledged that the nature of their addiction prohibited them from being fully

trusted and welcomed restrictions, such as close supervision, as a beneficial resource.

> *Paul (Resident, August 2019): "I'm unable to do life at the moment without that supervision … I'm building towards it … This is really hard for someone to say that they can't be trusted, they can't be trusted to not drink but, you know, you have to admit it. That's addiction."*

Residents failed to progress when there were problems with their ability to trust people in the community, or with the ability of the community to trust them. There was a sense in the community that many of the problems that led to residents leaving stemmed from the fact that *'they're scared to trust anybody, and they're scared to open up … they're frightened that their weaknesses will be exposed'* (Brian, ex-resident, Dec 2019).

This belief was also expressed in the higher levels of the programme and directly influenced adaptions to the selection process. For example, Quentin (CEO) expressed that the reason River Garden may be less suitable for people with more complex issues (e.g., highly traumatic backgrounds or cognitive impairment) was because the large site meant they have to be able to trust residents to work without close supervision, and people with more severe problems would find this more difficult (Fieldnotes, Dec 2019).

Many of the problems experienced by Stuart early in year three, interpreted in the community as issues of poor attitude and behaviour, appeared to be underpinned by his difficulties in trusting people. These difficulties were, in turn, linked to an array of contextual factors, including mental health problems, an undisclosed (during admissions) personality disorder, previous negative experiences in residential treatment, a more disadvantaged socio-economic background, and what seemed like a lifetime of trauma and violence. All of these issues were exacerbated by symptoms of anxiety and paranoia he was experiencing in the early stages of abstinence.

At River Garden he was the single new resident joining an established group of four long-term residents, and in a site large enough for avoidance behaviours to develop: *'it [conflict] happens in other treatment places … here you have that wee bit of freedom to … distance yourself from them'* (Stuart, Feb 2020). When he couldn't distance himself physically, he put emotional distance between himself and the community, responding to even mild challenges with aggressive outbursts. These failures to connect were underpinned by a failure of the trust mechanism.

> *Stuart (Resident, Feb 2020): "It is difficult to trust people in here, because I've been let down that many times in the past … so might come across as being very close to some people, but when I retract to my own environment or room, I question closeness of people in here, I do. Because as I says, I don't know them well enough … it's like you're letting down your guard, and then when you let down your guard, you leave yourself open to fucking people taking the piss."*

It was important for residents to receive reciprocated trust, since past negative experiences of treatment providers had involved feeling untrusted, for example, being accused of diverting opioid substitute prescriptions (Keith, resident, April 2019) or having to collect prescriptions daily because a pharmacist did not trust them with a weekly quantity (Brian, resident, April 2019). Even very calm, stable personalities could experience frustration with the limited trust afforded to residents at first, recognising that the first three months *'is a trial for both me and them, so there's no point in me jumping in at the deep end … if it doesn't work out'*, but at the same time, *'I'd quite like to get my teeth into something'* (Neil, resident, April 2020).

Implementers generally agreed that trust was an important mechanism that could potentially be influenced by residents' backgrounds. One position was that you cannot grant trust too early because residents take time to develop out of the untrustworthy behaviours that characterise their addictions. To illustrate this, one occasion was Stuart asking for a bag of compost to give a family member then

avoiding paying for it, perceived as *'he's still employing that sneaky behaviour … he needs to learn'* (Donny, staff, Sept 2020).

Staff recognised the importance of trust and the requirement for residents to place trust in the staff even when they did not immediately benefit, to *'be willing to put a lot of trust in us and understanding that you can't solve a long term problem with a short term solution'* (Nigel, staff, Sept 2020). It was seen as important to trust residents with minimal supervision, because if they were unable to remain abstinent without close supervision within the community, they would not be prepared for life outside and *'go back to using … it's more about making the residents confident and have some trust'* (Neville, trustee, Nov 2020).

The counterpoint within the Board was that River Garden was not presently giving people enough trust early enough, particularly in terms of limiting and supervising their off-site lives, if *'you're still guarding them when they go to the hospital, or the doctor's, what a waste … these are grown-ups'* (Lindsey, trustee, Nov 2020).

One trustee felt that trust alone was important but not sufficient, and the mechanism that was really lacking was love, defined as genuinely caring about somebody and what happens to them, which he felt had been overlooked in favour of the more instrumental focus, *'being an addict is treating relationships in a very instrumental way … recovery goes beyond that … where you actually really deeply care about someone, and you'll go out of your way to help them … I haven't seen that happen sufficiently'* (Nick, trustee, Oct 2020).

6.2.2 Respect

The concepts of trust and respect were closely related as the key responses to relational resources. Respect was also vital for the programme to work, operated in reciprocal and cultural patterns, and was influenced by the context of resident backgrounds. Residents had to have respect for staff and peers, as well as the programme rules and environment, and they had to feel respected in return.

Failures to properly nurture respect caused significant problems for the progression of residents and the overall culture of the community.

In the most difficult times during year two, rebellious residents managed to generate a culture of disrespect that was only resolved upon their leaving the community. They would only afford respect to people they perceived as being from similar backgrounds and a lot of the culture seemed about vying for position in a respect hierarchy. At the same time, some of the rebelliousness was rooted in feeling disrespected by programme implementers, who were felt to have oversold and underdelivered the expected programme resources.

In year two, residents described a culture where respect was earned through taking a joke in good spirits and give it back in equal measure, which filtered down from longer term to incoming residents. One resident described his first-day experience as, *'I walked in and [Brian] … said, what the fuck are you doing here? Do you think this is a fucking rehab? … I was intimidated … then he was like, ah I'm only joking … he's done it with the other two boys as well'* (Kyle, resident, April 2019). This type of behaviour was seen as amusing and as a marker of being comfortable in the community, *'for the first week … I … kept my views to myself, sussing everyone out … after that … I started … slagging off everybody … getting comfortable'* (Keith, resident, April 2019).

Part of this sussing out was evaluating whether peers were worthy of being respected, which factored in their social background, severity of addiction, and how immersed they were in drug using subcultures. For example, less respect may be afforded to someone if *'they've had a wee habit … a tiny bit of … partying and changed their life'*, because it would be harder to take advice from them than *'somebody that's been to the same sort of depth of despair … you can't speak to people about … the merits of shooting over smoking when it's somebody that's … never been there'* (Keith, resident, April 2019).

The problems with conflict and subgroups in year two (described in Chapter Four) were essentially manifestations of a culture of reciprocal disrespect. It often

occupied a fine line between joking and seriousness, and it could be difficult to gauge when the line was being crossed. For Brian, I realised that it was creating significant problems when he was promoted from resident into his role as peer worker, because instead of respecting his position and experience of recovery, residents at earlier stages would challenge and undermine him, *'I tell them … I want you to go and do this … they'll reject it. 'Who the fuck are you talking to … You're just a resident here, now you think you're a staff member and think you can tell everyone what to do' … Addicts have got this uncanny ability of picking up on a weakness right away … they'll exploit it to the best of their ability'* (Brian, resident, April 2019). This lack of respect led to strained connections:

> *Brian (Resident, April 2019): "The reason why I've put Kevin and Kyle in the red [on the network map] is because … they're quite challenging. They take the piss constantly, like to wind you up … try and get a reaction out of you all the time … take the piss and all that, so it kind of sets me off, brings out kind of anger in me sometimes … they're always moaning and complaining."*

The culture of River Garden came to involve casual disrespect as a measure of interpersonal bonding, in that *'if you spoke to somebody in a normal way, they would think you were weird … it was just all flinging pelters at each other, all giving abuse'* (Kyle, ex-resident, July 2019). Brian had contributed to this culture but struggled when it went too far, particularly when he aimed to be taken more seriously as a peer worker.

Issues developed out of control because of the relative freedom from staff supervision afforded by the large site and strategy of peer-to-peer support, at an early stage of formation when the one long-term resident was outnumbered by several new residents. Early stage residents lacked insight into the difficulties this could cause and reflected almost fondly on it as chaotic hilarity.

> *Kyle (Ex-resident, July 2019): "There were some folk what took it personally, aye. [Brian] could annoy you any way you want but see if you touched his ear, man, he fucking hated it. 'Cos we knew that he hated it,*

we used to walk past and flick his ear and things like that, he used to go mental. He's picked up the pool cue, he's like 'fucking do that again you'll be fucking wearing this' [laughs]"

This culture of disrespect extended from peer relationships to relationships with staff and a general disrespect towards the programme rules, manifesting as a collective disrespect towards the community culture by a subgroup of residents, Kevin, Kyle and Thomas, who supported each other in resisting the programme through subversive behaviours. These included stealing juice from the café, illicit use of mobile phones, work avoidance, smoking, arriving late for set mealtimes, disengaging from the structure altogether, isolating themselves from the rest of the community, alcohol and (potentially) other drug use, and abusive language towards staff. This fragmented the community into two groups, the opposing group of Eric, Keith, Brian, and Ian also sticking together, bound by their collective willingness to engage respectfully with the programme. These issues were generally framed as a matter of attitude.

Brian (Ex-resident, Dec 2019): "What starts to happen is, is wee groups develop, like wee cliques … If you're working with … two or three boys, and they're all of the same mindset … you can give each other bad advice … Thomas, and Kyle, and Kevin working together, and talking each other into drinking, and talked each other into smuggling drugs … talked each other into bringing in contraband, and mobile phones … Because they had the same mindset."

The subgroups were formed around people in similar stages of recovery (the rebels were all in earlier stages) and who had similar attitudes and backgrounds, *'people [who] are pretty sound … tend to stick together, people [who] are in a bad mood quite a lot or their attitude's not the best … they tend to stick together as well'* (Ian, resident, May 2019). The rebel subgroup enabled each other to break community rules and enabled each other in toxic interpersonal behaviour against group outsiders, acting differently than they would individually.

Ian (Resident, Dec 2019): "The three of them together, it was almost a bit of a toxic mix, really. They fed off each other, and when they were individual, when they were alone, they would talk openly about their traumas, what's happened to them in the past, their addiction, what's happened, how they're feeling … they'd be very open, but then as soon as you put them back to the group, they would just, 'aye, you're an arsehole, blah, blah, blah'. Not even give you the time of day, really"

This was generally validated by one of the residents who had left, who felt that he was more comfortable within this group because of sharing similar backgrounds, leading to them spending the evenings sitting in Kevin's room, just *'the three of us'*, separate from the rest of the community, and *'we were feeding off of each other, co-signing each other's bullshit'* (Kyle, ex-resident, July 2019).

On one occasion, the group arrived late for breakfast and staff attempted to punish them by restricting their freedom to leave the community on evenings and weekends, to go to 12-step meetings or into the nearby town for a haircut. One resident, Thomas, responded with verbal abuse and the staff member, Trevor, was unable to challenge the behaviour because *'if he'd have said something to Thomas, Kevin would've said something, and if he'd have said something to Kevin, I'd have said something … it'd have just ended up being an argument … if you're close with somebody you back them up'* (Kyle, ex-resident, July 2019).

By all accounts, Kyle was bonding well within the community until Kevin and Thomas arrived shortly afterwards, and he developed closer connections with them, demonstrating powerful social influence, to the extent of a pact that if any one of them were removed from the community, they would all leave in protest.

I: "Do you think they influenced … your attitudes towards the place?"

Kyle (Ex-resident, July 2019): "If I'm being honest, aye, probably. My mum keeps telling me that, like, 'if it wasn't for Kevin you'd still be there, you wouldn't have left and that, it's like, you were doing brilliant … you've just

threw it all away just to leave with somebody'. We'd kind of made a pact, it was if Kevin got, like, kicked out, I was leaving, if I got kicked out, he was leaving. Ken, it was just stupid, fuckin' wee boys stuff like you'd do when you're ten and that. It was pure stupid, man."

The belief that Kevin had been the main ringleader in this subgroup was widespread, particularly the idea that due to his preceding experience of long-term incarceration, he was disposed to treat the rules and relationships in River Garden similarly to the ways he had learned in the prison environment. This involved resisting and subverting the rules and drawing weaker residents into his sphere of influence, influencing them to support his resistance of the staff authority figures. Staff struggled to come up with ways of managing these situations as they developed (Trevor, staff, July 2019) and felt hindered by their limited ability to impose discipline when it was clear residents were not interested in committing to the programme with the expected attitude.

Nigel (Staff, August 2019): "We need to be strict with, you know, you get up in the morning, you go to breakfast, you do this, you work, you don't have your phone, you don't smuggle phones in, you use your phone not on work times, you honour your commitments, if you're on cooking rota you don't just skip it and go outside … and I'm not trying to create, like, standing there with a whip, but at some point you need to sit people down and say, 'this is the structure River Garden has set, we expect you to follow the rules', like, no gambling, no this, no smoking indoors, no threats, no, you know, you're here to do your job."

The formation into a resistant subgroup was felt by one staff member to be due to their inability to be *'humble or vulnerable or empathetic … to wipe the slate clean and start again from scratch at a psychosocial level … which requires integrity and … patience'* (David, staff, July 2019). Others placed more direct blame onto a single resident, felt to be the ringleader who had manipulated weaker residents into negative attitudes and behaviours, *'I felt I could have worked with Kyle … Kevin was just a master manipulator … he'd eight years in*

the jail to bloody master it … he recruited his wee soldiers … Kevin and Thomas were doing all his bidding … all the nipping … verbal bullying … the people who were left out were people that they obviously couldn't manipulate' (Trevor, staff, July 2019).

Residents like Kyle who had been *'doing really well up until the point that these divisions came about'* (Trevor, staff, July 2019) were believed to have been influenced into negative behaviours, *'two weren't ready and one was easily led'* (Nigel, staff, Aug 2019). Staff initially tried to split them up into different work groups but found it difficult to prevent them joining up in the evening, *"they said 'I'm going to my bed … then they end up in one room … now they're all in the one accommodation … we can try and limit them from sub-groups"* (Nigel, staff, Aug 2019).

When these residents left, there was a feeling that the experience made the remaining residents closer and more determined to develop the project and avoid these types of issue in future, *'it was a good time, during the summer, after everything kind of settled down again … it definitely made the people that were still here a stronger community'* (Ian, resident, Dec 2019). After several months of stabilisation with the four remaining residents, the next test would be the ability of the community to assimilate new residents into this positive culture and avoid being destabilised by the challenges presented by people in early recovery.

Early in year three, Stuart put the community to the test. He admitted that during his addiction he had not treated others with respect, that *'it was just … pure misery, hatred and evil, because I was an evil bastard. I'd have pissed and shat over anybody to get what I wanted'* (Stuart, Feb 2020). Attempts by long-term residents to provide him with peer support, be it guidance or gentle admonishment, led to serious outbursts of anger and aggression. The intensity of his aggression in response to even gentle admonishment (detailed in Chapter Four) seemed to indicate a lack of respect for both the boundary itself and the right of a more experienced peer to enforce authority over him. As with his trust issues, the response seemed to be anchored in serious mental ill health.

> *Stuart (Resident, Feb 2020): "Stupid petty arguments that have … almost tipped me over the edge … over nothing, over a fucking mattress. I … felt like hurting somebody, and that's not the person I want to be, but that almost tipped me over the edge … it was a person that's been fucking good with me, but … when you start getting paranoid, you become wary of everybody … people are challenging you, and you're not used to getting challenged … challenges I find difficult, people challenging you, and people pushing your buttons, to the point you're ready to fucking explode."*

From the perspective of the resident who had challenged him, this was an upsetting interaction that was caused by Stuart's resistance to any form of rules or authority, and his particular tendency to lash out at the people who had taken the most active role in supporting him during his first weeks in the community, mainly Paul and Keith. From Paul's perspective, *'we've supported him quite a lot … he had a massive lash out at us again yesterday and told us to fuck off … and was about to fucking clock us one … I can't feel threatened, my safety and the place that I live in'* (Paul, resident, Feb 2020).

Stuart had initially seemed receptive to peer support from Keith but began to take deep offence at his jokes, at one point responding he would *'knock you out'* in response to a joking comment about being bald, the threat of violence hanging for a second before Keith defused it with another joke (Fieldnotes, March 2020). This indicated that he was particularly sensitive to feeling disrespected. Much of the peer support in River Garden also seemed to revolve around the idea that recovery involved personal self-improvement and overcoming various character flaws, for example the idea that impatience was a characteristic of addicts, so part of recovery was learning patience. He seemed prone to interpreting these as personal criticisms and would respond defensively with criticisms of his own, like when he began to target Keith with accusations of being lazy (Fieldnotes, March 2020).

In contrast to year two, these issues did not lead to a culture of collective disrespect toward the programme, indicating the capacity to withstand challenges

was greatly improved. However, neither was Stuart assimilated into the respectful culture. Instead, he lashed out in a more individual manner and became isolated within the community over time. Despite the collective strength of the culture, it caused considerable personal strain on residents to take responsibility for enforcing it, *'we definitely are stronger … we've got to point out the unpleasant things … we've got to say, no, you can't take that mattress … you can't just go and eat all the food, even though he's volatile and does not like being told … it's quite scary … [but] if he doesn't make it we can look in the mirror and think we've done our best'* (Paul, resident, Feb 2020).

Outright resistance to the programme was always deemed to be unacceptable. That said, there was more flexibility around many of the original rules of *River Garden*, which were resisted by residents in both the retention and attrition groups. Even residents who were very respectful in their attitudes and behaviours did not necessarily respect every rule (indicating that it was possible to have high relational-respect but less instrumental-respect, that is, respect for the way the programme was designed). In many cases, they were successful in having rules relaxed, particularly when residents had advanced into more responsible positions where they had more say in how the community was run.

Key examples were the more relaxing of the no-smoking policy, the unsupervised use of mobile phones for residents in their first six months, the requirement to cease claiming benefits, and the rule that residents must be supervised by a responsible person when leaving the site. Residents became aware of the malleability of rules in a new project and their power to collectively advocate for adjustments.

Each rule had a specific theoretical validity for implementers, for example, the small allowance would be beneficial for residents to live a life uncomplicated by money, since their core needs of accommodation and food were being met. The perspective in favour of this was that *'it's making them stronger mentally [by] completely removing that option from them while they're vulnerable … they've got a mental obsession about finance … some boys buy a shitload of toiletries …*

go for haircuts all the time … loads of deodorant, different aftershaves … some guys will buy shitloads of CDs … a mental obsessional switch to spending money on drugs' (Brian, resident, April 2019).

Others made counter arguments that having no money was disempowering, particularly in the semi-permeable context of River Garden, where interactions with the surrounding world made money necessary. The allowance was considered insufficient for basic quality of life expenses, including mobile phone contracts, tobacco products, toiletries, takeaways, and outings, making residents more dependent because they had to rely on funds from family members or residents who still had benefits income, therefore residents *'should stay on … benefits until you're employed … the excuse was we're not taking money off the government [but] you're paying people's wages so why not pay benefits until people get wages?'* (Keith, resident, April 2019). The pushback was instrumental in the eventual decision to allow residents to claim benefits, once the influence of trustees to control this adaption had been minimised.

The use of mobile phones was not formally adapted in the same manner, but flexibly implemented and relaxed over time. A few weeks into his residence, Stuart was granted unsupervised use of his phone by a sessional peer worker and retreated to his bedroom, returning several hours later to disclose he had established contact with his ex-partner, who had cut contact with him, by calling a number of her family members. This caused problems the following day when he disclosed it to one of the staff team, Donny, who challenged that he knew he was not allowed unsupervised phone access and had already been told by Trevor (staff) not to contact his ex, resulting in an annoyed response from Stuart that he couldn't seem to do anything right. The issue seemed to be caused by the inconsistency between permanent and sessional staff and the relaxing of rules at the weekend. The response was a re-tightening of the rules for Stuart, who was *'no longer allowed his phone'* (Fieldnotes, March 2020).

Into lockdown, the relaxing of rules continued to cause issues, with Neil allowed to go off-site on walks by himself to play *Pokémon Go* (a mobile game that uses

GPS and requires players to physically walk to new locations) on his phone. This was a relaxing of the phone rules and the buddy system, which led to him being drawn into family problems through his phone without any peer support around him, contributing to his alcohol relapse. This type of relaxing of rules could indicate that the culture of relational disrespect had been replaced with a culture of instrumental disrespect, where basic rules around supervision of new residents were not considered important.

Implementers agreed that respect was a key mechanism and that the problems of year two had been caused by a culture of disrespect, worsened by the inexperience in the staff team having difficulties gaining the respect of the rebel subgroup, *'Brian was employed … but he was inexperienced, and he didn't know how to deal with people … the boys just ran over the top of him'* (Trevor, staff, Sept 2020).

There was also confirmation that respect could be affected by the type of background people were from, *'if you come from a posh family and … you've been taking cocaine for a couple of years, but you haven't lost teeth, house, work … some people might think, oh you haven't been injecting heroin or lived on the street … but people need to recognise everyone has their own personal bottom'* (Nigel, staff, Sept 2020).

Family background was agreed as a powerful influence on respectful or disrespectful attitudes, a staff member commenting that for resident who had failed to thrive in the community *'his family's … ethos was a fairly bigoted one … he didn't want [female trustee] to call him 'pal' because women shouldn't call people 'pal'. Things like this … with that … morality … they're not going to make it in a community … where you've got people who could be from all backgrounds'* (Donny, Sept 2020).

Among those trustees who had become dissatisfied with the project, it was felt that a culture of disrespect was not just limited to the early problems (mainly in year two) but had fostered into an ongoing culture of disrespect (in year three)

that manifested in improper boundaries between staff, residents, and trustees, and was rooted in a lack of *'mature recovery'* in the community and the failure to properly implement *River Garden Way* to *'create a culture … that we can say, aha, that's not what we do … irrespective of who it is that's doing the behaviour'* (Lindsey, trustee, Nov 2020).

Regarding respect of the instrumental resources (adherence to the programme structure, rules, and stages of progression) there was a division between staff and trustees who emphasised adaptive flexibility and those who felt problems had been caused by improper implementation. For example, new residents not being closely supervised by their 'buddy' could be seen as essential to avoid institutionalising them, *'it is important that you don't prescribe what people do with their time all the time … when they leave the programme … they find themselves sitting in a flat and they're not quite sure what to do … it's quite important they have that downtime … when nobody is looking over their shoulder'* (Donny, Sept 2020).

Staff confirmed that rules were being constantly adapted and readapted, for example when new residents *'felt excluded because everyone was on their phones … you tighten up on everybody's phone and say you're not allowed them in the rec room … you can see … is he just using that as an excuse [or] does he still then spend more time in his room because he's allowed to use his phone in his room'* (Donny, Sept 2020).

Trustees saw this as poor implementation, which had wider consequences for the community because if *'people can spend a lot of time on their phone … they're not engaging in the community … they're engaged somewhere else … there's been quite a lot of online shopping addiction [and] at least one or two residents signed up for benefits claims through their mobile phones'*. Too much flexibility was felt to have allowed residents to learn they could push against boundaries, rather than developing the self-discipline required to accept the rules, *"I think there was too much flexibility and that … weakened what was originally envisaged"* (Nick, trustee, Oct 2020).

The trustees more closely aligned with staff countered those decisions about the programme rules should not come from trustees because *'board members … getting involved in making decisions about residents … hasn't ended up well'* and it is preferable that *'all the decisions are being made by people [staff] who are actually experienced in working with recovery'* (Neville, trustee, Nov 2020). Many of the original theories underpinning the rules were challenged.

> *Neville (Trustee, Nov 2020): "All these theories … I find a lot of them are quite … judgemental because … If somebody has addiction to gambling, after a year, they're not going to magically sort that out. So, it's just artificial one year and hoping that that goes away. It's not like that. It's…time is not the one thing. It's more about what they're doing in that time. That's why I said it's … flexible."*

Beyond the basic divide between robust implementation and flexible adaption, there was another perspective. A perspective held by one trustee was that the very concept of rules itself was not compatible with the intended values of the community and caused River Garden to become no different to existing residential rehabilitation or prison environments. This in turn caused residents to behave as if they are in those settings, instead of more engaging in more radical processes of collective accountability.

> *Lindsay (Trustee, Nov 2020): "The capacity of a person in one month of recovery to make decisions with regard to things, is different from somebody in 12 months in recovery, right. So, I'm not any idealist, and think everybody straight off the street can suddenly participate in an enlightened process, but I do not think they should be met with punitive … we can have agreements with each other … where people are empowered to be part of the agreement making process. Not just, 'I'm setting the rules and your job is to follow them' … So, they weren't able to give up smoking, could we not have taken that in a bit more?".*

6.2.3 Motivation

Motivation was of particular importance for the work-related instrumental resources. Different motivations led to different outcomes. All residents had high baseline motivation to enter the community but sometimes for different reasons. For example, residents who were living in crisis and desperate for any form of residential rehabilitation (in the context of extremely limited provision) fared worse than those were motivated specifically by the work-based opportunities. Once in River Garden, it was important that residents continue to respond to resources in a motivated fashion over a very long period of time. The ability of residents to sustain motivation was underpinned by contextual factors such as resident health, ability, and experiences of work.

Resident motivation was also influenced by the context of the early implementation, when the limited infrastructure meant that the opportunities for skilled work were limited and there was a requirement for residents to build the infrastructure, a situation that some residents found more motivating than others. After the year two attrition, the remaining core residents were highly motivated by the instrumental challenges, less so by the relational (e.g., building relationships with other recovery communities), indicating that instrumental motivation had a greater benefit for progression.

Initial motivations

The physical environment of River Garden was a great motivator for residents, who were attracted to the impressive walled gardens situated on the banks of a river, surrounded by vast countryside. Within the site, there were gardens, fields, workshops and garages, an orchard, huge greenhouses, disused cottages, all with the potential to be transformed into business activities.

> *Brian (Resident, April 2019): "When I came down here and I seen a 48 and a half acre estate, two arboretums, big tree gardens … hundreds of metres of greenhouse, an allotment, an apple orchard, a beautiful ornamental garden*

> *… I'd have had to have been a millionaire or a multi-millionaire to be able to … call somewhere like this my home … that was the pull of it … put in three years' hard work, and you can call this place your own."*

Another advantage of the environment was that it afforded access to a calm, naturally beautiful surroundings that motivated residents to remain there, *'if you're having a shit day just look at where you are … It's calm. It's peaceful. It can be stressful as well, but it's just beautiful … I'm saying about being content and at peace, look where you are'* (Paul, resident, Aug 2019).

Residents who had never imagined themselves having an abstinent life found this specific setting offered something completely unique in contrast to their previous experiences of treatment, *'I couldn't ever picture myself being sober … then I came down here and … just seen a totally different thing … gardening, outdoors … an off-grid community … and just thought … I need to get involved in this'* (Keith, resident, April 2019).

Residents were also motivated by the geographical separation from their own communities, which afforded the opportunity to create a new identity, *'you move somewhere new, and nobody knows you … I got up to quite a bit of mischief when I was younger … you've always got a bad name where you come from'* (Kyle, resident, April 2019). Residents also welcomed separation from the pressures of the outside world, *'having responsibilities such as work and an employer … a manager … family and relationships … they all hold pressure on you … you kind of put that to the side for a while and you think, right, I'm focusing on myself in a safe environment'* (Ian, resident, May 2019).

Residents may have been motivated to enter River Garden by a desire to escape the circumstances of their lives, that had become difficult due to their substance use. Since the availability of residential rehabilitation was low, residents were sometimes more motivated to escape their circumstances than they were by the specific work-based recovery model on offer. This tied in with wider discourses about taking responsibility.

Stuart (Resident, Feb 2020): "Mental health treatment services turned round and says to me that basically I had to take responsibility for my own actions … I decided, right, I will take responsibility … started using the internet, looking up for various treatment places, and it was just, to be honest … pot luck that I came across River Garden, that's the truth, it was pot luck. Just Googling and came up this River Garden place.

Continuing motivation or demotivation

Despite the generally motivating nature of the environment, there was a sense amongst residents that some of the infrastructure was underdeveloped, in terms of facilities, structure, and activities. Residents who progressed in the community recognised these limitations, but this was balanced with motivations about the potential for development, *'we'll get a wee scene going, café open … there'll be more stuff to do … just now it's still in the infant stages so you're providing your own sort of entertainment'* (Keith, resident, April 2019).

Resident experiences were hindered by the lack of a focused work structure and limited opportunities for training. Even Ian, who was retained long term and experienced excellent outcomes, acknowledged initially that *'you didn't know what job you would be doing … it might … take you five minutes and then you'd be waiting around … I always wish I'd came when it was a bit … further on in terms of the facilities [and] opportunities … it's not even found its feet yet"* (Ian, resident, May 2019).

The facilities could also be underwhelming, one resident describing the makeshift gym room as, *'it's dampness and all freezing cold and that … it just puts you off going down … cos it's just a wee freezing cold room'* (Kyle, resident, April 2019). Although some residents were able to remain motivated despite these limitations, others who became dissatisfied and stopped engaging with the programme tended to emphasise these issues.

Kyle (Ex-resident, July 2019): "Once it gets further down the line it'll be alright … Once it starts opening up and … they've got, like, businesses running there and that, it'll probably come on a bit more… but they're just at just the start and struggling a bit… things not being done right at the start."

Kevin (Resident, April 2019): "Well, there's nothing really much to do. You get the pool table and stuff and watch films and that and things like that. Or you can go fishing sometimes. Aye, there's not too many things just now; it's because it's just new, they've still got things to put in place and that."

One of the main issues with an underdeveloped infrastructure was that it limited the type of work mainly to unskilled, manual repetitive outdoors gardening work that didn't feel like it was building towards any greater project, *'one day you're chopping logs or cutting branches … scatter jobs … I like [to] put the effort in and see an end result … when you're cutting down branches and that [you] don't really see an end product'* (Kyle, resident, April 2019). Again, even residents who progressed raised these issues:

Ian (Resident, May 2019): "There's no variety, it's the same thing over and over again … there needs to be a bit more incentives for the residents to get up and work."

Residents were even less motivated to undertake this work because they were not being paid for it, particularly when they had done similar types of work in the past as paid employment: *'I've always tree planted … and you're always getting paid for it … you're overworked in here. Sometimes you feel like you're in the … slaves or something like that'* (Kyle, resident, April 2019). Although residents may have applied themselves to the task enthusiastically at first, it was difficult for some to sustain over the long term, *'they were impressed by my work ethic at first … you just burn out after a wee while … you lose the will'* (Kyle, resident, April 2019).

Residents who persisted despite these early limitations were those who took a pragmatic attitude towards the necessity of doing a certain amount of outdoors gardening work and embracing it, with the understanding that it would help build towards training and development they were more passionate about.

> *Paul (Resident, Aug 2019): "The bottom line, if you put aside the recovery stuff, this is an ornamental garden … the jobs that I do here need doing because it's a garden … I'm not as practical as maybe some other people here so I'm like a sponge. I'm just sucking it all up so there might get a point where I'm like, where I've learnt how to use the bloody strimmer and stuff like that, and I might get bored, but not at the moment."*

There was also a view that mindset was important and that even the more menial jobs could be made to be rewarding by having the right attitude, such as appreciation of how these tasks helps the community overall.

> *Keith (Resident, Dec 2019): "It all depends on how you look at stuff … If you're [doing the dishes] and going, oh, it's lovely, warm soapy water on my hands, these soapy bubbles smell really nice, oh, look at how clean I've made all them dishes, they're all sparkling and shiny and … I've done a nice thing for somebody else … you can find pleasure in the shittiest of little jobs."*

Residents would always negotiate the admissions procedures in a highly motivated fashion but often struggled to maintain motivation after several weeks or months of distance from their initial motivating crises. In rare cases, they may not have intended to stay long but their motivation would grow, like with Ian who initially thought *'I'll get fit and healthy again, and then after three months, I'll go back to my old job'* but became more motivated because *"after a certain amount of time, you start to feel like you're responsible for it [the community]"* (Ian, resident, Dec 2020).

Although River Garden was a voluntary programme, there were indications that the nature of addiction itself could undermine the perceived autonomy of applicants, leading to loss of motivation when they were more stable.

> *Kyle (Resident, April 2019): "When you were signing up to your work and that, you're probably still partly rattling [withdrawals], so you'd have signed anything to get away from that life … you'd have signed your life away to be quite honest, just to get away from that life."*

Due to the communal nature of the environment and centrality of peer support to the model, residents had to sustain motivation towards the relational aspects of the programme as well as the instrumental. Brian had excelled at the instrumental challenges over his first year in the project, for much of which he had been the only resident. His loss of motivation during his second year was in respect to the relational challenges, which grew as the resident population increased, particularly the strains of living in close quarters with more residents and a culture of residents making complaints to staff about what he perceived as petty domestic matters.

> *Brian (Ex-resident, Dec 2019): "I couldn't go back into that accommodation block, now, with the boys … sharing bathrooms again, and sitting round at mealtimes with everybody … I don't want to do that again … I've had enough … I boiled the eggs and went back into my bed … they'd complained to Nigel (staff) that the boiled eggs were cold … I said, could they not just cut them up and just fucking, put them in the microwave, man, just to heat them up or something … I said, that's just getting petty, now, man … I said, no, I'm fed up, man, I'm fed up with it."*

Staff generally agreed that motivation problems were linked to limited infrastructure. Consequently, a key focus in year three had been on creating a more substantial infrastructure of opportunities to work towards more meaningful projects.

> Trevor *(Staff, September 2020): "We've got the Burns [meeting] room now, we've got the woodshed down the bottom. We've got the gardens. We've got, you know, this café is in the process of getting done as well … I think its changes in staff that make a difference as well, and the way that staff are able to work and the guys have been more directed and there's worth in what they're doing rather than just moving stuff about the place, or painting walls for the sake of it."*

However, there was also some feeling that residents still needed to be more motivated, that there were tendencies for work avoidance, and that this was failing to prepare them for moving into employment once they had completed the programme. This provided some validation of trustee concerns that River Garden was not yet providing a robust training and enterprise environment.

> *Donny (Staff, Sept 2020): "How productive they are in a day's work is a little bit worrying in terms of how they would fare in the big, wide world – that worries me a lot … Are we not pushing them hard enough, is that part of the reason they've turned to addiction in the first place … if you're an employer what you want is somebody who comes to you and says, right, I've finished now, what do you want me to do … doesn't sort of sit there at half past three thinking, well, there's no point in starting … I'm not sure any of them are like that really. It's a bit of a worry."*

The trustees who had stepped down agreed on the importance of motivation. However, they emphasised that the loss of motivation by residents in year two was less to do with the infrastructure and more about addict behaviours such as impatience, pointing out that most residents had left within their first three months, before a personalised training and development plan could be put into place.

> *Nick (Trustee, Oct 2020): "I think some of that is their impatience … that's the typical addict behaviour. The original plan was that you spend your first three months … [as] a volunteer helper … then … we'd sit down and try and*

work out what is it that you're interested in, and then we would start investing in training to help people to get there … so a lot of this was … the fact that some of the social enterprises weren't very far out of the ground, but the other thing was that they hadn't got to the point where we were going to start investing in their training, because that's expensive."

Another counter perspective on the lack of training being demotivating was that residents were, in fact, seeking something deeper, such as inspiration and personal growth. The focus on training opportunities was interpreted as residents lacking an understanding of these broader issues and consequently framing their dissatisfaction in more instrumental language.

Lindsay (Trustee, Nov 2020): "What is motivation … it's inspiration … I need to be continually inspired to stay. It needs to be meaningful for me … I think you can do all of that without training opportunities … I think, growth is probably what people want, they want to keep growing. And you've identified that as training opportunities, and I don't doubt that that's also the language that the residents have used, because that's … the only understanding they've got in terms of that thing that they want to happen … And I'm just wondering, if I explored the feeling a bit more, would I come up with … I want to feel something more."

The strategy of encouraging gratitude

The concept of 'gratitude' emerged as a response to the issues of year two, with trustees attempting to address the more endemic motivational issues by encouraging a culture where residents were more grateful for their opportunity to be in River Garden, being provided with food, accommodation, and opportunities, supported by staff and peers. When residents complained about menial work for no pay, they reported that trustees encouraged them to be more grateful for these other valuable resources, *'I said … if we're doing this work on the outside, we'd be getting such-and-such … and [Nick (trustee)] was like … if you had to pay for your rehab, it'd be a lot of money'* (Kyle, resident, April 2019).

Other residents bought into the concept of gratitude more enthusiastically, such as Brian who felt that *'gratitude is very healing … look at the opportunities I've got … to start a business … to build up your finances … other rehabs, they do you a therapy session then send you out the door'* (Brian, April 2019). However, when he later left the community, his concept of gratitude had reversed. Then, he felt that there had been a lack of reciprocal gratitude for the work he had put into building the physical infrastructure, complaining that *'I didn't feel as if Nick (trustee) had any fucking gratitude for me'* and that River Garden was *'basically … a work camp for addicts'* (Brian, ex-resident, Dec 2019), due to the heavy emphasis on disciplined work at the expense of more relational approach to recovery.

Even when the resources were more developed in year three, residents did not always find work therapeutic. For example, Neil came to the feel that the work emphasis was a *'distraction technique'* that did not address the causes of his addiction (Neil, ex-resident, Sept 2020).

With regards to whether gratitude needs to be a reciprocal relationship between trustees/staff and residents, this seemed to have been accepted by the staff. For example, Trevor felt that the gratitude discourse had come from trustees.

> Trevor *(Sept 2020): "I think probably the early stuff was, you know, Nick (trustee), 'you should be bloody grateful to be here', you know. And I don't think that worked. I don't think that, you know, it's we're doing you a service type thing and lording it over people. I think it's more … people are welcome. They're welcome to come and they're welcome to participate and if they're coming, knocking their pan in for one hour a day, they're contributing, you know. So that, I think the gratitude should go both ways."*

Trustees invoked the concept of gratitude as a way to connect River Garden to the wider recovery movement, *'gratitude is a really enormous theme in recovery'* (Nick, trustee, Nov 2020). This did not simply mean gratitude for being in River Garden but was about *'gratitude for being alive … for being clean … eating decent*

food … it's not just about being at River Garden, it needs to be wider than that … that's a sort of an inside thing … you can't force someone to be grateful' (Nick, trustee, Nov 2020).

The idea that gratitude should be a reciprocal process was rejected by one trustee, who felt that this attitude taught residents that gratitude was transactional, that they could only offer it if they were receiving it in return, *'I think it was quite crude … that someone had left there with that idea, that gratitude is a tit for tat basis … no, that's a transactional relationship. Gratitude is an abundant relationship with the universe where you're … just giving it away'* (Lindsey, trustee, Nov 2020).

The relationship between initial motivations and outcomes

Baseline motivation could be assumed for all residents, but continued motivation was more vital for resident progression. It was important for motivation to be continually renewed by providing residents with meaningful opportunities for skilled work, training, and progression. Motivation could be undermined when the instrumental infrastructure was underdeveloped and unable to provide these opportunities. Discourses of gratitude had been an effort to improve resident attitudes towards these limitations. Whether residents were unmotivated by the limited opportunities or motivated by the challenge of creating these opportunities seemed to be influenced by contextual factors, such as residents' existing skills, ability, and health.

6.3 Outcomes

The mechanisms of trust, respect, and motivation were integral to whether residents remained in the community or left. Those who were retained in the community experienced exemplary outcomes: abstinence, improved health, responsible positions within the community, personal achievements in training and employment, significant quality of life improvements. Those who left experienced extremely poor outcomes such as relapse, overdose, and serious

social isolation. Similar negative outcomes were also observed in one potential resident waiting to enter the community.

The different mechanisms leading to these outcomes have been described throughout the preceding sections, so this final section will focus more immediately on the details and the immediate causes of outcomes. These individual outcomes fed into outcomes at the community level, with the social fragmentation of year two developing into social cohesion in year three.

6.3.1 Retention

The uniquely instrumental approach to recovery was effective for the four residents who remained at the end of year three. All four had responsibility for their own area of the community: café, events, woodwork, and groundskeeping. Progression was marked by a strong sense of responsibility and purpose, positive social identities closely associated with instrumental roles, improved physical and mental health, enhanced quality of life, and stable long-term abstinence. Although the previous sections have described some contextual inequalities that made some residents less likely to achieve these outcomes, this should not minimise the fact that all four retained residents had overcome extremely serious problems, achieving a quality of sustained recovery they had been unable to find through various other forms of intervention.

For example, Eric, had used to inject opioids, had experienced serious violence, spent time in prison, experienced multiple near-fatal overdoses, and was diagnosed with Tourette syndrome. All of these factors would indicate high problem severity and potential barriers to abstinent recovery. However, he achieved excellent outcomes in health improvement, quality of life, and work-based training, developing a sense of the future he was working towards.

> *Eric (Resident, Dec 2019): "I've got … tickets [qualifications] for outdoor work for like the trimmers and brush cutters … motor training for the tractors. I'm also doing really well at college, and I obviously started my*

SVQ 3 in health and social care … so that at the end of my programme if I want to have a job in that area, working with people and younger people, which has always been an aspiration of mine … being employed, having responsibility, starting to be able to do things in life that I want like my driving lessons, my running … looking forward to things in the future just having a normal civilised life like a full-time job, driving a nice car, having your hobbies and your passion and that as well but just getting it all in balance."

The ability of River Garden to provide meaningful activity was an effective strategy for these residents. It demonstrated that having structure, purpose, and direction in life could lead to major health improvements, allowing people to take some kind of control back over their lives and develop positive identities related to being productive and having a valued social role. These tended to be reconnections with prior identities that had been lost as a consequence of alcohol and other drug use.

Paul (Resident, August 2019): "I was just drifting along through life … You're sitting on a sofa fucking feeling sorry for yourself, so you label yourself as an alcoholic with poor mental health and that's how it becomes a self-fulfilling prophecy. Whereas actually I'm not, [I've] got loads of qualities … but not having that purpose drags you down until … Whereas here okay, fair enough, I'm an alcoholic but I'm also just doing all this stuff, work … you value yourself again, because I'm a really productive person, I've got a lot to give to society, just had a shit couple of years."

6.3.2 Attrition

Six residents left River Garden during the study, five of whom were study participants. The outcomes for these residents were generally poor, characterised by social isolation and relapse, with two residents also experiencing near-fatal opioid overdose. The key mechanisms of trust, respect, and motivation seemed lacking for all of them, but there were differences in the more immediate

circumstances of what happened immediately before and after a resident left the community. For Kyle and Kevin:

> *Kyle (Ex-resident, July 2019): "We'd been drinking the night before, down at the water … and we'd been caught for it, but we've denied it. Basically, they thought we've been … taking drugs, but … we'd been drinking. They tried to kick us out. It's just pure stupidity, it was just a moment of madness."*

The relapse rapidly escalated immediately after leaving, with two residents Kyle and Kevin embarking on an alcohol binge during the bus journey back to Kyle's home-town, purchasing street Valium from a random person they met on the bus, and relapsing into injecting heroin when they arrived at their destination. This was partly to block out the relational stress of leaving, *'I was just going to go home, see the wain [child]. 'Cos I was worried about what to tell my mum … I just… thought, 'fuck it', I'll just wipe it all out'* (Kyle, ex-resident, July 2019).

The result of this rapid polydrug relapse after several months of abstinence was that they both experienced near-fatal overdoses and had to be revived with naloxone, an opioid-antagonist, Kevin with a take-home kit and Kyle by an ambulance paramedic.

> *Kyle (Ex-resident, July 2019): "Best of it is, Kevin done it before me, and he OD'd, and I had to bring him back, and I'd used the Narcan on him to bring him back… and then I went and done it straight after, and I dropped, and because I'd used all the Narcan [naloxone] on keeping him alive, there was none for me."*

For Brian, leaving after nearly two years seemed to be caused by a decline in his physical and mental health when the pressures and responsibilities on him increased, particularly the dual instrumental and relational responsibilities. He had become the peer worker for approximately half a dozen residents who were at earlier stages of recovery, some of whom did not respect his position. At the

same time, he was relied on to do skilled physical work in restoring the site and building his own social enterprise (a stonemasonry business).

> *Brian (Ex-resident, Dec 2019): "I've got arthritis in both my knees, both my wrists. I've got a bad back, and I'm a recovering addict, as well. And my mental health is not at the best, a lot of the time … What I'm asking is, was all of that taken into consideration on a daily basis … So, I got fed up with it, and I couldn't do it. And see at the end of the day, my mental health was fucking getting bad, man, I couldn't do it anymore. And I made a mistake, man, I made a bad choice, and I decided to go into Wetherspoons and decided to go for a drink, man. And here I am."*

Although he had previously complained about the irresponsible attitudes of other residents, he came to understand that a programme primarily based on the therapeutic benefits of work was not sufficient to cure his problems, as it did not address deeper factors such as recovery from trauma, which would require a more relational approach.

> *Brian (Ex-resident, Dec 2019): "People come from different types of backgrounds … family problems, and traumas … to … say … working every day, is going to cure your addiction, is wrong … Connection with other people not using drugs, and not using alcohol, on a daily basis, that, along with therapy, and working, is more likely to do it."*

For Neil, the main issue appeared to be a combination of a high level of freedom to spend unsupervised time off site, with access to his mobile phone, particularly at the weekends. Being afforded this level of freedom allowed him to relapse on alcohol while still resident in River Garden.

> *Neil (Ex-resident, Sept 2020): "I'd actually gone to play Pokémon Go on my phone and I was in conversation on the phone, and … things, kind of, got on top of me. One of my friends lost his dad and yeah, it was an argument with the girlfriend at the same time. And I decided I wanted to go and get some*

cigarettes and then it was, yeah, there was alcohol in the shop … I wasn't really supposed to, but I play Pokémon a lot on my phone and I, kind of, got granted some freedom to do that … I'd been out previously and like, on a weekend, it's very hard to keep track of people."

Although these events immediately preceded his leaving, they were rooted in a deeper lack of motivation to remain in River Garden, mainly due to feeling he was not given enough responsibility or direction in terms of his work role, not feeling connected to other residents who had been there much longer, who *'are further ahead [with] more freedom … it's very hard to be part of a group'*. He also felt bored with the activities, *'pool's fun, but I can't play it eight hours a day'*.

Furthermore, he felt that the highly instrumental approach led to a lack of relational connection, *'It wasn't, like, emotional, if that makes any sense, there wasn't really talk about anything, apart from what was happening now'*. Most of all, he did not feel that the project was stable enough to give up his housing and commit to River Garden as his home for the next three years, *'I've got a flat and for me to give that up for something which didn't feel particularly reliable … was … probably the main thing'* (Neil, ex-resident, Sept 2020).

Views amongst trustees and staff were mixed, with some acknowledgement of structural barriers to retention but more focus on residents' attitudes and behaviours, the visible outcomes of the context/mechanisms described in this chapter. For example: *'he [Stuart] didn't have the right attitude, he was definitely not a community member, he isolated all the time in his room'* (Nigel, staff, Sept 2020). Similarly, Trevor thought that Stuart had left because *'he didn't want to do what he was told'* and was resistant to being challenged due to being enabled by his parents, *'he was quite happy in his old life'* (Trevor, staff, Sept 2020).

There was a sense that residents planned relapses when they became dissatisfied, *'the plan comes into place … they don't give themselves time to work through it [their problem] … they're very much stubborn and they're going to leave and they*

relapse' (Trevor, staff, Sept 2020). Because relapse was seen as a choice, staff felt they did not have responsibility for providing ongoing support to residents who had left, because they had to focus on the residents who wanted to remain in the community, *'I've got four or five guys here that need my support … if it's their choice to leave, then sadly they've got to do that … I can't go about chasing people and seeing that they're okay'* (Trevor, staff, Sept 2020).

One trustee highlighted a pattern of residents leaving triggered by interactions with the wider treatment environment, particularly when residents had health problems that required treatment by the National Health Service (NHS). The problem was perceived as an overreliance on prescribing medications that could interfere with the programme of abstinent recovery that River Garden were trying to promote, *'I don't think that we had really understood about how regular NHS treatment was so reliant on heavy medication'* (Nick, trustee, Oct 2020).

One resident, Brian, had two separate relapses following interactions with the NHS, once after going into hospital for an operation and *'they were only too happy to stuff him with pain medication rather than … other ways of dealing with his pain'*, and later when he went to a psychiatrist for mental health problems and was prescribed psychiatric medication, *'the involvement of psychiatrists who have a completely different model … with their prescribing regimes, ran counter to what we do at River Garden'* (Nick, trustee, Oct 2020).

There was also a sense, shared by staff and trustees, that relapse could be caused by external relationships, such as getting into relationships in local recovery groups, *'Brian's relapse was caused by the fact that he got into a relationship with a woman that he met in twelve step programmes and the wider recovery community … [he] was disregarding what people at River Garden were saying about relationships [and] going against what the twelve step programme says about relationships'* (Nick, trustee, Oct 2020).

Trustees who remained at the end of year three had a less involved role in the details of residents lives, meaning they had fewer opinions on why residents had

left, *'I don't really know who has left or why they have left'* (Neville, trustee, Nov 2020). They wanted to see the development of a system where resident updates were communicated to the board in a more formal manner, *'so that the board can look … every month or two … and have a general idea of how things are going'* (Neville, trustee, Nov 2020). Neville (trustee) did express a view that people *'from local areas'* were struggling because they were not far enough removed from their past community networks. This was contrary to the view of Nick (trustee) that residents left because of too much disconnection from their external networks, particularly when COVID lockdown increased this disconnection.

> *Nick (Trustee, Oct 2020): "River Garden opened up much less quickly than the rest of the world, which affected connections to family members. People wanted to see their family, and they can't come here, then I'll go there."*

There was a generally pragmatic view on attrition across staff and trustees, that a residential rehabilitation community would always have a certain level of attrition that had to be accepted as a feature of the design, *'there will be some people who do well, some people who will relapse. It's the nature of addiction … We are never going to have a hundred percent success rate'* (Neville, trustee, Nov 2020). This view was shared across remaining trustees and those who had stepped back, like Lindsey.

> Lindsey *(Trustee, Nov 2020): "When I entered my first Board discussion, and they were having the heebie-jeebies about two people having left … I was saying, I don't understand why you're getting your knickers in a twist, this is basic format residential. This is what happens in residential settings."*

Given the prevalence of near-fatal overdose amongst the small number of people who left, I asked staff and trustees how they felt about the risks of people relapsing when they leave and overdose due to reduced tolerance. One trustee felt that more should have been done to implement proper exit procedures, *'it's*

as bad as any prison … it's not any more negligent than any other addiction service … but there was so much else that could have been done' (Lindsey, trustee, Nov 2020). The problem was that the work to develop these types of procedure had not been completed before trustees lost influence over the project:

> *Lindsay (Trustee, Nov 2020): "We were starting to work … trying to make successful exits every stage, you can finish at three months, you can finish at this, but we have to do this piece of work with you, and this transition work with you. But that hadn't gone in yet. So, I don't think that work had been done".*

Overall, the causes of attrition were interpreted by residents as worsening health, loss of motivation due to limited infrastructure, and lack of relational support due to the instrumental focus of the community. They were interpreted by the staff as rooted in choices and attitude of residents, and by trustees as issues with fidelity of the implementation and the management of interactions with the wider community and healthcare system. There were mixed views on whether attrition was a problem or just a natural part of residential rehabilitation.

6.3.4 Programme adaptions

The first three years of River Garden involved a series of adaptions, the most significant of which were in response to a culture of distrust, disrespect, and demotivation emerging in year two, followed by high attrition and relapse. Adaptions were made by staff in efforts to stabilise the community and minimise further problems with behaviour, attitude, and resident attrition.

The main instrumental adaption was slowing down resident intake to allow a small group of residents to focus on building up an infrastructure of social enterprises, along with continual tweaking of rules relating to more day-to-day issues such as mobile phone use and smoking. The main relational adaption was the reduced integration with local recovery communities and the shift of emphasis to River Garden being mainly about instrumental routes to recovery and strong connections

within the community instead of outside of it. This occurred mainly through the attrition of residents until the majority (three of four) who remained were unmotivated by some of the relational aspects envisioned by some trustees, such as integration with local recovery communities. The attrition of staff and trustees who had actively nurtured these connections also contributed.

Adaptions to the selection procedures were made to ensure that residents were brought in slowly enough to be absorbed into the community culture. Selection also began to identify residents were sufficiently stable and motivated by the specific work-based model that they would not create too many problems and to minimise the potential for attrition.

> *Paul (Resident, Sept 2020): "It's easier when you've got someone who like … [new resident] has a good attitude about work and all that kind of stuff and he's just come from … rehab in Glasgow … He's been there for three months, so then this is, kind of, his next step of his recovery. He's serious about it, if you know what I mean."*

6.4 Programme Theory

River Garden was formed in the context of a new recovery movement, by a board of third sector trustees, for residents with different backgrounds. A mix of instrumental and relational resources were provided, to which the three key responses were trust, respect, and motivation. When these mechanisms were present, they led to abstinence, improved health, responsibility, and community cohesion. Their absence led to worsening health, attrition, relapse, overdose, and community fragmentation. The primary mechanism required was instrumental motivation and the greatest difficulties were created by low relational respect. At the programme level, mixed outcomes led to key adaptions, namely restricted integration with regional recovery communities, a limited role for trustees, and careful selection of new residents who would benefit from instrumental challenges, while slowing intake to maintain relational stability. These adaptions created a new context, a more self-contained, autonomous

community. Within the wider treatment system, River Garden offers a programme of social reintegration through instrumental opportunity, for selected individuals with the ability to demonstrate prior motivation and abstinence.

6.5 Conclusion

For a new, ambitious intervention on such a large scale, it is important to acknowledge that River Garden worked, with excellent outcomes for four residents who remained in the community. Although the findings have drawn out some differences in resident backgrounds that have influenced these outcomes, this should not diminish the high levels of addiction severity, poor health, and other forms of adversity that residents had to overcome to achieve potentially lifesaving positive outcomes.

The unintended outcomes were extremely poor and draw attention to the life-threatening risks involved with relapse, particularly after a period of attempted abstinence. Efforts to adapt the project to become more stable, to minimise the risk of unintended consequences, were successful due to the willingness of staff to adapt key aspects of the original plan into something safer. At the same time, the willingness to deviate from the original plan sometimes led to issues with fidelity that seemed to also contribute to unintended outcomes.

Fundamentally, the most effective way to sustain a functioning community was through controlling contextual factors: careful selection was a way to control individual-level context, and separation from trustees and recovery communities reduced the influence of environmental context. This allowed more predictable patterns of mechanisms to be managed, particularly through focusing the emphasis of the project onto instrumental motivation. In the next chapter, I will discuss these findings in relation to the wider theoretical literature and current policy environment.

7 Chapter Seven – Discussion

In this penultimate chapter, I will interpret the findings in the context of the wider literature, particularly in relation to key theories that underpin the recovery movement and the implications of findings for contemporary drug policy. I begin with a brief summary of the findings and then address the key research questions. In answering these, I will propose that the programme required substantial reactive adaptions and that tension between different approaches developed from paradoxes within the model, these tensions finding resolution through further adaption. The findings provide critical insight into two important theories: recovery capital, and social identity models of recovery.

Residential rehabilitation forms a substantial component of the Scottish Government strategy to reduce drug-related deaths. The implications of these findings will be used to critically evaluate this strategy. The discussion will then move beyond this project to propose some generic principles for the transferability of interventions, before concluding with some reflections on reflexivity and an acknowledgement of the study limitations.

7.1 Summary of findings

During the eighteen months of fieldwork, ten residents held residence at River Garden. Of these, four remained at the end of year three, a retention rate of 40% during my recruitment window. The actual rate was lower, as at least two other residents entered and left before recruitment began. The mechanisms that caused these outcomes and how these were influenced by contextual factors were explored in the findings. Attrition occurred when residents became demotivated, distrustful, or disrespectful towards the instrumental and relational resources offered within River Garden. Attrition was preceded by resistance to the programme that could be either collective or individual and involve conflict or isolation. Mechanisms were influenced by contextual factors such as resident characteristics and backgrounds.

The key adaptions to the programme in response to these challenges (mainly led by staff and supported by some trustees) included pragmatic efforts to stabilise the community by slowing down resident intake, de-integration from regional recovery communities, and a narrowing of focus towards instrumental (work-based) strategies. This afforded the opportunity for staff to work closely with a small group of highly motivated residents in building up the project infrastructure. Selection of new residents became more careful and precise, with greater ensuring that new residents did not only have strengths and motivations (which were always selected for) but were also already sufficiently stable and motivated to integrate effectively.

Tensions developed between operational staff and sections of the Board of Trustees over deviation from the original development plan and the need for the direction of the board in the day-to-day operations of the project. From the staff and resident perspectives, there was resistance to board members being involved directly with resident issues, such as the selection or progression of residents, or directly involved in the social enterprise development, community practices, or adaptions to programme rules (e.g., the right of residents to claim benefits). From the trustee perspective, there was a sense that there had been deviation from key principles and milestones of the original development plan, with continued involvement necessary to resolve these issues. The position of the CEO as a conduit between the board and staff/residents became central, with this role becoming a buffer against too much board involvement (rather than an effective route to have board ideas passed down).

All of these events were categorised within the realist framework as formulations of resource and response. The two key forms of resource were classified as either instrumental (the work-based design of the environment) or relational (peer support and relationship networks). The three key responses were trust, respect, and motivation. Instrumental motivation was higher than relational motivation amongst the retained residents and staff, leading to the resolution that River Garden should be more about social enterprises than integration with local recovery communities. Low instrumental respect led to residents breaking rules

and not engaging in the work routines. This was related to low instrumental trust, a loss of trust that adherence was useful for recovery or that the promised rewards would be materialise.

Lower relational motivation, as well as leading to less emphasis on developing external recovery networks, also made the project less suitable for new residents with high relational motivation (e.g., a resident who needs lots of interpersonal support, as opposed to somebody who can immediately work productively). Low relational respect underpinned interpersonal conflict and splitting into subgroups. Low relational trust was the cause of residents becoming isolated. Resistance to the involvement of trustees was rooted in a lack of relational trust or respect of trustee input into community operations. The resistance of resident subgroups mirrored the broader resistance against trustees, in those early years when the project was finding its shape.

The outcomes achieved by the four remaining residents were exceptional, in terms of abstinence, quality of life, health improvement, gaining positions of responsibility, and developing careers. In this sense, River Garden achieved a strong association between retention and outcomes, the central claim for the efficacy of the therapeutic community model (De Leon, 2010). On the other hand, the low rates of retention were also consistent with the evidence base (EMCDDA, 2014b) and these positive outcomes were only experienced by a minority of residents. One question that may be asked is whether successful residents had such high capacity to engage with the challenges of the programme that they could potentially have applied this capacity to other, less intensive, forms of treatment with similar success. Two residents had already achieved lengthy abstinence before entry, however two expressed that they had only managed to sustain abstinence due to this specific work-based residential model.

The outcomes of residents who left River Garden prematurely were poor. Leaving tended to involve a rapid relapse and there was a significant occurrence of near-fatal overdose. One ex-resident had re-engaged with statutory treatment services and receiving opioid substitute therapy. One had relapsed on alcohol; another

was sustaining abstinence by avoiding his social network. All had lost the majority of their connections to River Garden and reported social isolation, suggesting very low social support and poor quality of life (Cacioppo and Cacioppo, 2014).

7.2 What contextual factors were critical when transferring this recovery model to a new setting?

The research questions asked what contextual factors were critical for transferring this San Patrignano inspired recovery enterprise model to Scotland. In particular, what reactive adaptions were necessary after implementation and how did these differ from the proactive adaptions that implementers had deemed necessary? Furthermore, what mechanisms made further adaption necessary and what were the key contextual factors influencing these mechanisms? Understanding these points would develop an understanding of what works, for whom, in what circumstances, and why (Pawson and Tilley, 1997).

A critical contextual factor was the wider recovery movement, with its very relational approach to recovery. In practice, some of the practices and ideas associated with the recovery movement were not valued by those residents who flourished in the instrumental (work-based) environment of River Garden. While theoretically these models could co-exist, the practicalities of the work-based model left limited energy for the relational approach. Therefore, River Garden converged on a more focused approach on social enterprise. This was mainly due to the attrition of residents, staff, and trustees who actively maintained these external connections and retention of those who gave greater priority to the work-based opportunities.

The second critical contextual factor was the governance structure, which gave the operational team the opportunity to resist the influence of trustees over adaptions. The final critical contextual factor was the characteristics of the target group, with the work-based model benefitting residents with the greatest capacity and motivation for work-related challenges and having limited ability to reach more chaotic and marginalised drug users.

7.2.1 Expected and Necessary adaptions

The proactive adaptions of the San Pa model deemed necessary by implementers have been described in two previous studies on the transfer of this model to Scotland, which were conducted prior to this research. The first was a qualitative study with key stakeholders in San Patrignano, identifying what they saw as the key contextual factors and mechanisms and what aspects they believed could be transferred or adapted (Devlin and Wight, 2020). In the second, individuals from the IFDAS implementation team were interviewed about which mechanisms they planned to transfer and adapt (Devlin and Wight, 2021). Much of what these stakeholders describe as mechanisms could be more accurately described within the realist framework employed in this study as *strategies*. For example, support from peers with lived experience is a strategy to increase the occurrence of mechanisms such as trust and respect.

7.2.1.1 Mechanisms without adaption

Stakeholders from IFDAS expected that the main mechanisms being transferred without adaption would be the (self-)selection of residents who were highly motivated, the provision of a safe residential environment, support from peers with lived experience, and identifying and building on residents' strengths (Devlin and Wight, 2021). A reactive adaption was that the intake became more selective, for not just people motivated to change their lives, but those who could begin a process of change prior to entry.

At the organisational level, there was an intention to transfer the importance of visionary leadership, having one 'catalytic individual' (Devlin and Wight, 2021: p.5) to push forward an innovative approach. In reality, the practice of the founder taking a key role in decision making was eventually met with resistance amongst staff and residents, who grew to increasingly distrust and disrespect the role of trustees over the first three years. Instead, they promoted a more resident-led approach and argued that the influence of the founder (and all trustees) in operational matters should be limited. There was a sense amongst

staff (and the CEO) that a highly motivated individual to push forward the establishment of the project had been valuable, but continued influence on the project vision was less so.

There were mixed views amongst the original IFDAS stakeholders about using social enterprise income to stay independent from government funding. Some stakeholders highlighted the benefits of autonomy but some others also raised concerns about a sense of financial insecurity (Devlin and Wight, 2021: p.5). The lack of cohesion on this matter eventually led to the agreement that residents could claim government benefits.

A significant idea to be transferred from San Patrignano was the concept of being an 'adaptive learning organisation', by involving residents in the infrastructural development as part of their recovery process and affording flexibility to experiment with adaptions (Devlin and Wight, 2021: p.5-6). The underdeveloped infrastructure, and the requirement for residents to contribute to building the infrastructure, made the programme more suitable for residents with a greater ability to make these contributions. The openness to adaptive learning created issues between stakeholders with different views on which features of the programme design should be flexible. Many of the tensions were rooted in different ideas of what constituted adaptive learning, whether any given change constituted necessary adaption or low fidelity implementation (Moore et al., 2014).

The use of peers with lived experience was a mechanism/strategy transferred without adaption. This was a central feature of the therapeutic community model more broadly (De Leon, 2010) and a strategy that is valued within the new recovery movement (White, 2009). In network terms this can be interpreted as an attempt to use homophily as a mechanism of connection (Schaefer and Kreager, 2020) and in realist terms could be considered a strategy to promote the relational mechanisms of trust and respect, because 'the dynamic of reciprocal respect promotes mutual understanding' (Devlin and Wight, 2020).

In practice, within a community where everybody had lived experience of addiction, other considerable forms of heterophily also influenced these mechanisms, such as addiction severity, socio-economic background, and time in recovery. While it may not have been assumed that lived experience alone would create connection (residents were also selected for other desirable attributes such as motivation and skills) these differences were often more vital to how people interacted. The development at one stage of a culture of disrespect demonstrated that lived experience alone did not guarantee respect. There was also a reciprocal disrespect, where participants in long-term recovery felt that people in early recovery could not yet be trusted or respected, having not yet gone through the requisite personal growth of long-term recovery.

Lived-experience is only one form of homophily and homophily is only one mechanism of network integration. Integration also depends on mechanisms such as entrainment (formal mentoring) and endogeneity (high reciprocity or low network closure) (Schaefer and Kreager, 2020). In other words, lived experience will not generate connection if there is low relational motivation for mentoring, if long-term residents are very focused on instrumental activity, or form a close group that is difficult for new residents to integrate into.

The tendency for newer residents to connect to each other or become isolated demonstrated the limitations of entrainment strategies (buddying) in countering more structural issues of endogeneity (integrating into a high closure network). Fundamentally, for the established long-term residents, their instrumental motivation was much stronger than their relational motivation, whereas for new residents this may have been the other way around. New residents with more challenging relational needs would then destabilise the long-term residents. A certain level of stability was required of new residents so they could fit in efficiently to the work-routines.

Perhaps the key principle of San Patrignano to be directly transferred without adaption was the focus on work-based activities and conscious avoidance of therapeutic activities usually found in recovery communities, such as groupwork.

The purpose of groupwork is usually to support residents with their psychotherapeutic development, build group cohesion, and allow them to collectively support each other to work through a programme of recovery (White-Campbell, Luketic and MacDonald, 2014; Dossett, 2017). In River Garden, the focus on vocational work instead of groupwork meant that there were some unmet needs amongst residents who would have benefited from these mechanisms. For example, residents whose motivation was unstable, who had unresolved trauma, or who were having difficulties integrating into the community may have benefitted by having a proper outlet to work through these issues. It also meant that River Garden lacked a specific programme of recovery to which all residents were collectively subscribed, with residents instead developing quite individualised recovery pathways. This may well have contributed to the issues with community cohesion and resident integration.

7.2.1.1 Mechanisms with adaption

The key adaptions from San Patrignano deemed necessary by stakeholders in advance were: 1) the inclusion of residents with problem alcohol use and requirement of residents to be abstinent from alcohol (unlike San Patrignano where wine is consumed), and 2) a smaller community with semi-permeable boundaries, so residents could access external support for medical and recovery needs would be able to reintegrate into the wider community, although some stakeholders considered semi-permeable boundaries a potential vulnerability (Devlin and Wight, 2021: 6).

The inclusion of residents with alcohol problems did not create any difficulties, although it may limit any claims that the project is contributing to a reduction in the drug-related death crisis, which mainly involves death from opioid and benzodiazepine poisoning (National Records of Scotland, 2021b). One problem was that the opportunity for residents to access alcohol meant that the strategy of separating residents from their AOD-using network was less effective, with alcohol relapse usually a key event in resident attrition.

Regarding the second adaption, the community population was further restricted well below the planned number as a stabilisation strategy. The original plan for semi-permeable boundaries was adapted to a more contained network, partially forced by the COVID-19 lockdown. There had already been significant de-integration with local recovery community organisations and twelve-step fellowships and a shifted focus on building strong connections *within* River Garden. A disconnect between the work-based model and the more relational models of these external groups led to better retention of residents with higher instrumental motivation. Resistance to ideas of the recovery movement such as gratitude (Chen, 2017) demonstrated the limitations of these ideas in a community that valued instrumental practicalities. The community became more cohesive and stable when, through a process of attrition, it had contracted to a smaller group with a cohesive vision of work as a route to recovery.

In network terms, the original vision allowed residents to develop networks that were highly diverse and low in constraint, affording high levels of freedom to engage in different groups and access varied information. The adapted structures removed a certain amount of relational noise from the community, leading to less diverse, more constrained networks consistent with social cohesion (Burt, 2001). Essentially, this had a stabilising effect by removing the variety of social freedom and influence. It was almost a *re*-adaption back to the closed boundaries of San Patrignano, imposed by lockdown but welcomed by staff and long term residents due to its stabilising effect.

The ability for residents to seek external medical support also created issues, including the substantial number of medical appointments required, the propensity of healthcare services to prescribe medications that were thought (by staff and trustees) to be incompatible with the abstinence-based approach, and two occasions where medical prescribing was thought to have contributed to a relapse. Since external support often clashed with the River Garden model, residents with less need for additional support tended to progress more effectively. Reliance on these wider systems was designed to prevent residents becoming institutionalised but also weakened the capacity of River Garden to

deliver its own style of support, a tension that was resolved through reduced integration.

A final adaption was providing residents with individual bedrooms, instead of the dormitory style 'continual socialisation' that means San Patrignano residents are 'never alone' (Devlin and Wight, 2020: 4). Dorm-living was considered to not be socio-culturally acceptable or feasible under Scottish social care standards or housing regulations (Devlin and Wight, 2021). Early efforts to establish a similar culture of never spending time alone ('isolating') were resisted and residents had a certain amount of flexibility to retire to their own rooms or pursue solo activities such as walks, in the evenings and at weekends. Residents in stable recovery benefited from this autonomy, but it also created a context whereby it was possible for poorly integrated residents to become isolated.

This constituted a situation where residents whose recovery was most stable benefited more than those who might require more structured social activity. The freedom from supervision meant that recovery in this setting was so dependent on intrinsic motivation that it was very similar to process of natural recovery (Waldorf, 1983). Those who were intrinsically motivated remained abstinent, those who were not found opportunities to relapse.

7.2.2 Paradox, Tension, and Resolution

The story of River Garden can be interpreted as a series of paradoxes, tensions, and resolutions. The paradoxes were inherent in the model, internal contradictions within the programme itself. Tensions developed out of these, between differently situated stakeholders about the causes of the resulting problems. Resolution was found through adaption, with each programme adaption constituting a pragmatic solution to some fundamental paradox.

The key paradox was the necessity of high levels of intrinsic motivation. San Patrignano stakeholders understood that people had to be self-motivated and have already achieved abstinence, but that motivation during admissions procedures

would be unstable and have to be continually renewed until it became intrinsic (Devlin and Wight, 2020). River Garden became even more selective over time, introducing a six-week entry procedure involving multiple visits (including drug testing) to ensure motivation was intrinsic before entry, as far as was possible. The paradox of high motivation was that this highly intensive intervention was most suitable for individuals who were so motivated that they would potentially benefit from less intensive support. Particularly, because evidence shows that brief interventions can trigger significant change and outcomes are not consistently improved by increasing treatment intensity (Miller, 2000). On the other hand, people who lacked the motivation to sustain abstinence in their own communities were deemed to be unsuitable.

This paradox led to tension between staff and some trustees over different ideas of who the project could support and how cautious the intake processes should be. This was resolved when the influence of those trustees who favoured quicker expansion of the selection/intake process was limited. At one point, when there had been difficulties getting any new residents in, due to repeated attrition during the six-week process, an experimental strategy by staff of speeding up the intake procedures led to a resident being rushed in who very quickly struggled to integrate and lost motivation. Selecting for motivation indicated that the capacity of the programme itself to boost and sustain motivation was limited, despite the aim that the location itself would enhance motivation (Devlin and Wight, 2021).

The strategy of achieving abstinence by removing people from their previous network into a long-term substance free environment (Devlin and Wight, 2020) was also paradoxical, in that residents might not build the intrinsic capacity to sustain abstinence outside of this setting over the long term (even if residents had managed to initially achieve abstinence to secure their place). This may explain why rates of relapse following residential rehabilitation are so high (Gossop, 2015) and why residents cited contact with active AOD-users as a potential risk to their abstinence, for example arguing that ex-residents who had relapsed should not return as visitors. This shows that both substance use and abstinence were highly context dependent, therefore achieving abstinence within the safe environment

of River Garden does not mean that it will be maintained after leaving. Fomiatti, Moore and Fraser (2017) argue that this focus on the careful management of social networks can further stigmatise substance user (e.g., River Garden residents who have relapsed) and the controlled social context of a rehab does not properly replicate the threats to abstinence people will experience outside (e.g., a River Garden resident forming unsupervised romantic relationships or being able to access alcohol). In the pilot study of (non-residential) participants in a local recovery community, they often described finding motivation to sustain abstinence without support, sometimes for years before they became involved in recovery communities (Anderson *et al.*, 2021). In River Garden, abstinence was bound to the setting and was not sustained when residents returned to their communities, albeit via unplanned exit (it does seem likely that residents who complete the three years will sustain abstinence).

Tension between implementers about how much contact residents should have with the outside world were again resolved through eventual agreement on a more contained approach. The shift to a more contained approach developed throughout the second year and solidified early in the third year, particularly with the idea that early residents should focus on relationships within River Garden rather than recovery support from outside. The COVID-19 lockdown in March of year three (2020) forced a much tighter containment, which was welcomed by staff and long-term residents as having many positive benefits (e.g., increased autonomy over enterprise development).

There was a paradox between two key stakeholder ideas, the strategy of a highly structured set of rules and routines to help residents build capacity for self-regulation (Devlin and Wight, 2020) and the concept of involving residents in a process of adaptive learning (Devlin and Wight, 2021). The process of defining whether resident input constituted a user-led adaption or a resistance to the programme rules created a significant fault line between staff and trustees. Issues such as the use of mobile phones, unstructured free time, the resident monetary allowance, and their desire to claim benefits, the use of tobacco products and so on all proved difficult to clearly categorise into one or the other.

The paradox of a focus on responsibility was that the very social, relational approach to recovery ended up locating the causes of relapse in individual responsibility, rather than the capacity of the community to influence outcomes. Critiques of recovery policy often raise the centrality of 'responsibilisation' (e.g., Roy and Buchanan, 2016), how a focus on personal responsibility can be harmful by relocating responsibility from structural issues onto individual agency. Abstinence becomes a matter of individual accountability and learning to navigate risk, rather than a collective public responsibility that recognises structural causes of relapse (Fomiatti, Moore and Fraser, 2017). In River Garden, the belief in personal responsibility for recovery was very strong. The ABI survey showed it was the strongest of all addiction beliefs. The strategy of affording residents increasing responsibility within the community was central to positive resident outcomes. However, when residents struggled to progress this was often perceived in an individualised manner, in terms of being irresponsible or having a poor attitude, rather than a recognition that the programme was not designed to support their needs.

The focus on work and structure as a means to recovery created a paradox whereby residents with the highest capacity to thrive in these challenges would succeed more than residents with fewer strengths. In other words, rather than helping people recover who otherwise lacked the requisite resources, it tended to benefit people who had more baseline resources they could draw on to navigate the programme challenges.

All of these issues occurred in the context of a central paradox between the instrumental and relational components of the programme, a tension between acknowledging the achievement of abstinent recovery while also allowing residents to build diverse identities that were not related to their past. These may not have been intrinsically paradoxical but, in reality, there was a tension between the two about which was most important, resolved through an adaption to prioritise the instrumental.

Something fundamental that underpinned all of the patterns of successful and unsuccessful outcomes was that much of what proponents of this type of programme view as its *mechanisms* are in fact the *outcomes* of recovery. For example, outcomes of successful recovery may involve developing new relationships, finding employment, hobbies to fill free time, building new identities that are not related to alcohol or other drug use, improved quality of life (Waldorf, 1983). What River Garden does (perhaps all TCs) is an attempt to use these outcomes as the mechanism, lifting people out of their current situation and placing them into a purposefully designed (De Leon, 2010) environment of work and relationships that emulate the experience of recovered life. Over time, the idea is that these routines should become internalised.

From a realist perspective, outcome as mechanism overlooks a crucial prior step: if there is no motivation to engage in the work, build relationships, abstain from substances etc, then the programme itself will not work. Mechanistically, it can be assumed that the aim of such a programme is that parachuting people into these outcomes will enhance *motivation* to continue this lifestyle, that experience of supportive relationships will teach people *trust and respect* that they carry forward. These mechanistic processes certainly can happen during residence, but outcomes are more assured if these have occurred prior to entry, and new residents are already sufficiently motivated, respectful, and trusting. The idea that these process of network transition are the mechanism of change, rather than the outcomes of change, is the key difference between foundational literature on natural recovery (Waldorf, 1983) and contemporary theorising which promotes network transition as a mechanism (Best, Beckwith, *et al.*, 2016).

7.3 Implications for the research developments of 'new recovery'

I will discuss the implications of these findings for two theories that are of particular relevance for the new (post-2000s) recovery movement and the current policy landscape. The theory of *recovery capital* provides a justification for investing in community resources to help people who would otherwise lack the

resources to initiate or sustain recovery (Cloud and Granfield, 2008). The *Social Identity Model of Recovery* (SIMOR) asserts that the most effective community resources are networks of abstinent peers with lived-experience of recovery, facilitating recovery through a mechanism of social identity change (Best, Beckwith, *et al.*, 2016). Both theories are influential in research on new recovery and commonly cited as justification for recovery community building and the expansion of interventions that use relationships to promote abstinence, such as residential rehabilitation and therapeutic communities (Fomiatti, Moore and Fraser, 2018). Findings from River Garden can contribute to a critical analysis of these two theories.

7.3.1 Recovery capital

Recovery capital is most commonly defined as the resources required to initiate and sustain recovery, comprised of economic capital (e.g., wealth), social capital (e.g., family, friendships), human capital (e.g., health), and cultural capital (e.g., identity and values) (Cloud and Granfield, 2008). These resources are invoked as a reason why some people are more likely than others to achieve sustained recovery, and why additional resources need to be made available for people who lack these, which should in theory redress inequality of recovery outcomes (Hennessy, 2017). The claim is supported by the strong association between measures of recovery capital and recovery outcomes, although this may not necessarily indicate it is possible to meaningfully increase recovery capital for people who lack it (Fomiatti, Moore and Fraser, 2018). The theory comes from the empirical basis that middle-class addicts had a greater ability to initiate and sustain untreated recovery than 'individuals from the most disadvantaged segments of society' (Granfield and Cloud, 1996: 55), meaning that it is essentially a description of the fact that recovery outcomes are patterned by social class in a classic Bourdieusian sense. Based on this logic, treatment should target resources towards individuals with the least economic, social, human, and cultural capital and build those resources, and not only focus on abstinence.

The idea that residential rehabilitation (and specifically the TC model) is most suitable for people with low recovery capital is frequently asserted, for example the idea that people with 'extremely low recovery capital might be in greater need of residential treatment' (White and Cloud, 2008: 7). The fact that TCs do not have higher efficacy compared to less intensive psychosocial treatments is often justified on the basis that they serve the highest levels of problem severity (De Leon, 2010). The Scottish Government Residential Rehabilitation Working Group suggests residential rehabilitation for people with 'significant comorbid physical, mental health or social problems' (Scottish Government, 2020).

In River Garden, outcomes were in line with the theory of recovery capital, in the sense that residents with greater recovery capital experienced better outcomes. However, they did not support the idea that residential rehab is more suitable for people with low recovery capital, as residents with more baseline recovery capital had the greatest capacity to engage with the instrumental resources. Common characteristics of those with successful outcomes included a less disadvantaged socioeconomic background, supportive families, manageable and improvable health, and respectful/trustworthy attitudes and values. In other words, the strengths-based approach (Best, Alwis and Burdett, 2017) benefitted those with more baseline strengths. The types of deficits that impeded residents from progressing (socioeconomic marginalisation, poor health, many failed treatments, disrespectful attitudes) more accurately represented low recovery capital. In the realist framework, these outcomes were the visible manifestation of deeper contextually patterned mechanisms. Cultural capital was not a discrete component of recovery capital, it was the cultural manifestation of physical and economic capital. The 'discordant values' (Cloud and Granfield, 2008: 1975) that made someone unsuitable constituted a form of negative recovery capital, much like the 'street capital' that helps someone survive in a violent street culture (Sandberg, 2008).

Observational studies of treatment outcomes show that rates of abstinence recovery are especially low for individuals with high social marginalisation, such as experience of prison or homelessness (McKeganey *et al.*, 2006). These

inequalities were replicated in River Garden, because the programme, by design, replicated the challenges of mainstream society. There was a view amongst some stakeholders that as the community culture grew more resilient, the capacity of the community to support people with lower recovery capital would increase. Given that recovery capital is essentially a description of class inequality, this raises the question of whether there can be a cultural solution to a structural problem.

These outcome patterns can be explained by the socioecological model, where inequalities at the upstream structural level will flow downstream to the relational level. The Drug Outcome Research in Scotland (DORIS) study showed that rates of abstinent recovery following treatment are generally low (8%). They are particularly low for individuals with indicators of high levels of social marginalisation, such as homelessness, having ever been arrested, not being in education or employment, having a history of suicide attempts or self-harm, and with health issues that did not improve after entering treatment (all <5%) (McKeganey *et al.*, 2006).

The ability of River Garden to increase rates of abstinent recovery would depend on its capacity to support individuals with these high levels of marginalisation. Rates of abstinent recovery in River Garden were approximately comparable to the residential rehabilitation cohort in DORIS (25%), which shared the feature that selective intake procedures 'would screen out the people on whom this investment was most likely to be wasted or who might undermine the therapeutic power of peer relations' (Ashton, 2008: 8). Careful selection is often justified by reframing residential rehabilitation as an educational process. De Leon (2015: 1108) makes a comparison to universities, where candidates are selected from 'an existing self-selected sub population of applicants … thus … effectiveness cannot be concluded independently from the students who are selected'. Educational language is commonly used in recovery-focused services, e.g., 'recovery coaching' (Laudet and Humphreys, 2013: 129), but it is unlikely that careful selection of candidates with the capacity to succeed will reduce the structural inequalities observed in treatment outcomes.

River Garden was successful in helping people sustain recovery by providing opportunities for career development, along with housing and safety, key components of recovery capital (Groshkova, Best and White, 2013). On the other hand, these measures of recovery capital were less attainable by people with higher levels of marginalisation. Fomiatti, Moore and Fraser (2018) would argue this is partially because the measures of recovery capital prioritise certain neoliberal conceptions of recovery (self-management, responsibility) that the effects of marginalisation can make more difficult to achieve. Even if we accept that traits such as responsibility would be valuable traits to have in any historical epoch, people do not necessarily relapse (or use drugs to begin with) because they are irresponsible. A focus on responsibility as central to recovery may conflate visible recovery outcomes with the underlying mechanisms of change. The River Garden model can be justified because there is an argument for targeting resources on people who are most likely to benefit, but findings do not support the justification that such an approach will most benefit people with low recovery capital.

7.3.2 Social identity

Social identity models conceptualise recovery as a process of a drug user leaving a social group of substance users and becoming part of a new social group of others in abstinent recovery, which leads to internalising the norms and values of the recovery group (Best, Beckwith, *et al.*, 2016). The 12-step group *Alcoholics Anonymous* (AA) is invoked as an appropriate test case because it is 'the mutual aid recovery group with the largest membership and the strongest empirical evidence base' (Best, Beckwith, *et al.*, 2016: 117). River Garden offers insight into two components of this theory: the dynamics of social influence, and the value of recovery-oriented social identities. Findings indicated that social influence was not a straightforward process, that residents could resist group influence and even introduce negative influence into the community. This was shown through a resident subgroup who resisted the programme and encouraged each other into resistance and relapse. This form of collective ideological

resistance is a recognised feature of TC practice (Bloor, McKeganey and Fonkert, 1988).

A critique of the social identity model is that it locates the problem of (and solution to) addiction within the social network, assuming that careful management of network composition is the key to recovery; in this process it 'erases stigmatisation and marginalisation' (Fomiatti, Moore and Fraser, 2017: 175) and paradoxically (for a social model) centres responsibility for abstinence onto the individual, who must be responsible for managing their social world. When residents were capable of taking responsibility, it led to excellent outcomes. However, when this strategy failed there was evidence of responsibilisation, where individuals were held responsible for issues that were collective and systemic, such as the limitations of the community to support severe and complex needs. Essentially, the focus on responsibility overlooks how relapse can occur due to instrumental or relational pressure found within the community, rather than being purely an individual failure of responsibility.

In River Garden, many residents relapsed despite immersion in an abstinent network. There were clear limitations on the capacity of peer support and work-based opportunities to support these types of issue, illustrating limitations to the centrality of abstinent peer support in strategies to resolve the deeply structural problems involved in problem substance use. The concept that substance use networks are characterised by negative influence and recovery networks by positive influence did not fully account for the potential for relational strain within an abstinent environment (Neale, Tompkins and Strang, 2017). The strategy of social influence was less suitable for people whose drug use was 'entangled in configurations of poverty, homelessness, trauma, inequality, stigmatisation and gendered violence' (Fomiatti 2017, p.181).

In terms of residents developing a '*recovery-focused*' (Best, Beckwith, *et al.*, 2016: 116) identity, there was significant resistance to the idea that identities must foreground a status of being in recovery. Consequently, River Garden became about a minimisation of recovery-focused identity, in favour of the

opportunity to develop more diverse, work and hobby-related social identities. These more mainstream identities were viewed by staff and residents as more beneficial for post-residence social integration. Much of the resistance to integration with recovery groups was associated with a tension between recovery identities and forging new identities that had nothing to do with past drug use. The question of whether a recovery identity increases or reduces stigma is central in debates around conceptualising addiction as a disease (Szalavitz, 2017). The new recovery movement promotes visible recovery identities as a strategy to reduce stigma (Best and Lubman, 2012). The majority of rehabs provide 'links to mutual aid and recovery organisations', as a way of drawing on wider community resources (Scottish Government, 2020: 6). Other major beneficiaries of government funding offer models that are highly informed by and integrated with mutual aid communities, i.e. 12-step programmes, such as the Lothian and Edinburgh Abstinence Programme (LEAP) (Mccartney, 2011). This would suggest that explicitly recovery-focused identities are more widely accepted as a strategy to reduce stigma.

In River Garden, there was a feeling that recovery identities would increase stigma. The freedom for residents to decide their own pathways led to mixed patterns of integration with mutual aid and new recovery organisations. This initially created ambivalence which then led to resistance. As a result, River Garden is fairly unique in its prioritising of instrumental identity, and perhaps more in line with the Scottish Government's original vision of mainstream integration, which prioritised employment and responsible citizenship (Scottish Government, 2008). The low rates of success could be interpreted as a drawback of treating recovery as a matter of enterprise, which can 'perpetuate dominant neoliberal ways of thinking about responsibilisation, citizenship and normality' (Fomiatti, Moore and Fraser, 2017: 10).

Thinking about identity transition as an embodied process can provide further insight. As per Nettleton, Neale and Pickering (2011), recovery is about learning to navigate everyday life and to manage complex forms of bodily discomfort, such as emotions, sleeping, boredom, pain, cravings, diet and hygiene etc. New habits

and practices are related to identity because they are learned within a social context. The social context of River Garden did not have strong cultural norms to help people navigate these types of issue, hence issues with boredom, emotional outbursts, overconsumption of sugar and so on were common themes for residents who left. Residents who recovered tended to have backgrounds that afforded them experience of normative habituated actions and the ability to draw upon a stock of embodied resources, 'repertories of action' acquired through a more stable backgrounds, that were less accessible by residents with greater levels of marginalisation (Nettleton, Neale and Pickering, 2011: 353). Residents who could reconnect with routines they had lost due to substance use fared better than those who had to learn new routines for the first time. When residents did pursue healthy personal development (running, education, meditation) it was usually an individual pursuit, rather than a collective cultural norm that new residents could be integrated into.

7.4 Policy implications

These findings are relevant to current drug policy. Scottish drug policy contains a strong emphasis on abstinent recovery (Scottish Government, 2018). This emphasis has also been expanded in response to successive years of record numbers of drug-related deaths, which rose from 527 to 1,339 between 2013-2020 (National Records of Scotland, 2021b). There has been a parallel expansion of harm reduction strategies (Scottish Government, 2021a).

In 2021, the Scottish Government (2021c) announced a national mission to reduce drug related deaths, by investing an additional £250 million over the next five years, with £100 million of this assigned for increasing residential rehabilitation capacity. Rehab providers can apply through the Residential Rehabilitation Rapid Capacity Programme and must demonstrate they can support key Government priorities: increasing capacity, increasing pathways for vulnerable groups and those with complex needs, embedding aftercare services, and overcoming barriers to access including medication, mental health, and attitudinal barriers (Scottish Government, 2021c).

River Garden specifically has received £6 million in Scottish Government funding to expand its capacity eightfold in the next five years, increasing from seven to fifty-six residents (Bol, 2021). This will constitute a substantial contribution to the overall rehab capacity in Scotland, placing River Garden at the heart of the national strategy. These findings provide some insight into the strategy of using abstinence-based residential rehab as a solution to drug-related deaths. They also provide an opportunity to appraise general trends towards recovery-focused treatment, with River Garden providing a case study to discuss the strengths and limitations of the wider recovery movement.

7.4.1 Drug related deaths

The findings did not suggest that the River Garden model would offer any direct protection against drug-related deaths. There were two reasons for this. First, because people who are most likely to experience a fatal overdose would be unlikely to be considered suitable applicants or have the ability to navigate the six-week intake process, especially achieving abstinence before entry. Drug related deaths are associated with higher levels of chaotic use, as recent non-fatal overdoses are a key risk factor for subsequent fatal overdose (Caudarella *et al.*, 2016).

The second reason was the relatively high proportion of fatal and non-fatal overdose clustered around entry and exit, with two near-fatal overdoses in exiting residents and the (suspected) fatal overdose of a prospective resident. This was consistent with evidence that overdose is more likely after a period of abstinence in residential settings such as prisons, hospitals, and rehabs (Strang *et al.*, 2003; Keen *et al.*, 2021). Since rates of unplanned attrition were consistent with the expected rates of TC attrition (EMCDDA, 2014b) this will likely always present a risk. The requirement to become abstinent before entry could also increase risk, prompting applications to quickly reduce or abstain from OST medications that would otherwise have helped reduce overdose risk (Neale, Nettleton and Pickering, 2013).

The very social approach to recovery, and limited integration with the wider treatment system, limits capacity to support people at a stage of addiction where it most manifests as a medical crisis. This would require some form of medical infrastructure for stabilisation and detox. When people are in this more active, uncontrolled substance use, there is evidence that medical approaches, particularly substitute prescribing, have a greater protective effect than approaches that promote abstinence (Wakeman *et al.*, 2020). River Garden may help prevent relapse amongst its long-term residents, but this would be unlikely to reduce the population prevalence of drug-related death, since it is difficult for people in high risk groups to become residents.

Internationally, the only significant achievements in reducing drug deaths and associated harms (such as blood borne viruses) have occurred through structural-level interventions such as decriminalisation and safe-supply prescribing (Stevens, 2019) that reduce risk for people who are still actively using substances. Since rates of abstinent recovery following treatment are generally low and similar to rates of natural recovery (Heilig *et al.*, 2021), the chances of reducing population-level harm by increasing rates of abstinence does not seem attainable, since it would require a significant proportion of the most chaotic, severe, and marginalised drug users achieving an outcome that is rarest amongst that population (McKeganey *et al.*, 2006). Given the strong association between poverty and drug deaths in Scotland (McPhee, Sheridan and O'Rawe, 2018; Parkinson *et al.*, 2018; Tweed, E., Miller R., Matheson, 2018) the tendency for River Garden to benefit people from less disadvantaged backgrounds would indicate its reach does not yet extend to the communities where drug-related deaths are most likely.

7.4.2 Scottish Government policy and strategy

In terms of meeting the Scottish Government (2021c) priorities, the findings of this study suggest that River Garden is in an excellent position to fulfil the first priority of increasing capacity. The large site could support a much higher resident population and larger range of social enterprises for them to work in.

Integration of new residents would potentially be easier in a larger community with more residents at different stages of recovery. There was less evidence that River Garden would do well in increasing pathways for vulnerable groups and those with complex needs, or overcome barriers to access, given the requirement for a high level of stability before entry, the demands of the work-based model, the lack of a medical infrastructure, and the screening out of individuals with mental health and attitudinal issues.

River Garden embodies the strengths and limitations of the wider recovery movement. It excels in producing excellent quality of life improvements for individuals who are intrinsically motivated and able to recover. In the pilot study, participants often described an extremely poor quality of life in the early years of their recovery, drawing on strong intrinsic motivation to endure this period (Anderson *et al.*, 2021). The strength of this programme is to provide motivated individuals with a high quality of recovery. As part of a whole-systems approach, this project can play an important and unique role as a social integration programme for people whose more acute needs have either been self-resolved or supported by another part of the system and who would benefit from support with the next steps of social integration. The whole-systems approach would be strengthened by greater integration with the rest of the treatment system and the development of agreed protocols for managing intake and exit, particularly due to the acute harms that have occurred around these times.

7.5 General principles of transferability

The findings of this study may be useful in formulating some general principles of transferability, contributing to an accepted framework for understanding transferability. The first general principle is that allowing intervention recipients input into how the programme is developed will lead to adaptions that reflect the character of the local population, particularly those who first receive the intervention. Furthermore, the shape of the programme will be guided foremost by those recipients *who most benefited* from the intervention, due to the relationship between retention and influence, and their influence will lead it to

further benefit them. The characteristics of successful recipients will become the desired characteristics of prospective recipients and consequently these characteristics become the foundation of the community culture. For example, the strategy of initially recruiting residents with greater strengths to seed the community led to these becoming the desired attributes for future residents. The success or failure of implementers' ideas about what the project should be will depend largely on the acceptability of these ideas to these core influential recipients. This would only be possible to avoid by pre-developing the infrastructure before programme delivery.

The second general principle is that any ambivalence or lack of clarity over key features of the design unresolved before implementation can lead to a lack of cohesion in the programme delivery and disagreement about fidelity of adaption. A variety of interpretations amongst implementers about programme design can create inconsistent delivery, as well as points of weakness where recipients can exert influence over adaptions (or undermine fidelity) in ways that implementers did not intend. There is a fundamental tension between programme delivery and adaptive learning, because what is perceived as adaption or resistance will depend on the situated perspective of any given stakeholder.

The third general principle is that it is difficult to prospectively identify the key mechanisms that can be transferred to the new setting, or anticipate what adaptions are necessary for the new context, prior to implementation. The unintended mechanisms and outcomes of each adaption will not be seen until after implementation. For example, the adaption of semi-permeable boundaries was anticipated to strengthen the project by drawing on a wider range of resources that had already been developed in local communities. It was not foreseen that residents gaining support externally would be felt to weaken the River Garden community, or that a tension would develop between the River Garden programme and the principles of recovery promoted in local recovery groups. An adaption can make solid theoretical sense but the emergent outcomes that develop in reality may be unpredictable.

7.6 Reflexivity

This research project involved situating myself within the River Garden community to better understand it, which requires some reflexivity about my role in the project, to understand how my presence as a researcher may have influenced the data collected, the findings and their interpretation. Reflexivity acknowledges that the researcher has a specific political, cultural, and social location and embraces the values of subjectivity as a way of conducting more meaningful research (Fook, 1999).

I shall begin by locating myself within the new recovery movement. I was initially motivated to research the recovery movement because I viewed it as a welcome challenge to the dispassionate medicalised models that had dominated drug treatment. I also considered myself a 'lived experience' researcher, with my research interests very much shaped by my own experiences of attempting to engage with drug treatment services (circa 2007-9). During my mid-to-late teens, it became commonplace in my peer group to use cannabis regularly, before moving onto amphetamines and ecstasy, then (for a smaller number of us) onto benzodiazepines and opiates. I became isolated from my peer group, and in a two year period from 2007-09 experienced around half a dozen near-fatal overdoses (several requiring hospitalisation). I attempted to get support from GPs, mental health services, statutory addiction services, third sector addiction charities etc, and developed a real sense of antipathy towards the addictions field due to the lack of support available. Education was central to my recovery, specifically an access course in social sciences that eventually led to this PhD.

I could empathise, then, with the desire of the recovery movement to challenge established forms of treatment practice and create radical solutions that promoted practical routes to recovery built on the benefits of purpose and structure. I was aware of critiques of the recovery movement, particularly from an MSc in Alcohol and Drug Studies that mainly taught evidence-based harm reduction. Nevertheless, I felt River Garden proposed an exciting new approach that seemed to offer solutions to some of these critiques (e.g., employment

training and the three-year programme could reduce the high rates of post-rehab relapse).

Throughout my studies, I became more disillusioned with the project and with the recovery movement as a whole. The reality of life in River Garden did not match up with the idealised visions described by recovery proponents. Many of the problems at this time were consistent with key critiques applied to the recovery movement, including the rates of attrition, prevalence of overdose, the responsibilisation of individuals for negative outcomes, and the tendency to replicate rather than reduce structural inequality of outcomes. Essentially, this study involved a major personal journey. It began with a real sense of excitement to be studying a radical, unique, recovery community, which had major international significance and could potentially change the landscape of the treatment sector in Scotland. I eventually concluded that this social enterprise model was mainly useful for providing rehabilitation opportunities for people who were at a certain stage of stable recovery but had very limited capacity to support people into recovery, mainly because the model was so focused on work at the expense of the types of therapeutic intervention that are useful for behaviour change. It felt that River Garden was not necessarily a recovery community, but rather a vocational training centre for people who have had substance use problems in the past.

One aspect of the recovery movement that was particularly relevant was the importance of lived experience. I have discussed how the lived experience model was a strategy to draw out relational mechanisms such as trust and respect. From a networks perspective, I interpreted this as an attempt to promote integration by using a form of homophily, a single shared characteristic. I also noted that homophily on this characteristic did not guarantee integration, with residents splintering into subgroups or becoming individually isolated due to other differences, such as social background or cultural attitudes. From my perspective, the idea of being accepted into the community felt as if it hinged on a shared lived experience with the residents. This was deliberately built into the research strategy, as a key gatekeeper suggested the title of ‘peer researcher’ for my role.

I found that the status of peer researcher only went so far. In initial interactions with residents, I sometimes experienced a line of questioning that seemed to be searching for other attributes to measure up whether I could be respected or trusted.

My first interaction with Brian indicated that he didn't quite believe my lived experience could be comparable to his present experience of severe opioid withdrawals, assumptively asking 'a bit of cannabis, was it?'. Perhaps my main personal objection to the lived experience strategy is that the only way to demonstrate authenticity is to disclose personal trauma, to assure him that our shared experience was more similar than he had assumed. In my first interaction with Kevin and Thomas, they were interested in what part of Glasgow I was from. Upon learning it was a fairly quiet suburb they were (jokingly) dismissive that it wasn't an area with a tough reputation, and again I felt an evaluation was being made of whether I was worthy of respect. In any case, I learned that these types of differentiation were not just directed at me but underpinned a more widespread fragmentation of the community as residents weighed each other up.

As well as matters of homogeneity, integration was also influenced by matters of network structure, particularly the size and transitivity of the network. In the earlier stages, the network was large enough for the development of subgroups, mainly grouped around resident attributes (e.g., length of time in recovery). This hindered integration because new residents could connect with each other instead of integrating with long term residents. Later, the technique of slowly introducing new residents created a new problem. Now, new residents had to integrate into a very small, highly transitive network, that was also highly homophilic in terms of time in recovery, social background, and shared experience.

As a researcher, I felt my experience of integration mirrored the experiences of new residents. I had planned my ethnographic fieldwork to begin when there were approximately twenty residents, feeling it would be easier to blend in. In practice, there were four long-term residents, two of whom were frequently off-site for education and training. I felt self-conscious of being the new person trying

to join in with a very small group, especially because I was there to observe them for research. I eventually accepted the slow development and adjusted my expectations, coming to view the fieldwork as an opportunity to observe the roots of a developing culture, rather than the bustling fully-formed recovery village I had expected. In year three, when new residents were eventually introduced, I realised that they were experiencing similar difficulties of being the only new person. In this sense, my experience was useful in understanding how issues of network structure can hinder integration, independently of the welcoming nature of the individuals who inhabit that structure.

This thesis has concluded with some fairly critical interpretations of the River Garden project, for example, that it is difficult to justify a three year residential project when the work-based programme seems to benefit those with the least support needs. It was difficult to write this discussion without feeling like this may also be interpreted as a criticism of people in the River Garden community. It is not. Essentially, it is an effort to put forth a theoretically-informed viewpoint, to place this project within a broader context of theory and evidence. This contextualisation may be of less practical interest to programme staff and other stakeholders, who will continue to invest their efforts in all of their residents and will, by definition, see the best results in those most likely to benefit from a work-based programme. The collective efforts involved in stabilising the project were pragmatic and admirable, creating a foundation for the long-term future of the community. My role as a researcher is to think about what this means for the theory of recovery capital or policy of using residential rehab to reduce drug-related deaths, but people within the project will rightly be focused more on the human aspects of helping individuals.

I struggled with how critical the writing sometimes became, particularly with regards to the relevance of the findings for the current policy environment. On principle, I cannot soften the interpretation that a project like this cannot claim to reduce drug related deaths or support that segment of the drug using population most likely to experience death, particularly at the point when they are most vulnerable. However, it will afford a higher quality of recovery to individuals with

a decent level of pre-existing capacity for recovery. This is still an admirable mission. In my findings chapter, I tried to give equal prominence to positive and negative outcomes, as I felt it would be unfair to only focus on the negatives and overlook the experiences of residents who had positive experiences in River Garden. In my discussion, I have tried to be quite objective by developing a framework of instrumental versus relational resources, and categorising River Garden as a project where the instrumental resources were valued more by the residents who were retained, leading to a devaluing of some of the more relational resources. However, I have not attempted to make any great critique of this detachment from recovery communities and identities, simply because this did appear to be what River Garden residents preferred. Despite this, I have acknowledged that the very instrumental focus may have limited the capacity of River Garden to support people who required greater relational support. I have also been very explicit that River Garden is unlikely to reduce drug deaths, due to the rigorous selection processes that would screen out anybody who is at high risk for a drug death, and the fact that residents experienced overdoses immediately after exiting the community. This raises the question of why the project received such substantial funding as part of the Scottish Government mission to reduce drug deaths. The answer may simply be that they are under political pressure to increase the number of rehabilitation beds in Scotland, and River Garden's large site offers the space and opportunity to quickly increase national capacity by building some additional accommodation units.

There were many aspects of River Garden I approved of a great deal. In particular, the emphasis on helping residents create a range of identities related to work, training, education, hobbies, and the like. The resistance to explicit recovery-oriented identities was an area where River Garden came to align closely with my own recovery beliefs. I had several conversations with residents where we agreed on the importance of being able to get on with life, being able to leave ones past behind, sharing a feeling that recovery-oriented identities could make undesirable parts of the past a permanent aspect of our present. Sometimes I wondered if sharing my beliefs on this risked influencing the community (and the research findings), but by the time of the *River Garden Way* meetings in year three I

realised that resistance to recovery identities was very firm amongst staff and residents.

Following a more theoretical line, I could also recognise that residents who most benefitted from the very instrumental approach were those with less relational support needs. Perhaps trustees who continued to promote 12-step and recovery community integration recognised that links to these settings would expand the capacity of River Garden to retain residents with more marginalised backgrounds or for whom the mechanisms of change had not yet fully occurred. The suitability of relational or instrumental resources for people at different stages of recovery meant there was perhaps a fundamental tension that would always have to be resolved.

When this research was being planned, I expected that the main ethical issues would relate to protecting participant anonymity. Much of the preparatory ethical work involved protocols of whether to disclose anonymous findings to programme staff or university supervisors, particularly whether any observed/disclosed substance use would mean the participant would be classified as a risk of harm to themselves or others. There were also more general concerns around the ethics of working with vulnerable groups. I never saw anybody using illicit substances, but I did observe a lot of furtive tobacco smoking, even in the earliest stages when there was still a no smoking policy. This did not meet the criteria of reporting as it did not involve alcohol or illegal drugs, or intoxication. There were three incidents when residents relapsed on alcohol but none of these occurred when I was on site (two were before the participant observation began, one was after lockdown). One ex-resident was on prescribed OST at the time I interviewed him but was alert and talkative.

In practice the more challenging ethical issues related to unexpected developments involving stakeholders, particularly trustees and staff. A particularly sensitive issue was the theme of resistance to the trustees that developed amongst staff and residents. I was concerned that residents may feel I was there to observe on behalf of the board, particularly since the idea of

researcher involvement had been facilitated by one trustee, whose influence was being resisted in other areas. Luckily, the staff offered continued support to the research, and I did not experience any resistance from residents, beyond the slightly awkward integration issues covered previously. The main issue this caused was having to interview numerous stakeholders with very different situated perspectives on some very heated issues, at a time when some of these issues were still unresolved and feelings were high. I had to remain neutral and retain the trust of all of these groups so they would share their perspectives with me, while they knew that I was also interviewing others with conflicting perspectives.

My technique was to remain neutral and engage on points of agreement that I could find with each individual, trying to make sense of all the perspectives without letting a single perspective dominate. Ethically, I felt somewhat dishonest, as I felt I was agreeing with each interviewee, even those with radically different perspectives. Everybody I interviewed gave completely reasonable and convincing responses. Coding and analysing the transcripts several months later afforded a more systematic process to draw together the perspectives into a theoretical whole. In reporting the findings, I tried to minimise any of the more personal relational strain between stakeholders and draw out the underlying systemic matters. Since I was most integrated with those living in RG, i.e., the residents and staff, I had empathised during the fieldwork with their resistance to trustees, even growing to share the general sense of anxiety and unease on days when trustees were planned to visit the site. This provided some insight into how these emotions can develop in a residential setting, as it was not until I had some distance from this setting that I could attempt to develop a more balanced consideration of all the stakeholder perspectives.

The level of organisational dysfunction in River Garden was particularly high, to the extent that it was the primary and most persistent issue throughout the fieldwork. This was completely unexpected. I had gone into the project expecting to gather findings about the social process involved in recovery, the role of peer support and social influence in behaviour and identity change. During fieldwork, there were a small number of stable, long-term residents, whose recovery did not

seem to be dependent on these types of process. Instead, the main topics of discussion often centred around the River Garden project itself. Differences in views on the direction of the project were at the heart of the operational dysfunction, as there was a failure to find common ground on many key issues, leading to more outright conflict over who was in control. While this thesis has incorporated these events within the process/realist evaluation framework, for example, by analysing the governance structure as a contextual factor, an alternative approach could have been to use an organisational behaviour theory lens. This would offer a more organisational-focused framework through which to understand issues relating to governance, human resource management, staff training and role expectations, organisational reforms, and issues in establishing team based models of service provision (Mickan and Boyce, 2007).

I also have to consider how my feelings and positionality may have coloured my collection and interpretation of the data. During the earlier stages of fieldwork, my involvement with the community was mainly as an occasional visitor. People were pleasant and welcoming, as they would be with any official visitor, but I was still an outsider. When I began more regular participant observation, I gained more of an insider status and the level of disclosure increased. It was during participant observation in early 2020 that I began to learn more about the issues that had occurred in summer 2019, some of which nobody had disclosed during fieldwork at that time. My interpretation of the findings may also be influenced by my empathy for the views of residents who left River Garden. I related to how they may have had high hopes that the reality of the project did not meet. One reason this thesis ended up more critical than I would have originally imagined was that I felt a responsibility to represent the voices of these residents, who constituted the majority of my participants. In a sense I felt more kinship with people who found River Garden underwhelming than those who thrived there.

Finally, I would acknowledge that the findings could have been written up in a different (and potentially more effective) manner. In this thesis, I presented three separate findings chapters. The first of these, Chapter Four, provided a ‘descriptive history’ of the events that occurred during my time studying River

Garden. This chapter followed a chronological structure, telling the story of the key events. The analytical commentary in this chapter was quite limited, only briefly touching on analytical insights that had occurred to me as events progressed. The next two chapters (Chapter Five 'Recovery Capital and Networks', and Chapter Six 'Individual and Community Perspectives') went onto present a more thematic analysis, organising findings around methodological and analytical themes. For example, in Chapter Six, the findings were structured into contextual factors, mechanisms, and outcomes. An alternative approach may have been to present all of the findings as a 'performance story'. A performance story is a more narrative focused way of reporting on programme performance, by drawing multiple lines of qualitative and quantitative evidence together to provide an account of progress towards outcomes, what is working, and what is not working (Austrialian Government, 2009). In practice, I could have taken a performance story approach, simply by using my initial chronological story chapter as the foundational structure for all of the findings, drawing in the thematic and interpretative content from subsequent chapters at the appropriate points in the story. Any future publications from this research, including articles, book chapters, or the conversion of the thesis into a full book, will be guided by the principle of foregrounding the story in this manner.

7.7 Specificity and limitations

I have used my study of River Garden to make various critiques of the recovery movement, residential rehabilitation, and therapeutic communities. However, this study is very specific in two ways. First, the River Garden model is particularly unique in comparison to existing residential rehabilitation provision in Scotland, especially its work-based approach to recovery, its large and open site, and its effort to replicate the conditions of the real world. Many of the critiques I have made about the model could be due to the specific focus on work, and may not apply to other residential rehabs, particularly those with a more relational approach, or with integrated detox services, or with medical and psychological staff involved in the service delivery. One can imagine that the unsuitability of River Garden for people with unmanaged trauma or chaotic polydrug use stems

directly from the lack of medical infrastructure. Therefore, these critiques cannot be made to other residential rehabilitation programmes based on the evidence from this study alone.

That said, it is possible that some of these critiques would apply elsewhere, based on the fact that the attrition and relapse rates were fairly standard in comparison to the published literature (McKeganey *et al.*, 2006; EMCDDA, 2014b). The theoretical critiques of recovery capital, in particular, are likely to be relevant across settings, given that recovery capital essentially measures the forms of marginalisation that make people least likely to recover (Fomiatti, Moore and Fraser, 2018).

7.7.1 Recommendations for future research

Moving forward, a critical question for River Garden is whether its ability to support residents with higher levels of marginalisation and more severe, complex support needs will increase as its infrastructure continues to develop, or whether they will continue to select relatively stable entrants. If so, what will be the acceptable level of stability/risk? It will also be interesting to see how the increase to 57 residents is managed over the next 5 years. As the size increases, the community could potentially remain more self-contained or begin to reintegrate with the wider recovery movement. Regarding the plan to introduce female residents, there are questions about how the community will evolve with this change, how specific gendered issues will be managed (e.g., how River Garden support residents does who have children) and how integrated will the female residents be with the rest of the River Garden network.

Following my research, I have identified some key research questions. These are mainly additional questions that have developed out of my research findings:

1) What are the differences in baseline characteristics between residents who are accepted into River Garden and those who are not considered suitable (in terms of trauma, health, problem severity, social/family background)?

2) Similarly, what are the differences in baseline characteristics between residents who complete the River Garden programme and those lost to attrition (in terms of trauma, health, problem severity, social/family background)?

3) What is the reach of River Garden in comparison to other forms of residential rehab, non-residential recovery communities, or peer-led harm reduction communities?

4) How integrated will River Garden and its residents be with the local community over the next five years (will there be a reconnection with local recovery movements and re-emphasis on semi-permeability, or continuing emphasis on residents building connections within River Garden)?

5) Does River Garden help people sustain abstinent recovery who otherwise would have relapsed and are there any differences in efficacy compared to alternative recovery-focused interventions?

6) What formal and informal social network structures develop over the next five years and what are the implications of these for resident progress or adaptions to the programme (e.g., where are trustees and staff positioned within the ego network of a resident, how many external connections do residents have, are there resident subgroups, how integrated are male/female residents)?

For future research in this area I would recommend the following methods could be applied to answer these questions: 1) formal measurement of baseline characteristics of residents, particularly trauma, problem severity, and recovery capital, as well as a baseline ego network survey; 2) prospective longitudinal mixed-methods ego network analysis, tracking the network transitions of residents and the overall integration with the wider community; 3) comparison with more relational-focused residential rehabilitation, by replicating these methods in another rehab setting; 4) comparison with a non-abstinent setting, such as peer-

led harm reduction communities; 5) a wait list-control, or applicant-control comparison to compare the characteristics and outcomes of accepted residents against those who are not offered a place; 6) comparison with people who are not admitted but are admitted to an alternative treatment elsewhere; 7) strengthening causal claims by using a quasi-experimental methodology such as *regression discontinuity* (Venkataramani, Bor and Jena, 2016), measuring the difference in outcomes of individuals clustered around the defined cut-off point for admission; and 8) more advanced statistical analysis of egonet data including multilevel models to measure the probability of different characteristics occupying certain network positions (e.g., the probability of trustees versus staff members being rated as a close tie).

7.8 Summary

This chapter has summarised the key findings from the research and interpreted them with reference to the existing literature. In doing so, I have focused on points where the findings from this study make a substantial contribution to the theory and policy of addiction and recovery. In particular, I have offered a critique of the theories of recovery capital and social identity, and the policy of using residential rehabilitation to reduce drug-related deaths. In keeping with the realist approach to evaluating transferability, I have also proposed some principles of transferability that may be applicable when other interventions are transferred, including if the River Garden model is transferred elsewhere in Scotland or the UK. In the next and final chapter, I will directly answer the original research questions, summarise the strengths/limitations and the recommendations for future research, and offer some policy recommendations.

8 Chapter Eight - Conclusions and Recommendations

8.1 Introduction

In this final chapter I will return to the original research questions. These will then be used to make some clear policy recommendations. The original aim of this study was to evaluate the formation of the River Garden community, examining how the principles of the San Patrignano model were transferred and adapted and the influence of contextual factors on these adaptions.

8.2 Main conclusions

8.2.1 What contextual factors were critical for the transferability of the San Patrignano model to a substantially different international setting?

This thesis shows that the formation of the River Garden community was a challenging process. Stakeholders involved in setting up the project made several proactive adaptions to the San Patrignano model to make it suitable for Scotland, each of which was supported with practical or theoretical justification. These included a much smaller community of a maximum of forty residents, semi-permeable boundaries, inclusion of residents with alcohol problems, and single bedrooms instead of dormitories. The original aims of the founders were to help residents become abstinent by removing them from communities with high levels of drug use, but to avoid the institutionalisation that could occur in a very large community with closed boundaries (i.e., San Patrignano). At the same time, their adaptions recognised the cultural differences between Italy and Scotland, such as the high levels of problem alcohol use, and the sociocultural/regulatory unsuitability of dormitory-style accommodation in Scotland.

A critical adaption was the choice to make the community semi-permeable, rather than fully enclosed. Many of the most significant unexpected difficulties were

related to this adaption (and the relative capacity of staff/trustees to sustain or reverse it). For example, the freedom of residents to develop external networks reduced the cohesion of the River Garden internal network (due to variation in social influence and resident activities).

Another adaption, extending the remit to include people whose problems included alcohol rather than only illegal drugs, limited the effectiveness of the key strategy of removing people from communities where substances were easily available. Several relapse/attrition incidents involved legal alcohol procured locally (again, possibly due to semi-permeable boundaries). Furthermore, the decision not to have similar shared sleeping accommodation to San Patrignano increased the possibility for residents to become isolated and hindered integration of new residents. The ability of trustees to proactively identify adaptions that would make River Garden more, not less, suitable in Scotland was limited because the unintended outcomes were unpredictable and emergent.

Problems in the first three years with resident behaviour and difficulties integrating new residents led to high levels of attrition. Several important adaptions were made to stabilise the community. These included limiting the intake of new residents, selecting them increasingly carefully (screening out those who might present significant challenge, such as those with mental health problems or coming directly from prison), and minimising integration with external recovery communities. With the community composed of a small group of stable, motivated long-term residents, they could be afforded high levels of freedom and autonomy. This level of autonomy was less beneficial to new residents whose recovery was less stable. The critical contextual factors were:

1) The wider recovery movement. River Garden was intended to be integrated with local recovery communities, particularly one new recovery community based nearby which shared several key stakeholders with River Garden. There was also a local 12-step fellowship movement which residents were proactively linked in to in the early stages. It was envisaged that residents could draw on these broader sources of recovery support and members of

these external recovery communities would have an active role in River Garden life (e.g., volunteers from the local recovery community could visit and provide recovery support to residents).

Over time, influential actors within River Garden came to perceive this as unsuitable, leading to a key adaption of withdrawing from these networks. Reasons included safeguarding issues, attrition of key stakeholders who linked the organisations together, a lack of enthusiasm from most residents for these wider resources, and a sense that the River Garden programme was weakened by residents spending a lot of time off site. Staff expressed this weakening in terms of exposure to different models of recovery that clashed with the River Garden model (i.e., a relational approach that did not fit with the preferred instrumental approach) and in terms of residents gaining support from external peers limiting the opportunity for internal peers and staff to provide support.

2) The Third Sector governance structure. River Garden was established via the charitable organisation Independence from Drugs and Alcohol Scotland (IFDAS). Early on, members of the Board of Trustees had a very active role in the daily management of the community. Over time, they were pushed into more peripheral roles, coming to be viewed by the staff and residents as outsiders. The governance structure afforded staff the opportunity to resist trustee influence on key issues, such as the adaptions summarised above. An important strategy to resist trustee influence was making recourse to formal governance structures, such as the concept that communication should go through formal processes from trustees to CEO, CEO to staff, and staff to residents. Accordingly, trustees had limited direct influence over staff and residents who made the daily operational decisions.

3) The characteristics of residents. Key resident characteristics that influenced outcomes included socio-economic background, problem severity, and health. Drug related deaths were extremely high and

increasing in Scotland in the period running up to and beyond the establishment of River Garden in 2018, and these deaths are associated with poverty, chaotic polydrug use, and frequent near-fatal overdose. Generally speaking, this type of resident profile was not well supported by the River Garden model. The absence of a medical infrastructure or professional healthcare on site (for detox, stabilisation, specialist mental health support etc.) limited the programme reach, as it better supported people who had achieved a reasonable level of stability before entry (be it substance use or mental health stability). The responsibility for achieving this stability was placed on individual prospective residents and consequently less stable people were considered unsuitable. Residents who had more supportive external networks and higher education levels did better than those who lacked these resources, suggesting that the resources a person had at baseline shaped their capacity to progress through the challenges of the programme.

This would suggest that an expansion of the River Garden model is unlikely to reduce drug deaths at the population level and more likely to exacerbate outcome inequalities than reduce them. This is particularly likely, due to the high rates of attrition and the incidences of fatal and near-fatal overdose that were clustered around entry and exit, suggesting it offers minimal protective factors for these events. The higher prevalence of chaotic polydrug use and drug-related deaths in Scotland than Italy made the very social, de-medicalised model less suitable for the original target population (people with high problem severity and low recovery capital) due to the resources being less suitable to manage these levels of challenge and risk. On the other hand, if somebody is stable enough to navigate entry and remain at River Garden it does provide a very high quality of recovery due to the significant investment made in resident support and training.

8.2.2 What aspects of the programme worked and who were they most likely to work for, under what circumstances, and why?

In my analysis, I broadly separated the programme resources into two main categories: instrumental and relational. Instrumental resources were those that aimed to promote behaviour change through the repeated completion of increasingly challenging tasks that were designed into the programme environment. For example, a resident would begin by undertaking unskilled gardening work and gradually progress to developing their own social enterprise. Relational resources were the advice and support offered by peers within River Garden (and, at first, in wider recovery networks). These were clearly not discrete resources, as the task-based challenges contained relational aspects and vice versa. However, there were issues around which resources should be given greater emphasis in River Garden and the separation works as a heuristic tool to explore this.

When the programme worked, it worked best for residents who showed high levels of motivation and capability with regards to the instrumental challenges. The residents who were retained long-term mostly all thrived on the opportunity to receive work-based training and develop their own social enterprises. Consequently, the relational aspects (such as attending recovery cafes or 12-step meetings) were given less priority because this group of residents did not generally need or value these resources as much. Relatedly, there was an expectation that residents would gradually increase their external social networks over time. This did happen on the whole but amongst the four remaining residents there were two patterns: those who developed large external networks (one recovery focused, one hobby and education focused) and those who kept networks mainly contained to River Garden. As such, expanding social networks was a less vital component of the programme than training and development. These instrumental resources were more likely to work for people with the highest capacity for task-based challenges and the lowest requirement for relational support. They were in good physical and mental health, their problems with substance use were more clearly

resolved, and they were at a stage of recovery where they could focus on moving forward with practical matters.

8.2.3 What are the implications for national and international drug policy, specifically the policy of reducing drug-related harms by delivering interventions to support abstinent recovery

River Garden has been awarded significant funding as part of the Scottish Government strategy to reduce drug-related deaths. River Garden offers many valuable resources for its residents and has helped support some high quality recovery outcomes. However, I would not suggest that this model would be effective in reducing population level mortality. For this to be the case, we would have to see the following:

1) its reach would need to extend to the most deprived communities where combined drug use and the related drug deaths are most prevalent. Good outcomes for people from more middle-class backgrounds does not directly address the causes of drug deaths, particularly since they did not all use opioids or benzodiazepines.

2) It would need to be capable of supporting people who are using chaotically and particularly those who have recently experienced near-fatal overdoses, key risk factors for DRDs. The requirement for residents to achieve abstinence and stability before entry excludes the segment of the drug using population most likely to experience a fatal overdose. People who are not yet stable enough to sustain abstinence are likely to be at increased risk when attempting to navigate the admissions procedure, due to the requirement to reduce medication and attempt unsupported abstinence. There was evidence of further risk of relapse after unplanned exit.

3) To increase the population prevalence of abstinent recovery (i.e., to reduce drug deaths simply by reducing the number of people engaged in problem drug use) it would be necessary to support people into abstinent recovery who otherwise would have been unable to achieve this. It was not

possible to truly disentangle processes of natural recovery from the effects of being in River Garden, but the requirement for recovery processes to have begun before entry and to navigate a selective admission process would suggest that River Garden did not benefit people who otherwise would have been unlikely to recover. Similarly, the idea that it may be possible to reduce deaths by reducing the number of people who relapse after initiating recovery would be better supported if rates of attrition and relapse were low. However, they were high.

River Garden does work well as a social integration model, supporting people in rebuilding their lives through training and enterprise. This may not directly reduce mortality but does alleviate other forms of harm caused by problem substance use, by providing the opportunity to rebuild lives. I would advise that the model is not considered as an intervention to reduce drug related deaths but its strengths in supporting social integration are highlighted instead.

8.3 Theoretical conclusions: Recovery Capital, and Social Identity Models of Recovery

Rather than a programme that benefits people with very low recovery capital, River Garden was more suitable for individuals with a reasonable amount of baseline recovery capital. For example, those with supportive family backgrounds, who had already demonstrated some capacity to sustain abstinence before entering, and with stable enough physical and mental health to cope with the instrumental and relational challenges of the programme. This supports the association between recovery capital and recovery outcomes. However, it does not support the idea that targeting resources towards people with low recovery capital will reduce outcome inequalities. In practice, people with more recovery capital will benefit from these resources more and outcome inequalities will be replicated.

The problems with resident integration, behaviour, relational strain, negative influence, and attrition in the first three years led to a more careful selection of

residents who would make suitable community members. This did not support the concept of the Social Identity Model of Recovery (SIMOR) that exposure to abstinent networks could be used as mechanism of behaviour change, by causing a transition in social identity. In practice, the processes of social influence were far more complex and multi-directional. Small numbers of unmotivated residents could resist, subvert, and undermine their peers in the community. The adaption to more careful selection of residents indicated a realisation that the mechanistic power of exposing individuals to recovery networks may be limited. Applying a realist framework, I found greater indications that the network/identity transitions for successful residents could be more accurately categorised as recovery *outcomes* rather than *mechanisms*.

8.4 Strengths and limitations

This study has made a substantial contribution to addiction theory by using River Garden as a case study to examine influential theories such as recovery capital and social identity models of recovery. I have also made a useful contribution to drug policy by evaluating the model as a strategy for the wider crisis of drug related deaths in Scotland. This was a rigorous observational study, where I have triangulated findings across a variety of methods, used a longitudinal approach to gain a good insight into causality and temporal change, and validated my programme theories by interviewing key implementers and refining my theories accordingly. I was flexible in adapting the study to the unpredictably slow growth of River Garden and the Covid-19 lockdown. The proportion of residents and staff recruited into the study was very high (all 4/4 staff and 9/10 residents). The findings are robust and relevant.

There were two main limitations. First, as an observational study it was not possible to fully understand whether people who achieved good outcomes did so due to the treatment effect of River Garden or some other factor (e.g., natural recovery processes or the support of family). Similarly, I could not truly tell whether people who relapsed did so due to failings of the programme or would have relapsed in any setting due to individual factors. The second limitation was

that the low resident numbers and high attrition affected aspects of the study design. This is common in TC studies due to the generally high attrition rates. In my study, the plan to recruit approximately twenty residents and follow them up over three timepoints turned into a far messier affair, with much smaller numbers and most residents only followed over two timepoints. Some of the statistical insight into network transition was limited by these issues. The COVID-19 lockdown in March 2020 necessitated a transition to remote research, preventing ethnographic fieldwork and face to face interview for the final eight months of data collection, so insights into River Garden during lockdown were limited compared to earlier stages of the research.

8.5 Recommendations for future research

This is the first study to focus on the residents, staff, and trustees of River Garden after the project officially opened and took in residents. I studied a very particular period of community formation. Since in 2021 River Garden received funding to expand its capacity several times over (including a dedicated accommodation unit for women) further research could apply a similar evaluation approach to see how things progress.

There are several important questions that should be at the forefront of any future research on this project which flow directly from my findings. For example, where I have suggested that River Garden had to carefully select residents stable enough to succeed, a fecund line of enquiry may be whether its capacity to support a broader range of individuals may expand over time as the project infrastructure becomes more developed (e.g., more experienced peers, and more developed social enterprises to provide structure and opportunities), numbers of community members increase, and the gender balance changes.

Similarly, while stakeholders considered retreating from wider recovery networks necessary for stability in early formation, a valuable follow up research question would be to explore links (or not) with the wider movement when the community is larger. Will a culture of residents attending external support groups redevelop

when there are more residents? These issues are important theoretically, as they would indicate whether my conclusions on social identity, recovery capital, key mechanisms, and necessary adaptions were temporally specific to early community formation, or more permanent. Future research should explore the ongoing relationship between the Board of Trustees, and the staff and residents who are on site daily, and how their relative power evolves. Will there be continued adaption from the original vision or realignment with key principles, especially in the light of recent dependency on government funding, and which stakeholders will shape this?

Finally, River Garden requires a robust outcomes study, involving long-term follow up of retention and attrition cases along with an experimental or quasi-experimental design to strengthen causal insight, such as a waitlist control or quasi-experimental statistical analysis. The processes by which residents are selected should also be considered as part of these analyses. This would be useful to provide a more robust insight into the efficacy of the model, evaluate the additional funding and expansion over the next five years, and inform future funding, expansion, and transfer and adaption of the model to additional new settings.

8.6 Recommendations for policymakers and rehab/TC programme managers

The methods employed in this study would provide a useful framework for the evaluation of other residential rehabilitation settings. The Scottish Government have invested significantly in expanding residential rehab capacity over the next five years, which will lead to the growth of existing rehab settings and the creation of new ones. Many of the issues raised in River Garden will be as relevant elsewhere. For example, I have found the careful selection of residents with desirable attributes was important for the stability of River Garden. It would be valuable to study the selection procedures employed elsewhere and the baseline characteristics of those who gain entry. Furthermore, attention should be paid to the effects of becoming less selective as overall capacity expands.

Fundamentally, these questions will provide insight into the reach and efficacy of residential rehabilitation as a strategy. Rehab managers and policymakers should be aware of the importance of selection procedures and the implications for efficacy, reach, and the capacity to reduce population level harm.

Scottish Government guidance asserts that it is good practice for treatment providers to assertively refer and link people into mutual aid (e.g., 12-step groups) and lived-experience recovery organisations (e.g., new recovery communities). In River Garden, this strategy of assertive linkage and integration with wider organisations was not effective. The social network ('egonet') mapping interviews used in this study were useful to measure the extent that residents were integrated with these wider networks and how this changed over time. To evaluate Scottish Government strategy, the same methodology could be used across a wider range of rehab settings: prospectively recruiting residents at intake and repeatedly mapping their social networks throughout and after they leave the setting. The proportion of residents who sustain these networks would help evaluate the efficacy of this strategy (and identify factors that increase/decrease its efficacy, such as the specific recovery model offered by each rehab). Rehab managers and policymakers should be aware of the potential limitations of assertive linkage, particularly when there is a disconnect between the specific rehab model and the models of recovery offered elsewhere.

Treatment providers, policymakers, and funders should be aware that there are particular challenges involved in setting up a new TC, rather than expanding existing sites which already have an established culture. Notably, the early stages of community formation will be fragile and therefore limited in their capacity to support people with the most severe and complex needs. The process of building a culture and infrastructure may take years. Furthermore, semi-permeable boundaries and integration with other projects may provide additional resources (such as peer support) but also have the potential to increase unpredictable outcomes and reduce the capacity of the TC to deliver a cohesive model.

The ethnographic methods I used in this research provided vital insight into issues of programme fidelity (where delivery differed from design), how the community culture developed and changed over time, and unexpected emergent themes such as the organisational strain that developed between groups with different ideas of how the project should be developed. It may be difficult to gain such a privileged level of access to many other residential settings, particularly those regulated by statutory healthcare bodies. However, to get a true insight into issues of fidelity and culture, any opportunities for direct participation and observation of community practices should be facilitated where possible.

A great deal of my understanding of how River Garden worked was informed by observing and interviewing the community managers. For example, the pragmatic steps they took to stabilise the community (e.g., careful selection of residents) informed my conclusion that careful selection was essential for the programme to work. For rehab managers elsewhere, I would also advise a pragmatic approach. The alternative would be to select residents who are unsuitable, on the basis of grander theoretical ideas about who rehab is supposed to support (i.e., people with the most severe/complex problems). To do so would increase risk and the occurrence of serious unintended outcomes. At the policy level, I would encourage that the different parts of the treatment system are integrated to work together in a complementary fashion. River Garden (and projects like it) should be seen as supplementary components of a broader system rather than direct alternatives.

9 Appendices

Appendix 1 - Standard Operating Procedure: dealing with participant emotion and/or revealing risk of harm during one-to-one interviews and participant observation.

MRC/CSO Social and Public Health Sciences Unit
Standard Operating Procedure

Standard Operating Procedure: dealing with participant emotion and/or revealing risk of harm during one-to-one interviews and participant observation.			
Effective Date:	Jan 2019	Review Date:	
Expiry Date:			
	Position	**Signature**	**Date**
Development Lead:			
Martin Anderson	PhD Student		19th Dec. 2018
Approved by:			19 Dec. 2018
Daniel Wight	Programme leader		

Amendment Chronology	
Version Number	**Reason for Amendment**

Contents

1. Acronyms and Definitions

SPHSU	Social and Public Health Sciences Unit

2. Background

The Social and Public Health Sciences Unit (SPHSU) at Glasgow University conducts research that sometimes involves participant interviews and participant observation. Occasionally during research participants become upset or reveal risk of self-harm or potential risks to others. In order for us to comply with Good Clinical Practice and ethical approvals, researchers in the Unit need to follow a standardised procedure for dealing with these issues during interviews.

3. Purpose

This SOP describes the procedure for addressing the needs of participants who may become upset or emotional during one-to-one interviews or participant observation. It also covers the procedure for reporting risk of self-harm or risk to others (where the risk may be from the participant themselves or risk to someone else that the participant is aware of and reveals during the interviews).

4. Scope

This document applies to the interviews for the PhD study "Conducting a process evaluation of a therapeutic community for alcohol and other drugs recovery: social network and identity transitions in a purposively designed social environment."

5. Responsible Personnel

It is the responsibility of the researcher conducting the interviews to ensure that this procedure is adhered to when conducting one-to-one interviews and participant observation with participants.

Responsibility for the execution of each step of this procedure is identified in section 6 of this SOP.

6. Procedure

For procedural flow diagrams refer to Appendix I.

6.1 Study documents

The study protocol and information sheets must describe the nature of the interviews and participant observation, and participants must be aware of this and give consent to take part. The information sheet must also state that the researcher will be obliged to pass information to someone outside the study if they have concerns about the participant's or anyone else's safety. The researcher involved in interviewing must be aware of the protocol and procedures for the interview as well as familiar with University of Glasgow Lone Worker Procedure (http://www.gla.ac.uk/media/media_500539_en.pdf) To ensure that the researcher is protected from risk of harm they will comply with procedures described in the SOP Communicare for lone workers (SOP- BA- 008 v1.0 20 December 2016). A data management plan must also be devised in order to store the data collected securely.

6.2 Equipment

It is the responsibility of the researcher to ensure that there are available leaflets directing participants to appropriate sources of support. These should be taken along to each one-to-one interview. The type of leaflet/help document may vary due to location and participant group, however the study team should think through what leaflets are most appropriate.

6.3 Procedure

Emotional upset/anger (refer to process flow I.)

If the participant becomes upset during a one-to-one interview the researcher must adhere to the following procedures.

1. Give participants time to gather their thought and compose themselves. The interviewer should note this on the hand written interview notes.
2. The interviewer should ask if the participant requires the recording to be stopped. In this case the interviewer should switch off the digital recording device.

3. The interviewer should then ask if the participant wishes to terminate the interview. If the participant wishes to terminate the interview then the interviewer notes on the paperwork why the interview was stopped.
4. If the interviewee indicates that they are happy to continue, the recording device is switched back on and the interview continues as planned.
5. The interviewer should ask if the participant needs a recovery peer or peer worker to provide support. The interviewer must then endeavour to contact the appropriate person and note this on the supplementary paperwork. If the interviewer cannot get in touch with their contact, the interviewer will ask for another person who they can contact.
6. The interviewer should also ask the participant if they would like any information on local services which can provide support to them or any leaflets on healthy lifestyle.

Risk of Harm reported (refer to process flow II.):

If the participant identifies any risk of harm to themselves or to others during a one-to-one interview or participant observation, the researcher must adhere to the following procedures. If there is a risk of harm to the interviewer the SOP Communicare for Lone Workers (SOP- BA- 008) must be adhered to.

1. The interviewer must record anything that signifies a risk of harm to themselves or others on the supplementary paperwork.
2. The interviewer must inform the participant that researchers have a duty of care and are therefore obliged to report to someone if they feel that individuals are at risk of harming themselves or others.
3. If risk of harm is assessed as being high enough that duty of care outweighs researcher confidentiality, the researcher should contact a member of staff to report their concerns for the safety of the participant or others.
4. The interviewer should consider contacting the relevant authorities, for example the police or ambulance services, to inform them of their concerns. This is to ensure that the information disclosed by the participant is communicated in a timely manner to enable adequate preventative measures being put in place.

Assessing risk of harm:

Risk of harm could include risks of violence to themselves or others, or illicit use of substances. All participants have a recent history of problem alcohol or other drug (AOD) use, and a core mechanism of the intervention is that it provides an AOD-free environment. The use of any AOD could potentially pose a significant risk of harm. A protocol of disclosure has been developed to help the researcher evaluate whether the risk of harm is great enough to warrant reporting. This protocol aims for a middle-ground between protecting the safety of vulnerable adults and ensuring their confidentiality in a research relationship, to ensure a robust evaluation. There are three potential responses, which make up a 'traffic light' system.

1. Green: If the participant discloses or is observed using alcohol or cannabis, but does not appear inebriated, the researcher will not disclose this violation of the intervention's Drug and Alcohol Policy. The researcher will also not disclose dislike or poor relations with another resident or member of the wider community, or a general dissatisfaction with life in the intervention. The researcher will ask the participants if they would like any information on local services which can provide them support or any leaflets on a healthy lifestyle, and recommend they voluntarily speak to a recovery peer or peer worker.
2. Amber: If the participant discloses or is observed using alcohol or cannabis on more than one occasion, or expresses significant dissatisfaction with life in the community and low-mood, or an idealisation of harm towards themselves or others (without explicit threat), the researcher will firstly escalate this to their research supervisors, without informing intervention staff. Research supervisors can provide guidance on whether and how the issue should be disclosed to intervention staff. Participants will be informed that that the researcher has a duty of care and may be obliged to report to someone if they feel that individuals are at risk of harming themselves or others.
3. Red: If the participant discloses or observed using opiates/opioids, benzodiazepines, novel psychoactive substances, depressants or sedatives, hallucinogens, stimulants, the intravenous use of any substance, or a relapse to their primary substance of addiction, or if participant is noticeably

intoxicated, the researcher will disclose this immediately to staff. The researcher will disclose any other immediate concerns of harm to themselves or others, including sedation, difficulty breathing, explicit statements of a desire to self-harm or harm others, or disclosure of actual harm towards members of the intervention community or wider community (including verbal bullying). Participants will be informed that the researcher has a duty of care and will be reporting the incident to staff.

4. If concerns warrant sharing with external agencies, the researcher will relay these without delay to the intervention staff who will determine whether the possible harm is significant. Where an individual is felt to be in immediate danger the police or ambulance service will be contacted.

Exceptions where AOD use protocol will not be used:

1. During participant observation, there will be certain times where the researcher is designated the role of 'trusted individual'. For example, if the researcher is accompanying a participant off-site.
2. When in the 'trusted individual' role, the researcher has a duty to follow established protocol for 'trusted individuals' within the intervention and this will be made clear to the participant at the time.

Suggested script for disclosing potential harms to supervisors:

1. "What you've told me is making me worried about you and I want to be able to make sure that you get support in coping with this. I might not be the best person to offer you support but I want to be able to find the right person to do that. Because I'm concerned about you I'm going to have to speak to my research supervisors for some advice about what we can do to support you. How would you feel about me doing that?"
2. If the participant says they don't want the researcher to speak to the supervisors, then the following script can be used:
   "I am still very concerned about you but I understand that you don't want me to talk to anyone about it. As part of my job it's important that I make sure that I don't put you in any danger or let you carry on dealing with a situation that might cause you harm. What I can do though is speak to my supervisors but I won't say that it is you that I am talking about. It's important that I let

you know however that if my colleague thinks we need to tell someone else then we might need to let them know who you are. If that's going to happen I will come and tell you who we are going to speak to and what information we are going to share with them."

7. References

- None

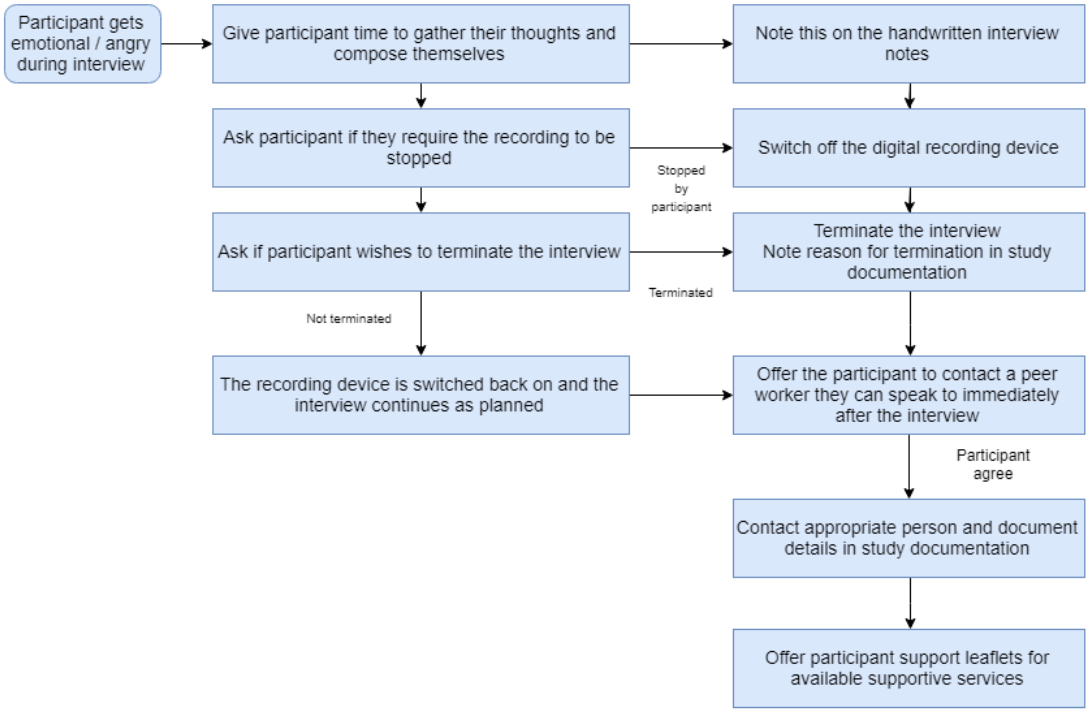
8. Referenced SOPs/Documents

- None

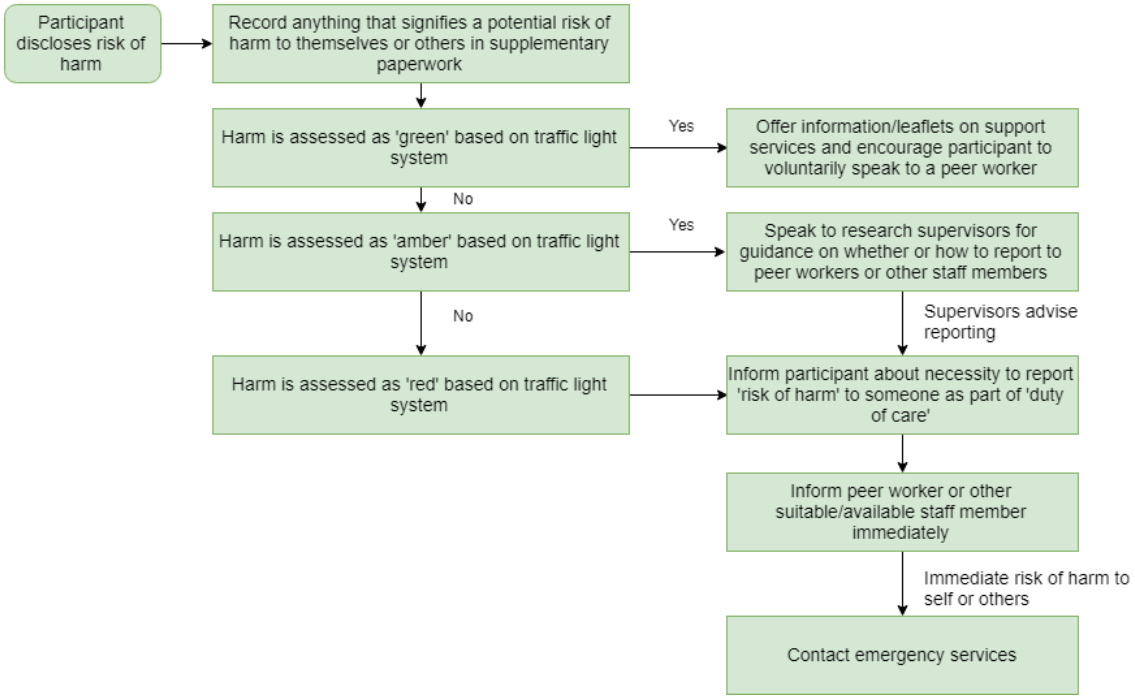
9. Appendices

Process flow I. Emotions/anger/confusion and anxiety
Process flow II. Risk of harm

Process flow I.



Process flow II.



Appendix 2 – Information sheet for resident and staff egonet interviews

University of Glasgow

College of Social Sciences

Participant Information Sheet

Study title: Conducting a process evaluation of a therapeutic community for alcohol and other drugs recovery

Secondary title: Studying how social networks influence health behaviours in a recovery community

Researcher: Mr Martin Anderson

Invitation

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

The purpose of the study is to find out how a residential recovery community can help people recovery from alcohol and other drug issues. This is important since this type of recovery community is a new model in Scotland and it is important to help build research evidence. It is especially important that members of the community have their voices heard in the research evidence.

What will happen to me if I agree to take part?

If you agree to take part, you will be invited to take part in an audio-recorded research interview. The researcher will ask you to complete two questionnaires, then help you create a visual map of people you know or regularly interact with. You will have the opportunity to discuss these relationships and how they have influenced your alcohol or other drug use and recovery. Interviews are expected to last 1-2 hours. You will be invited to repeat this procedure again once you have completed six months in the community, then again around the time you complete the programme (usually after a year). If you were to exit the community before this, you will be asked if you are willing to be visited by the researcher to conduct these interviews.

The researcher may also join in with activities in the community, known as 'participant observation'.

You will be asked if you consent to the researcher being provided with information you have already given to River Garden, including your application and admissions forms, and progress reviews. This information will help understand the demographics, histories and progress of the people entering River Garden, and how these compare with other treatment seekers in Scotland. You can opt out if you do not want this information shared.

What are the possible disadvantages and risks of taking part?

There are no major disadvantages or risks involved in taking part. It is possible that talking about traumatic experiences or difficult relationships could be upsetting. However, the researcher will make sure you are comfortable and we can stop the interview at any time or you can ask the researcher to move on to another topic.

What are the possible benefits of taking part?

The information collected will give us a better understanding of how recovery communities help people recover from alcohol and other drug problems. We hope you may find it rewarding to reflect and talk about your experiences, which will help build evidence in relation to recovery communities so that other people can benefit in future.

Do I have to take part?

Participation is entirely voluntary. If you do decide to take part, you will be given this participant information sheet to keep and asked to sign a consent form. If you decide to take part, you are free to withdraw at any time and without giving a reason. If you withdraw from the study, you can request that data you have already provided not be included in the study. You have the right to withdraw your data up to three months from day your data is collected.

Will my taking part in this study be kept confidential?

All information or responses that you provide during the course of the research will be kept strictly confidential. Data will be anonymised and referred to by an ID number and you will not be identified. Any information will be held on a password protected University of Glasgow computer on a secure drive. All audio recordings and written notes will be held securely in the MRC/CSO Social and Public Health Sciences Unit, University of Glasgow. Data will be stored securely for at least up to 10 years in keeping with University of Glasgow policy. Data will be made available for use by other researchers in its anonymised form.

Please note that assurances on confidentiality will be strictly adhered to unless evidence of serious harm/distress, or risk of serious harm/distress, is uncovered. In such cases we have a duty of care to report this to the appropriate agencies.

What will happen to the results of the research study?

Results of the study will be presented in a PhD thesis. The results may also be published in academic journals or in the publication of a book. Findings will be potentially communicated in conference papers and presentations. You will not be identified in any report or publication.

Who is organising and funding the research?

The research is funded by the Medical Research Council (MRC). The research student is based at the Social and Public Health Sciences Unit, and registered with the College of Social Sciences, University of Glasgow.

Who has reviewed the study?

The project has been reviewed by the College of Social Sciences Ethics Committee.

Who can I contact for further information?

Mr Martin Anderson. m.anderson.2@research.gla.ac.uk

If there are any issues, or further questions, you can contact my supervisors

Professor Danny Wight. Danny.Wight@glasgow.ac.uk
Dr Mark McCann. Mark.Mccann@glasgow.ac.uk
Dr Lucy Pickering. Lucy.Pickering@glasgow.ac.uk

Who can I contact if I have a complaint?

College of Social Sciences Ethics Officer, Dr Muir Houston. Muir.Houston@glasgow.ac.uk

Thank you for reading this.

End of Participant Information Sheet

Appendix 3 – Consent form for resident and staff egonet interviews

Consent Form

Title of Project: Conducting a process evaluation of a therapeutic community for alcohol and other drugs recovery

Name of Researcher: Mr Martin Anderson
Name of Supervisors: Professor Danny Wight, Dr Mark McCann, Dr Lucy Pickering

I confirm that I have read and understood the Plain Language Statement/Participant Information Sheet for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

I understand that I can withdraw my data from this study up to three months from the date I take part.

I consent / do not consent (delete as applicable) to interviews being audio-recorded.

I consent / do not consent (delete as applicable) to being included in participant observation

I consent / do not consent (delete as applicable) to the researcher accessing my admissions and review information

I acknowledge that participants will be referred to by pseudonym.

I acknowledge that there will be no effect on my status as a resident arising from my participation or non-participation in this research.

- All names and other material likely to identify individuals will be anonymised.
- The material will be treated as confidential and kept in secure storage at all times.
- The material will be retained in secure storage for use in future academic research
- The material may be used in future publications, both print and online.
- I agree to waive my copyright to any data collected as part of this project.
- I understand that other authenticated researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.
- I understand that other authenticated researchers may use my words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form

I agree to take part in this research study ☐

I do not agree to take part in this research study ☐

Name of Participant …… Signature ……..

Date ……

Name of Researcher …… Signature ……..

Date ……

…… End of consent form ……

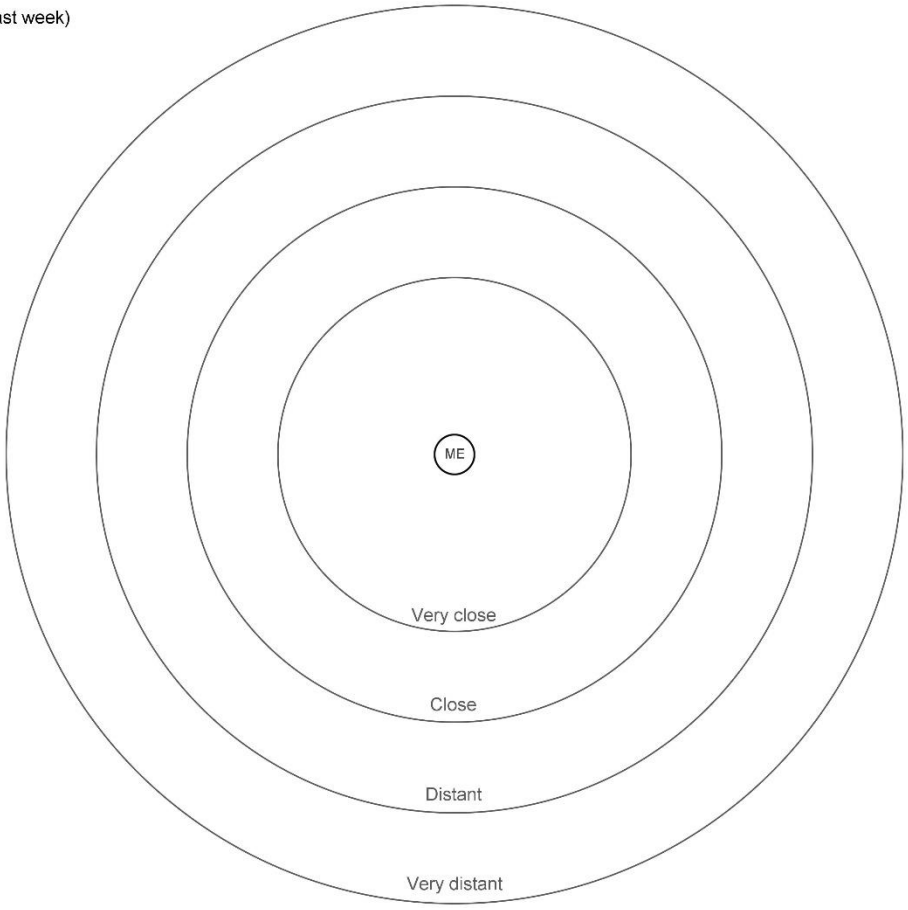
Appendix 4 – Concentric circles templates

University of Glasgow

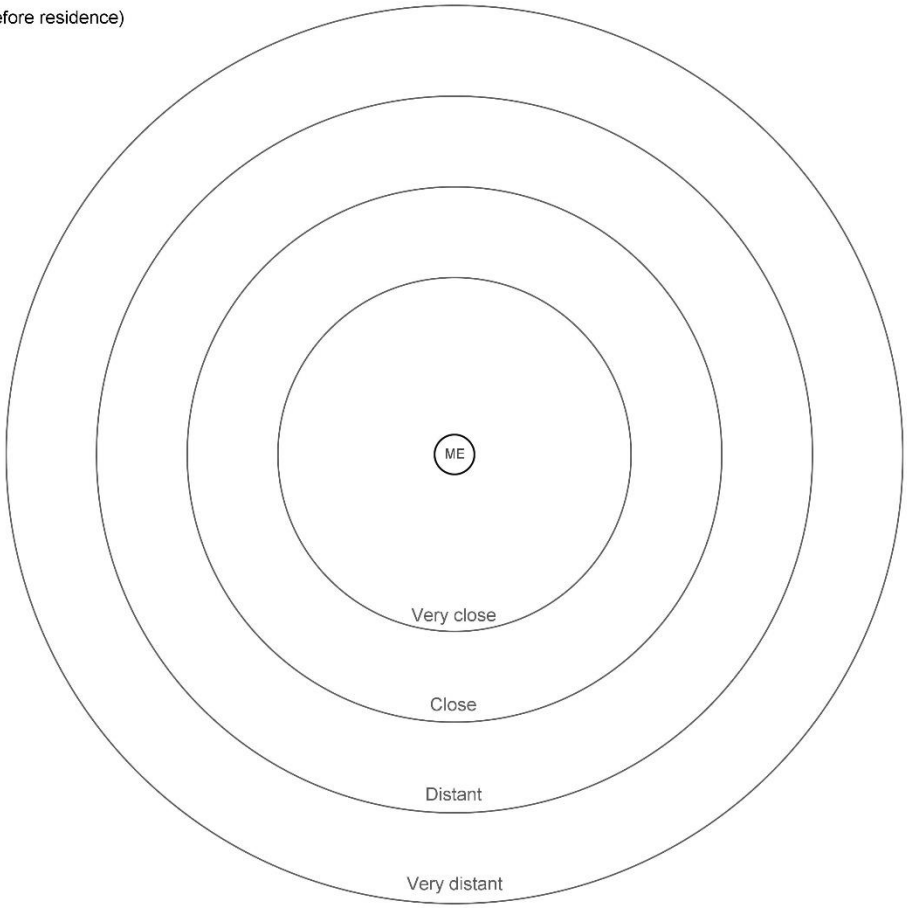
College of Social Sciences

Network map templates

Network map (past week)



Network map (before residence)



Appendix 5 – Name interpreter survey

Participant ID:

Name:	Gender:	Age:	Relationship:	Alcohol or other drug use (none, some, lots, stopped)	In recovery? (yes/no)	Uses alcohol or other drug services? (yes/no)	Involved in recovery communities (yes/no)

Appendix 6 – Egonet interview procedures guide

University of Glasgow

College of Social Sciences

Mixed methods social network data collection procedures

Study title: Conducting a process evaluation of a therapeutic community for alcohol and other drugs recovery: social network and identity transitions in a purposively designed social environment

Introduction

Obtain written consent to record interview.

Provide a brief overview of the aims of the project. Explain that social networks may influence AOD use and recovery, so we are interested in measuring social networks and discussing them in more detail.

Remind them if they feel uncomfortable to just say so and we can skip the question or topic

Quantitative scales

Present participant with the quantitative scales and give them as much time as they need to fill it in. Offer to help complete the questionnaire if they'd prefer not to do it themselves. The scales are the Circumstances, Readiness and Motivation Scales (CRMS) and the Addiction Beliefs Inventory (ABI).

Be clear that these questionnaires are anonymous, and their individual results will not be seen by any intervention staff, and that their answers will not influence their status as a resident.

Participant background

Start recording.

Ask participant how old they are, which substances they used, and if they can provide some background information on the circumstances which led to them self-referring to a TC. There is no need to ask for detailed demographic information and drug history as this is captured during their admissions process and will be accessible to the researcher.

Constructing the ego-net social network map

Present the participant with the concentric circles template. Explain that this represents their personal social network, with themselves at the centre of the map, and that they will place alters closest to the centre for those they are closest too, and at the outer edge for those they consider distant.

Name generator

Explain that we are going to create a visual representation of their social network. Ask participants to think of *'people you have had contact with in the past week'*. Ask participant to write the initials of these people on the template, in the appropriate position of closeness. Prompt for alters within the community, visitors, and people they interact with outside the community.

For retrospective maps, the name generator prompt is *'people you had contact with in the last week before you entered the recovery community'.* Prompt for AOD using peers or others they may have lost contact with after entering the RG admissions process.

If participant names a group or organisation instead of an individual, ask how many people are these, how many did they interact with, what type of activities take place (what, when, where, who, how).

Names are to be written on sticky notes then placed on the concentric circles. Ask participant to consider how the alters are placed in comparison to each other, and move them around if necessary.

Name interpreter

Explain that we are going to capture additional details about the people in the social network. Ask participant to draw a green circle around alters who

had a positive influence on AOD recovery or healthy lifestyle, and a red circle around alters who were a negative influence. Use the name interpreter cards to collect additional information about each alter: age, gender, alcohol use, other drug use, if they use treatment services, if they are in recovery, and what is their relationship to the participant.

Alter-alter ties

Explain that we are going to capture details on how connected the people in the network are to each other. Since this is a residential environment, it can be assumed that all participant will know each other quite well. Alter-alter ties will be elicited based on alters who the participant considers having *'a close relationship'.* A close relationship would be defined as one where the alters discuss important matters with each other and spend their free time/leisure time together. Ask participants to draw a black line between all alters who have close relationships.

For a lesser-weighted measure of alter-alter ties, also ask who in the network simply knows each other well enough to chat. We will then have three levels: closely connected, connected, unconnected.

At this stage the network map will visualise the degree, closeness, and positive/negative influence of alters, and alter-alter ties.

Prompts for qualitative interview

The construction of the network map will act as a prompt for a qualitative interview. When participants are drawing the map, ask them to explain why they are placing alters in certain positions, why they have marked alters as positive or negative, the nature of their relationship with the alters and the alters relationships with each other. Specifically focus on these relationships in reference to their influence on AOD use and recovery. Many of these topics will occur naturally during the drawing of the network maps. They can be prompted if they don't occur naturally. Some questions could include:

Social support

- 'can you explain how [alter] has influenced your recovery?'
- 'who would you be most likely to ask for support or advice?'
- 'if you had a problem who would you approach first?'

- ‘how does the support you receive here compare to other forms of support (e.g. professional intervention)?’

Nature of relationships

- ‘what sort of relationship do you have with [alter]?’
- ‘can you explain what makes [alter1] a closer relationship than [alter2]?’
- ‘what made this relationship positive/negative?’
- ‘have you experienced any conflict or observe conflict between others?’

Social influence

- ‘how did these relationships influence your decision to pursue recovery?’
- ‘how does a network of abstinent/recovery peers influence your wellbeing?’

Network structure

- ‘who in the network meets in smaller groups and what sort of activities are involved’ (what context/activities)? (cliques)
- ‘who in the network can you get difference sources of information and advice from? (closure)
- ‘which different activities and communication can you have with different groups’ (opportunity/constraint)
- ‘can you explain why [two unconnected alters] are not close?’ (structural holes)

Additional prompts for retrospective map

Social support

- ‘can you explain how [alters] supported you during your AOD use’
- ‘who (if any) influenced your decision to pursue recovery’
- ‘if you had a problem who would you have approached first’
- ‘how did this support compare to support you are receiving now’

Nature of relationships

- ‘What sort of relationship did you have with [alter]
- ‘What makes [alter1] a close relationship than [alter2]
- ‘What made this relationship positive or negative’
- ‘did you experience any conflict or observe conflict between others’

Social influence

- ‘how did these relationships influence your AOD use’
- ‘how did these relationships influence your decision to pursue recovery?’
- ‘how did a network of AOD-using peers influence your wellbeing?’

Network structure

- ‘who in the network met in smaller groups and what sort of activities were involved’ (what context/activities)? (cliques)
- ‘who in the network could you get difference sources of information and advice from? (closure)
- ‘which different activities and communication could you have with different groups’ (opportunity/constraint)
- ‘can you explain why [two unconnected alters] were not close?’ (structural holes)

Conclusion

Thank participant for taking part in the interview and ask if they have any questions or anything else they want to talk about. Switch off recording device and store all data at SPHSU.

Appendix 7 – Digital consent form for remote research

University of Glasgow

College of Social Sciences

Consent Form

Title of Project: Conducting a process evaluation of a therapeutic community for alcohol and other drugs recovery

Name of Researcher: Mr Martin Anderson
Name of Supervisors: Professor Danny Wight, Dr Mark McCann, Dr Lucy Pickering

I confirm that I have read and understood the Plain Language Statement/Participant Information Sheet for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

I understand that I can withdraw my data from this study up to three months from the date I take part.

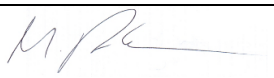
I consent to interviews being audio-recorded	☐
I consent to being included in participant observation	☐
I consent to the researcher accessing my admissions and review data	☐

I acknowledge that participants will be referred to by pseudonym.

I acknowledge that there will be no effect on my status as a resident arising from my participation or non-participation in this research.

- All names and other material likely to identify individuals will be anonymised.
- The material will be treated as confidential and kept in secure storage at all times.
- The material will be retained in secure storage for use in future academic research
- The material may be used in future publications, both print and online.
- I agree to waive my copyright to any data collected as part of this project.
- I understand that other authenticated researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.
- I understand that other authenticated researchers may use my words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form

I agree to take part in this research study	☐
I do not agree to take part in this research study	☐

Name of participant	Signature	Click or tap to enter a date.
Martin Anderson		21/08/20

…… End of consent form ……

Appendix 8 – Topic guide for theory-testing and refinement interviews with project implementers

University of Glasgow
College of Social Sciences

Topic guide for qualitative interviews with programme implementers

Introduction

Thank you for taking part in this interview. As you know, I have been conducting fieldwork with residents of River Garden. The purpose of this interview is to help me check some of the theories I have developed during this fieldwork. These theories are concerned with what aspects of the programme work, for whom, under what circumstances. You are being interviewed because your role in developing or implementing *River Garden* means you will have insights into how it works (or doesn't), the importance of contextual factors, and the likely outcomes of the programme.

Question	Logic
I understand you have been closely involved with the implementation of *River Garden*. From your perspective, what are the things that are most important for me to	Introductory question demonstrates that the programme architecture is the focus of the interview.

understand about how the programme works?	
I am interested in how the San Patrignano, Basta, and Delancey Street models are adapted for Scotland. What have been the most important changes made to the programme? *What issues made these changes necessary? (E.g. a reactive response to circumstances, or a proactive, conscious decision).* *How did these changes come about? Who initiated them?*	Looking for transferability 1 (programme adaptions) In a time-sensitive model, these programme-level outcomes become the new context for the next programme phase.
Which kind of people are more likely to benefit from River Garden than others? *Is resident background important? If so, <u>what is it about</u> background that influences what works?*	Exploring context 1 (resident characteristics)

(Potential prompts: trauma, family, severity, age, class, crime.) *Has it been necessary to change the programme to make it more effective for a broader range of people?* *What would make someone unsuitable to become a resident?*	
What has changed in how well RG was working (or not) in the early stages compared to now? *What was working well?* *What wasn't working well?* *How are resident experiences influenced by the types of work and training available?* *Has this changed from the early stages to now?*	Exploring context 2 (environmental characteristics)

What are the experiences of new residents compared to more experienced residents? *Has this changed from the earlier stages to the later stages?* *What about the balance between the number of new and experienced residents?* *How has the infrastructure developed since the early stages?*	
How has the *River Garden* culture developed since the early stages? *What are the main features of the River Garden culture and how do these aspects of the culture help recovery?*	Exploring context 3 (community culture)
I have seen that residents have a lot of freedom to interact with people outside of the	Exploring context 4 (characteristics of the design/transferability)

programme. What are your thoughts on how much freedom residents should have? *What is it about the level of freedom that works or doesn't work?* *In what ways does interaction with external organisations (twelve-step, NHS services) influence residents?* *Have there been any adaptions to this aspect of the programme?* *How has COVID-19 affected this?*	
To what extent is the programme, and residents, integrated with regional and national recovery movement? *Are there positives for residents engaging with the recovery movement? And are there any negatives?*	Exploring context 4 (policy environment)

Are there any reasons for residents not engaging? *Are residents more or less integrated with recovery than River Garden as an organisation?* *What about other national movements, e.g. #StopTheDeaths, Drugs Research Network Scotland, Harm Reduction?*	
How close has the operational management of *River Garden* been to board policy and direction? *Has this changed since the programme started?* *In what ways has it changed and why?* *How does this affect how the programme is delivered?*	Exploring context 5 (IFDAS board)

What are the pros and cons of board involvement in the programme operation? *Does this lead to the programme deviating from the original board vision? If so, in what ways?*	
What role does peer support play compared to other forms of help, particularly within *River Garden*? *How does it compare to peer support available in twelve-step groups, recovery cafes etc?* *What factors are important in making sure people respond well to peer support?* *Can you provide an example of a time when peer support has worked and one when it has not worked? Why was this?*	Looking for mechanisms 1 (peer support)

Any adaptions to make peer support more effective?	
What is it about providing people with purposeful work activity that helps them recover? *It seems like some residents will respond more positively to structured work than others. What factors would explain that?* *Has it been necessary to adapt anything relating to the work routines?*	Looking for mechanisms 2 (structured purposeful activity)
How do you think the rules and supervision arrangements help residents recover? *What are the most important rules?* *Have residents been invested in the rules or has there been resistance to some rules?*	Looking for mechanisms 3 (rules and supervision)

How do you ensure residents are invested in the rules? *Have the rules been adapted?* *What are the consequences of rule breaking for individual residents and the programme as a whole?* *(Potential prompts: phones, smoking, how the level of freedom from supervision affects rule adherence).*	
It seems that removing people from their previous environment is an essential part of the programme. What is it about offering a residential programme that is important? *What is the most important benefit for residents of being offered long-term (three years) accommodation?*	Looking for mechanisms 4 (abstinent environment)

What sort of factors could lead to somebody becoming unhappy with the environment? *What are the implications when new residents come in with potentially challenging behaviours and issues?* *Could this be avoided? If so, how? (Potential prompt: careful recruitment?)*	
There is a theory that forming new connections is an important aspect of recovery. What are the important factors in ensuring that residents form positive connections? *I have noticed that residents who work together seem to form closer connections. What are the implications of this?* *Have any residents become disconnected or isolated?*	Exploring outcomes 1 (connection)

What are the consequences of resident conflict and how is this managed?	
I have seen some residents achieve long-term abstinence. Others have left the programme and relapsed. What are your opinions about what happened with those who have left? *Why do some people leave and other stay?* *Are there any important changes that could be made to the programme to reduce these occurrences?* *The possibility of relapse and overdose is a recognised risk of abstinence-based programmes, how is this managed?* *How appropriate is it to remove somebody from the programme if they relapse?*	Exploring outcomes 2 (relapse, leaving)

It seems that a lot of work is involved in managing resident health. What is it about the programme that helps someone improve their physical and mental health? *Could the pressures of the programme lead to worse health in some circumstances? (E.g. providing peer support may be stressful).* *Examples of how health is managed?*	Exploring outcomes 3 (physical and mental health)
1. Why are trust and respect so important for residents? I have noticed these are key issues in how they respond to peer support. 2. How important is it to show gratitude for the support they are being given?	Exploring mechanisms (trust, respect, safety, gratitude, motivation etc. Any other mechanisms introduced by the interviewee can be addressed here too.)

3. What are the consequences if residents become unmotivated? 4. What happens if residents feel that there is a lack of reciprocation when it comes to gratitude and respect? 5. Why is the level of freedom to interact outside the programme beneficial to some and destabilising to others? 6. Some difficulties in the early stages seemed to result from the fact the infrastructure was still being developed. What was it about this that caused problems? 7. What is it about developing a robust community culture that helps the programme remain stable?	

My study is interested in the ways River Garden is adapted to work in the Scottish context. Would you agree with these changes that I have noticed? • *Relaxing of smoking policy* • *Reduced freedom for new residents to pursue external support (e.g. twelve-step).* • *Less integration with wider recovery movement.* • *More emphasis on avoiding external relationships.* • *Reduced board oversight in daily operations.* • *Development of cohesive culture (e.g. emphasis on gratitude, surrender).* • *Limiting resident numbers and focusing on building infrastructure.* • *More selective about residents with greater problem severity*	Exploring transferability (validating programme changes observed).

• *Speeding up of entry procedures.* • *Greater fluidity in programme stages (e.g. not automatically progressing someone to peer worker at 12 months).* *What other adaptions may be necessary?*	

<u>Thank you for taking part in this interview</u>.

10 Glossary

TERM	DEFINITION
ABI	Addiction Beliefs Inventory.
ADDICTION	Commonly defined as a chronically relapsing disorder, although this is a particularly medicalised definition.
AOD	Alcohol and other drugs.
BOARD OF TRUSTEES	River Garden has a Third Sector governance structure, including a Board of Trustees who have overall responsibility for its management.
CMRS	Circumstances, Motivation, and Readiness Scales. Likert survey to measure reasons for entering residential treatment.

EGONET	Shortened version of ‘ego network’, referring to the personal social network of an individual.
IMPLEMENTERS	The trustees and staff members who set the project up.
TC	Therapeutic Community, a style of rehabilitation programme where community is used to promote behaviour change.
RECOVERY	A lifestyle change characterised by sobriety, health, and citizenship.
REHAB	Residential rehabilitation, an intervention where psychosocial support and structured activities are provided in a residential setting.

11 References

Adams, P. J. (2016) 'Switching to a Social Approach to Addiction: Implications for Theory and Practice', *International Journal of Mental Health and Addiction*, 14(1), pp. 86–94. doi: 10.1007/s11469-015-9588-4.

Aldridge, J. and Charles, V. (2008) 'Researching the intoxicated: Informed consent implications for alcohol and drug research', *Drug and Alcohol Dependence*, 93(3), pp. 191–196. doi: 10.1016/j.drugalcdep.2007.09.001.

Alexander, B. K. (2000) 'The Globalization of Addiction', *Addiction Research*, 8(6), pp. 271–277.

Anderson, M. *et al.* (2021) '"It's not 9 to 5 recovery": the role of a recovery community in producing social bonds that support recovery', *Drugs: Education, Prevention and Policy*, 28(5), pp. 475–485. doi: 10.1080/09687637.2021.1933911.

Ashton, M. (2008) 'The new abstentionists', *Druglink*, July/Augus, pp. 1–24.

Austrialian Government (2009) *Developing a Performance Story Report: User Guide*. Available at: https://www.cifor.org/wp-content/uploads/dfid/KNOWFOR monitoring tool kit/9. PSR guide.pdf.

Bathish, R. *et al.* (2017) '"Is it me or should my friends take the credit?" The role of social networks and social identity in recovery from addiction', *Journal of Applied Social Psychology*, 47(1), pp. 35–46. doi: 10.1111/jasp.12420.

Becker, H. S. *et al.* (2004) 'On the Value of Ethnography: Sociology and Public Policy: A Dialogue', *The ANNALS of the American Academy of Political and Social Science*, 595(1), pp. 264–276. doi: 10.1177/0002716204266599.

Beckwith, M. *et al.* (2015) 'Predictors of flexibility in social identity among people entering a therapeutic community for substance abuse', *Alcoholism*

Treatment Quarterly, 33(1), pp. 93–104. doi: 10.1080/07347324.2015.982465.

Bell, K. and Salmon, A. (2012) 'Good intentions and dangerous assumptions: Research ethics committees and illicit drug use research', *Research Ethics* , 8(4), pp. 191–199. doi: 10.1177/1747016112461731.

Berkman, L. F. *et al.* (2000) 'From social integration to health: Durkheim in the new millennium', *Social Science and Medicine*, 51(6), pp. 843–857. doi: 10.1016/S0277-9536(00)00065-4.

Berridge, V. (2012) 'The rise, fall, and revival of recovery in drug policy', *The Lancet*, 379(9810), pp. 22–23. doi: 10.1016/S0140-6736(12)60011-7.

Best, D. *et al.* (2010) 'Comparing the addiction careers of heroin and alcohol users and their self-reported reasons for achieving abstinence', *Journal of Groups in Addiction and Recovery*. doi: 10.1080/1556035X.2010.523364.

Best, D. *et al.* (2012) 'Mapping the recovery stories of drinkers and drug users in Glasgow: Quality of life and its associations with measures of recovery capital', *Drug and Alcohol Review*, 31(3), pp. 334–341. doi: 10.1111/j.1465-3362.2011.00321.x.

Best, D. *et al.* (2015) 'Recovery Capital and Social Networks Among People in Treatment and Among Those in Recovery in York, England', *Alcoholism Treatment Quarterly*, 33(3), pp. 270–282. doi: 10.1080/07347324.2015.1050931.

Best, D., Beckwith, M., *et al.* (2016) 'Overcoming alcohol and other drug addiction as a process of social identity transition: the social identity model of recovery (SIMOR)', *Addiction Research & Theory*, 24(2), pp. 111–123. doi: 10.3109/16066359.2015.1075980.

Best, D., Beswick, T., *et al.* (2016) 'Recovery, Ambitions, and Aspirations: An Exploratory Project to Build a Recovery Community by Generating a Skilled Recovery Workforce', *Alcoholism Treatment Quarterly*, 34(1), pp. 3–14. doi:

10.1080/07347324.2016.1113105.

Best, D., Alwis, S. J. De and Burdett, D. (2017) ‘The recovery movement and its implications for policy, commissioning and practice’, *NAD Nordic Studies on Alcohol and Drugs*, 34(2), pp. 107–111. doi: 10.1177/1455072517691058.

Best, D., Manning, V. and Strang, J. (2007) ‘Retrospective recall of heroin initiation and the impact on peer networks’, *Addiction Research and Theory*, 15(4), pp. 397–410. doi: 10.1080/16066350701340651.

Best, D. W. and Lubman, D. I. (2012) ‘The recovery paradigm: A model of hope and change for alcohol and drug addiction’, *Australian Family Physician*, 41(8), pp. 593–597.

Betty Ford Instutute Consensus Panel (2007) ‘What is recovery? A working definition from the Betty Ford Institute’, *Journal of Substance Abuse Treatment*, 33(3), pp. 221–228. doi: 10.1016/j.jsat.2007.06.001.

Biernacki, P. (1986) *Pathways from Heroin Addiction: Recovery Withouth Treatment*. Philidelphia: Temple University Press.

Bitel, M. (2013) ‘The role of social enterprise in recovery from drug and alcohol addiction : a report on a visit to the San Patrignano community , Rimini , Italy Report prepared for the Peter Gibson Memorial Fund’, (June).

Bloor, M., McKeganey, N. and Fonkert, D. (1988) *One Foot in Eden: a sociological study of the range of therapeutic community practice*. London: Routledge.

Bol, D. (2021) ‘Scotland’s drug deaths crisis: SNP Government to expand rehab places to 1,000 by 2026’, *Herald Scotland*, 30 November. Available at: https://www.heraldscotland.com/politics/19752933.scotlands-drug-deaths-crisis-snp-government-expand-rehab-places-1-000-2026/.

Bonevski, B. *et al.* (2014) ‘Reaching the hard-to-reach: A systematic review of

strategies for improving health and medical research with socially disadvantaged groups', *BMC Medical Research Methodology*, 14(1), pp. 1–29. doi: 10.1186/1471-2288-14-42.

Burt, R. S. (2000) 'The Network Structure of Social Capital', *Research in Organizational Behaviour*, 22, pp. 345–423.

Burt, R. S. (2001) 'Structural Holes versus Network Closure as Social Capital', in Lin, N., Cook, K., and Burt, R. (eds) *Social Capital: Theory and Research*. London: Aldine Transaction.

Burt, R. S. *et al*. (2012) 'What's in a name generator? Choosing the right name generators for social network surveys in healthcare quality and safety research', *BMJ Quality and Safety*, 21(12), pp. 992–1000. doi: 10.1136/bmjqs-2011-000521.

Cacioppo, J. T. and Cacioppo, S. (2014) 'Social Relationships and Health: The Toxic Effects of Perceived Social Isolation', *Social and Personality Psychology Compass*, 8(2), pp. 58–72. doi: 10.1111/spc3.12087.

Caudarella, A. *et al*. (2016) 'Non-fatal overdose as a risk factor for subsequent fatal overdose among people who inject drugs', *Drug and Alcohol Dependence*, 162, pp. 51–55. doi: 10.1016/j.drugalcdep.2016.02.024.

Chen, G. (2017) 'Does gratitude promote recovery from substance misuse ?', *Addiction Research & Theory*, 25(2), pp. 121–128. doi: 10.1080/16066359.2016.1212337.

Christakis, N. A. and Fowler, J. H. (2008) 'The Collective Dynamics of Smoking in a Large Social Network', *New England Journal of Medicine*. doi: 10.1056/nejmsa0706154.

Christakis, N. A. and Fowler, J. H. (2013) 'Social contagion theory: Examining dynamic social networks and humanbehavior', *Statistics in Medicine*, 32(4), pp. 556–577. doi: 10.1002/sim.5408.

Chua, V., Madej, J. and Wellman, B. (2009) ‘Personal communities: the world according to me’, *Handbook of Social Network Analysis*, pp. 1–29.

Cloud, W. and Granfield, R. (2008) ‘Conceptualizing recovery capital: Expansion of a theoretical construct’, *Substance Use and Misuse*, 43(12–13). doi: 10.1080/10826080802289762.

Crossley, N. *et al.* (2015) *Social Network Analysis for Ego-Nets*. London: Sage. doi: 10.4135/9781473911871.

Dalkin, S. M. *et al.* (2015) ‘What’s in a mechanism? Development of a key concept in realist evaluation’, *Implementation Science*, 10(1), pp. 1–7. doi: 10.1186/s13012-015-0237-x.

Devlin, A. M. and Wight, D. (2020) ‘Mechanisms and context in the San Patrignano drug recovery community, Italy: a qualitative study to inform transfer to Scotland’, *Drugs: Education, Prevention and Policy*, 28(1), pp. 85–96. doi: 10.1080/09687637.2020.1747397.

Devlin, A. M. and Wight, D. (2021) ‘Transfer and adaptation of a drug recovery model from San Patrignano, Italy to River Garden, Scotland: a qualitative study’, *Drugs: Education, Prevention and Policy*, Online. doi: 10.1080/09687637.2021.1991889.

Dewey, A. and Drahota, A. (2016) *Introduction to systematic reviews: online learning module*, *Cochrane Training*. Available at: https://training.cochrane.org/interactivelearning/module-1-introduction-conducting-systematic-reviews.

Dingle, G. A. *et al.* (2015) ‘Breaking good: Breaking ties with social groups may be good for recovery from substance misuse’, *British Journal of Social Psychology*, 54(2), pp. 236–254. doi: 10.1111/bjso.12081.

Dingle, G. A., Cruwys, T. and Frings, D. (2015) ‘Social identities as pathways into

and out of addiction', *Frontiers in Psychology*, 6(1795), pp. 1–12. doi: 10.3389/fpsyg.2015.01795.

Dossett, W. (2017) 'A daily reprieve contingent on the maintenance of our spiritual condition', *Addiction*, 112(6), pp. 942–943. doi: 10.1111/add.13731.

Douglas, M. (2007) 'Traditional Culture: Let Us Hear No More about It', in Rao, V. and Walton, M. (eds) *Culture and Public Action*. Stanford: Stanford University Press.

Due, P. *et al.* (1999) 'Social relations: network, support and relational strain.', *Soc. Sci. Med.*, 48, pp. 661–673. doi: https://doi.org/10.1016/S0277-9536(98)00381-5.

Duke, K. (2012) 'From Crime to Recovery: The Reframing of British Drugs Policy?', *Journal of Drug Issues*, 43(1), pp. 39–55. doi: 10.1177/0022042612466614.

Durland, M. M. and Fredericks, K. A. (2005) *Social Network Analysis in Program Evaluation*. New Directions for Evaluation.

Eagle, D. E. and Proeschold-Bell, R. J. (2015) 'Methodological considerations in the use of name generators and interpreters', *Social Networks*, 40, pp. 75–83. doi: 10.1016/j.socnet.2014.07.005.

Edwards, G. (2010) 'Mixed-Method Approaches to Social Network Analysis', *ESRC National Centre for Research Methods*, (January).

EMCDDA (2014a) *Residential treatment for drug use in Europe*. Luxembourg.

EMCDDA (2014b) *Therapeutic communities for treating addictions in Europe: evidence, current practices and future challenges*, *Luxembourg: Publications Office of the European Union*. Luxembourg.

EMCDDA (2021) *Europeans Drug Report 2021: Trends and Developments*. Luxembourg: Publications Office of the European Union.

Emmel, N. (2008) 'Participatory Mapping : An Innovative Sociological Method', *Methods*, (Toolkit #03), p. 8.

Fine, G. A. (2003) 'Towards a Peopled Ethnography', *Ethnography*, 4(1), pp. 41–60. doi: 10.1177/1466138103004001003.

Fletcher, A. *et al.* (2016) 'Realist complex intervention science: Applying realist principles across all phases of the Medical Research Council framework for developing and evaluating complex interventions', *Evaluation*. doi: 10.1177/1356389016652743.

Fomiatti, R. D. (2017) 'Hope, Choice and the Improvable Self: A Critical Analysis of "New Recovery" in Australia', (December).

Fomiatti, R., Moore, D. and Fraser, S. (2017) 'Interpellating recovery: The politics of "identity" in recovery-focused treatment', *International Journal of Drug Policy*, 44, pp. 174–182. doi: 10.1016/j.drugpo.2017.04.001.

Fomiatti, R., Moore, D. and Fraser, S. (2018) 'The improvable self: enacting model citizenship and sociality in research on "new recovery"', *Addiction Research and Theory*, 27(6), pp. 527–538. doi: 10.1080/16066359.2018.1544624.

Fook, J. (1999) 'Reflexivity as Method', *Annual Review of Health Social Sciences*, 9, pp. 11–20. doi: https://doi.org/10.5172/hesr.1999.9.1.11.

Gaëlle, A. (2016) 'Who are my people ? Strengths and limitations of ego-centered network analysis : A case illustration from the Family tiMes survey', *FORS Working Papers*, pp. 1–38.

Gilmore, B. *et al.* (2019) 'Data Analysis and Synthesis Within a Realist Evaluation: Toward More Transparent Methodological Approaches', *International*

Journal of Qualitative Methods, 18, p. 160940691985975. doi: 10.1177/1609406919859754.

Glouberman, S. and Zimmerman, B. (2002) *Complicated and Complex Systems: What Would Successful Reform of Medicare Look Like?*, *Commission on the Future of Health Care in Canada*. doi: 0-662-32778-0.

Gossop, M. *et al.* (2003) 'The National Treatment Outcome Research Study (NTORS): 4–5 year follow-up results', *Addiction*, 98(3), pp. 291–303. doi: https://doi.org/10.1046/j.1360-0443.2003.00296.x.

Gossop, M. (2015) 'The National Treatment Outcomes Research Study (NTORS) and its influence on addiction treatment policy in the United Kingdom', *Addiction*, 110(S2), pp. 50–53. doi: 10.1111/add.12906.

Granfield, R. and Cloud, W. (1996) 'The elephant that no one sees: Natural recovery among middle-class addicts', *Journal of Drug Issues*, 26(1), pp. 45–61.

Granovetter, M. (1983) 'The Strenght of Weak Ties: A Network Theory Revisited', *Sociological Theory*, 1(1983), pp. 201–233.

Groshkova, T., Best, D. and White, W. (2013) 'The Assessment of Recovery Capital: Properties and psychometrics of a measure of addiction recovery strengths', *Drug and Alcohol Review*, 32, pp. 187–194. doi: 10.1111/j.1465-3362.2012.00489.x.

Hammersley, M. (2006) 'Ethnography: problems and prospects', *Ethnography and Education*, 1(1), pp. 3–14. doi: 10.1080/17457820500512697.

Hawkins, J. D. and Fraser, M. W. (1987) 'The social networks of drug abusers before and after treatment', *Substance Use and Misuse*, 22(4), pp. 343–355. doi: 10.3109/10826088709027434.

Heilig, M. *et al.* (2021) 'Addiction as a brain disease revised: why it still matters,

and the need for consilience', *Neuropsychopharmacology*, 46(10), pp. 1715–1723. doi: 10.1038/s41386-020-00950-y.

Hennessy, E. A. (2017) 'Recovery capital: a systematic review of the literature', *Addiction Research and Theory*, 25(5), pp. 349–360. doi: 10.1080/16066359.2017.1297990.

Herz, A., Peters, L. and Truschkat, I. (2015) 'How to Do Qualitative Structural Analysis: the Qualitative Interpretation of Network Maps and Narrative Interviews', *Forum: Qualitative Social Research*, 16(1). doi: 10.17169/FQS-16.1.2092.

Hogan, B., Carrasco, J. A. and Wellman, B. (2007) 'Visualizing personal networks: Working with participant-aided sociograms', *Field Methods*, 19(2), pp. 116–144. doi: 10.1177/1525822X06298589.

Horsburgh, K. and McAuley, A. (2017) 'Scotland's national naloxone program: The prison experience', *Drug and Alcohol Review*, 37(4), pp. 454–456. doi: 10.1111/dar.12542.

Hunter, R. F. *et al.* (2017) 'Social network interventions for health behaviour change: a systematic review', *The Lancet*, 390(S47). doi: 10.1016/s0140-6736(17)32982-3.

ISD Scotland (2020) *Prevalence of Problem Drug Use in Scotland: 2015/16 Estimates: A review of definitions and statistical methods*. Available at: https://publichealthscotland.scot/media/6301/2020-06-02_drug-prevalence-2015-16_follow-up-report.pdf.

Kalk, N. J. *et al.* (2018) 'Treatment and Intervention for Opiate Dependence in the United Kingdom: Lessons from Triumph and Failure', *European Journal on Criminal Policy and Research*, 24(2), pp. 183–200. doi: 10.1007/s10610-017-9364-z.

Kaskutas, L. A. *et al.* (2002) 'Social networks as mediators of the effect of Alcoholics Anonymous', *Addiction*, 97, pp. 891–900.

Keen, C. *et al.* (2021) 'Periods of altered risk for non-fatal drug overdose: a self-controlled case series', *The Lancet Public Health*, 6(4), pp. e249–e259. doi: 10.1016/S2468-2667(21)00007-4.

Koob, G. F. and Volkow, N. D. (2010) 'Neurocircuitry of addiction', *Neuropsychopharmacology*, 35(1), pp. 217–238. doi: https://doi.org/10.1038/npp.2009.110.

Krackhardt, D. and Stern, R. N. (1988) 'Informal Networks and Organizational Crises: An Experimental Simulation', *Social Psychology Quarterly*, p. 123. doi: 10.2307/2786835.

Laudet, A. B. and White, W. L. (2008) 'Recovery capital as prospective predictor of sustained recovery, life satisfaction, and stress among former poly-substance users', *Substance Use and Misuse*, 43(1), pp. 27–54. doi: 10.1080/10826080701681473.

Laudet, A. and Humphreys, K. (2013) 'Promoting recovery in an evolving policy context: What do we know and what do we need to know about recovery support services?', *Journal of Substance Abuse Treatment*, 45(1), pp. 126–133. doi: 10.1016/j.jsat.2013.01.009.Promoting.

De Leon, G. *et al.* (1994) 'Circumstances, motivation, readiness, and suitability (the CMRS scales): Predicting retention in therapeutic community treatment', *American Journal of Drug and Alcohol Abuse*, 20(4), pp. 495–515. doi: 10.3109/00952999409109186.

De Leon, G. (1995) 'Therapeutic communities for addictions: A theoretical framework', *Substance Use and Misuse*, 30(12), pp. 1603–1645. doi: 10.3109/10826089509104418.

De Leon, G. (2010) ‘Is the Therapeutic Community an Evidence Based Treatment? What the Evidence Says’, *International Journal for Therapeutic and Supportive Organizations*, 31(2).

De Leon, G. (2015) ‘“The Gold Standard” and Related Considerations for a Maturing Science of Substance Abuse Treatment. Therapeutic Communities; A Case in Point’, *Substance Use & Misuse*, 50(8–9), pp. 1106–1109. doi: 10.3109/10826084.2015.1012846.

Leshner, A. I. (1997) ‘Addiction Is a Brain Disease, and It Matters’, *Science*, 278(October), pp. 45–47.

Levine, H. G. (2002) ‘The Secret of Worldwide Drug Prohibition.’, *Independent Review*, 7(2), p. 165. Available at: http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=7509063&site=ehost-live.

Litt, M. D. *et al.* (2007) ‘Changing Network Support for Drinking: Initial Findings From the Network Support Project’, *Journal of Consulting and Clinical Psychology*, 75(4), pp. 542–555. doi: 10.1037/0022-006X.75.4.542.

Losada, L. and Blanco-villasen, M. T. A. A. (2018) ‘Revisiting the difference between mixed methods and multimethods : Is it all in the name ?’, pp. 2757–2770. doi: 10.1007/s11135-018-0700-2.

Luke, D. A. *et al.* (2002) ‘Assessing the diversity of personal beliefs about addiction: Development of the addiction belief inventory’, *Substance Use and Misuse*, 37(1), pp. 89–120. doi: 10.1081/JA-120001498.

Ma, J. *et al.* (2019) ‘Effects of medication-assisted treatment on mortality among opioids users: a systematic review and meta-analysis’, *Molecular Psychiatry*, 24(12), pp. 1868–1883. doi: 10.1038/s41380-018-0094-5.

Malivert, M., Fatseas, M. and Denis, C. (2012) ‘Effectiveness of Therapeutic

Communities: A Systematic Review', *European Addiction Research*, (Jan). doi: 10.1159/000331007.

Mann, C. J. (2003) 'Observational research methods. Research design II: cohort, cross sectional, and case-control studies', *Emergency Medicine Journal*, 20(54), pp. 54–60. doi: http://dx.doi.org/10.1136/emj.20.1.54.

Manzano, A. (2016) 'The craft of interviewing in realist evaluation', *Evaluation*, 22(3), pp. 342–360. doi: 10.1177/1356389016638615.

Marin, A. and Hampton, K. N. (2007) 'Simplifying the personal network name generator: Alternatives to traditional multiple and single name generators', *Field Methods*, 19(2), pp. 163–193. doi: 10.1177/1525822X06298588.

Maté, G. (2012) 'Addiction: Childhood Trauma, Stress and the Biology of Addiction', *Journal of Restorative Medicine*, 1, pp. 56–63. doi: 10.14200/jrm.2012.1.1005.

Mccartney, D. (2011) 'LEAP and the Recovery Community in Edinburgh LEAP and the Recovery Community in Edinburgh', *Journal of Groups in Addiction & Recovery*, 6(1–2), pp. 60–75. doi: 10.1080/1556035X.2011.570554.

Mcintosh, J. and Mckeganey, N. (2000) 'Addicts' narratives of recovery from drug use: Constructing a non-addict identity', *Social Science and Medicine*, 50(10), pp. 1501–1510. doi: 10.1016/S0277-9536(99)00409-8.

McIntosh, J. and McKeganey, N. (2001) 'Identity and recovery from dependent drug use: The addict's perspective', *Drugs: Education, Prevention and Policy*, 8(1), pp. 48–59. doi: 10.1080/09687630124064.

McKeganey, N. *et al.* (2006) 'Abstinence and drug abuse treatment: Results from the Drug Outcome Research in Scotland study', *Drugs: Education, Prevention and Policy*, 13(6), pp. 537–550. doi: 10.1080/09687630600871987.

McKeganey, N. (2012) ‘Harm reduction at the crossroads and the rediscovery of drug user abstinence’, *Drugs: Education, Prevention, and Policy*, 19(4), pp. 276–283. doi: 10.3109/09687637.2012.671867.

McPhee, I. and Sheridan, B. (2020) ‘AUDIT Scotland 10 years on: explaining how funding decisions link to increased risk for drug related deaths among the poor’, *Drugs and Alcohol Today*, 19(2), pp. 72–85. doi: 10.1108/DAT-05-2020-0024.

McPhee, I., Sheridan, B. and O’Rawe, S. (2018) ‘Time to look beyond ageing as a factor? Alternative explanations for the continuing rise in drug related deaths in Scotland’, *Drugs and Alcohol Today*, 19(2), pp. 72–85. doi: https://doi.org/10.1108/DAT-06-2018-0030.

Meisel, M. K. *et al.* (2015) ‘A social network analysis approach to alcohol use and co-occurring addictive behavior in young adults’, *Addictive Behaviors*, 51, pp. 72–79. doi: 10.1016/j.addbeh.2015.07.009.

Meisel, M. K. and Goodie, A. S. (2015) ‘Predicting prescription drug misuse in college students’ social networks’, *Addictive Behaviors*, 45, pp. 110–112. doi: 10.1016/j.addbeh.2015.01.025.

Mickan, S. and Boyce, R. A. (2007) ‘Organisational behaviour: understanding people in healthcare organisations’, in Jones, R. and Jenkins, F. (eds) *Key Topics in Healthcare Management*. 1st edn. London: CRC Press. doi: https://doi.org/10.1201/9781315377452.

Miller, W. R. (2000) ‘Rediscovering fire: Small interventions, large effects’, *Psychology of Addictive Behaviors*, 14(1), pp. 6–18. doi: 10.1037/0893-164X.14.1.6.

Monaghan, M. and Yeomans, H. (2016) ‘Mixing drink and drugs: “Underclass” politics, the recovery agenda and the partial convergence of English alcohol and drugs policy’, *International Journal of Drug Policy*, 37, pp. 122–128. doi: 10.1016/j.drugpo.2016.02.005.

Moore, G. *et al.* (2014) 'Process evaluation in complex public health intervention studies: the need for guidance.', *Journal of epidemiology and community health*. doi: 10.1136/jech-2013-202869.

Moore, G. F. *et al.* (2015) 'Process evaluation of complex interventions: Medical Research Council guidance', *BMJ (Online)*, 350, pp. 1–7. doi: 10.1136/bmj.h1258.

Morgan, J. R. *et al.* (2020) 'Comparison of Rates of Overdose and Hospitalization After Initiation of Medication for Opioid Use Disorder in the Inpatient vs Outpatient Setting', *JAMA network open*, 3(12), p. e2029676. doi: 10.1001/jamanetworkopen.2020.29676.

Mowbray, O. and Scott, J. A. (2015) 'The Effect of Drug Use Disorder Onset, Remission or Persistence on an Individual's Personal Social Network', *The American Journal on Addictions*, 24(5), pp. 427–434. doi: https://doi.org/10.1111/ajad.12224.

National Records of Scotland (2021a) *Alcohol-specific deaths 2020*. Available at: https://www.nrscotland.gov.uk/files//statistics/alcohol-deaths/2020/alcohol-specific-deaths-20-report.pdf.

National Records of Scotland (2021b) *Drug-related deaths in Scotland in 2020*. Available at: www.nrscotland.gov.uk.

Neale, J., Nettleton, S. and Pickering, L. (2013) 'Does recovery-oriented treatment prompt heroin users prematurely into detoxification and abstinence programmes? Qualitative study', *Drug and Alcohol Dependence*, 127(1–3), pp. 163–169. doi: 10.1016/j.drugalcdep.2012.06.030.

Neale, J., Tompkins, C. N. E. and Strang, J. (2017) 'Qualitative exploration of relationships between peers in residential addiction treatment', *Health and Social Care in the Community*, (June), pp. 1–8. doi: 10.1111/hsc.12472.

Nettleton, S., Neale, J. and Pickering, L. (2011) '"I don't think there's much of a rational mind in a drug addict when they are in the thick of it": Towards an embodied analysis of recovering heroin users', *Sociology of Health and Illness*, 33(3), pp. 341–355. doi: 10.1111/j.1467-9566.2010.01278.x.

Noble, H. and Smith, J. (2015) 'Issues of validity and reliability in qualitative research', 18(2), pp. 34–35. doi: 10.1136/eb-2015-102054.

Nurjono, M. *et al.* (2018) 'Realist evaluation of a complex integrated care programme: Protocol for a mixed methods study', *BMJ Open*, 8(3). doi: 10.1136/bmjopen-2017-017111.

Pahl, R. and Spencer, L. (2010) 'Family, Friends, and Personal Communities: Changing Models-in-the-Mind', *Journal of Family Theory & Review*, 2(3), pp. 197–210. doi: 10.1111/j.1756-2589.2010.00053.x.

Panebianco, D. *et al.* (2016) 'Personal support networks, social capital, and risk of relapse among individuals treated for substance use issues', *International Journal of Drug Policy*, 27, pp. 146–153. doi: 10.1016/j.drugpo.2015.09.009.

Parkinson, J. *et al.* (2018) 'Drug-related deaths in Scotland 1979–2013: evidence of a vulnerable cohort of young men living in deprived areas', *BMC Public Health*, 18(357). doi: 10.1186/s12889-018-5267-2.

Patino, C. M. and Ferreira, J. C. (2018) 'Internal and external validity: can you apply research study results to your patients ?', *The Brazilian Journal of Pulmonology*, 44(3), p. 183.

Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*. London: Sage.

Pawson, R. and Tilley, N. (2004) 'Realist Evaluation', pp. 1–36.

Plummer, M. L. *et al.* (2004) '"A bit more truthful": The validity of adolescent sexual behaviour data collected in rural northern Tanzania using five methods',

Sexually Transmitted Infections, 80(SUPPL. 2), pp. 49–57. doi: 10.1136/sti.2004.011924.

Pluye, P. *et al.* (2009) 'A scoring system for appraising mixed methods research , and concomitantly appraising qualitative , quantitative and mixed methods primary studies in Mixed Studies Reviews', 46, pp. 529–546. doi: 10.1016/j.ijnurstu.2009.01.009.

Public Health Scotland (2021) *Drug-Related Hospital Statistics: Scotland 2020/21*. Available at: https://www.publichealthscotland.scot/media/10239/2021-11-23-drhs-report.pdf.

Putnam, R. D. (2000) *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.

Reeves, C. L. (2010) 'A difficult negotiation: Fieldwork relations with gatekeepers', *Qualitative Research*, 10(3), pp. 315–331. doi: 10.1177/1468794109360150.

Reifman, A., Watson, W. K. and Mccourt, A. (2006) 'Social Networks and College Drinking: Probing Processes of Social Influence and Selection', *Personality and Social Psychology Bulletin*, 32(6), pp. 820–832. doi: 10.1177/0146167206286219.

Reinarman, C. (2005) 'Addiction as accomplishment: The discursive construction of disease', *Addiction Research & Theory*, 13(4), pp. 307–320. doi: 10.1080/16066350500077728.

Richardson, E. and Giles, L. (2021) *Monitoring and Evaluating Scotland's Alcohol Strategy: Monitoring Report 2021*. Edinburgh.

Rogers, P. J. (2008) 'Using programme theory to evaluate complicated and complex aspects of interventions', *Evaluation*, 14(1), pp. 29–48. doi: 10.1177/1356389007084674.

Roy, A. and Buchanan, J. (2016) 'The Paradoxes of Recovery Policy: Exploring the Impact of Austerity and Responsibilisation for the Citizenship Claims of People with Drug Problems', *Social Policy and Administration*, 50(3), pp. 398–413. doi: 10.1111/spol.12139.

Sandberg, S. (2008) 'Street capital: Ethnicity and violence on the streets of Oslo', *Theoretical Criminology*, 12(2), pp. 1362–4806. doi: 10.1177/1362480608089238.

Schaefer, D. R. and Kreager, D. A. (2020) 'New on the Block: Analyzing Network Selection Trajectories in a Prison Treatment Program', *American Sociological Review*, 85(4), pp. 709–737. doi: 10.1177/0003122420941021.

Scottish Government (2008) *The road to recovery: A new approach to tackling Scotland's drug problem*. Edinburgh.

Scottish Government (2018) *Rights, respect and recovery: alcohol and drug treatment strategy*. Edinburgh.

Scottish Government (2020) *Residential Rehabilitation Working Group: recommendations on drug and alcohol residential treatment services*. Edinburgh. doi: 10.1016/j.drugalcdep.2019.03.031.

Scottish Government (2021a) *National Mission to Reduce Drug Related Deaths and Harms*. Available at: https://www.gov.scot/policies/alcohol-and-drugs/national-mission/.

Scottish Government (2021b) *Phase One Report: Good Practice Guide for pathways into, through and out of Residential Rehabilitation in Scotland*. Edinburgh. Available at: https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2021/11/pathways-through-out-residential-rehabilitation-scotland/documents/guidance-good-practice-pathways/guidance-good-practice-pathways/govscot%3Adocument/guidan.

Scottish Government (2021c) *Residential Rehabilitation Rapid Capacity Programme: guidance*. Available at: https://www.gov.scot/publications/residential-rehabilitation-rapid-capacity-programme-guidance/pages/strategic-context-for-rrrcp/.

Scottish Government (2021d) *Scottish Crime and Justice Survey 2019/20: Main Findings*. Available at: https://www.gov.scot/publications/scottish-crime-justice-survey-2019-20-main-findings/.

Smith, L. A., Gates, S. and Foxcroft, D. (2006) 'Therapeutic communities for substance related disorder', *Cochrane Database of Systematic Reviews*. doi: 10.1002/14651858.cd005338.pub2.

Soyez, V. *et al*. (2006) 'Motivation and readiness for therapeutic community treatment: Psychometric evaluation of the Dutch translation of the Circumstances, Motivation, Readiness, and Suitability scales', *Journal of Substance Abuse Treatment*, 30(4), pp. 297–308. doi: 10.1016/j.jsat.2006.02.007.

Stevens, A. (2019) '"Being human" and the "moral sidestep" in drug policy: Explaining government inaction on opioid-related deaths in the UK', *Addictive Behaviors*, 90(August 2018), pp. 444–450. doi: 10.1016/j.addbeh.2018.08.036.

Stout, R. L. *et al*. (2012) 'Association Between Social Influences and Drinking Outcomes Across Three Years', *Journal of Studies on Alcohol and Drugs*, 73(3), pp. 489–497. doi: 10.15288/jsad.2012.73.489.

Strang, J. *et al*. (2003) 'Loss of tolerance and overdose mortality after inpatient opiate detoxification: Follow up study', *British Medical Journal*, 326(7396), pp. 959–960. doi: 10.1136/bmj.326.7396.959.

Sturgeon, N. (2021) 'Drugs policy - update: statement by the First Minister - 20 January 2021'. Edinburgh. Available at: https://www.gov.scot/publications/update-drugs-policy/.

Szalavitz, M. (2017) ‘Squaring the Circle: Addiction, Disease and Learning’, *Neuroethics*, 10(1), pp. 83–86. doi: 10.1007/s12152-016-9288-1.

Tweed, E., Miller R., Matheson, C. (2018) ‘Why are drug-related deaths among women increasing in Scotland?’, *Scottish Government*.

Valente, T. W. (2012) ‘Network Interventions’, *Science*, 336(6090), pp. 49–53. doi: 10.1126/science.1217330.

Valente, T. W., Gallaher, P. and Mouttapa, M. (2004) ‘Using social networks to understand and prevent substance use: A transdisciplinary perspective’, *Substance Use and Misuse*, 39(10–12), pp. 1685–1712. doi: 10.1081/JA-200033210.

Vanderplasschen, W. *et al.* (2013) ‘Therapeutic Communities for Addictions: A Review of Their Effectiveness from a Recovery-Oriented Perspective’, 2013.

Venkataramani, A. S., Bor, J. and Jena, A. B. (2016) ‘Regression discontinuity designs in healthcare research’, *BMJ (Online)*, 352, pp. 1–6. doi: 10.1136/bmj.i1216.

Wagner, K. D. *et al.* (2013) ‘Personal social network factors associated with overdose prevention training participation’, *Substance Use and Misuse*, 48(1–2), pp. 21–30. doi: 10.3109/10826084.2012.720335.

Wakeman, S. E. *et al.* (2020) ‘Comparative Effectiveness of Different Treatment Pathways for Opioid Use Disorder’, *JAMA Network Open*, 3(2), pp. 1–12. doi: 10.1001/jamanetworkopen.2019.20622.

Waldorf, D. (1983) ‘Natural recovery from addiction: Some social-psychological processes of untreated recovery’, *Journal of Drug Issues*, Spring, pp. 237–247. doi: 10.1177/002204268301300205.

Waldorf, D. and Biernacki, P. (1979) ‘Natural recovery from heroin addiction: A

review of the incidence literature', *Journal of Drug Issues*, 9(2), pp. 281–289. doi: 10.1177/002204267900900212.

Wang, S., Moss, J. R. and Hiller, J. E. (2005) 'Applicability and transferability of interventions in evidence-based public health', *Health Promotion International*, 21(1). doi: 10.1093/heapro/dai025.

Webster, R. (2017) 'User-led interventions: an expanding resource?' European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Available at: http://www.emcdda.europa.eu/system/files/attachments/6236/EuropeanResponsesGuide2017_BackgroundPaper-User-led-drug-interventions.pdf.

Weinberg, D. (2002) 'On the Embodiment of Addiction', *Body & Society*, 8(4), pp. 1–19. doi: 10.1177/1357034X02008004001.

White-Campbell, M., Luketic, L. and MacDonald, S. (2014) 'Psychosocial groupwork for older adults having substance use and mental health issues', *Groupwork*, 24(1), pp. 60–80. doi: 10.1921/8101240206.

White, W. L. (2009) 'The mobilization of community resources to support long-term addiction recovery', *Journal of Substance Abuse Treatment*, 36(2), pp. 146–158. doi: 10.1016/j.jsat.2008.10.006.

White, W. L. and Cloud, W. (2008) 'Recovery capital: A primer for addictions professionals.', *Counselor*, 9(5), pp. 22–27.

Whitehead, M. and Dahlgren, G. (1991) 'What can be done about inequalities in health?', *The Lancet*, 338, pp. 1059–1063. doi: 10.1001/jama.1957.02970500014004.

WHO (2020) *International standards for the treatment of drug use disorders: revised edition incorporating results of field-testing*. Geneva: World Health Organization and United Nations Office on Drugs and Crime. doi: 10.18356/0489b59b-en.

Wight, D. *et al*. (2015) 'Six steps in quality intervention development (6SQuID)', *Journal of Epidemiology and Community Health*, 70(5), pp. 520–525. doi: 10.1136/jech-2015-205952.

Williams, A. *et al*. (2016) 'Process evaluation of an environmental health risk audit and action plan intervention to reduce alcohol related violence in licensed premises', *BMC Public Health*, pp. 1–11. doi: 10.1186/s12889-016-3123-9.

Willis, P. and Trondman, M. (2000) 'Manifesto for Ethnography', *Ethnography*, 1(1), pp. 5–16.