UNIVERSITY OF LEICESTER
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An Evaluation of a Structured Alcohol Treatment Programme for Dependent Drinkers

Gillian Le Page

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Abstract

An Evaluation of a Structured Alcohol Treatment Programme for Dependant Drinkers: Gillian Le Page

The current research examined the effectiveness of a structured intervention for dependent drinkers, in doing so it examined three main issues:

1. The impact of waiting times on effective engagement into treatment and whether longer periods of waiting is associated with 'natural recovery' without structured treatment.
2. The impact of a pre-treatment induction group and whether this is associated with better outcomes and a higher likelihood of completing treatment.
3. The effectiveness of a multimodal treatment programme for dependent alcohol service users and whether completion of the programme is associated with better outcomes at the end of the programme and at 6 months' follow-up.

Results: Service users who waited more than 21 days to commence treatment did the same on a number of different treatment outcome measures as service users who commenced treatment within 21 days.

Service users who waited 21 days or more to commence treatment were not more likely to drop out of treatment than service users who commenced treatment within 21 days.

Service users who completed the Induction Group (IG) didn't do any better on post treatment outcomes than non-IG completers

Service users who completed the Induction Group were more likely to complete treatment successfully.

Service users who had not completed the Induction Group were twice as likely to drop out Treatment

Service users who completed the structured intervention did significantly better than the non- completers on the outcomes

Conclusions: The impact of waiting times on engagement in to treatment remains unclear. There is evidence that a pre-treatment intervention helps to retain service users in treatment. There is evidence that a multimodal structured treatment for alcohol dependency is effective pre-to post on outcomes, with treatment benefits maintained at 6 months follow up.

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Chapter One: The Literature Review

Introduction

Alcohol (or ethanol) is a legally available and socially acceptable drug in the United Kingdom for adults over 18 years of age and is classified as a depressant drug due to its suppressant effect on the central nervous system (e.g. Winnington & Hussein Rassool, 1998). It is produced by the fermentation of foods and grains such as barley, hops, potatoes and grapes, producing various kinds of alcoholic drinks including beer, wine and spirits of various strengths, i.e. percentage proof as measured by Alcohol by Volume[1] (Shaw, Ritvo & Irving, 2005).

The normalisation and acceptability of alcohol as being part and parcel of everyday living is epitomised in the quotation by Hoggart (1958): "*A man needs his pint, it helps to make life worthwhile; if one can't have a bit of pleasure like that, then what's there to live for? It is 'natural' for a man to like his beer ..."* (p. 54). The prevalence of alcohol consumption is described by Plant (1986) as being 'the nation's favourite drug', whilst Shaw et al. (2005) suggests that "alcohol has the same addiction potential as cocaine" (p. 26).

This chapter will provide a brief overview of alcohol consumption in the UK, review some of the extensive alcohol literature by considering the empirical and theoretical evidence for the risk factors associated with or predictive of alcoholism and dependence as standalone and integrated theories, consider the evidence for effective alcohol treatment and the role of effective treatment engagement practices and finally consider the role of successive Government Alcohol Policy and Strategies.

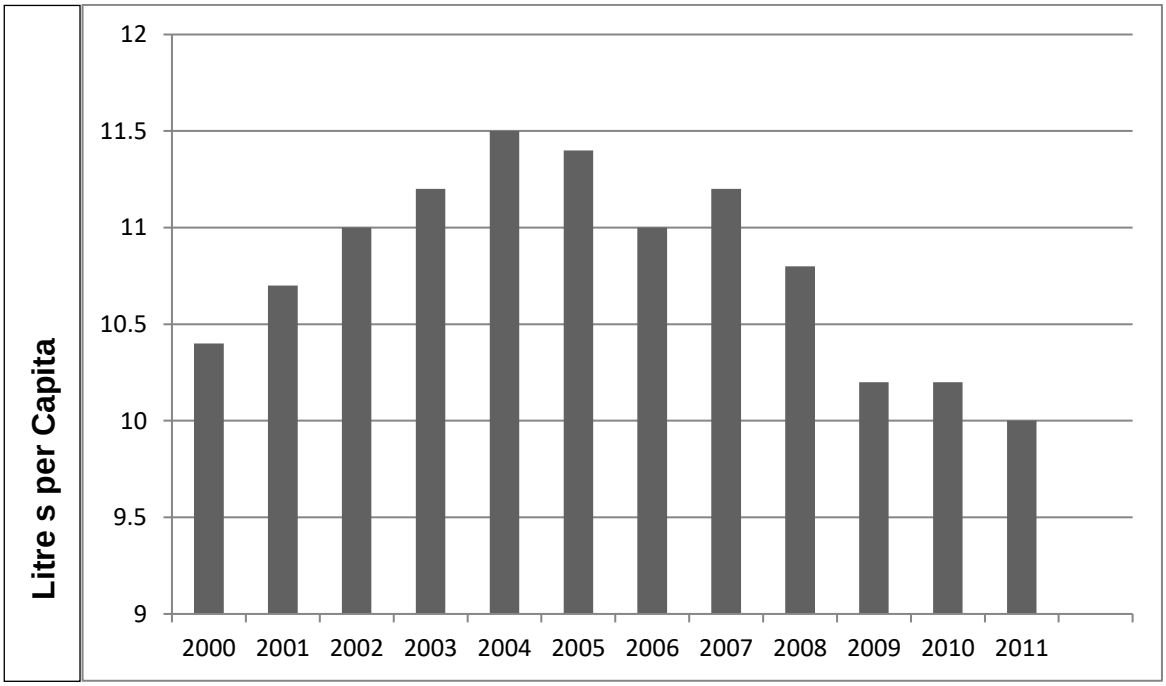
An Overview of Alcohol Consumption in the UK

The history of alcohol consumption in Britain over the last 500 years has been variable. From the late 17th Century to the mid-19th Century, the trend was for

[1] ABV is Alcohol by Volume; the amount of alcohol contained in the size of drink and measured in units with 1 unit being the equivalent of 10ml or 8g of pure alcohol (Drink Aware.co.uk. Accessed 10.40 25/3/17)

consumption per head to decline, despite brief periods of consumption 'spikes' such as the 'gin craze' linked to elevated levels of poverty and social deprivation during the times of significant social change associated with the Industrial Revolution during the 18th Century (House of Commons Report, 2009; Marks, Murray, Evans, Willig, Woodall, Sykes, 2005). By 1960, the trajectory of consumption was increasing and by 2009, was recorded at 9.5 litres of annual alcohol consumption per capita for adults, more than doubling since 1950 (House of Commons Report, 2009).
When the age category of 15 to18 year olds is added, this increases the per capita consumption in 2009 to 10.5 litres, as Figure 1 below illustrates.

Figure 1: UK Total Alcohol Consumption aged 15 and over, 2000 to 2011, litres per capita:



Adapted from Institute of Alcohol Studies (2013). Alcohol Fact Sheet (p. 4).

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However, there does need to be some caution as to how reliable these figures are, with the real possibility of a significant underestimation of per capita figures when considering unrecorded alcohol consumption including homemade or informally produced alcohol, smuggled alcohol, alcohol obtained through cross-border shopping and alcohol consumed abroad (Institute of Alcohol Studies, 2013).

Several reasons are given explaining why alcohol consumption had peaked in 2004, including affordability, availability and increased expenditure on marketing which some critics argue glamorises alcohol consumption (Alcohol Concern, 2011). Others have argued that Government Policies have played a part in encouraging the increase in alcohol consumption over the last 50 years, with the reluctance of the British Government to introduce minimum pricing and the changes to licensing legislation in 2005, which enabled 24 hours opening in pubs and clubs (House of Commons report, 2009). However, whilst the downward trajectory per capita consumption has been fairly consistent since 2004, the most recent projections for the UK in 2015 provided by the WHO Global Status report on Alcohol and Health (2014), is an increase of consumption to 12 litres per capita. This predicted spike the report authors argue, is potentially a public health crisis with a significant cost to the public purse in future years. Given this potential increase in alcohol consumption and associated harms, the fundamental question of why a small but sizeable number of individuals develop alcohol problems becomes increasingly important when considering what constitutes effective alcohol treatment for dependant drinkers. The evidence suggests that the causal factors of alcoholism are complex and multifaceted, with several risk factors identified in the literature which are indicative or predictive of alcoholism and dependence and which are discussed in the next section.

Risk factors associated with and/or predictive of alcoholism

Alcohol dependence, or alcoholism is characterized by a craving for and possibly physical dependence on alcohol, an inability to control drinking, and an increasing tolerance to the effects of alcohol (Petrakis, Gonzalez, Rosenheck, & Krystal, 2002). It is perhaps a commonly held belief that people who have problems with alcoholism do so because they have made a ‘conscious’ choice to drink and have poor self-control so drink excessively, with the harms associated with dependant drinking regarded as ‘self-inflicted’. The resolution to the problem is believed to be to simply ‘stop drinking’ and that the ability to do this lies with an individual’s personal choice and control. However, there are several theories about the risk factors associated with or predictive of alcoholism and supported by empirical evidence that suggest

otherwise in that it is not just about individual choices and control, but can also be influenced by other factors including a genetic disposition, personality traits and environmental circumstances. The next sections of this chapter will consider four main theoretical approaches and their empirical evidence for them.

Biological Theories

Genetic Disposition Theories

The empirical evidence for a genetic basis for alcoholism has expanded in the past 40 years due to new scientific procedures which have enabled researchers to be more sophisticated in the study of genetics and disease (Iyer-Eimerbrink & Nurnberger, 2014). For example, there are several studies reported that examine the concordance between identical and non-identical twins for alcoholism. The empirical evidence found more alcohol dependence between identical twins compared to non-identical twins. This finding is explained by genetic theorists as demonstrating a genetic influence for alcoholism because identical twins share the same genes whilst non-identical twins share about 50% of the same genes (e.g. Edenberg, & Foroud, 2006; Iyer-Eimerbrink & Nurnberger, 2014). Similarly, Family studies which look at the generational familial history of alcoholism between alcoholic and non-alcoholic members have also found evidence supporting the suggestion that the risk for alcohol dependence is determined partly by genetic influence. For example, Iyer-Eimerbrink & Nurnberger, (2014) found a greater degree of concordance for alcoholism in children whose parents were alcohol dependant compared to children of non-alcoholic parents. When considered together, these findings provide evidence for the possibility that there is indeed a genetic component for alcoholism.

However, the identification of any specific genes associated with the risk of alcoholism has been more problematic as the chromosomal regions identified contained hundreds of genes that may be linked to this risk (Edenberg, & Foroud, 2006). There is now more recent empirical evidence of candidate gene associations which establishes specific single genes that might contribute to the risk of developing an alcohol use disorder. This research has found that variations in two specific

genes, ADH4[2] and ADH1B (which are linked to variations in the metabolism[3] of alcohol) seem to be implicated in the risk of developing an alcohol problem (e.g. Iyer-Eimerbrink & Nurnberger, 2014). Conversely, other studies have found that variations in the ALDH2[4] gene are associated with adverse reactions such as nausea, flushing and an increased heart rate when alcohol is consumed (e.g. Forund et al., 2010; Iyer-Eimerbrink & Nurnberger, 2014). Understandably, individuals who experienced these unpleasant symptoms tended to 'curb' their alcohol intake, which researchers concluded indicates that the ALDH2 gene may be a protective factor in developing an alcohol use disorder (Iyer-Eimerbrink & Nurnberger, 2014).

Almasy (2003) attempts to explain why some individuals with a predisposition for developing alcoholism don't, or only become alcohol dependant in later life. He proposes a liability threshold model which is more flexible than the affected/unaffected dichotomy model as it allows for the position on the disease threshold to change with increasing risk, such as changes to mental health, divorce, family problems or age. This Almasy (2003) explains, is why individuals with a genetic disposition to alcoholism may or may not become affected. Equally so, individuals who are not genetically predisposed, may later develop alcoholism because of significant life events.

Other research has identified the GABRA2[5] gene as being associated with adult alcoholism (Edenberg & Foroud, 2006). Variations in GABRA2 gene were linked to drunkenness during adolescence (Dick, Cho, Latendresse, Aliev, Nurnberger & Edenberg, 2013), and a predisposition for conduct problems (Dick, Bierut, Hinrichs, Fox, Bucholz, & Kramer, 2006). Examples of conduct problems and GABRA2 gene association included sensation seeking behaviours in early adolescence (Dick, Aliev,

[2] Alcohol dehydrogenase (ADH4): the enzyme which metabolises alcohol to acetaldehyde.
[3] The rate of alcohol metabolism is influenced by variations in the enzymes that break down alcohol (ADH4 and ADH1B). The presence of these enzymes helps to break down alcohol and eliminate it from the body. Efficient metabolism avoids a build-up of acetaldehyde (a toxic by-product of the break down process) thus avoiding the unpleasant toxic effects caused by acetaldehyde. This means that individuals who efficiently process alcohol from their body are more at risk of developing alcohol dependency firstly because they don't suffer the ill effects of alcohol toxicity so don't 'learn' the need to avoid drinking too much. Secondly, as the alcohol is metabolised efficiently, they can drink more without experiencing the ill effects thereby increasing the risk of becoming tolerant to the effects of alcohol and over time becoming dependant.
[4] Aldehyde dehydrogenase (ALDH2): the enzyme which metabolises acetaldehyde to acetate. Low activity of this enzyme causes a build-up of acetaldehyde resulting in aversive side effects.
[5] GABRA2 gamma-aminobutyric acid type A receptor alpha 2 is associated with increased risk of alcoholism

Latendresse, Porjesz, Schuckit, & Rangaswamy, 2013) and increased rule breaking during adolescence (Trucco, Villafuerte, Heitzeg, Burmeister & Zucker, 2014). What is interesting about the link between a specific gene, alcohol problems and impulsive type of behaviours is the question of how this might interact with or be a contributory factor in the development of certain personality traits. This factor will be discussed later in the chapter.

So, on the one hand genetic theories can provide evidence for the risk factors associated with or predictive of alcoholism, and on the other hand there is evidence that different genes can in fact act as protective factors. However, evidence from twin studies have been inconclusive in supporting a direct genetic effect. For example, Mathews, Carter and Hall (2012) assert that whilst there is a substantial genetic contribution to alcoholism confirmed by twin and adoption studies with approximately 56% of the variance due to genetic factors, 44% variance is due to specific environmental factors (Almasy, 2003; Mathews et al., 2012).

Gene-Culture Theory

Ducci and Goldman (2008) propose an integrated model; Genetics x Environment + Mediating Factors = Increased risk for alcoholism, with mediating factors including availability of alcohol, emotional and social support, peer influence and socioeconomic status. Söderpalm, Gordh and Söderpalm (2011) identify the environmental risk of a family history of alcoholism using self-report questionnaires to confirm this. They concluded that a family history of alcoholism enhances the subjective feelings of being positively stimulated by the alcohol. However, whilst gene-culture theory acknowledges the combined influence of a genetic disposition and environmental influence, it lacks a comprehensive explanation of what it is about the environment which may influence the development of alcoholism. This is discussed later in the chapter.

Prenatal Alcohol Exposure (PAE)

Despite the well documented risks and harms of alcohol dependency, it is generally accepted that the decision to consume alcohol generally lies with the individual's personal choice and responsibility. However, there is one group of individuals that may challenge this position and that is children who are born to mothers who

consumed alcohol during their pregnancy i.e. Prenatal Alcohol Exposure (PAE). Establishing the exact nature of this risk for the development of later alcoholism is a relatively new area of research with the findings of some of the longitudinal studies summarised below.

A study by Baer, Sampson, Barr, Connor and Streissguth (2003) found that heavy episodic drinking in pregnant mothers was significantly associated with the risk of later alcohol consumption in their children at 21 years of age. Of the total sample, 8.1% exhibited signs of mild dependence, with a significant main effect of maternal episodic drinking and no significant main effect of family history of alcohol problems. By way of explanation for this finding Baer et al. (2003) suggested that prenatal exposure to alcohol may result in a drug sensitivity and drug preference as has been suggested in animal models of addiction. This finding potentially challenges a 'stand-alone' genetic explanation of alcoholism, as does the Knopik, Heath, Bucholz, Madden and Waldron (2009) identical and non-identical twin study. They found a significant association between maternal alcohol dependence and PAE and later adolescent alcohol problems in both twin groups, with a nonsignificant finding for the heritability of alcohol problems but main effect for shared environmental factors.

Finally, Hannigan, Chiodo, Sokol, Janisse and Delaney-Black's (2015) longitudinal study suggests another explanation for the impact of PAE on later alcohol use in adolescence. They found that young adults who had been exposed to higher levels of PAE reported higher ratings of pleasantness for alcohol odours. The authors concluded that their findings were consistent with the hypothesis that positive associations or feelings of pleasantness to the odour of alcohol are acquired prenatally and may last for many years. Although this was a very small study (n = 75), Hannigan et al. (2015) pose the question of what this finding might mean for the initiation of drinking, alcohol-seeking and high-risk alcohol behaviours. These are areas which as yet, remain unexamined (Hannigan et al., 2015).

However, there are some empirical weaknesses in the studies that have been discussed. Firstly, the studies used self-reports of alcohol consumption with no apparent test for reliability such as third-party reports or blood and urine testing. Secondly, the generalisability of the findings is necessarily limited due to the relatively small sample size across the studies, so the application of these findings to

any theoretical explanation must be considered as tentative. PAE is an area of research that it is deserving of further investigation as these findings have clear implications for both antenatal clinical practice and treatment approaches.

Personality Theories

Impulsive Personality

There is no consistent and agreed-on definition of impulsivity, instead it is a broad personality construct of various traits (Dick et al., 2010). These multiple facets or traits include emotional urgency, lack of planning[6], lack of perseverance, sensation-seeking, risk taking, novelty seeking, boldness, boredom and unreliability (Depue & Collins, 1999; Pedersen, Walther, Harty, Gnagy, Pelham & Molina, 2016). There are well established links between impulsivity and alcohol use (Dick et al., 2010). On the one hand, there is evidence for the relationship between heavy alcohol use triggering impulsive behaviour (Dick et al., 2010; Marczinski, Abroms, Van Selst & Fillmore, 2005) and on the other hand, empirical support for a predisposition for impulsive behaviour being associated with heavy alcohol consumption. For example, Ray, McGeary, Marshall and Hutchinson (2006) found that adult participants who scored higher on the Impulsivity and Sensation Seeking Scale (IMPSS) prior to participating in an alcohol infusion experiment, recorded increased heart rate response to the infused alcohol compared to participants with lower pre-experimental IMPSS scores. Ray et al. (2006) proposed that participants with heightened heart rate reactivity were potentially more sensitive to the invigorating effects of alcohol rather than the sedating effects reported by the low heart rate reactivity group. This finding correlated with the heightened heart reactivity group being more impulsive and more sensation and reward seeking in their behaviour. Ray et al. (2006) concluded that individuals who were driven to sensation seeking behaviours and were more impulsive were therefore at risk of greater alcohol consumption and the later development of alcohol-related problems.

[6] Lack of Planning is defined as the tendency to engage in a behaviour before thinking about its consequences (Ellingson, Fleming, Vergés, Bartholow & Sher, 2014).

Further evidence of this risk is demonstrated by Janssen, Larsen, Peeters, Pronk, Vollebergh and Wiers's (2014). Their study found that adolescents with high scores on risk-associated personality questionnaires (sensation seeking behaviour) predicted early onset and heavy drinking. The authors also found that there was no evidence that this could be moderated by strict parental rules about alcohol consumption when this cohort was compared to adolescents with lower risk associated personality scores. This second group appeared to respond more positively to strict parental rules about alcohol consumption as they reported drinking less. However, a limitation of this study is that it does not consider the impact of peer pressure on decisions about drinking, a factor which is known to be strong among the adolescent group (e.g. Barnow, Schultz, Lucht, Ulrich, Preuss & Freyberger, 2004; Cruz, Emery & Turkheimer, 2012).

Dick, Aliev, Latendresse, Porjesz, Schuckit, and Rangaswamy (2013), in combining genetic and personality theories for alcoholism, found the GABRA2 gene shared associations with both alcohol use and certain sensation seeking behaviour. Specifically, their study suggests that the risk pathway for alcohol disorder by GABRA2 begins with a predisposition to sensation seeking in early adolescence. Dick, Cho et al. (2013) concluded that based on the above findings, certain personality traits (i.e. impulsivity and sensation seeking) may not only be related to but may mediate or exacerbate the relationship between a genetic predisposition and the subsequent future development of alcoholism.

The interaction between impulsivity and alcohol is therefore unclear because heavy alcohol consumption may contribute to impulsive behaviour or a predisposition for impulsive behaviour may correlate with an enhanced risk for alcohol problems (Dick & Cho, et al., 2010). However, there are some problems with the psychometrics used to measure impulsivity, with different measures being used in empirical research which either measured impulsiveness as a single construct or different facets of impulsivity. This latter approach resulted in some studies finding positive correlations with alcohol misuse on some facets of impulsivity but not others (Dick et al., 2010). This inconsistent approach means that empirical findings cannot be universally applied as some studies may have been less sensitive in the measurement of impulsivity traits which may have impacted on their findings. Therefore, it is not conclusive that a predisposition for impulsive behaviour will

always lead to alcohol use and later alcoholism and the interplay between other environmental factors also need to be considered and which are discussed in the next section.

Environmental Theories

Family History

There is a significant body of literature on the impact of a family history of alcoholism, with environmental theories examining the development or risk of later alcoholism in children and adolescents of these families. Studies have variously found that alcohol expectancies (i.e. positive endorsement of statements that justify alcohol use; e.g. 'alcohol makes me more interesting' or 'alcohol helps me sleep better'), are elevated in females with a family history of alcohol misuse (Pastor & Evans, 2003). The Molina, Donovan and Belendiuk (2010) study found a family history of alcoholism is associated with impulsivity and conduct problems in children and increases their vulnerability to alcoholism during childhood. However, moderating parenting practices such as consistency of discipline style, was found to reduce this risk (Molina et al., 2010), whilst parents who drink but control underage drinking in the home, can reduce the child's involvement in underage alcohol use (Yu, 2003). LaBrie, Migliuri, Lenney and Lac (2010) found that college students with a family history of alcoholism, had more unhelpful expectancies of alcohol use (e.g. drinking as a strategy to solve problems or manage negative feelings), and reported increased weekly alcohol consumption and experienced a greater negative impact of alcohol use compared to students with no family history of problem drinking. Beseler, Aharonovich, Keyes and Hasin's, (2008) longitudinal study with a 10 year follow up found that participants whose alcohol consumption was to mediate negative affect or to facilitate social interactions, were at greater risk of later alcohol dependence if they had a family history of alcoholism. Other studies into the impact of episodic parental heavy drinking found it predicted the initiation and development of alcohol consumption in their children (Pilatti, Caneto, Garimaldi, del Valle Vera & Pautassi, 2013; Vermeulen-Smit, Koning, Verdurmen, Van der Vorst, Engels & Vollebergh, 2012). Studies have also shown that people who have experienced early lifetime

adversity[7] and with a family history of alcoholism are more prone to poor affect regulation, negative moods and demonstrate risky drinking and drug abuse tendencies which elevate the risk for later alcoholism (Goldstein, Flett & Wekerle, 2010; Sorocco, Carnes, Cohoon & Vincent, 2015).

The evidence therefore indicates that there is an association between a family history of alcoholism and the risk of later development of alcoholism in children living in these families, with some studies finding evidence that a family history of alcoholism could predict later alcohol problems. So, whilst there is clearly an environmental impact, the actual developmental pathway to alcoholism is not fully explained by a family history of alcoholism and as has already been discussed, a genetic predisposition may also be a factor.

Parenting Style

Environmental theories also attempt to explain how different parenting styles may lead to later alcoholism. For example, Patock-Peckham, Cheong, Balhorn and Nagoshi's (2001) summary of the literature indicates a strong relationship between self-regulation and early relationships with parents as being important to where a child 'fits' on the ego-control spectrum. At one end of the continuum is behaviour that is described as under controlled, characterised by an inability to delay gratification, poor emotional control and easily distracted. This is consistent with the constructs of impulsivity and sensation seeking and results in poor self-regulation. At the opposite end of the continuum is over controlled behaviour characterized by good impulse control, ability to over- ride immediate gratification needs and filter out distractions resulting in good self-regulation.

Patock-Pelham et al. (2001) propose three distinct parenting styles that influence this relationship:

1. Permissive - child sets own boundaries and makes own decisions with minimal punishment;
2. Authoritarian - parent is highly directive and expects total obedience with strict punishment used to control behaviour;

[7] Early Life Adversity included events before 16 years: experience of physical or sexual abuse, victim of sexual assault/rape (family member / stranger), victim of violent crime and separation from either biological parent 6 months or more.

3. Authoritative - parent provides clear and firm boundaries, with discipline being moderated by warmth, reason and flexibility.

Patock-Pelham et al. (2001) examined the relationship between parenting styles, self- regulation, alcohol use and drinking problems. They found that a permissive parenting style correlated with lower self -regulation and was highly related to later alcohol use problems, whilst authoritative parenting style was predictive of higher self -regulation and drinking control. What is interesting about this aspect of developmental theories is how under control on the ego control spectrum, low self-regulation and a permissive parenting style all fit together. On the one hand, it is postulated that poor impulse control in the child and the need for immediate gratification results in low self -regulation and on the other hand, it is the permissive parenting style which permits a child to set their own boundaries that creates low self-regulation. However, it is worth considering the possibility of a causal relationship between low self-regulation and a permissive parenting style in that the presence of one of these factors influences the other, leading to increased risk for later alcohol problems.

However, Hartman et al.'s (2015) study partly contradicts the Patock-Pelham et al. (2001) findings. They found a differential relationship between paternal and maternal parenting styles in university students, with higher levels of maternal authoritarianism being indirectly linked to both increased alcohol use and alcohol-related problems through more self-concealment and more impaired control over drinking. However, they also found that higher levels of paternal authoritarianism were indirectly linked to less alcohol use and alcohol-related problems through less self-concealment and less impaired control over drinking. What this differential relationship means clearly requires further investigation, but is beyond the scope of the current study. However, it does provide a clear example of the contradictory empirical findings in this area, making it difficult to make any firm conclusions about different parenting styles and later alcohol problems.

In considering the impact of parenting styles further, there is some evidence that harsh and inconsistent parenting (as opposed to authoritarian parenting), is known to be linked with later adolescent alcohol use (Brody, & Ge, 2001), and harsh and

inconsistent parenting styles correlated with parental alcohol use and the risk of later adolescent alcohol problems (Alati, Baker, Betts, Connor, Little, Sanson & Olsson, 2014.) It may well be that the greater influencing factor is the inconsistency of parenting style, leaving the child uncertain of which rules apply and when and that it is the degree of parental alcohol use that is the mediating factor.
However, whilst environmental theories partly explain the potential impact of parenting styles on self-regulation and the later risk of alcoholism, they do not adequately explain the development of impulsivity and sensation seeking traits in the child. As has been discussed earlier, both personality and genetic theories of alcoholism are relevant for a more comprehensive understanding. The theories discussed so far also do not explain the direct developmental influence of how a child might 'model' or imitate parental drinking behaviour and this is better explained by developmental theories such as social learning theory (Bandura, 1977b).

Peer Pressure

There is empirical evidence that the development of alcohol problems is also influenced by peers. Barnow, Schultz, Lucht, Ulrich, Preuss and Freyberger (2004) found a significant correlation between being a member of a delinquent / substance-using peer group fostering positive alcohol expectancies. However, this study was not able to conclude if this was entirely due to peer influence or if adolescents with positive alcohol expectancies tend to seek out delinquent/substance-using groups. A later study by Cruz, Emery and Turkheimer (2012), was able to support the second point made by Barnow et al. (2004), as they concluded that adolescents may select friends who also consume alcohol. However, the Visser, de Winter, Veenstra, Verhulst and Reijneveld's (2013) longitudinal study cast some doubt on the influence of a peer group on later alcohol consumption. In their study, potential participants who were already consuming alcohol were excluded from participating, so Visser et al. (2013) were able to conclude that individuals were not drawn to the peer group because of pre-existing drinking habits within the peer group, but could be influenced by peers who started drinking during the course of the study.

Other research favours the seeking out of a peer group with similar beliefs as being the main influencing factor. For example, Durkin, Wolfe and Clark (2005) found that binge drinkers amongst a college student cohort were more likely to associate with

peers who also enjoyed binge drinking and who had more perceptions aligned to the rewarding consequences of alcohol consumption rather than negative ones. Durkin et al. (2005) concluded that to some extent, binge drinking behaviour is a type of learned behaviour that is shaped by the influence of peers. Preston and Goodfellow's (2006) later study into the influence of a peer group on alcohol consumption extend the notion of family influence on the development of deviant behaviour to include peers. Their study examined two distinct peer groups: 12 to 17 years and 65 years and over. They found that the influence of social learning factors of being around peers who drink (deviant peers) and personal approval of daily alcohol use (acceptance of deviant norms) correlated with increased daily alcohol consumption in both groups and peer disapproval had no effect. Despite some inconclusive and contradictory evidence about the actual influence of peer pressure, these findings do say something about the role of peers in either encouraging or coercing an individual to consume alcohol in the first place or the seeking out of peers where alcohol consumption is the norm, which helps to maintain the drinking behaviour once it has begun. However, the role of perceptions and how these are underpinned by specific thinking styles and the development of a belief system which supports alcohol consumption, needs further explanation and which is best addressed by psychological theories such as social cognitive and behavioural theories of alcoholism.

One potential explanation for how parent/parenting and peers might impact on alcohol use is Bandura's (1977b) Social Learning Theory. This theory proposes that human behaviour is shaped by the interaction between the environment and other people. Akers (2000) emphasises the effect of society on both the learning process and deviant behaviour and proposed two key concepts relevant to deviant behaviour: differential association and definitions. The former relates to the way in which individuals are 'shaped' by these deviant environmental 'norms' and the longer the exposure, the greater the risk that these become adopted as the norm. In families with a family history of alcoholism, Aker's theory proposed that it is this exposure to deviant behaviour (excessive drinking) which creates norms favourable to alcohol use. Ultimately this can lead to the individual being driven to seek out others with

similar definitions or personal beliefs about alcohol to reinforce their sense of normal behaviour (Akers, 2000).

Psychological Theories

Mental illness

Dual diagnosis or co-morbidity is defined as the co-existence of an alcohol misuse or alcohol dependence problem and one or more additional mental illnesses or behavioural disorders (Raistrick et al., 2006). There is significant debate within the substance misuse field around the developmental order of co-morbidity and the subsequent treatment pathway. Broadly speaking there are two main causal relationships between mental illness and alcohol use. Firstly, the excessive use of alcohol leads to mental illness and secondly, alcohol use as self-medication to alleviate the symptoms of mental illness.

Raistrick et al. (2006) provide further clarification on the nature of this causal relationship as follows:

- Alcohol dependence causes mental illness (e.g. alcoholic hallucinosis);
- Intoxication causes mental illness (e.g. pathological intoxication and amnesia);
- Alcohol withdrawal is a direct cause of anxiety and delirium.

Therefore, these three factors are considered as risks for developing mental illness through dependant alcohol consumption, with clear biological explanations for their aetiology. The next three factors see mental illness as being the risk for developing alcohol problems (Raistrick et al., 2006):

- Drinking is a risk factor for individuals with a predisposition to mental illness (e.g. depression and anxiety);
- Psychological vulnerability is a predisposition to problem drinking (e.g. low self-esteem and identity problems);
- Mental illness is a precipitant pf problem drinking (e.g. hypomania, major depression, psychosis and social phobia).

There is empirical evidence that supports alcohol dependence as a coping strategy for managing mental illness. For example, the Olsø, Gudde, Wullun and Linaker's (2012) study with patients with severe mental illness with or without alcohol

problems. They found a large effect size on two items in the Drinking Motives Measure (DMM), concluding that patients with co-morbidity were more likely to use alcohol because they believed it helped with the symptoms of depression or nervousness and to help forget their worries. Fundamentally, this belief system or schema is best understood from a cognitive perspective.

Social Cognitions

The basic principles of cognitive theory are that the way individuals interpret specific situations influences their feelings, motivations and actions (Beck, 1963), with their interpretations of situations being shaped by the individual's beliefs that are triggered by the situation (Beck, 1996). When these beliefs have a negative bias, it can result in an exaggerated feeling of threat or challenge (Beck & Haigh, 2014). These beliefs with a negative bias are known as cognitive distortions or thinking errors and schemas, which are internally stored representations of stimuli, ideas or experiences which shape the belief system relevant to expectancies and self-evaluation rules (Beck, 1967). However, McCusker (2001) challenged the premise that individuals had conscious control over their belief systems arguing that much of the belief system is automatic, reflexive and unconscious. Beck and Haigh (2014) acknowledged this as a gap in the earlier theory, later proposing that schemas are activated automatically as part of information processing which helps us understand and predict what might happen in specific events. The mechanism by which these may be deactivated is by modification of the content of cognitive schemas with corrective information (Beck & Haigh, 2014).

The original cognitive model also did not explain the process of normal adaptations and mechanisms for the activation and deactivation of schemas which Beck and Haigh (2014) later incorporated into a revised Cognitive Theory. They proposed that normal adaptation occurs when cognitive functioning is not impaired by errors in thinking. When thinking errors occur, normal adaptation can transform into dysfunctional adaptation. The mechanism by which this occurs is proposed as being mediated through faulty information processing resulting in cognitive biases, excessive affect and maladaptive behaviour (Beck & Haigh, 2014).

When the generic cognitive model is applied to addiction, several authors propose four different cognitive processes underpinning the addictive behaviour (e.g. Beck,

Wright, Newman & Liese, 1993; Del Boca, Darkes, Goldman & Smith, 2002; Marlatt,1985) and which are:

1. self-efficacy (the ability to refuse a substance);
2. outcome expectancies (the anticipation about the effect of a substance);
3. attributions of causality (belief that the substance use is attributable to internal or external factors);
4. decision making processes (to use or not use).

In the addiction's field, cognitive theory later evolved by combining with behavioural theories to give a more comprehensive explanation for the substance using behaviour. Hasking, Boyes and Mullan (2015) hypothesize a theoretical relationship between Reinforcement Sensitive Theory[8] (RST) and Social Cognitive Theory[9] (SCT) which they argue, supports the need for an integrative model of RST and SCT to explain pathways to alcoholism and dependency. This integrated approach would result in a more targeted treatment approach for individuals with high-levels of reward sensitivity (i.e. emphasis on the pleasurable effect of alcohol) and impulsive drinking behaviour. Behaviour can then be mediated by changing alcohol expectancies from positive associations to focusing on negative consequences and developing drink refusal self-efficacy skills (Hasking et al., 2015).

The basis of RST has its origins in behavioural models enshrined in the principles of reinforcement and punishment contingency i.e. the relationship between behaviour and its consequences (Skinner, 1974). A limitation of a purely behavioural theoretical explanation of alcoholism is that it ignores the individual's cognitions, thoughts and feelings (McMurran & Hollin, 1993). However, Social Learning Theory (Bandura, 1977b) incorporates cognitions as being an important factor in understanding human behaviour and proposes the concept of motivation rather than reinforcement as the

[8] Reinforcement Sensitivity Theory is based on two mediating components that either inhibit drinking behaviour; Behavioural Inhibition System (BIS) or facilitate drinking behaviour; Behavioural Approach System (BAS). Gray (1970 & 1982) suggests that BIS explains why individuals are sensitive to punishment and the avoidance of nonrewarding cues such negative emotions and BAS explains why there are individual differences in reward sensitivity with an association between impulsivity, positive emotions and family history of alcoholism

[9] Social Cognitive Theory is based on the premise that cognitions mediate the influence of environmental factors which in turn influences individual behaviour, with cognitive outcome expectancies formed through the individual's ability to foresee the potential and actual consequences of their behaviour (Bandura, 1986 & 1997). Central to the success of moderating and not acting on impulsive thoughts is the need for self-efficacy.

mechanism by which behaviour might be maintained or changed. Importantly, motivation can be internally or externally driven (McMurran & Hollin, 1993) which Hasking et al. (2015) consider in their theory with the inclusion of internally driven behaviour such as the rewards of drinking and positive expectations and externally driven environmental factors such as a family history of alcoholism.

Hasking et al.'s (2015) hypothesized approach does have some merit towards providing a more integrated model of alcoholism and dependence. However, it is limited in its consideration, as it does not consider the potential mediating impact of genes and what genetic theories say about individual differences in metabolising alcohol and how this may increase or decrease the risk of alcoholism (e.g. Edenberg, & Foroud, 2006; Iyer-Eimerbrink & Nurnberger, 2014)

Hasking et al.'s (2015) model also makes clear reference to the role of impulsivity and the associated failure to consider the negative consequences of excessive drinking. However, this is discussed more in terms of a cognitive behavioural choice as opposed to considering this as a personality trait which other researchers have proposed links to the initiation and maintenance of drinking (e.g. Dick et al., 2010; Marczinski, Abroms, Van Selst & Fillmore, 2005).

Overall, when considering genetic, personality, environmental, developmental and psychological theories separately, it is currently not wise to consider that each individually provides a satisfactory explanation for a causal relationship for risk of or predictiveness of alcoholism. However, considering a combined impact of these three factors may go some-way to gaining a better understanding of both the heritability, environmental and developmental impact on the development of alcoholism. It is beyond the scope of this study to explore this but what this might mean for current treatment approaches will be explored in the discussion section.

Integrated Theories of Alcoholism and Dependence

Whilst each of the theories discussed in this chapter provide some valid explanations for the development of alcoholism and dependency, the empirical evidence reviewed illustrates both the competing and at times contradictory explanations. Perhaps

because of the inherent contradictions there is a paucity of evidence in the research literature that combines the different theories into a complete integrated theory of alcoholism. This is perhaps not surprising as currently, no one explanation can fully account for the multifaceted complexities underpinning alcohol dependency.

Several partially integrated theories have been discussed in this chapter (e.g. gene-culture theory, Ducci & Goldan 2008; genetic and personality theories, Dick et al., 2013). For example, a further consideration is the evidence of the influence of the GABRA2 gene which Dick, Cho et al., (2013) suggest acts as a pathway for alcoholism when combined with a predisposition to impulsivity and sensation seeking behaviour.

This raises more questions than it answers in the sense that does the GABRA2 gene always need to be present for these personality traits to emerge which may then lead to alcoholism, or do other factors exert a combined influence such as family history and parenting styles?

Different environmental theories have also empirically supported that both a family history of alcoholism (Keyes & Hasin, 2008; LaBrie, Migliuri, Lenney & Lac, 2010): Pastor & Evans, 2003), permissive parenting styles (Patock-Pelham, Cheong, Balhorn & Nagoshi, 2001) and harsh and inconsistent parenting (Brody & Ge, 2001) are associated with the risk of developing later alcoholism. In particular, Patock-Pelham et al., (2010) identified a relationship between the child showing traits of an inability to delay immediate gratification needs, poor emotional control and easily distracted. All of these characteristics or traits sit within the impulsivity ‘spectrum’ (Pederson, et al., 2016) and where the parenting style is permissive, these behaviours are not kept ‘in-check’. But without then considering any genetic, environmental or personality influence on this behaviour, it is not possible to say if children of parents with a family history of alcoholism were ‘born’ that way because they inherited one of the ‘faulty genes’, if they were ‘made’ that way by the influence of the parent’s behaviour, or if the behaviour is driven by an impulsive personality type which may also have a genetic component.

This picture is further complicated by both developmental and psychological theories. Bandura’s (1977) Social Learning Theory argues that an individual’s behaviour is shaped by the interaction between the environment and other people.

This offers a similar explanation for the risk or predictiveness of developing alcoholism as the family history theory of alcoholism. Akers (2000) argues that the children of alcoholic parents become 'shaped' by these deviant norms and the longer the exposure to these deviant norms, the greater the risk that they become adopted as being 'normal'. This then creates norms favourable to alcohol use. A similar effect was also found in studies that examined the role of peer groups on alcohol consumption (e.g. Preston & Goodfellow, 2006). Psychological theories have then explained the influence of experience and how these 'shape' individual social cognitions. Beck & Haigh (2014) argued that the individual's life experiences are represented as 'schemas' which are part of the information processing systems which help us understand and predict what might happen in specific events. So, if a child who has lived in a family where excessive alcohol consumption is the norm, it is possible that the child's schemas about what happens within families may develop and incorporate excessive alcohol use as being part and parcel of normal family life.

Further evidence of partial integration between theories can be found in the work of Cornelius, De Genna, Goldschmidt, Larkby and Day (2016). They proposed three possible explanations for their findings that prenatal alcohol exposure was a significant direct predictor of adolescent drinking. Firstly, that there is a familial explanation which is either genetic or rooted in family history of alcohol problems. Secondly, that the prenatal exposure to alcohol caused foetal changes in neurobehavioural effects that may affect drinking behaviour. Lastly, that mothers who drank during pregnancy, were more likely to continue drinking during the child's life time and that it is parental modelling of drinking and normalisation of alcohol use within the family that influenced the adolescent's alcohol use (Cornelius et al., 2016). Whilst this partially integrated theory does give a more comprehensive explanation than a single theory approach, it excludes other factors such as the role of cognitive distortions, parenting styles, peer influence and personality traits. Batra (2004) goes as far as arguing that "there is as yet no consensus on an integrated conceptualization of addiction that combines biological, social and psychological explanations" (p.1504).

With the advances in genetic explanations for the risk of alcoholism, a better understanding of the impact of certain personality types and the contribution of familial and environmental factors, it is perhaps timely to consider a more integrated

theory drawn from the different theoretical perspectives and which could influence different and more holistic treatment approaches underpinned by a cross fertilisation of the different disciplines. Ultimately, this could help refine current treatment options and improve treatment outcomes. As it stands, the lack of an integrated theory for alcoholism and lack of consensus about what causes alcohol problems has resulted in a "confusion on how best to treat them" (Miller & Hester, 2003, p. 2).

Alcohol Treatment: What Works

The importance of understanding the different theoretical explanations for alcoholism and dependency is that it is the research evidence from theoretical models and the risk factors predictive of alcoholism which should inform the different treatment approaches. This would then enable a proper consideration of which approach offers the best opportunity for recovery. However, Drummond, Tiffany, Glautier and Remington (1995), argue that "the problem with understanding 'what works', is that there is a lack of a 'leading theory' for addiction which has resulted in a lack of consensus about the most effective methods of treating alcoholism" (p. 7). The later work of Miller and Hester (2003) and Raistrick, Heather & Godfrey (2006) rejects the 'leading theory' concept, arguing that there is substantial empirical evidence that 'no one approach' is more effective, although Luty (2006) contradicts this, citing continuing uncertainties in the evidence for what works. This is not a new issue. Fingarette (1988) argued that alcohol treatment from the mid 1980's onwards was either lacking research support or being contraindicated by the research evidence. Raistrick, et al. (2006) have a different view, arguing that the quality of treatment outcomes research has improved over the years. However, they also acknowledge that many studies still have methodological deficiencies in relation to treatment variables. This included factors such as one-third of studies failed to describe the therapists' training and one-fifth of studies failed to describe the treatment orientation or format. They also noted that the treatment effectiveness literature tends to underestimate the overall benefits of treatment by focusing the effectiveness of the intervention on drinking outcomes as opposed to some of the wider determinates of health and quality of life. In conclusion, there is some consensus in the literature that there is no 'best' treatment for alcohol problems or 'treatment of choice', but there

are several effective treatments that are known to be of potential benefit to service users (e.g. Hester & Miller, 2003; Raistrick et al., 2006).

Broadly speaking, there are currently two main approaches to alcohol treatment for alcoholism and dependency; pharmacological and psychosocial interventions (PSI). Raistrick et al. (2006) argue that both approaches are best delivered as an integrated treatment package, as on the one hand pharmacological interventions target only a narrow spectrum of alcohol symptoms whilst PSI provides the learning that underpins sustained behavioural change and recovery.

Pharmacological Enhancements to Treatment

Unlike opiate addiction where methadone is commonly used as the first line for opiate substitution treatment (OST), currently there is no equivalent substitute which replaces the physiological effects of alcohol (Raistrick et al., 2006). However, there are several pharmacological medications which are used either for alcohol withdrawal or relapse prevention.

Medically Assisted Alcohol Withdrawal

Medically assisted alcohol withdrawal or detoxification (detox) is the process of rapidly achieving an alcohol-free state (Raistrick et al., 2006). The National Institute for Health and Care Excellence (NICE) clinical guidelines 115 (2011) advise that medically assisted alcohol withdrawal should be a planned process, with service users being properly prepared for treatment to improve outcomes (e.g. Kouimtsidis & Ford, 2011; Kouimtsidis, Drabble, & Ford, 2012).

Currently, NICE CG115 (2011) recommend the use of benzodiazepines (e.g. chlordiazepoxide or diazepam) on a titrating then reduction regime generally over a 7 to 10-day period.

Whilst the evidence that demonstrates the effectiveness of a successfully completed alcohol detoxification in achieving an alcohol-free state is conclusive, maintaining abstinence following detoxification is significantly less effective as a stand-alone treatment (e.g. Kouimtsidis, Sharma, Charge & Smith, 2016; Raistrick et al., 2006). However, research also shows that multiple treatments are counterproductive in achieving sustained recovery because they can exacerbate craving, increase sensitivity to stress and impair the ability to delay immediate gratification (e.g. Duka,

Gentry & Ripley, 2004; Duka et al., 2011; Loeber, Duka, Welzel, Nakovics, Heinz, & Flor, 2009; and Loeber et al., 2010). There is also evidence that medically assisted alcohol withdrawal should be part of a care planned approach that includes intensive follow-up with structured PSI (e.g. Models of Care for Alcohol Misuse, 2006, Raistrick et al., 2006; NICE, 2011,). However, Kouimtsidis et al.'s (2012) study found that more than 40% of service users who successfully completed alcohol withdrawal treatment, did not attend any follow up support. they also found that attending preparation groups for detoxification enhanced engagement with after care support. Whilst the conclusions of this study are based on a small cohort (n = 39), Kouimtsidis et al. (2016) found that 82% of the cohort who had attended the preparation groups engaged in after care support with n = 23 reporting maintained abstinence at 6 months' post detoxification. This is a relevant finding for this study, as the role of preparation for PSI treatment in enhancing engagement is examined in Chapter 5.

Relapse Prevention Pharmacological Interventions

The role of medications for relapse prevention is to support service users in maintaining their treatment goal recovery (i.e. abstinence or controlled drinking). Raistrick et al., (2006) describe two main approaches; sensitizing agents and anti-craving agents. However, sensitizing agents are only suitable for maintaining abstinence, whilst anti-craving agents can help maintain abstinence or controlled drinking. The pre-treatment assessment process informs which agent may be most beneficial to patients (Gueorguieva, Wu, Donovan, Rounsaville, Couper, Krystal, & O'Malley, 2011). Ooteman, Naassila, Koeter, Verheul, Schippers, Houchi, Daoust and van den Brink's (2009) study recommendations suggested a more integrated approach to assessment. They hypothesised that the different anti-craving agents (naltrexone and acamprosate) exert their effects through different genetic characteristics associated with the target neurotransmitters. The study outcome provided evidence to support the hypothesis with Ooteman et al. (2009) concluding that more effective treatments can be offered when genetic information is used in patient treatment matching

There are currently three pharmacological relapse prevention medications available in the UK (NICE, 2011): disulfiram, acamprosate and oral naltrexone.

Disulfiram is a sensitizing agent that acts as an inhibitor of aldehyde dehydrogenase, causing toxicant acetaldehyde to accumulate following alcohol ingestion (Barth & Malcolm, 2010). It is started at least 24 hours after the last alcoholic drink has been consumed (NICE 2011). It works by changing the expectations of drinking behaviour learned through the process of operant conditioning and reinforcement contingency to being something unpleasant and to be avoided i.e. punishment contingency or negative reinforcer (e.g. McMurran & Hollin, 1993; Raistrick et al., 2006). The individual is aware that should they consume alcohol whilst taking disulfiram, they could experience very unpleasant side effects due to the disulfiram inhibiting the production of the enzyme aldehyde dehydrogenase (ALD) in the liver, which metabolises the alcohol and helps to avoid a build-up of acetaldehyde, (a toxic by-product of the break down process) (e.g. Iyer-Eimerbrink & Nurnberger, 2014). Side effects include, flushing, nausea, vomiting, palpitations arrhythmias, hypotension and collapse (Raistrick et al., 2006), which appears to mimic what genetic research has found as the presenting symptoms in individuals who have variations in the ALD2 gene and consume alcohol (e.g. Forund et al., 2010; Iyer-Eimerbrink & Nurnberger, 2014). Effectively, disulfiram changes the positive expectancy effect of alcohol consumption to a negative one.

Whilst NICE (2011) guidelines are not specific in how long disulfiram can safely be prescribed for, anecdotally, it is common practice in treatment services for prescribing to be limited for 6 - 12 months. However, given the implications of recent genetic research and the potential benefit of longer term disulfiram prescribing versus clinical risk of further liver impairment (Chick, 2004), clinical guidelines may in the light of this newer evidence, benefit from further empirical review and this will be fully discussed in the final chapter.

The evidence for the effectiveness of disulfiram in helping service users to maintain abstinence is contradictory. On the one hand, it is argued that there is a clear role for prescribing disulfiram in some service uses as part of a package of care including PSI (Fuller & Gordis, 2004; Raistrick et al., 2006) and better outcomes are achieved with supervised consumption whether that be in a clinical setting where a therapist reminds the service user of the dangers of consuming alcohol and positive reinforcement is given for continued abstinence (Ehrenreich & Krampe, 2004) or

family member supervision (Raistrick et al., 2006). However, a more recent study by Yoshimura et al. (2014) found that supervised consumption was ineffective in enhancing effectiveness.

Perhaps controversially, Polkolainen (2004) also suggest the potential benefits of enhancing effectiveness by controlled exposure of the service user to alcohol whilst taking disulfiram so that they can personally experience the adverse effect (i.e. negative reinforcer) and which they argue will help with ascertaining the correct dosage for patients, as some individuals are more sensitive to the adverse reactions than others. There is partial support for this point in the Yoshimura et al. (2014) study with a small sample size Japanese cohort in a hospital alcohol dependency unit. This study compared patient's positive for the inactive ALDH2 genotype and 3-month outcomes on maintaining abstinence with either disulfiram or placebo, post treatment. They found that disulfiram was more effective in maintaining abstinence in patients with the inactive ALDH2 genotype over placebo. The authors suggested that this may be because they had already experienced adverse alcohol reactions and therefore disulfiram had a greater aversive potential. What is not explained is how patients with the inactive ALDH2 genotype are assessed as alcohol dependent, despite an apparent genetically explained alcohol intolerance. To some degree, this finding seems contradictory.

Acamprosate is an anti-craving agent and is prescribed to help maintain abstinence as it is believed to help control the desire to drink after a period of abstinence (e.g. Rasitrick et al., 2006; Rösner, Leucht, Lehert & Soyka, 2008). Exactly how it works is not clear but it is thought that it acts as a glutamate-partial co-agonist at the NMDA[10] receptor site in the brain i.e. it binds to the receptor and activates it to produce a biological response that restores the homeostasis in NMDA that has become dysregulated in alcohol dependence and withdrawal, inducing an effect of negative reinforcement on addictive behaviour (e.g. Lingford-Hughes & Nutt, 2003; Mason, 2015). Rösner et al.'s (2008) study concluded that acamprosate was shown to only support abstinence and did not influence alcohol consumption after the first drink, therefore was more effective in preventing a lapse. A later study by Maisel, Blodgett,

[10] NMDA: N-methyl-D-aspartate

Wilbourne, Humphreys and Finney (2013) concurs with the usefulness of acamprosate in patients who have successfully completed detoxification as an adjunctive treatment with PSI. Donoghue, Elzerbi, Saunders, Whittington, Pilling and Drummond's (2015) systematic review and meta-analysis of RCT studies across Europe and other countries found that at 6 months' follow-up, patients who had been prescribed acamprosate, were significantly less likely to have lapsed compared to placebo.

Oral Naltrexone is an anti-craving opioid antagonist that works by blocking the neural opioid pathways which form part of the reward circuit in the brain which act as a reinforcer for continued drinking (Raistrick et al., 2006). The main benefit being that it reduces cravings (Vuoristo-Myllys, Lipsanen, Lahti, Kalska & Alho, 2014). An early RCT study by Chick et al. (2000) found no significant difference between naltrexone and placebo conditions in time to first drinking and continued abstinence at 12 weeks, but there was a significant decrease in self- reported cravings in the naltrexone group compared to the placebo group and the naltrexone group consumed on average about 50% less than the placebo group when drinking did occur. This finding may be related as the authors suggest that craving may result from heavy drinking and a stimulus to start drinking, which perhaps suggests that naltrexone may well have some impact on reducing drinking but not abstinence. However, given the small sample size (n = 35 in each group), caution is needed in considering this as a conclusive finding. There is however further evidence from more recent studies with patients taking naltrexone with low risk drinking correlating with a more rapid reduction in cravings compared to high risk drinkers and that medication non-adherence was a major barrier to naltrexone's effectiveness (e.g. Vuoristo-Myllys, et al., 2014).

However, a later study by Donoghue et al. (2015), contradicts Chick et al.'s (2000) finding of no difference between placebo and naltrexone, as this study found that the risk of lapse or relapse at three months was significantly reduced in patients who had been prescribed naltrexone compared to placebo. Gueorguieva et al.'s (2011) review based on the COMBINE study (Anton et al., 2006) calculated trajectories of drinking rather than actual consumption and found that naltrexone was most effective for continuous abstinence in patients who were daily drinkers but had stopped early (i.e.

become abstinent) compared to frequent drinkers. It is unclear if this group became abstinent during the study because of the naltrexone or if they had independently made the decision to become abstinent and the naltrexone helped them maintain this. A further possible limitation of the trajectory approach in this study is that drinking trajectories may change due to unforeseen life events that can quickly destabilise a drinking pattern that is difficult to factor into a trajectory model of alcohol consumption.

The main conclusions of pharmacological enhancements to treatment is that the evidence of standalone treatment is inconsistent in demonstrating effectiveness in maintaining abstinence or controlled drinking. However, effectiveness is significantly enhanced when prescribing is as an adjunct to PSI (e.g. Raistrick et al., 2006; Vuoristo-Myllys, et al., 2014) and it is proposed that acamprosate is better suited to an abstinent state whilst naltrexone is more suitable for managing a lapse (Raistrick et al., 2006). The next section will review the effectiveness of PSI.

Psychosocial Interventions (PSI)

Psychosocial Interventions broadly speaking cover a wide range of formal activities including individual key working focusing on relapse prevention and enhancing motivation. Also included are talking therapies such as cognitive behavioural therapy, motivational enhancement or contingency management, and group family therapy (Drug misuse and Dependence. UK guidelines on clinical management, 2007). Central to the effectiveness of PSI is that the methods have firm foundations in theory and research with the Mesa Grande being considered as providing prima facie evidence of good effectiveness of alcohol focused PSI in therapies with a cumulative evidence score of 25 and above (Raistrick et al., 2006).

One of the largest multicentre randomised clinical trials for alcohol treatment effectiveness conducted in the USA was The Project MATCH (1997) study.

Project MATCH

Project Match (2007) evaluated the effectiveness of three different psychosocial interventions for the treatment of alcohol dependency. Participants were recruited from patients attending after care treatment following inpatient or day hospital treatment and from patients receiving outpatient therapy. Participants from the two groups were randomly assigned to one of three treatments conditions: (1) four-

session motivational enhancement therapy (MET[11]); (2) 12-sessions of either twelve-step facilitation therapy (TSF[12]); or (3) 12 sessions of cognitive behavioural therapy (CBT[13]). Participants in all three treatment conditions showed significant improvements in rates of abstinence and for those who continued to drink, a reduction in daily unit consumption and number of days drinking post treatment was recorded. However, there was no significant difference on the outcomes between the three different treatment modalities. The implication of this finding is that firstly treatment can be effective and secondly that different theoretical approaches produce similar outcomes but that as MET is of a shorter duration, it may be more cost effective than CBT or TSF as it requires less resources to deliver (Raistrick et al., 2006).

However, Cutler and Fishbain (2005) dispute the findings of Project MATCH. They argued that on average only 3% of the post treatment drinking outcomes were attributable to the treatment intervention itself and that this treatment 'effect' appeared to be present after the first session before most of the treatment had been delivered. Cutler and Fishbain (2005) therefore concluded that "current psychosocial interventions for alcoholism are not particularly effective" (p. 9).

United Kingdom Alcohol Treatment Trial (UKATT)

Another large-scale alcohol treatment trial is the United Kingdom Alcohol Treatment Trial (2005a; UKATT) study. The UKATT compared the outcomes of participants who were randomly allocated to either 8 sessions of Social Behaviour and Network Therapy Group (SBNT[14]) (Copello, Orford, Hodgson, Tober & Barrett, 2002) or a group where 3 x 50-minute sessions of Motivational Enhancement Therapy (MET) was offered. Follow-up at 3 and 12 months found that both groups had reduced their alcohol consumption at 3 months, had improved quality of life and improving mental health, and this effect was maintained at 12 months. In conclusion, there was little difference in outcomes between the two treatments with the less intensive MET

[11] MET uses a counselling motivational style with objective feedback to help participants see the benefits of change.
[12] TSF is based providing information on the Twelve Steps to facilitate attendance at AA Meetings
[13] CBT is based on understanding how our thinking affects how we feel and how we behave. Changing what you think about a situation can change the way you feel and behave.
[14] SBNT is based on the principle of using cognitive and behavioural strategies to build social support to help the client modify drinking and maintain changes,

being equally effective as the more intensive SBNT (UKATT 2005a). Like Project MATCH, the three session MET was 48% cheaper than the eight session SBNT.

Whilst the UKATT trial did show that participants reported a significant reduction in daily alcohol consumption in both groups, with a base line average daily unit consumption of 26.8 units (SD = 24.9 to 28.7); at 3 months, it reduced to 17.9 daily units (SD = 16.3 to 19.5) and a slight increase at 12 months to 19.2 daily units (SD = 17.2 to 21.2). However, it appears based on the data that is reported in the study, that participants were still drinking at dependent levels at 3 months (average of 125 units a week). In addition, the benefit of the interventions was becoming lost at 12 months, as average daily unit consumption was increasing again (average of 134 units a week) with the SBNT group increasing slightly more (Raistrick, Bradshaw, Tober, Weiner, Allison, & Healey, 1994). The question therefore of briefer and supposedly more cost-effective treatments comes into question when considering the dependant cohort, as this level of drinking constitutes a continued risk to health and well-being and cost to health services (MoCAM, 2006).

The UKATT trial is an important study in relation to understanding which interventions are more effective in relation to both outcomes and cost. In particular, MET is often described as a brief intervention and as Moyer, Finney and Swearingen (2002) suggest, brief interventions seem modestly effective in opportunistic samples of people who did not realise they were drinking too much (i.e. participants were not actively seeking treatment). However, Rao and Luty (2009) argue that whilst research has shown that brief interventions, delivered in a variety of settings are effective in reducing alcohol consumption among people who drink at hazardous or harmful levels, there is no evidence that opportunistic brief interventions are effective among people with more severe alcohol problems and levels of dependence. It therefore can be concluded as Rao and Luty (2009) suggest, that whilst single methodological briefer interventions like MET or SBNT do have an impact on alcohol outcomes in the short term in a dependent cohort, this reduction is not at a level where alcohol related harm is likely to be significantly reduced and that treatment gains appear to begin to decay at 12 months which potentially compromises sustainable recovery.

The Mesa Grande

The Mesa Grande (Miller, Wilbourne & Hettema, 2003) is an important and influential systematic review of the research into the effectiveness of alcohol treatment. Each treatment was 'ranked' as being effective in its own right on the basis of the available research on the different theoretical approaches to treatment as opposed to comparisons between different treatments. The meta- analysis of 381 studies in the Mesa Grande, concluded that 4.7% of the studies were designed in such a way, that no clear outcome could be identified and that only 38.3% of the studies demonstrated a significant treatment effect. However, there are limitations in the application of the findings to practice because of the relatively small numbers of studies in the different theoretical groups. For example, interventions based on Cognitive Therapy had a 40% effectiveness outcome out of 10 studies reviewed, which in real terms means 6 studies did not demonstrate treatment effectiveness.

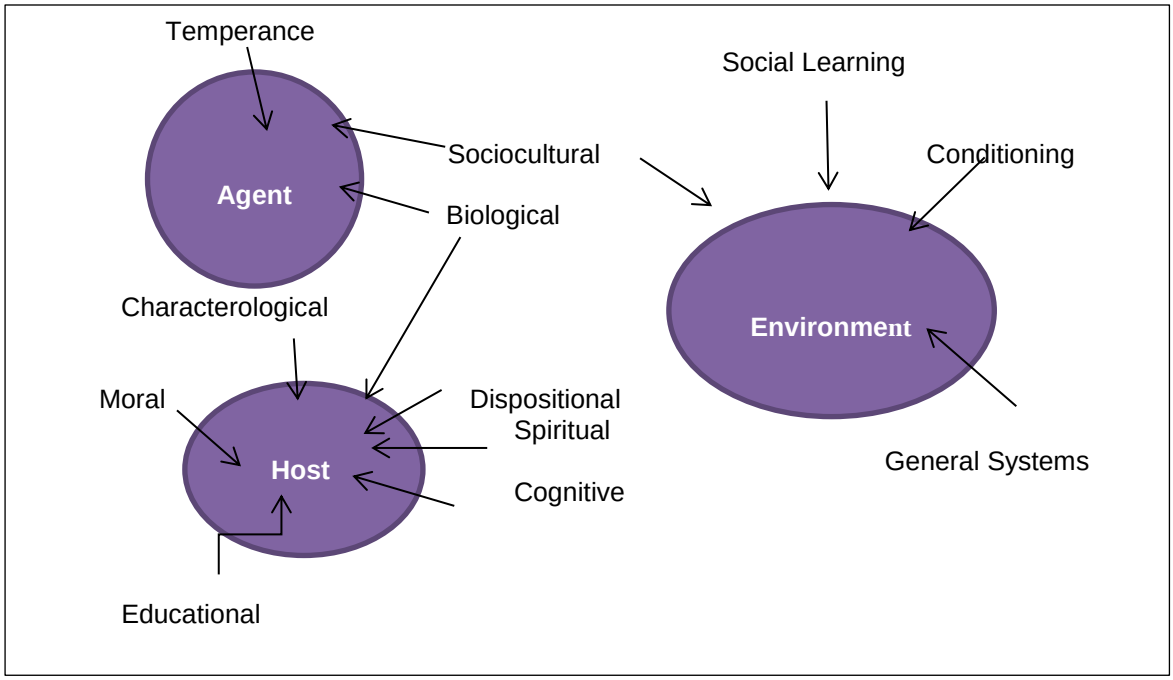
A further limitation of the Mesa Grande study is that it contains no information on whether different interventions are more or less suitable for different drinking cohorts. For example, are the same interventions that are successful with hazardous drinkers also effective for dependent drinkers? This is an important issue, as dependent drinkers are likely to have more complex and entrenched problems associated with and underpinning their drinking behaviours.

Informed eclecticism

Miller and Hester (2003) argued that there is no one approach for the treatment of alcohol problems that is any more effective than another and that an eclectic approach to treatment which offers a menu of options to address the diverse needs of people with alcohol problems is the way forward i.e. an informed eclecticism that is based on the Public Health Model. This model proposes that treatment or an intervention should be organised around and target the 3 components or causal factors of a Public Health 'disease' model. Specifically, the Agent; i.e. the alcohol itself as being the cause of the problem. The Host; considers individual risk factors or susceptibility to alcohol misuse. The Environment; the extent to which alcohol use is promoted or discouraged.

The Public Health model proposes that the three different components should be targeted simultaneously to maximise effectiveness and different theoretical models will do this better than a single approach (Miller & Hester, 2003). This is shown in Figure 2 below:

Figure 2: Public Heath Model for a Multimodal approach to Alcohol Treatment.



Adapted from Miller and Hester (2003).

Multimodal treatment

NICE (2010c) defines this multimodal approach as a combination of several interventions which have been developed and evaluated as standalone interventions for alcohol misuse. Components of a multi-modal treatment could include motivational aspects (such as Motivational Enhancement Therapy), Twelve Step Facilitation, AA or self-help group participation, group counselling, Cognitive Behavioural Therapy based relapse-prevention training and psycho-educational sessions. The intention is that by combining several effective intervention approaches, the combined treatment will enhance treatment outcomes.

This multimodal approach is established practice in offending behaviour treatment and McMurran, (2006) argues that there is much to be learned by community alcohol

treatment researchers and programme designers from the offending behaviour body of research. This includes the recognition of the need to use more than one theoretical approach to enhance treatment effectiveness. There is evidence of 'cross pollination' between the two disciplines of substance misuse and offending behaviour when delivering treatment in a hospital setting. Long, Kidger and Hollin (2001) developed an evidence based multimodal in-patient treatment programme for dependent alcohol service users which incorporated several different theoretical approaches to treatment including Cognitive Behavioural Therapy Functional Analysis to identify cues and triggers to drinking and the beliefs that underpin these, self-reward (Contingency Management), Changing Lifestyle (Relapse Preventions – alternatives to drinking), Relapse Prevention, coping skills, (Motivational Interviewing), Dealing with Negative Emotional states (CBT), Progressive Muscle Relaxation, Assertiveness Training and Problem solving. The outcomes for a sequential study design, within group analysis showed a significant increase in available days abstinent, a significant reduction in daily unit consumption and a significant reduction in alcohol related problems at 6 and 12 months follow up (Long, Williams & Hollin, 1998).

Other examples of multimodal programme outcome research in the alcohol field include a study by Davis, Campbell, Tax, and Lieber, (2002) which compared a minimal treatment (MT) intervention with a standard treatment (ST) for alcohol dependent patients. The ST group incorporated a multimodal approach through its inclusion of alcohol education (psycho-educational), leisure education sessions (Social Behaviour Network Therapy), supporting sobriety (relapse prevention) and Twelve Step Facilitation to engage with AA groups. In contrast, the MT group saw a selection of different videos once a week and a monthly discussion group focused on the film (psycho-educational). At the end of the 6-month programme, although both groups had significantly reduced their number of drinking days, participants in the ST group significantly reduced their daily unit consumption and a greater proportion in the ST group achieved abstinence at the end of the programme. Davis et al. (2002) therefore concluded that a multi-modal intervention programme was more effective than minimal treatment. However, they also commented that a limitation of their study was the lack of standard manualised treatment in the ST group and some variations in outcomes may be due to individual therapist characteristics and

theoretical orientation that may have influenced the delivery style of group discussions.

The John, Veltrup, Driessen, Wetterling and Dilling (2003) study compared a multi-modal group work programme with individual counselling. Both interventions were based on the principles of motivational interviewing, relapse prevention, and psycho-educational films. At six months follow up there was little differences between the two groups on outcomes with the exception that participants in the group work programme were more likely to engage in post treatment self- help support but this was not maintained at 12 months follow up. What is perhaps significant about this finding is that access to self-help groups is contact with peer groups that may strengthen self-efficacy and self-change and is an important consideration in helping build resilience and sustainable recovery.

Much of the empirical evidence into the effectiveness of different PSI modalities that has been discussed has held over time. For example, Blonigen, Finney, Wilbourne and Moos (2015) meta-analyses found that the most effective psychosocial modalities for treating alcohol use disorders are cognitive-behavioral interventions, motivational interviewing (MI) and motivational enhancement therapy (MET), behavioral couples and family therapies, and 12-Step facilitation (TSF) but the evidence for which is more effective remains very limited with Lenaerts et al. (2014) being clear that the evidence base for effective alcohol treatment is still plagued by methodological limitations which make comparisons difficult. In part, this is due to a lack of comparators or control groups, limited sample size, different measures of 'success' and the overall lack of high quality studies in this area. But they also concluded that an integrated continuing care model holds the best approach for this group who present with such complex and multiple needs. This appears to be a similar philosophy to the multi modal model of integrated treatment that has already been discussed and which is the model utilised in the current study.

Temperance Models

Whilst more scientific approaches to theoretical modelling may be dismissive of the Temperance Model of alcoholism most commonly found in the philosophy of

Alcoholics Anonymous (AA), citing poor methodologies, outdated ideas, researcher bias and size effect limitations to exclude inclusion in the literature, (Streifel & Servanty-Seib, 2006), the AA model may well be an early example of a more integrated model of alcoholism. Clearly, the AA model includes components of both behavioural theory and cognitive social learning theory embedded in the 12 Steps, which teaches people to think and behave differently, focusing on the negative consequences and harms caused (AA, 1976). The AA model also acknowledges the role of uncontrollability, (AA, 1976) which later personality theories identify as traits associated with developing alcoholism such as sensation seeking and impulsiveness (Streifel & Servanty-Seib, 2006). Mental health and psychiatric illness are also recognised as contributory factors. Finally, there is something about the idea that the action of alcohol on these chronic alcoholics is a manifestation of an allergy, causing them to crave more and these allergic types can never safely use alcohol in any form at all (AA, 1976). This 'idea' may have a more scientific explanation through the application of genetic theories. For example, the role of ADH4 and ADH1B genes in the metabolism of alcohol (Iyer-Eimerbrink & Nurnberger, 2014), could be the mechanism responsible for facilitating the 'allergic' or 'abnormal' reaction to alcohol, which allows individuals to consume alcohol excessively without experiencing some of the usual unpleasant side effects of intoxication and correlates with the risk for the development of or predisposition to alcoholism.

Despite this seemingly more integrated approach, there is little empirical evidence to support AA's effectiveness. However, a small number of studies have found some evidence of effectiveness. For example, Moos and Moos (2004) found that participants who engaged with AA meetings and attended for longer had better alcohol related outcomes at 1 and 8 years than participants who dropped out of AA meetings. Bliss, (2007) notes that participants found the intensity of support AA can offer as being seen as one of the keys to its success as it provides a sense of 'fellowship' and mutual support through group meetings and sponsorship.

It is interesting to note that one of the strengths of AA is seen to be the mutual support offered through attending group meetings. This contrasts with the long-recognised problems with the level of engagement in group work in a more formal treatment setting and which are discussed next.

Group Work

Sobell and Sobell (2011) define group therapy as a way to describe a wide variety of therapeutic activities including education, co-dependency, support and aftercare which are delivered in either a didactic format or facilitated interaction. The main benefit of delivering treatment in groups is firstly it offers social support to clients and secondly multiple clients are treated concurrently so therefore, is less resource intensive than individual therapy (Sobell & Sobell, 2011). Group work or therapy has a long history in the treatment of substance misuse in the USA (e.g. Weiss, Jaffee, deMenil & Cogley, 2004) with various studies showing the benefits of group work such as being cost and time efficient while maintaining positive outcomes (e.g. Timko, Laudet & Moos, 2016; Sobell & Sobell, 2011). The inclusion of group work as a treatment modality was formalised in the UK by the National Treatment Agency through the classification of a Structured Day Programme treatment modality, with a primary focus of delivering treatment through structured group work.

However, given the popularity of group therapy by service providers, there is a lack of research into its effectiveness as a treatment (Sobell, Sobell & Agrawal, 2009), with many of the studies having methodological problems (Weiss et al., 2004). Weiss et al. (2004) reviewed 24 comparative studies of various combinations of group work and individual therapy, concluding there were no differences on outcomes between groups and individual therapy and that no one style of group therapy was better. But there remains a problem with being able to demonstrate that it is the targeted intervention that has resulted in change, as many clients have engaged with treatment prior to either the group or individual therapy, with many receiving concurrent support such as self-help or after care groups (e.g. Sobell et al., 2009; Sobell & Sobell, 2011).

Sobell et al.'s (2009) study did address some of the methodological limitations of earlier studies by comparing the same intervention delivered either in a group or individual setting, with participants being randomly assigned to each condition. The intervention targeted non-problematic drinkers. A manualised delivery method was utilized, with treatment fidelity being monitored through analysis of taped sessions and homework completion. To enhance engagement with group therapy, participants were given a leaflet to explain the benefits of groups. Overall, engagement was good in both conditions, with no difference on outcomes between both conditions (i.e.

reduction in alcohol use post treatment and at 12 months' follow-up). However, participants in the individual therapy condition were more satisfied with both the quality of the intervention and the therapist relationship. It was also noted that significantly more participants, if they had been given a choice, would have selected individual therapy. However, over time this view changed as a repeat retrospective evaluation at 12 months found that significantly more group participants would have selected group therapy than individual therapy if given the choice. Sobell et al. (2009) explain this shift by suggesting that there is some pre-existing bias against group therapy, which to some extent was lessened by their experience of being in a group.

Given the commonality of group work in treatment services, this finding is a concern as it must be considered that participants may well dismiss group work as being a helpful intervention due to unfounded fears and expectations. Whilst Sobell et al. (2009) found no difference in drop-out rates between the two conditions once engaged, other studies have found that retention in group work can be more problematic. For example, Brownlee, Curran and Tsang's (2017) qualitative study found specific factors linked to drop out rates in their group work programme included not wanting to disclose in front of other group members, disliking crowds, and being able to trust other group members. Other group member's stories creating triggers for lapse and repetitiveness of discussions were also factors associated with attrition. Brownlee et al. (2017) concluded that standard group therapy increased the risk of premature drop-out from treatment but the strength of the therapeutic alliance, exploration of treatment expectations and understanding barriers to treatment may influence treatment retention. Other qualitative analysis studies have found that single-gender groups can increase treatment satisfaction and improve treatment outcomes (e.g. Greenfield, Cummings, Kuper, Wigderson & Koro-Ljungberg, 2013; Sugarman, et al., 2016).

Overall, it is concluded that group work can be an effective treatment modality but preparing participants for group work and addressing concerns can be a significant factor in both engagement and retention (Sobell & Sobell, 2011).

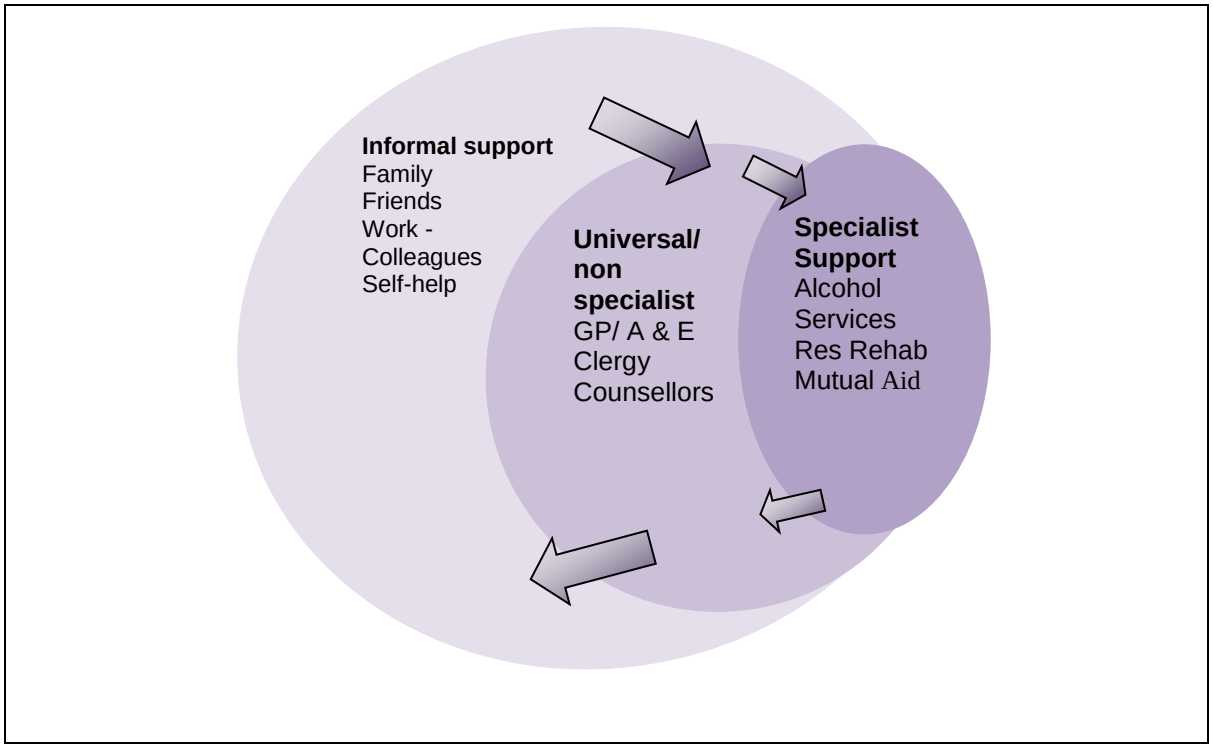
The next section of this chapter reviews the literature on the wider context of effective alcohol treatment for dependent drinkers such as the impact of waiting

times on engagement into treatment and the impact of preparation for treatment. Whilst the evidence concludes that there is no one best approach for effective treatment (Miller & Hester, 2003), there is still contradictory evidence in relation to the question concerning the concept of 'natural recovery' and if dependent alcohol service users benefit from treatment at all.

Enhancing Treatment Engagement for Dependent Drinkers

Marshall, Humphreys and Ball, (2010) argue that how people recover from alcohol problems is multifaceted, with a wide range of different kind of support being effective. This includes the more informal support from self- help, families, friends, and work colleagues, to non-specialist professional support such as the Clergy, counselling provision, GPs, A & E or Social Services. At the other end of the continuum are specialist services including Community Alcohol Services and Residential Rehabilitation or mutual aid groups such as AA and SMART (Marshall et al., 2010). In principle, this multifaceted approach is a 'stepped care system' where individuals 'pass through' each stage (see Figure 3 below) until their treatment goal is sustained (Bower & Gilbody 2005; NICE 2010c), or they lapse and drop out, re-entering treatment when they are ready to go through the treatment process again until the desired outcome is reached (Prochaska et al., 1991).

Figure 3: Stepped Care Recovery Model of Treatment for Alcohol Problems:



Adapted from Marshall et al. (2010)

Despite proposing this wide range of services in a stepped care model of recovery, Marshall et al. (2010) suggest that most drinkers who get better do so without ever accessing this sector i.e. specialist support which Weisner, Matzger and Kaskutas (2003) refer to as 'natural recovery'. This is not disputed, but there does not appear to be any methodologically reliable empirical evidence such as matched randomised control studies comparing 'natural recovery' (i.e. no treatment) with a treatment cohort as it would not be ethically acceptable to withhold treatment.

Treatment Engagement

Accepting the empirical evidence that some service users with alcohol problems who are referred, do benefit from alcohol treatment, one aspect of being effective is engaging service users into treatment. This is a critical issue because there remains considerable concern that approximately only a third of alcohol dependent individuals who were referred to treatment, accessed treatment (ANARP, 2004), with Mitchell and Selmes (2007) suggesting that service users of alcohol and substance

misuse services probably having the highest non-attendance rates of all service user groups.

There are several factors cited as reasons why service users don't engage with treatment and these include accessibility, social factors, poor motivation, or forgetting to attend (Booth & Bennett, 2004; Booth, Dale, Slade & Dewey, 1992; Sawyer, Zalan, & Bond, 2002; Marshall et al. 2010). Waiting times may also be a barrier to accepting and being retained in treatment (Capoccia, Cotter, Gustafson, Cassidy, Ford, Madden & Molfenter, 2007; Flemming & Lewis, 1987; Leigh, Ogborne & Cleland, 1984; Hoffman, Ford, Tilloston, Choi & McCarty;2011Orford & Edwards, 1971; Rees, Beech & Hore; 1984; Sutherland, Stockwell & Edwards, 1985; Redko, Rapp & Carlson, 2006;). Conversely, it has also been argued that waiting times may also provide an opportunity for 'natural recovery' (Redko, Rapp & Carlson, 2006) or make no difference at all to engagement and recovery (Leigh et al., 1984; Mayer, Merrill, Needham, & Myerson, 1965). The issues around the role of pre-treatment work to engage service users in treatment are explored in more detail in Chapter 5.

Government Policy

Underpinning both Government policy and strategy has been the emerging evidence over the last decade of the increasing harm caused by alcohol misuse. There are extensive Government statistics on alcohol related physical harm, some of which will be considered below.

Alcohol when consumed at toxic levels, can lead to alcohol poisoning, respiratory failure, coma and death (Shaw, Ritvo & Irvine, 2005), and places an enormous burden on the tax payer through the associated cost to health services.
The level of increased risk to health in harmful drinkers compared to the general population is summarised in Table 1 below:

Table 1: Increased risks of ill health to harmful drinkers compared to the general population.

Condition	*Men (increasing risk)*	*Women (increasing risk)*
Hypertension (high blood pressure)	4 times	2 times
Stroke	2 times	4 times
Coronary heart disease(CHD)	1.7 times	1.3 times
Pancreatitis (inflammation of the pancreas)	3 times	2 times
Liver disease	13 times	13 times

Source: House of Commons Report (2009).

In 2006/07 the cost to the NHS in England for alcohol related treatment was estimated to be £ 2.7 billion per annum This accounted for the costs of hospital inpatient stays, day visits, outpatient visits, A&E visits, ambulance services, GP consultants, practise nurse consultants, lab tests, drugs to treat alcohol dependency, specialist treatment services, and other healthcare costs (e.g. Statistics on Alcohol: England, 2009; NHS Information Centre, 2011). Latest estimates put this figure at £3.5 billion annually (Alcohol Concern, 2016).

The House of Commons Report (2009) concluded that alcohol misuse accounts for almost 10% of the disease burden in the NHS, with alcohol related hospital admissions rising year on year in all age groups but most rapidly in the 35 to 49 age group from just over 30,000 in 1995/96, to more than doubling to over 70,000 in 2005/6 (HES, 2006). Data for the UK in 2012/13 sees a significant increase to 1,008,850 alcohol related hospital admissions where alcohol-related disease, injury or condition was the primary reason or where the admission was for another reason and alcohol is the secondary diagnosis (Alcohol Concern, 2016).

The impact of excessive alcohol consumption cannot be underestimated. For an increasing number of individuals who consume alcohol harmfully or dependently, ultimately, this may lead to their premature death. In 1991, alcohol-related deaths peaked at around age 70 for both men and women, but by 2005 the peak age was around 55–59 for men and women (House of Commons Report 2009) and alcohol-related death rates have more than doubled since 1979, with more people dying at a younger age (Safe & Sensible, 2007). To illustrate this point further, in 2005, 4,160 people in England and Wales died from alcoholic liver disease, an increase of 41% since 1999 when the number of deaths from this disease was 2,954 (Safe & Sensible, 2007).

However, the data on alcohol related deaths may have limitations. Specifically, deaths could be under reported which may in part be due to definitions for how alcohol-related deaths are recorded and vary between official sources (Health Statistics Quarterly, 2007). For example, many definitions do not include other diseases where alcohol has been shown to have some causal relationship, even when alcohol is not specifically mentioned on the death certificate. Other external causes of death, such as road traffic and other accidents are also excluded (Breakwell, Baker, Griffiths, Jackson, Fegan, and Marshall, 2007). This point is illustrated by considering the 2014 data where there were 8,697 alcohol-related deaths registered in the UK (14.3 deaths per 100,000 of the population). However, it is suggested that if all deaths where alcohol is a contributory factor are included, this would be significantly increase the number to 21,512 alcohol related deaths in the UK in 2013 (Alcohol Concern, 2016). Therefore, this more inclusive methodology gives a more accurate reflection of the actual nature and ‘cost’ of the physical harm associated with alcohol misuse.

There may also be issues of regional variation. For example, Romeri, Baker and Griffiths (2006) describe a causal relationship between death rates and measures of deprivation which Morgan and Baker (2006) define as being unemployed, living in overcrowded accommodation, not a car owner and low social class including those employed in partly skilled and unskilled occupations. Breakwell et al. (2007) provide some evidence for a regional variation in alcohol-related death rates with areas with the highest rates of social deprivation recording the highest rates of alcohol-related

deaths (Health Statistics Quarterly, 2007). However, recorded deaths whilst still high, have fallen since peaking in 2008, but the rate is still higher than 1994 when recording alcohol related deaths began. Whilst recorded deaths for women are lower than men, in 2014 the alcohol related death rate for women in the UK was significantly higher compared to 1994 (ONS, 2016). Whether this means anything in relation to how women access treatment is discussed in this current study, which found significantly less alcohol dependant females accessed structured treatment compared to men.

The preceding discussions have clearly outlined the significant harm to health and well-being and associated economic burden to individuals, families and the wider community caused by alcohol misuse. With the trajectory of physical harm clearly showing an increasing trend, the Government acknowledged the need to give some strategic steer on the problem and subsequently released several policy and strategy documents over the past decade to coordinate and drive forward change to improve outcomes. The next section reviews and summarises the Governments' strategies and policies that have influenced and directed the national approach on how to minimise and reduce the impact of alcohol related harm.

Government Strategies 2004 - 2012

The Government launched three successive Government Alcohol Strategies in the years between 2004 and 2012: Alcohol Harm Reduction Strategy for England, (2004); Safe, Sensible, Social, (2007) and The Governments Alcohol Strategy, (2012), with systematic reviews of the harms and cost to the individual and society and a clear strategic plan to address this. Paradoxically, the strategies also postulate that alcohol can play an important and positive role in British culture. For example, when used sensibly, alcohol can enhance social occasions and well-being, especially where this encourages sociability (Alcohol Strategy, 2004; Alcohol Strategy, 2012). In addition to these social benefits, financial gains are also acknowledged. For example, taxation revenue from alcohol sales and numbers employed in the drinks industry creates a 'profitable alcohol industry which enhances the UK economy' (Alcohol Strategy, 2012, p. 5). How much this financial gain has

ultimately influenced strategy is unclear, but this will be discussed in the final chapter.

1) *Alcohol Harm Reduction Strategy for England (2004)*

The ambition of the Alcohol Harm Reduction Strategy was to set out a new cross-government approach to tackle alcohol related harms by creating a partnership at both a national and local level between government, the drinks industry, health, police, individuals and communities.

Four main themes were outlined:

i. Better Education and communication including a clear 'sensible drinking' message, targeting of individuals most at risk of alcohol related-harm (binge and chronic drinkers), and better education in schools and advertising standards

ii. Improving health and treatment services by better training for staff to facilitate early identification of problems, undertake a national audit of demand for treatment and the provision to identify gaps, and more intensive support for vulnerable groups (homeless, drug users, mentally ill and young people).

iii. Combating alcohol-related crime and disorder through exclusion orders in town centres, greater use of fixed penalty fines for anti-social behaviour, and supporting licensees to reduce underage sales and serving people who are already drunk.

iv. Working with the alcohol industry to ensure alcohol use is not 'glamorised' in advertising, better information on bottles on units and sensible drinking, and a financial contribution to pay for new schemes to address alcohol misuse.

2) *Safe, Sensible, Social (2007). The next steps in the National Alcohol Strategy*

The 2007 Safe, Sensible, Social Strategy acknowledged that whilst some progress was made with the 2004 Alcohol Harm Reduction Strategy, including completing the first national assessment of the need for and accessibility of alcohol treatment (Alcohol Needs Assessment Research Project (ANARP), 2004), there remained a considerable concern that there was still excessive alcohol consumption among some sections of the population. Within this strategy, three main themes were identified:

i. Ensure laws and licensing powers are effective;

ii. Focus on the minority of drinkers who cause or experience the most harm to themselves, their communities and their families;

iii. Greater investment in promoting sensible drinking.

Typologies of drinkers

Central to both these strategies is the classification of different types of drinkers and this has been important to allow a consistent method of identifying the extent of the problem, with the different categorisation summed up in Tables 2 and 3 below:

Table 2: Alcohol Harm Reduction Strategy for England (2004). Typologies of drinkers:

Typology:	*Weekly Unit Consumption: Men*	*Weekly Unit Consumption: Women*
Abstainers	0	0
Low to Moderate	Up to 21 units	Up to 14 units
Moderate to Heavy Drinking	21 – 50 units	14 – 35 units
Very Heavy Drinking	50 + units	35 + units
Above Daily Guidelines	4 – 8 units max	3 – 6 units max
Binge Drinking	8+ units max	6+ units max

Table 3: Safe, Sensible, Social (2007) Typologies of drinkers:

Typology:	*Weekly Unit Consumption: Men*	*Weekly Unit Consumption: Women*
Sensible Drinking	Not regularly drink more than 3 – 4 units daily	Not regularly drink more than 2 – 3 units daily
Harmful Drinking	Over 8 units a day or 50 units a week	Over 6 units daily or 35 a week
Binge Drinking	Drinking too much alcohol over a short period of time / becoming drunk	Drinking too much alcohol over a short period of time / becoming drunk

The Alcohol Strategy (2004) estimated that 10% of the population were abstinent [15] from alcohol, whilst 54% drank within the recommended guidelines of 2-3 units[16] daily for women and 3-4 units daily for men[17]. 13% of the population drank above these limits: i.e. women consuming over 14 and under 35 units of alcohol a week and men, over 21 and under 50 units a week. 23% of the population were categorised as very heavy drinkers (women consuming +35 units a week and men + 50 units (Safe, Sensible, Social, 2007).

However, people who drink will often underestimate how many units they have consumed (Safe, Sensible, Social, 2007), especially the 'home drinkers' where units are generally not measured accurately. Anecdotal evidence also suggests that individuals may deliberately be misleading about how much they have been drinking, for example parents may minimise actual self-reported drinking to reduce the risk of social service involvement. Therefore, it is perhaps safer to conclude that any self-reported alcohol consumption on which evidence is based, may not be entirely accurate, especially when considered in combination with the increasing trajectory per capita data. On the one hand, this may mean that whilst the overall population is drinking less harmfully, those who do consume alcohol harmfully may be doing so to a greater degree than previously recorded. This has clear implications for the capacity of specialist alcohol treatment services once this cohort begins to experience the ill-effects associated with harmful and dependant drinking.

A limitation of both these classifications is that it is not clear about the dependant drinking cohort. A third definition of the different typologies of drinkers that does include dependent drinking is the World Health Organisation (WHO) categorisation of alcohol use disorders (WHO, 1993) is summarised in Table 4 below:

[15] Does not drink alcohol, even occasionally

[16] A UK unit is 10ml or 8g of pure alcohol. The number of units in a drink depends on what you are drinking – how strong it is and how much there is. Half a pint of 3.5% beer/lager/cider is one unit, one small glass (125ml) of wine at 9% is one unit (Safe, Sensible, Social, 2007).

[17] In 2016, the Government changed recommended daily guidelines for men to the be the same as women

Table 4: WHO (1993) Typologies of drinkers:

Typology:	*Weekly Unit Consumption: Men*	*Weekly Unit Consumption: Women*
None	0 units	0 units
Hazardous drinking	Drinking between 22 and 50 units per week for men	Drinking between 15 and 35 units per week for women
Harmful drinking	Drinking more than 50 units per week for men	Drinking more than 35 units per week for women
Moderately dependant drinking:	Level of dependence not severe, raised tolerance, mild symptoms of withdrawal, impaired control over drinking but no 'relief'[18] drinking	
Severely dependant drinking:	Serious alcohol-related problems, severe alcohol withdrawal symptoms, high tolerance, 'relief' drinking	

Becoming dependent on alcohol occurs through the process of building tolerance[19] to the substance as classified by ICD-10 Criteria for the Alcohol Dependence Syndrome (WHO, 1992). This provides a list of seven criteria, of which three or more of the manifestations should have occurred together for at least 1 month or, if persisting for periods of less than 1 month, should have occurred together repeatedly within a 12-month period.

Table 5 below presents the seven ICD-10 criteria for alcohol dependence syndrome:

[18] Drinking to abolish or avoid withdrawal symptoms – see later discussion
[19] Tolerance occurs when more alcohol is consumed in order to achieve the same effect (Shaw, Ritvo & Irving, 2005).

Table 5: ICD-10 Criteria for the Alcohol Dependence Syndrome (WHO, 1992).

1.	A strong desire or sense of compulsion to consume alcohol;
2.	Impaired capacity to control drinking in terms of its onset, termination, or levels of use, as evidenced by: alcohol being often taken in larger amounts or over a longer period than intended; or by a persistent desire to or unsuccessful efforts to reduce or control alcohol use;
3.	A physiological withdrawal state when alcohol use is reduced or ceased, as evidenced by the characteristic withdrawal syndrome for alcohol, or by use of the same (or closely related) substance with the intention of relieving or avoiding withdrawal symptoms;
4.	Evidence of tolerance to the effects of alcohol, such that there is a need for significantly increased amounts of alcohol to achieve intoxication or the desired effect, or a markedly diminished effect with continued use of the same amount of alcohol;
5.	Preoccupation with alcohol, as manifested by important alternative pleasures or interests being given up or reduced because of drinking; or a great deal of time;
6.	Being spent in activities necessary to obtain, take, or recover from the effects of alcohol;
7.	Persistent alcohol use despite clear evidence of harmful consequences, as evidenced by continued use when the individual is actually aware, or may be expected to be aware, of the nature and extent of harm.

Raistrick et al. (2006) divide the classification of dependent drinkers into two further categories:

Moderately dependent drinkers who are typically defined as having:

- increased tolerance to alcohol;
- symptoms of alcohol withdrawal;
- impaired control over drinking but not ‘relief’ drinking.

Severely dependent drinkers who are typically defined as experiencing:

- a serious and long-standing condition;

- severe alcohol withdrawal;
- high tolerance;
- drinking to avoid or counter incipient withdrawal symptoms;
- may have experienced withdrawal seizures and have delirium tremens[20];
- hallucinations[21].

The WHO/ICD-10 classification is more useful in clinical practice, as firstly the different groups form the basis for matching treatment to level of need (summarised in Table 6 below) and specifically, this definition also categorises the dependant drinker cohort (e.g. Raistrick et al., 2006, MoCAM, 2006).

T*able 6: Category of drinker matched to treatment need:*

Category	*Intervention*
None	Public health programmes – primary prevention
Hazardous drinking	Simple brief interventions in generalist settings
Harmful drinking	Extended brief interventions in generalist settings
Moderately dependant drinking	Less intensive treatment in generalist or specialist settings
Severely dependent drinking	More intensive specialist treatment

Source: Adapted from Raistrick et al. (2006)

Drummond, Oyefeso, Phillips, Cheeta, Deluca, and Winfield (2005), suggest that there are approximately 8.2 million people in England who are potentially in need of more 'specialised' alcohol treatment, with a figure of 1 in 18 (5.6%) of the population who have a specialist treatment need, i.e. are alcohol dependent to some degree.

[20] delirium tremens is the most severe form of alcohol withdrawal resulting in an altered mental state (confusion) and autonomic. Untreated DTs can progress to cardiovascular collapse

[21] Hallucinations occur during or after a period of heavy alcohol consumption (withdrawal) and manifest as predominantly auditory hallucinations

3) The Government's Alcohol Strategy (2012)

This last strategy set out in 2012, is more treatment focused than its predecessors including ring fenced funding for alcohol services but with effectiveness being monitored through payment by outcomes for recovery in commissioned treatment services. A greater integration between health and social care with a focus on improving mental health (including dual diagnosis – co-morbidity of alcohol and mental health). Commissioning effective treatment for dependant drinkers with recovery support for families, housing and employment, early cautioning schemes for low level offences (e.g. drunk and disorderly, criminal damage and public order). Lastly, education and brief interventions to support responsible drinking including reviewing alcohol guidelines for adults.

Non-treatment focused strategies include increasing taxation on alcohol, introduction of minimum pricing and a ban on multi-buy promotions restrict the number of licenced premises in towns and cities, remove licenses from irresponsible licensee's and restrict late night hours in problem areas. So, on the one hand, there appears to be a clear Government message that drinking in moderation creates few ill effects and may even bring some health benefits (Alcohol Harm Reduction Strategy, 2004). On the other hand, there is evidence that there is a small but increasing minority who drink excessively (i.e. have become dependent or problem drinkers) who are at risk of experiencing significant alcohol related harm (Safe, Sensible, Social, 2007; House of Commons Health Committee, 2009).

The paradox of the benefit and harm of alcohol consumption together with the value of taxation revenue from alcohol sales and numbers employed in the drinks industry has potentially impacted on successive Government Policy on how to systematically address the impact and harm of alcohol through investment in effective evidence based specialist alcohol treatment and with built- in sustainable capacity in treatment services to meet the increasing demand. However, the Alcohol Strategy (2012) has begun to address these important issues.

In summary, over the last decade, alcohol related harm has an increasing trajectory. Various government policies have attempted to co-ordinate the approach to reduce this harm. Central to the strategies is the provision of effective treatment, but

successful engagement into treatment is recognised as being a potential barrier to recovery.

The Current Research

In line with the evidence available at the time, the need to review the service provision at the research site was prioritised in 2004. A full account of this review is described in detail in the Chapter 2, but it was clear that at the time of the review, that the quality and evidence base for treatment was poor. This finding lead to the development of a 12 session Relapse Prevention Treatment Group (RPTG) based on the current research evidence and literature for effective alcohol treatment that was available in 2006/07. This literature review underpinned the theoretical approaches embedded in the RPTG.

The current research examines the effectiveness of this structured intervention for dependent drinkers. In doing so, it examines three main issues:

Chapter 4 considers the impact of waiting times on effective engagement into treatment and whether longer periods of waiting is associated with 'natural recovery' without structured treatment.

Chapter 5 considers the impact of a pre-treatment induction group and whether this is associated with better outcomes and a higher likelihood of completing the intervention.

Chapter 6 considers the effectiveness of a multimodal treatment programme for dependent alcohol service users and whether completion of the programme is associated with better outcomes at the end of the programme and at 6 months' follow-up.

Chapter 2

The Evolution and Development of a Treatment Programme for Dependent Drinkers.

The current research examines the effectiveness of an intensive community based treatment programme for adult dependent drinkers. This chapter outlines this programme and its development.

Systematic Internal Service Review

In 2004, an internal review of the treatment intervention at the research site (a tier 3 Structured Day Care Programme) found that alcohol treatment was ad-hoc and based around discussion groups and social activities. Treatment (i.e. discussion groups) were delivered in a group setting with typically up to 8 participants attending at any one time. The group sessions were 'open' meaning that new participants joined at each session. Clinical observation of the groups and feedback from participants indicated that some found the constant change to group membership destabilising. Groups were facilitated by two experienced practitioners. There was little evidence of recognised theoretical models of interventions or evidence based practice being utilised as part of treatment and there was no outcome monitoring (Le Page, 2004). The internal review coincided with the release of the Government's first Alcohol Harm Reduction Strategy for England (2004) and was consistent with the main conclusions about national alcohol treatment in that there was a need to both implement evidence based practice and outcome monitor treatment interventions (e.g. Alcohol Strategy, 2004).

During 2005, a new structured group work treatment programme was rolled out as a pilot. The material for the pilot programme was developed from work that had first commenced in 1997, when the author was working in a Prison and developed a six-week group work programme for offenders who were serving short custodial sentences for alcohol related offending. This six-week programme covered basic alcohol education and awareness, relapse prevention and drink refusal skills. Each session was delivered through a session plan and the content was based on the available literature at the time (e.g. Baldwin, 1990, McMurran & Hollin, 1993, Walters,1998 & Wanigaratne, Wallace, Pullin, Keaney & Farmer, 1990).

Further development of the original programme incorporated methodological approaches to treatment development and delivery practised in forensic psychology. For example, linking theory and evidence based practice, providing a comprehensive treatment manual for fully trained staff with continual monitoring of programme drift and integrity, outcome monitoring and the provision of a self-help manual for participants (McMurran, 2006, Ross, Fabiano & Ewles, 1988).

Pilot phase: 10 session Life Skills Group (LSG).

The revised Life Skills Group pilot programme commenced in January 2005. Treatment was delivered in a group setting with 8 participants and one practitioner acting as a facilitator. The sessions were delivered using the treatment manual which contained clear instructions on both the group and individual exercises. The content was 'linked' by a written script which acted as a guide for staff on how the material needed to be delivered (see Appendix A for an example of a section from the treatment manual).

The Life Skills Group was a 'closed'[22] 10 session (20 hour) programme delivered twice a week for 2 hours. The sessions were held either in the morning or afternoon. Participants who had consumed alcohol prior to the session were excluded. The rationale for this was two-fold, firstly the risk that this might pose to abstinent drinkers (i.e. smell of alcohol leading to cravings/urges and lapse) and secondly, to control for the impact of alcohol on cognitive functioning and any associated impact on the ability to concentrate.

The group was aimed at meeting the treatment needs of both moderate and severely dependent drinkers who were identified as being in this category of drinker by clinical assessment. Service users determined their own treatment goals of either controlled dinking or abstinence.

Programme Targets

The programme targets for change were:

[22] Service users were not able to join the current group once the Life Skills Group had commenced

- Improved knowledge of the risks of excessive alcohol consumption and its harmful effects;
- Increased self-awareness for the participant's reasons for drinking and explore who had been affected/harmed by their behaviour;
- Increased strategies to manage cravings such as alternatives to drinking;
- Achieve a reduction in daily alcohol consumption or maintenance of abstinence;
- Improved general health and well-being;
- Reduced feelings of irritability, depression and anxiety;
- Increased assertiveness skills;
- Increased self-esteem;
- Identification of irrational thinking errors to help reduce cognitive rigidity in thought/feeling/behaviour.

Treatment Approach

The intervention was based on a multimodal or eclectic approach to treatment aligned to the Public Health model (discussed in Chapter One) and combined several ranked treatment modalities from the Mesa Grande (Miller, Wilbourne & Hettema, 2003) and which are summarised in Table 7 below:

Table 7: List of Theoretical perspectives underpinning the Life Skills Group with the Mesa Grande rank and correlating Public Health component.

Treatment Modality	*Mesa Grande Rank*	*Theoretical Perspective/Model*	*Public Health Component*
Motivational Enhancement	2	Social Learning	Environment
Community Reinforcement	4.5	Sociocultural	Agent
Self-Change Manual	4.5	Education	Host
Behavioural Self-Control Training	7	Conditioning	Host/ Environment
Social Skills Training	9	Social Leaning	Environment
Cognitive Therapy	13	Cognitive	Host
Problem solving	24	Social Leaning	Environment
Functional analysis	28	Social Leaning	Environment
Relapse Prevention	29	Social Leaning	Environment
Relaxation Training	44	Social Leaning	Environment
Education	48	Education Model	Host

The selection of these treatment modalities as part of the intensive multimodal intervention is that the different approaches complement each other by building on a core set of skills to facilitate behavioural change (McMurran, 2006).

Transtheoretical Model of Change

Central to the programme material was the Prochaska et al., (1991) six stage Transtheoretical Model of Change: pre-contemplation; contemplation; decision; active change; relapse and maintenance. Generally, services users having consented to a referral to the intensive programme had resolved the cognitive dissonance that is typical of the contemplation stage of change (i.e. self-awareness of problem drinking but not motivated to change the behaviour). Most were therefore at the action stage of change (i.e. motivated and ready to make changes), later graduating to the maintenance stage of change (Miller, 2003). This fitted well with the treatment philosophy of the Life Skills Group, which was both psycho-educational

and skills based around both relapse prevention (e.g. Beck, Wright, Newman & Liese, 1993; McMurran & Hollin, 1993; Shaw, Ritvo & Irvine, 2005; Vellman, 1992; Wanigaratne, et al., 1990) and the indirect problems that contribute to alcohol misuse (McMurran, 2006; Wanigaratne et al., 1990).

The following treatment approaches underpinned the programme material that was delivered as specific sessions in the Life Skills Group:

Psycho-Educational Model

The Life Skills Group delivered an educational element through two mechanisms. Firstly, through the alcohol education itself (e.g. risks, harms to health and well-being) and secondly the programme was based on a model of learning[23] rather than a therapeutic model[24].

The value of alcohol education is unclear, primarily because programmes have not been systematically discussed, critiqued or evaluated for their effectiveness Cuthbert, 1990). Mason and Norris (1990) emphasise the importance of providing accurate and credible information to service users so that they can make informed choices about the function and role of alcohol in their lives. McMurran and Hollin (1993) proposed that a more effective strategy for alcohol education is to target education appropriately, present an appropriate message and provide a back-up skills programme that offers advice on how to reduce drinking. Although alcohol education is bottom of the Mesa Grande ranked table (Miller et al., 2003), it was included in the Life Skills Programme as part of the Public Health model to educate the 'Host' (i.e. service user), so that they can make informed choices on the harms and risks of alcohol misuse, (e.g. Mason & Norris, 1990; Miller & Hester, 2003).

Cognitive Behavioural Therapy (CBT)

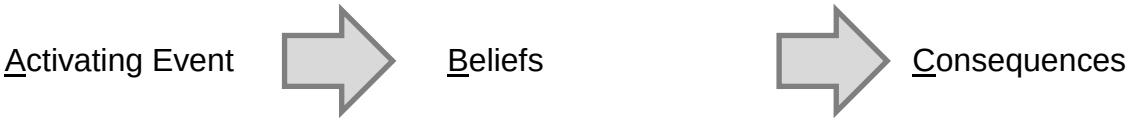
Beck et al. (1993) describe CBT as a system of psychotherapy that attempts to reduce excessive emotional reactions and self-defeating behaviour by modifying the faulty or erroneous thinking and maladaptive beliefs that underlie these reactions. In summary, what you think or believe about an event will affect how you feel, how you

[23] Model of Learning in this research focused on teaching new skills and strategies to change unwanted behaviour.
[24] A Therapeutic Model focuses more on an in-depth exploration of the reasons behind the behaviour facilitated by group discussions and personal disclosure.

feel affects how you behave, how you behave effects how you feel (e.g. Branch & Willson, 2007; Padesky, 1994; Palmer & Szymanska, 1995,).

This sequence of events is represented as an ABC model and is illustrated in Figure 4 below:

Figure 4: A simple ABC model of CBT



Several thinking errors or automatic assumptions or beliefs have been identified and these irrational beliefs add to the emotional disturbance. Examples of thinking errors or beliefs include catastrophising, all or nothing thinking or rigid thinking and mind reading (e.g. Branch & Wilson, 2007; Ellis, Gordon, Neenan & Palmer, 1997; Palmer & Dryden, 1995).

The later work of Spada (2006) conceptualized distorted beliefs about drinking, identifying three specific types:

1. *Positive thoughts about drinking*: for example, “If I have a drink, I will feel more relaxed”;
2. *Permissive thoughts about drinking*: for example, “One more drink won’t hurt, I’ll start cutting down tomorrow”;
3. *Uncontrollability thoughts about drinking*: for example, “If the bottles open, I’ve got to finish it”.

Spada (2006) argued that unless these distorted beliefs are challenged and changed, the cycle of drinking will continue as this irrational thinking style both justifies and legitimises the drinking behaviour. Spada (2006) represented this model as an A-T-E-B-C analysis as follows: *A*ctivating events influence *T*houghts & *E*motions about the event followed by the *B*ehaviours and *C*onsequences.

Workbooks

The workbooks that participants were asked to complete both during the session and outside of the group as homework, were also based on the principles of CBT to serve as a bridge between sessions, for the service user to test erroneous beliefs and try out new-ways of thinking and behaving (Branch & Wilson, 2007; Beck et al.,1993). Sobell & Sobell (2011) suggest that compliance of homework completion can be enhanced by explaining to participants that by completing homework tasks, the process of change is accelerated as they will be working on changing outside of sessions. In accordance with Beck et al. (1993), homework was reviewed at the beginning of each session (see Appendix B for an example of a work book section).

Social Learning Theory

Coping and social skills training is an effective treatment modality for moderately dependent alcohol misusers (Raistrick, Heather & Godfrey, 2006) and is ranked 9th on the Mesa Grande (Miller et al., 2003). The principles of coping skills sit within the social learning theoretical perspective and provide some explanation for the causal factors that may be linked to alcohol misuse. For example, maladaptive coping strategies where alcohol is used to manage everyday problems such as feeling stressed. In this example, the operant learning factor is short term positive reinforcement or reward (i.e. drink to feel less stressed). However, it risks having longer term negative consequences or punishment such as the unpleasantness of arguments with family about drinking behaviour (McMurran & Hollin, 1993). Social skills training therefore encompasses both coping skills and social skills training and places strong emphasis on skills training to help service users learn alternative strategies to manage high-risk situations for drinking (Mason & Norris, 1990, Raistrick et al., 2006).

Life Skills Group Programme Content

The Life Skills multimodal treatment programme was structured around the following evidence based eclectic treatment approach (Mesa Grande; Miller et al., 2003):

1. Alcohol education to allow participants to make informed choices about their drinking goal (abstinence is not a requirement nor is it the only goal);

2. Relapse prevention to help participants manage cravings, set SMART[25] goals, identify high-risk situations, plan to make changes and maintain them and alternatives to drinking;

3. Managing emotions (anxiety and anger);

4. Assertiveness to help participants improve interpersonal relationships, learn to negotiate and drink refusal skills;

5. Managing worrying thoughts (CBT) to help participants identify their irrational thinking errors;

6. Problem solving to give participants skills to manage not only their alcohol problem but other problems associated with alcohol misuse. For example, better management of interpersonal problems by learning new skills to address problems in a more pro social way and to reduce the risk of relying on alcohol to avoid the dealing with or escalating the situation.

Treatment Manual and Staff Development

McMurran and Duggan (2005) describe several advantages to the use of a manual in that they help to enhance treatment integrity, facilitate staff training and supervision and allow the intervention to be replicated to a minimum quality assured standard (McMurran, 2006). The use of a treatment manual was integral to the delivery of the intervention and addressed the concerns of Miller and Hester (2003) in relation to an eclectic methodology losing focus and therefore becoming ineffective.

Staff delivering the programme came from a range of professional backgrounds including a social worker, counsellors and addiction therapists. Prior to the launch of the Life Skills Programme, all staff delivering the programme underwent a five-day training programme which included the theory underpinning effective alcohol treatment, group work delivery skills (Tuckman,1963) and training on delivering the

[25] SMART: Specific Measurable Achievable Relevant Time Limited

programme manual including an observed and evaluated practice session delivered for all staff. This training was followed up by a full cycle of observed delivery and was introduced to ensure the maintenance of treatment integrity and minimise programme drift (Hollin & Palmer, 2006).

Pilot data for the Life Skills Programme 2006 –2008

A 2 ½ year pilot phase for the Life Skills Group commenced in January 2006 until June 2008. All participants were given information about the pilot study and gave their informed signed consent to participate in the pilot. Outcome data from the six measures was collected at the start of the Life Skills Group and at the end, with the mean scores for the pilot cohort are presented in the Table 8 below. A full description of the outcome measures and discussion on the rationale for outcome measure selection is discussed in the next chapter.

Table 8: Alcohol Outcome Measures: Life Skills Group Pilot data 2006 – 2008

Questionnaire	*n =*	*Pre*	*Post*	*+ outcome*
Alcohol Q: part 1	60	6.9	9.2	Increase
Alcohol Q part 2	60	17.7	24.2	Increase
Average reduction days drinking in month	59	2.7	2.2	Decrease
Assertiveness Q	58	19.2	12.8	Decrease
Locus of Control	58	39.9	45.7	Increase
Thinking Style Q	54	29.6	23.4	Decrease
Irritability	56	4.9	4.1	Decrease
Depression	56	7.0	5.4	Decrease
Anxiety	56	8.6	6.5	Decrease
Rosenberg self esteem	56	24.0	29.9	Increase

There are two relevant comments to make about the pilot data. Firstly, the mean scores between the pre-and post LSG data showed improvements in the desired direction, which suggested that the LSG was having an effect which required further evaluation. Secondly, the number of participant data over a two-year period was considerably lower than expected and the reason for this needed further investigation.

Outcome Measure Evaluation

The review of the pilot data revealed some quite significant problems with the quality of completed questionnaires, which meant that some data could not be included in the pilot analysis. Problems included incomplete questionnaires, participant names not being included so data sets could not be matched properly and questionnaires not being completed at treatment start and end so that base line scores and any progress could not be effectively measured.

To address this problem, further staff training was provided on effective administration of outcome measures and a written protocol was provided to all staff. Completed questionnaires were checked for accuracy by the author immediately after completion. This meant any errors or omissions could more easily be rectified and subsequently reduce the amount of lost data.

Programme material revisions following pilot phase (June 2008)

Analysis of the qualitative feedback from staff and service users together with the outcome measure pilot data resulted in the following changes being made to the programme:

- Renaming of the programme to the Relapse Prevention Treatment Group;
- Programme cycle increased to 12 sessions to allow more time for exercise feedback, work book completion and group discussion. The new programme was also structured around six modules. Each module was delivered over two sessions on a weekly basis;
- Revision of the two sessions on problem solving as the material was felt to be overly complicated;
- Revision of CBT the session to include positive, permissive & positive thinking errors about drinking (Spada, 2006).
- The programme targets remained the same. However, two new outcome measures were introduced: Treatment Outcome Profile (TOP), *(*Marsden & Farrell, 2006*)* and Alcohol Use Disorders Identification Test (AUDIT) (Babor, Higgins-Biddle, Saunders & Monteiro, 2001).

All delivery staff were provided with further training covering the programme changes.

The Revised Delivery Model

The new Relapse Prevention Treatment Group Programme (see Appendix C for Programme summary) was launched in January 2009 and included the pre-treatment Induction Group (IG) as the first stage of the programme and which had previously been introduced during the pilot phase as a way of managing waiting times. The revised IG acted as the minimal treatment group in the empirical study.

Induction group method and content

Six sessions were held once a week for 2 hours. The first two sessions were 'open' meaning that new participants could join the group. After this point, the group was 'closed' to new entrants for that cycle of delivery.

The content of the Induction group was as follows:

Session 1: Complete baseline Outcome Measures (TOP and AUDIT). Engaging in treatment /getting confident in groups using 'Let's Talk' cards;

Session 2: Video exploring alcohol use and associated harm followed by group discussion;

Session 3: 'What the papers say'. Group discussion looking at incidents reported in the papers involving alcohol. Discussions typically included the discussions of violent crimes, drink driving and safeguarding where children have been left at home alone whilst the parent (s) engages in alcohol use to a degree that means their parenting capacity has become impaired. Participants begin to consider consequential thinking;

Session 4: Facts and figures of alcohol related harm/cost and impact;

Session 5: Moral dilemma debates (group formation exercise);

Session 6: Completion of the pre-Relapse Prevention Treatment Group outcome measure questionnaires.

This Chapter has detailed the development of a 12-session evidence based structured treatment programme for dependant drinkers in a community setting. The process of programme development took place over twelve years and incorporated the evidence base of effective treatment and good practice discussed in the previous Chapter. The developmental process also included extensive feedback from services users and delivery staff. Once the research commenced, no further changes were made to the programme material, although on-going feedback continued to be gathered from participants via post session evaluations (see Appendix D) and quarterly service user consultation events. This was subsequently incorporated in to the later revisions to the programme material.

Chapter 3: General Method

This chapter will outline the overarching methodology of the research.

The Research Site

The research site was a Tier 3 service providing a structured day programme (SDP) to service users with current and previous drug and alcohol problems. The research site service provider was a third sector voluntary provider, funded by the Local Authority through a ring fenced 'pooled treatment'[26] budget. The structured day programme aimed to support drug and alcohol service users to move away from problematic substance use and into healthier and safer lifestyles, by providing group work, discussion groups, case work, drop-in clinic, social activities and complementary therapy in a safe, non-judgmental environment and in partnership with other local service providers[27]. The treatment philosophy of the programme was non-abstinence based with service users free to choose their own treatment goals. However, there was a clear 'fit for purpose rule' which meant that service users could still be drinking or using drugs. However, alcohol service users could not have consumed alcohol prior to attending groups.

Participants

Inclusion and Exclusion Criteria

To participate in the research, the following inclusions criteria were set:

Self- reported a degree of dependent drinking as indicated by:

- Alcohol as the primary problematic substance of use and
- AUDIT scores of over 19 or;
- Current or previous self-reported daily unit consumption of 15 units a day or more.

The following exclusion criteria applied to all service users regardless of being part of the research:

- Aged under 18 years;
- Have an active psychotic illness which would impair their ability to engage;

[26] Pooled Ring-Fenced Budget included protected funding for drug and alcohol treatment services.
[27] Other funded services included Voluntary Sector Tier 2 Open-Access services, the NHS Tier 3 and 4 providers and funding for Tier 4 Residential Rehabilitation.

- Have a severe cognitive impairment that meant that participants were unable to benefit from the programme content (e.g. Korsakoff's Syndrome)[28];
- Actively engaged in alcohol treatment with another provider;

Based on information in the referral document and initial screening for the inclusion and exclusion criteria, 130 individuals were eligible for inclusion in the study.

Referral Source

Participants were referred to the programme via the routes described in Table 9 below:

Table 9: Referral source to Structured Day Programme (n = 130):

	CAT	*AAC*	*SELF*	*CCT*	*LRI*	*MHS*	*SS*	*CJ*	*DAC*
n =	66 (51%	32 (25%)	20 (15%)	3 (2%)	2 (1.5%)	3 (2%)	2 (1.5%)	1 (1%)	1 (1%)

Code:

CAT = Community Alcohol Team: NHS specialist services (Tier 3);

AAC = Alcohol Advice Centre: Open-Access (Tier 2);

SELF = Self referred;

CC = Community Care Team: Residential Rehab (Tier 4);

LRI = Leicester Royal Infirmary: Alcohol Liaison Nurse;

MH = Mental Health Service;

SS = Social Services (Safeguarding);

CJ = Criminal Justice;

DAC = Drug Advice Centre: Open-Access (Tier 2).

[28] Korsakoff's Syndrome is a chronic memory disorder caused by severe deficiency of thiamine (vitamin B-1) most commonly caused by alcohol misuse.

76% of the referrals came from other alcohol services (CAT and AAC). This essentially meant that these participants had consulted with another professional regarding their alcohol consumption prior to entry onto the programme. The impact of accumulative treatment effect was difficult to control for, but where it was clear this was a confounding variable such as conjunctive treatment, participants were excluded from the research, but not the programme.

Programme Pathway

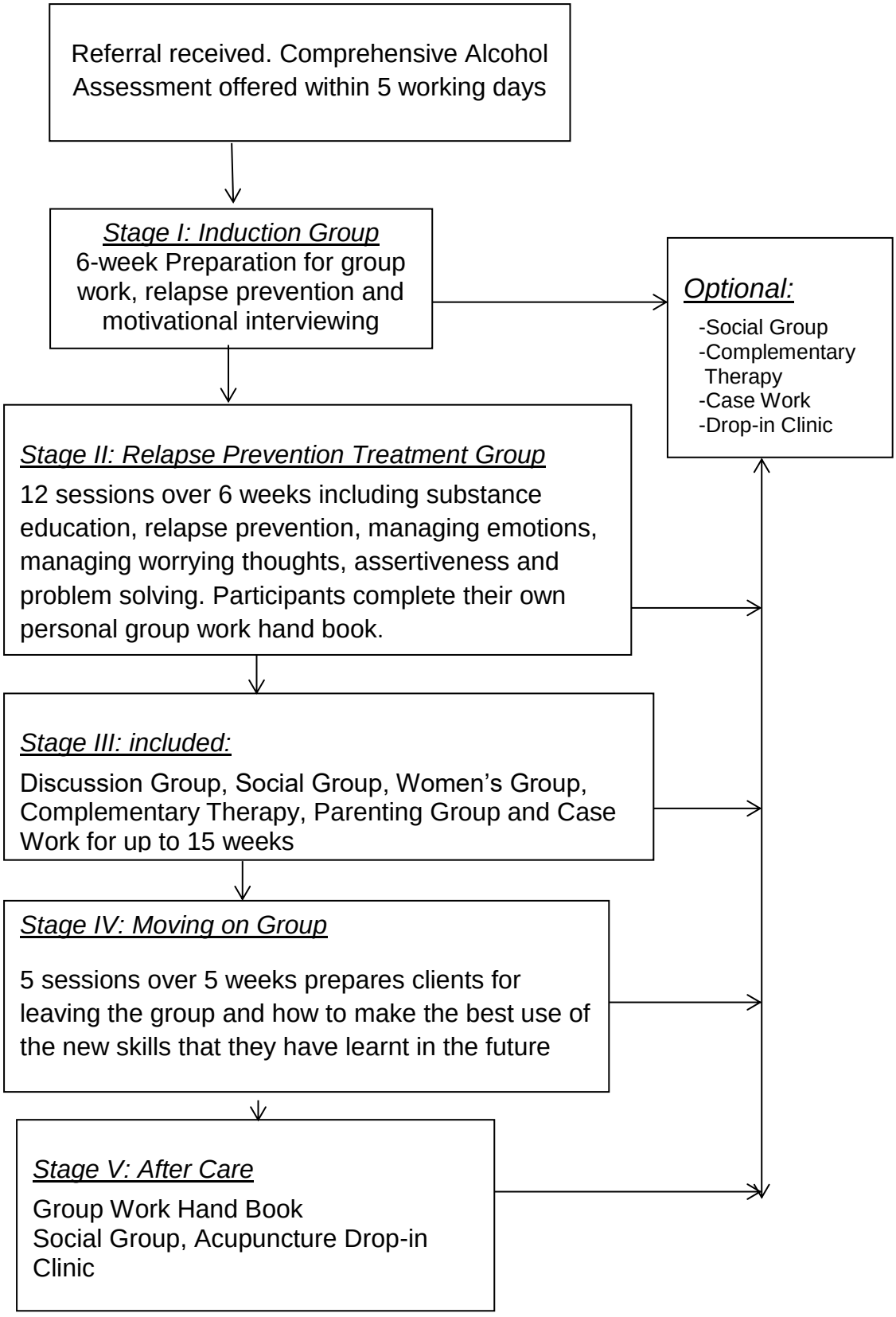
The stages and pathway through the programme is outlined in Figure 5 below. Once a referral was received, service users were offered a first comprehensive alcohol assessment appointment within 5 working days. Following assessment, participants were offered a place on next available Induction Group (stage I). Participants did not have to attend the Induction group in order to progress to stage II of the programme, (Relapse Prevention Group). It was not necessary to fully complete any of the stages before moving on to the next stage. However, to successfully 'graduate' from the programme and receive a certificate, all stages needed to be fully completed. In most cases the maximum time participants could be engage in the programme was for six months.

Recruitment

Participants who had been referred to the SDP were recruited to the study by an informed signed consent protocol (see Appendix D). Of the original 130 eligible referrals, following attending a comprehensive alcohol assessment and obtaining signed consent to participate in the study, a total of 127 participants[29] were included in the study. Of this cohort, 86 participants were males, with a mean age of 44.0 years (SD = 8.88) and range of 18 to 65 years. The remaining participants were female (n = 41) with a mean age of 44.0 years (SD = 8.88) and range of 20 to 61 years. The stages and pathway through Structured Day Care Programme is shown in Figure 5 below.

[29] Three participants failed to attend the comprehensive assessment appointment and did not engage.

Figure 5: Stages and Pathway through Structured Day Care Programme



Experimental Design

Waiting times

The target for length of waiting times from the point of referral to engagement in a first structured treatment session is agreed by the National Alcohol Treatment Monitoring Service (NATMS) and is set at 'within 21 days'. In the current research, the average waiting time for the whole cohort was 16 days, with a minimum wait of 3 days to a maximum wait of 64 days from the point of assessment to the first group work session. In some cases, the length of waiting period from the date of assessment to the date of engagement in group work depended on where the group cycle was in its delivery time line. Broadly speaking, if the first two sessions of the minimal treatment group had already been completed in the current cycle, a service user would need to wait to commence the next cycle of minimal treatment group work, thereby creating a maximum additional wait of 28 days. Participants would however have access to low level drop-in support, complementary therapy and social activities during this further waiting period. This was important to make sure that not only the NATMS target were met, but more importantly, ethically, treatment was not withheld for the purposes of undertaking the research through the creation of a 'control group'.

Following assessment, participants were assigned to one of two groups by length of their waiting time to commence treatment of either less than 21 days (n = 73) or 21 or more (n = 54) days.

Figure 6 below demonstrates the research cohort's pathway through the Programme split by the two waiting times groups.

Figure 6: Cohort pathway through the research programme (Stage I and II)

by waiting times ≤ 21 days or 21 + days.

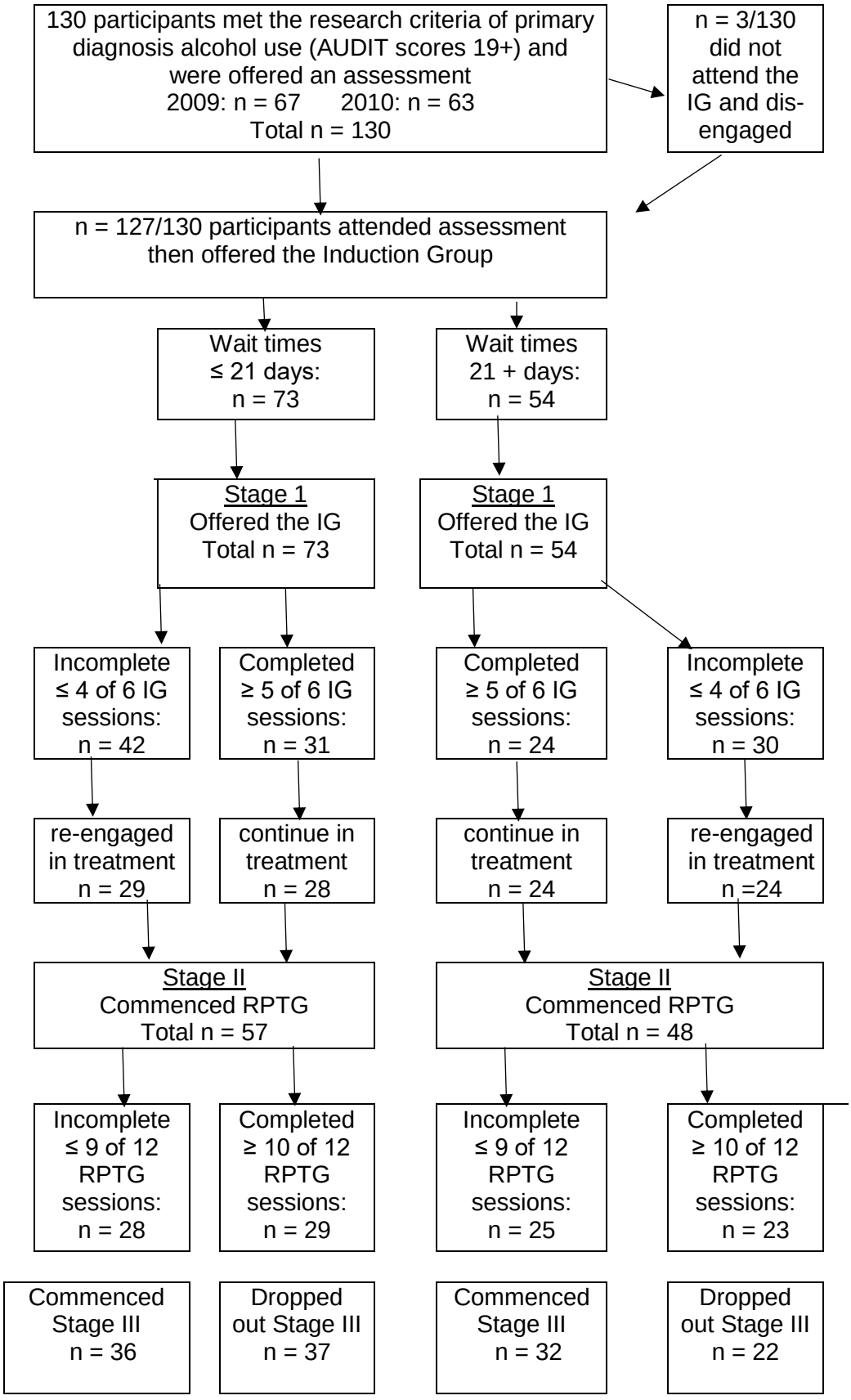


Table 10 provides a further explanation of the numbers in Figure and shows a full breakdown of participants through the full Programme during the research period split by waiting times to commence treatment. This includes participants who dropped out and were later successfully re-engaged.

Table 10: Treatment continuation by waiting times < 21 days or ≥ 21 days

	Total n = 127			
	Wait time < 21 days: n = 73 (100%)		Wait time ≥ 21 days: n = 54 (100%)	
From start of IG to 6 months follow up	Number	%	Number	%
Offered Stage I (IG)	n = 73	100%	54	100%
Incomplete IG	42	58%	30	56%
Completed IG*	31	42%	24	44%
Dropped-out before Stage II	16/73		6/54	
Total commenced Stage II	n = 57	100%	n = 48	100%
Continued engagement*	28	49%	24	50%
Re-engaged at Stage II	29	51%	24	50%
Total Stage II RPTG drop-outs	n = 28		n = 25	
Commenced Stage II (RPTG) then dropped out.	17	30%	11	23%
Dropped out Stage II (RPTG) but continued in treatment (Stage III to V).	11	19%	14	29%
Total Stage II completers	n = 29		n = 23	
Completed Stage II (RPTG) then dropped out.	4	7%	5	10%
Completed Stage II (RPTG) and continued in treatment (Stage III to V).	25	44%	18	38%
	n = 57		n = 48	
Total dropped-out by start Stage III	37	51%	22	41%
Total remain in treatment	36	49%	32	59%
Total n =	73	100%	54	100%

Outcome Measures

The research used a variety of outcome measures to assess alcohol consumption and the other variables which are described as the programme targets for change in Chapter Two.

Treatment Outcomes Profile (TOP)

The TOP *(Marsden & Farrell, 2006)* is a national outcome monitoring tool developed for Public Health England (formerly the National Treatment Agency) for substance misuse services and had to be completed nationally, by all service users in treatment. To avoid unnecessary duplication, the TOP was therefore the main outcome measure for alcohol use and social and psychological functioning. The twenty item self-report questionnaire is in 4 sections which look at the level of alcohol use as well as physical and psychological well-being, quality of life and social functioning and is described below.

Section 1 is based on a 28-day recall for substance use. Sections 2 and 3 is either a forced choice yes / no answer. Section 4 uses rating scales on a continuum of 0 – 20 with 0 indicating a poor level of functioning and 20 indication a good level of functioning. Further detail on each section of the four sections is summarised below

Section 1 asks questions on substance use (average daily unit consumption and number of drinking days in the last 28 days. Reduction in daily unit consumption and number of days drinking indicates an appropriate change in levels of drinking.

Section 2 asks questions on injecting risk behaviour.

Section 3 asks questions on crime.

Section 4 asks questions on health and social functioning. The higher the score, the better the level of functioning.

For the current study, sections two and three were not analysed.

A review of the validity and reliability of the TOP (Marsden et al., 2008) found the twenty outcome measures met inter-rater reliability with intraclass correlation coefficients for scale measures and Cohen's kappa measures reaching or exceeding 0.75 and 0.61 respectively. The authors concluded that the TOP has satisfactory

validity as an outcome measure. In 2012, Public Health England adapted the TOP for use with alcohol only service users (Alcohol Outcome Record, AOR). If this outcome measure had been available at the time of the study, this would have been a preferable tool as it avoids asking questions about drug use and injecting behaviour which anecdotally, many service users found irrelevant and therefore made them reluctant to complete the questionnaire.

The Alcohol Use Disorders Identification Test: AUDIT-C and Full AUDIT

The AUDIT *(Babor, Higgins-Biddle, Saunders, & Monteiro, 2001)* is a simple 10 item self- report screening tool intended for the early identification of individual levels of alcohol consumption in relation to hazardous and harmful drinking as well as alcohol dependence. The questionnaire is in two parts. The first part forms the AUDIT-C and consists of 3 screening questions. The remaining 7 questions are the AUDIT (part 2). Each question has five possible answers which are scored as follows:

Never = 0

Monthly or less = 1

2 – 4 times per month = 2

2 – 3 times a week = 3

4+ times per week = 4

The AUDIT - C scoring range is from 0 – 12 with scores of 5 or above indicating a positive test for increasing or higher risk drinking with the recommendation to complete the full AUDIT (total scoring range from 0 – 40, including the combined AUDIT-C score).

In this study, participants were asked to complete both the 3 screening questions in part 1 and the 7 remaining questions in part 2. The objective of using this screening tool was to firstly identify participants who scored 20+, indicating a level of possible alcohol dependence and secondly to use this tool as a measurement of change over time. The following cut off scoring criteria was used (Babor et al., 2001): 0 – 7 Lower risk drinkers; 8 – 15 Increasing risk drinkers; 16 – 19 Higher risk drinkers; 20+ Possible dependence.

Most participants who scored under 20 on the AUDIT were screened out, but where self-reported levels of weekly unit consumption indicated dependence (100 + units a week), and/or reported symptoms of alcohol withdrawal, participants were included

as this level of consumption indicated some level of dependence. Reductions in the scores over time indicated a reduction in levels of drinking.

The AUDIT has a long history of development over two decades and has been found to provide an accurate measure of drinking risk across age, gender and culture (Babor et al., 2001). In addition, there is evidence of the reliability of the AUDIT, with high internal consistency with an alpha coefficient of 0.86 which Babor et al. (2001) argue, suggests that the AUDIT does measure a single construct in a reliable fashion and that test-retest studies indicate high reliability with a correlation co-efficient of 0.90. In relation to the current study, the domain of additional significance is the dependence domain with questions 4,5, and 6 screening for impaired control over drinking, impaired salience over drinking and morning drinking respectively. These specific content items correlate most closely with symptoms of dependency (Babor et al., 2001).

Alcohol Knowledge Questionnaire

The Alcohol Knowledge Questionnaire was designed and constructed by the author and is based on designing specific questions to test the knowledge and coping strategies delivered during the alcohol education module. Development of the questionnaire began in 1997 with a prison cohort. The questionnaire was updated so that it remained relevant to the changes in the Alcohol Education Module. The questionnaire is in two parts.

There were 12 questions in part 1. The scoring range was from 0 – 16. Each correct answer scores one point. For question 3 there is a total of 4 points, with one point being awarded for each correct answer. The higher the post test score, the greater the level of demonstrated knowledge and learning.

Part two comprised of 4 further questions. Participants were asked to list alternatives in the following dimensions:

A: how alcohol effects your life;

B: health risks;

C: triggers for drinking;

D: ways to control drinking.

The more answers and alternatives given, the more knowledgeable a person is about their drinking and how to reduce it. Each separate answer or alternative given scores one point. There was no limit to the possible score in part 2.

Assertiveness Questionnaire

The Assertiveness Questionnaire was designed and constructed by the author and specifically related to the social skills scenarios and role play session in the assertiveness module, so that knowledge and learning of the session content could be demonstrated. The scenarios[30] in the assertiveness module were more relevant to the study cohort than the general population as many of the scenarios were linked to the use of alcohol to manage the situation rather than being assertive. This was the rationale for not using a validated psychometric tool which was available at the time such as the Rathus Assertiveness Schedule (Nevid & Rathus, 1978).
The author constructed Assertiveness Questionnaire was a 12- item self -report outcome measure assessing an individual's ability to be assertive in certain common social situations. Participants could tick one of the following responses for each question: Never = 4; Rarely = 3; Sometimes = 2; Often = 1; Always = 0.

The scoring range was from 0 – 48. The higher the score the less assertive a person is in their interpersonal communication style. At post-test, a reduction in scores indicated increased assertiveness ability in some social situations.

Thinking Style Questionnaire

The Thinking Style Questionnaire is an adapted version for a UK cohort of the American version of the Rational Emotive Behavioural Therapy Self-Help Form (Sichel & Ellis, 1984). There was no information available on the validity and reliability for the adapted questionnaire. It was sourced by the author from the study material for a Cognitive Behavioral Therapy course attended in 1999, with permission for use in a clinical setting. The questionnaire was a 10 item self-report tool with questions constructed around common situations which create an automatic irrational thinking style response based on four common irrational beliefs: awfulizing;

[30] E.g. Assertiveness questionnaire asked 'A friend insists you have just one more drink for old times' sake. Are you able to say no if you don't really want one?' Role play scenario to target drink refusal skills selecting participants who had scored a 3 or 4 in the questionnaire to practice this skill followed by group discussion and feedback from other participants.

I can't stand it; damnation and always and never thinking (Ellis, Gordon & Palmer, 1997). The scoring criteria for each item is: Strongly disagree = 1; Disagree = 2; Neither agree or disagree = 3; Agree = 4; Strongly agree = 5. The scoring range was from 10 – 50. The higher the score the more rigid or inflexible the thinking style with scores of 35 or more indicating that it is likely that the person may hold beliefs that could be making them think in a negatively biased way. Post treatment, a reduction in scores indicated a more flexible thinking style.

Irritability, Depression and Anxiety Scale (IDAS)

A revised version of the IDAS *(Snaith & Zigmond, 1994)* was used in the study from the original due to the findings of Snaith and Taylor (1985), who concluded that four of the inward irritability items in the original version were not homogenous with other constructs of irritability and were therefore removed in the study version. The IDAS is a 14 item self-report questionnaire assessing the 3 independent mood states of irritability, depression and anxiety. There are four items for outward irritability and five items for anxiety and depression respectively. Individual items are scored on a four-point Likert scale with a range of 0 – 3. Table 11 below shows the different scoring band threshold for the IDAS

Table 11: Scoring band threshold for the IDAS:

	Irritability	*Depression*	*Anxiety*
Normal	0 – 4	0 – 5	0 – 3
Borderline	5 – 7	6 – 8	4 – 6
Morbid	8 – 12	9 – 15	7 – 15

The higher the score the more acute the psychological impact, with a decrease in scores indicating a reduction in symptoms.

Yuan, Shen, and Wu (2001) concluded that the revised IDAS has good psychometric properties with a Cronbach *a* range from 0.419 to 0.769 and a correlation coefficient range of 0.44 to 0.776 and therefore demonstrated empirical support for the validity and reliability of the IDAS for clinical researchers.

Rosenberg Self Esteem Scale

The Rosenberg Self-Esteem Scale *(Rosenberg, 1965)* is a 10-item forced choice self- report questionnaire assessing global feelings of self-esteem and self-worth in the previous month. Scores ranged from 10 – 40, with higher scores indicating greater level of self-esteem. The scoring protocol was as follows:
Scoring for items 1,3,5,7,9; Strongly agree = 4; Agree = 3; Disagree = 2;
Strongly disagree = 1. Items 2,4,6,8,10 are reversed scoring.
Empirical evidence demonstrating the reliability and validity of the scale has shown a significant association (p ≤.05) between the scale and self-reports of self-esteem and self-worth (Rosenberg, 1965) and Cronbach alpha reliabilities ranging from .72 to .88 (Gray-Little, Williams & Hancock, 1997) and .88 to .90 (Robins, Hendin & Trzesniewski, 2001).

Locus of Control Scale

The Locus of Control Scale *(Rotter, 1966)* version used in the study was an 18-item forced-choice self- report questionnaire that measures generalized expectancies for internal versus external control of reinforcement. People with an internal locus of control believe that their own actions determine the rewards that they obtain, while those with an external locus of control believe that their own behaviour doesn't have much influence and that rewards in life are generally outside of their control. The scoring range is from 0 – 72 with higher scores reflecting a greater belief that an individual is in control of their life.

A low score indicates an internal control while a high score indicates external control.

The scoring protocol is as follows: Items: 2,3,4,6,9,10,11,12,14, 17 18 are scored in the following way: Always agree = 0; Agree = 1; Unsure = 2; Disagree = 3; Always disagree = 4. Items: 1,5,7,8,13,15,16 are reversed scoring:

Empirical evidence of validity is supported in the Lange and Tiggemann (1981) dimensionality and reliability study. The authors found a correlation of .61 on test and re-test reliability and concluded that the scale is stable over a considerable period and sufficiently demonstrated both internal and external locus of control.

Methods of Administration and Data Collection

The method of administration for the outcome measures and data collection was at the five times described below. Half an hour was set aside for completion at Time 1, 2 and 5 and an hour at Time 3 and 4:

Time 1: At assessment where the initial AUDIT and TOP were completed with the participant on a one to one basis with a key worker. The advantage of having the first set of questionnaires completed with the support of a key worker was it provided an opportunity for participants to understand the self-report questionnaire process as well as helping to identifying any participants who had literacy problems and needed extra support to complete the questionnaires.

Time 2: At the start of the Induction Group where the AUDIT and TOP were completed as the base line measure in a group setting in session 1. Where participants missed this session, and were still able to join the group work cycle, they completed the questionnaires on a one to one basis with a key worker.

Time 3: The full test battery of outcome measures was completed in a group setting at the last session of the Induction Group (AUDIT and TOP as a repeat measure and remaining outcome measures as the base line for pre- and post- measures). The questionnaires were handed out in a specific order, and completeness was checked before the group moved on to the next questionnaire. This procedure was replicated if it was needed to administer the psychometrics on a one to one basis if the last IG session had been missed.

Time 4: At the end of the RPTG the same method of collection was implemented across for same test battery of psychometrics at Time 3. For Hypothesis 6, where participants had commenced the RPTG and did not complete the programme but remained in treatment, the post RPTG psychometrics were completed within the same time line as if they had completed the RPTG. Tests were administered on a one to one basis.

Time 5: At 6 month's post RPTG completion, the AUDIT and TOP were administered. The method of collection was either by the key worker in a one to one setting or by post. Where the questionnaires were sent out, a stamped-addressed

envelope was included with a request for returns within 3 weeks. Follow up reminder phone calls were made by the author at two weeks where contact details were known and it was appropriate to call. Participants were asked for to complete the questionnaires themselves, but it was not possible to control for compliance. Literacy was assumed as it was checked that participants had been able to complete the previous questionnaires without support. Has assistance been required, there was a telephone protocol in place.

If questionnaires were returned which indicated a lapse or relapse situation, participants were re-contacted and offered an opportunity to re-engage with treatment.

Research Ethics

Ethical approval was obtained from the University of Leicester Psychology Departmental Ethics Officer. In addition, permission was granted by the Board of Trustees of the research site for the study to take place and for the authorisation of anonymous data collection from participants with their informed signed consent. All participants were given a copy of the participant information sheet (Appendix E) and asked to sign the participant consent form (Appendix F) before they could be included in the study.

At no time was treatment withheld from participants to meet the research requirements.

Data Analysis Strategy

The effectiveness of the programme is examined in three sets of analyses.

Chapter 4 considers the impact of waiting times before entering the Induction Group (IG) on (1) treatment engagement and (2) outcomes on the TOP and AUDIT

Chapter 5 considers the impact of the pre-treatment Induction Group in terms of whether completing the IG was associated with better outcomes and a higher likelihood of completing the full RPTG intervention.

Chapter 6 considers the effectiveness of the RPTG programme and whether completion of the RPTG is associated with better outcomes at the end of the programme and at 6 months' follow-up.

Chapter 4: Do waiting times impact on engaging in Structured Alcohol Treatment?

Introduction

This chapter explores the impact of waiting to start treatment on several key outcome measures. There is some evidence to suggest that the impact of a lack of funding for alcohol services has resulted in the variable capacity of alcohol treatment resulting in waiting lists to access treatment (Alcohol Needs Assessment Research Project, 2004). Anecdotally this lack of funding has resulted in low staffing levels, high case-loads and limited assertive re-engagement protocols when service users didn't engage with treatment once it was offered. The ANARP study (2004) concluded that alcohol treatment services were failing to meet the demand. If people requiring treatment are put on waiting lists, it is important to consider the impact of this on treatment outcomes. In this study three impacts were considered. Firstly, the empirical evidence of the impact of waiting for treatment is reviewed. Secondly, a consideration of if waiting to commence treatment helps or hinders recovery from alcohol misuse and if during the period of wait, people will naturally recover without formal treatment interventions. Finally, the impact of the waiting period on on-going engagement once a place in treatment is offered, is considered

From the literature review in Chapter One, two empirical research questions are addressed. Firstly, do people naturally recover from alcohol problems without structured interventions? Secondly, is waiting to commence treatment for longer than 21 days associated with the likelihood of engaging with or dropping out in the initial stages of treatment?

Benefits of Accessing Structured Treatment

Successful Treatment Outcomes

There is some research evidence that shows that heavy drinkers who receive an intervention are twice as likely to reduce their alcohol consumption compared to heavy drinkers who have not had an intervention (Babor et al., 2003; Wilson, White & Lange, 1978). Other outcome studies have shown that participants who engaged in alcohol treatment showed improvement in life adjustments (Pettinati, Sugerman, DiDonato & Maurer, 1982) and participants who had completed residential rehabilitation, at 12 weeks follow up were reporting improved quality of life including

improved feelings of psychological well-being and physical health if they had remained abstinent (Foster, Marshall, Hooper & Peters, 1998). It was also concluded from several other studies, that participation in treatment has generally been associated with positive outcomes (e.g. Cutler & Fishbain, 2005; McLellan et al., 1994; United Kingdom Alcohol Treatment Trial, 2005; Raistrick, Heather &Godfrey, 2006). Overall, the research shows some benefit to accessing treatment. However, if treatment is beneficial, there needs to be a better understanding of why only small numbers of dependant drinkers actually access treatment compared to the numbers who need treatment (Alcohol Needs Assessment Research Project, 2004).

Impact of Waiting Time on Engagement

There is some evidence from treatment outcome studies that substantial numbers of this client group are more likely not to accept treatment at the end of the waiting period (e.g. Capoccia et al., 2007; Flemming & Lewis, 1987; Redko, Rapp & Carlson, 2006). The cost of failing to engage or delayed entry into treatment is well documented in relation to a deterioration in physical health, criminal justice involvement, social problems, domestic violence, mental health problems and child abuse or neglect and the associated cost to the tax payer (Alcohol Harm Reduction Strategy; 2004; Models of Care for Alcohol; 2006), so the fact that approximately a third of alcohol dependant individuals who were referred to treatment, accessed treatment (ANARP; 2004) is a real concern.

Reasons why this group are more prone to either fail to engage or drop out of the treatment process are varied, with some research findings reporting that excessive waiting times are associated with a failure to engage in treatment when the waiting period is overly long (Rees, Beech & Hore, 1984). Where treatment has been initiated, the long waiting times may also be associated with clients not complying with or dropping out of the treatment programme (Leigh, Ogborne & Cleland, 1984). Leigh et al. (1984) also found that dependant drinkers who failed to engage in treatment was more likely when the wait to start treatment was more than 14 days. Other studies found that individuals were more prone to dropping out of treatment within the first four sessions if the waiting period had been excessive (e.g. Capoccia et al., 2007; Hoffman, Ford, Tilloston, Choi & McCarty, 2011; Orford & Edwards, 1971; Sutherland, Stockwell & Edwards, 1985). In support of this but at the other end

of the spectrum, Rees et al. (1984) found that shorter waiting times were associated with better engagement in alcohol treatment. Despite some evidence that longer waiting times do negatively impact on treatment engagement, Addenbrook and Rathod (1990) concluded that studies into the impact of waiting and dropping out of treatment are inconsistent and inconclusive. However, a more pertinent question is not just to consider the waiting period alone but examine the impact of waiting times on motivation, which is also a crucial factor in treatment engagement. Wanigaratne, Wallace, Pullin, Keaney & Farmer, (1990) argue there is a general assumption that at the point of referral and assessment, clients with alcohol problems are motivated to engage in treatment to some degree. What is less clear is if a longer waiting period to commence treatment de-motivates clients and the waiting period itself creates an environment in which the less motivated de-select themselves (Robin, 1976). However, there is some evidence that has found that waiting before commencing treatment may have a positive impact in that the waiting list can act as a 'prompt for sobriety', as proof they do not need treatment (Redko, Rapp & Carlson, 2006). The authors also proposed that some individuals with alcohol problems will recover 'naturally' without any form of intervention (Redko et al., 2006), but this is contradicted by Marshall, Humphreys & Ball (2010) who argued that most people will have accessed some form of treatment or support at some point in their recovery journey. Redko et al. (2006) acknowledge this point, noting in their study that during a waiting period, service users may seek alternative self-help support through Mutual Aid groups like AA as a strategy to cope with the waiting time. However, the impact of mutual aid support is not well documented as generally, they are closed to access for non-members and do not rely on the public purse to deliver services, therefore are not subject to the same level of scrutiny as publicly funded alcohol treatment providers, such as reporting successful outcomes.

Despite this evidence that longer waiting times impact negatively on engagement in treatment, evidence also shows that clients who access treatment shortly after assessment are not any more likely to continue in treatment (Leigh et al., 1984; Mayer, Merrill, Needham, & Myerson, 1965). This inconclusive and at times contradictory evidence led Best et al. (2002) to conclude in their study that "There is little evidence that either reduced waiting times increase retention nor that increased waiting times are associated with higher patient motivation" (p. 68).

To illustrate, the Best et al. (2002) study looked at the impact of waiting time from brief assessment to treatment entry on alcohol use and concluded that between the two groups (≤ 50 days or ≥ 50 days wait to commence treatment), there were no significant differences in drinking frequency (i.e. mean number of drinking days in the previous month) as a function of waiting times. However, the study does not report on the daily unit consumption separately for each group, which would have revealed the actual mean level of daily drinking between the groups and therefore say more about any impact of wait on actual levels of alcohol consumption. This study limitation meant that a participant could have increased the daily alcohol consumption and this would not have been different to a participant who drunk less on the same number of days. It is therefore difficult to conclude based on the evidence presented by Best et al. (2002) if waiting times did impact on daily unit consumption between the two groups. Specifically, if the longer wait was associated with an increase, reduction or no reported difference in both the number of days drinking in the last month and the number of daily unit consumed.

The current study sought to both replicate the previous findings of Best et al. (2002) and to address some of the weaknesses in their methodology and take forward the recommendation of the Best et al. (2002) research, which identified the need to compare the daily alcohol use of clients who had to wait for treatment, with clients who had rapid access. Best et al. (2002) argued that this should help further the understanding of the impact of wait on "treatment initiation, retention and meaningful treatment success measures" (p. 73).

There are two experimental hypotheses for this current Chapter:

1. Participants will 'recover' without any structured psychosocial interventions (PSI);
2. Participants will be more likely to drop out before treatment start (RPTG) if they wait 21days or more to commence treatment.

Method

Participants

Participants were referred to the research site Structured Day Programme either by self-referring or via a professional referral route. All service users were offered an initial assessment within five working days of the referral. All participants were offered a treatment start date within 21 days of the assessment. For this study, a total of 121 participants out of the original 130 participants were included i.e. they had attended the assessment and attended the first Induction Group session. Of the 9 participants not included, 3 did not attend the assessment and 6 dropped out before the first IG session.

In total, 80 participants were males, with a mean age of 44.43 years (SD = 8.92) with a range from 18 to 65 years and 41 of the participants were females with a mean age of 43.68 years (SD = 10.58), with a range from 20 to 61 years.

Waiting Times

Waiting time is defined as the period from the date a person is referred for a specific treatment modality to the date they start that modality. Referral for a specific treatment modality typically occurs within the treatment agency at or following assessment (National Alcohol Treatment Monitoring Service, 2009).

The National Treatment Agency (now Public Health England) set a national standard framework that service users should wait no longer than 21 days before accessing alcohol treatment. However, whilst this is the optimum target, not all service users were entering treatment within the 21 days due to factors such as not attending appointments, cancelling and re-arranging, or simply not replying to contacts from the service. This created two ‘naturally’ occurring groups: participants who commenced the group work programme within 21 days n = 73 (61%) and participants who waited more than 21 days n = 48 (39%).

Outcome Measures

Two outcome measures were used in this study. The Treatment Outcome Profile (TOP) (Marsden et al., 2008) and The Alcohol Use Disorders Identification Test

(AUDIT) (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). These measures were described in Chapter Three.

A base line of outcomes was established at referral/assessment (Time 1) and compared to scores at the start of Induction Group (Time 2). See General Method Chapter 3 for details about assessment times.

Results

Hypothesis 1

A mixed between-within subject's analysis of variance was conducted to assess the impact of waiting period of more than 21 days or less than 21 days, (IV/group), across two assessment times (initial assessment/start of Induction Group, IV/time) on participants scores (DV) for TOP (daily units, number of days drinking, psychological well-being, physical well-being and quality of life) and the AUDIT. The descriptive statistics for the outcome measures TOP: (daily units, days drinking, psychological and physical well- being and quality of life) and AUDIT at Assessment (Time 1) and start of the IG (Time 2) for both groups (less than 21 days/21 or more days wait) are presented in Table 12 below:

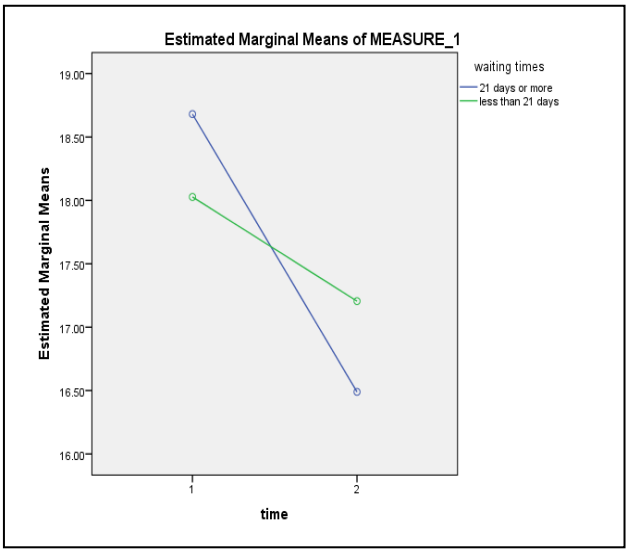
Table12: Descriptive statistics for the TOP & AUDIT across two groups at T1 (assessment) and T2 (IG start).

	Time 1				Time 2			
	≥ 21 days (n = 48)		*≤ 21 days (n = 73)*		*≥ 21 days (n = 48)*		*≤ 21 days (n = 73)*	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Daily Units	*18.68*	*6.65*	*18.02*	*7.31*	*16.48*	*6.80*	*17.20*	*7.24*
Drinking Days	*23.59*	*5.21*	*24.72*	*4.74*	*22.44*	*5.56*	*23.95*	*5.07*
Psychological Well Being	*9.25*	*4.28*	*9.54*	*4.14*	*10.02*	*4.10*	*9.82*	*4.05*
Physical Health	*9.82*	*3.99*	*10.31*	*4.00*	*10.59*	*3.94*	*10.57*	*4.03*
Quality of Life	*10.89*	*3.78*	*11.01*	*4.19*	*11.29*	*3.78*	*11.27*	*4.21*
AUDIT	*26.65*	*6.55*	*27.45*	*7.40*	*25.70*	*6.91*	*26.93*	*7.44*

Daily Unit Consumption

There was a significant interaction between time and group: F (1, 118) = 21.52; Wilks' Lambda = .85; p <.001; partial eta squared = .15 for daily unit consumption with participants in the group who waited 21 days or more before commencing the Induction Group, reducing by an average of 2.1 units per day at Time 2, compared to those who waited less than 21 days reducing by an average of 0.8 units a day at Time 2 (see Figure 7 below):

Figure 7: Daily Unit Consumption at Assessment and IG start for participants waiting less than 21 days or 21 days or more to commence the IG.



There was a substantial main effect for time: F (1, 118) = 104.21; Wilks' Lambda =.53; p < .001; partial eta squared = .47 (large effect size) with both groups showing a reduction in daily unit consumption at Time 2. The main effect for comparing the two different groups was not significant: F (1, 118) = .001; p = .981; partial eta squared < .01.

It can therefore be concluded that participants in both groups significantly reduced their daily unit consumption of alcohol between Time 1 and 2. There was also a significant interaction between group and time, with those waiting 21 days or more reducing their daily units' consumption more than those who waited less than 21 days.

Number of drinking days in last 28 days

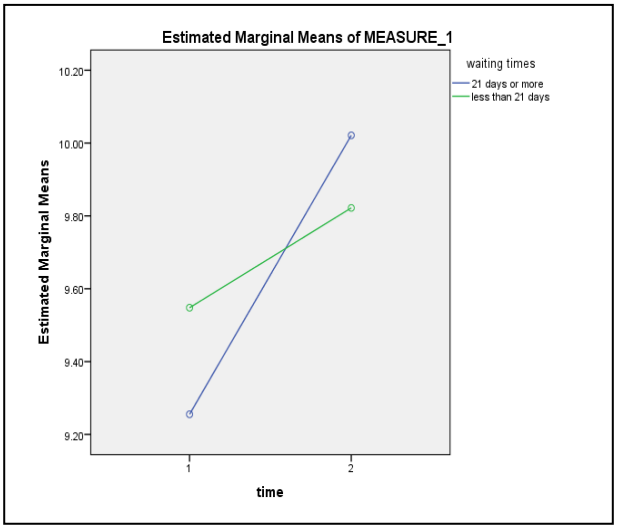
There was a no significant interaction between time and group: F (1, 118) = 1.3; Wilks' Lambda = .99; p = .263; partial eta squared = .01. There was a substantial main effect for time: F (1, 118) = 31.84; Wilks' Lambda = .79; p < .001; partial eta squared = .21 (large effect size) with both groups showing a reduction in number of drinking days at Time 2. The main effect for comparing the two different groups was not significant: F (1, 118) = 1.98; p = .162; partial eta squared =.02.

It can therefore be concluded that over time whilst both groups did significantly reduce the number of drinking days in a 28-day period within each group, this was at about the same rate for both groups. Therefore, the length of time waiting to commence the IG made no difference on the reduction of number of drinking days.

Self-reported Psychological Well Being in a 28-day period

There was a significant interaction between time and group: F (1, 118) = 12.97 Wilks' Lambda = .90; p < .001; partial eta squared = .10 for self-reported improvement in psychological well-being, with participants in both groups reporting improved psychological well-being at Time 2 but the rate of improvement was greater in the group who waited 21 days or more to commence the IG (see Figure 8 below):

Figure 8: Psychological Well Being scores for 28-day period at Assessment and IG start for participants waiting less than 21 days or 21 days or more to commence the IG.

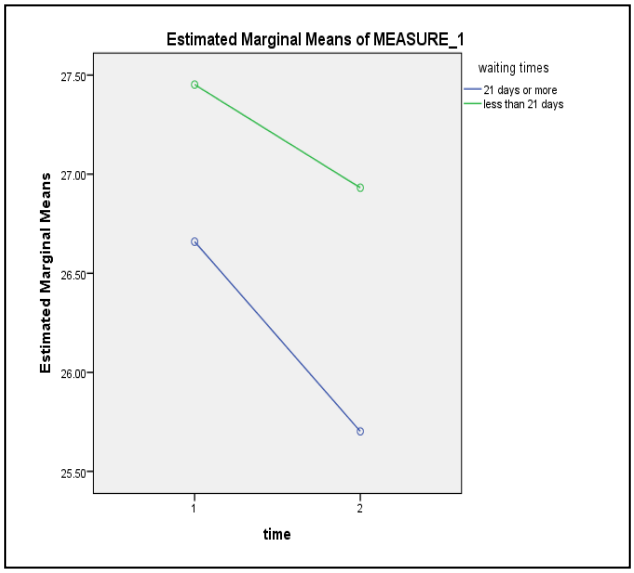


There was a substantial main effect for time: F (1, 118) = 57.96; Wilks' Lambda = .67; p < .001; partial eta squared = .33 (large effect size) with both groups showing improvement in feelings of psychological well-being at Time 2. The main effect for comparing the two different groups was not significant: F (1, 118) = .004; p = .952; partial eta squared < .01. Both groups reported a significant within group increase in psychological well-being at Time 2 and this was greater in participants who had waited 21 days or more before commencing the IG.

Self-reported Physical Health in a 28 Day Period

There was a significant interaction between time and group: F (1, 118) = 14.27; Wilks' Lambda = .89; p < .001; partial eta squared = .11 for self-reported improvement in physical well-being, with participants in both groups reporting improved physical well-being at Time 2 but the rate of improvement was greater in the group who waited 21 days or more to commence the IG (see Figure 9 below):

Figure 9: Physical Health scores in a 28-day period at Assessment and IG start for participants waiting less than 21 days or 21 days or more to commence the IG.



There was a substantial main effect for time: F (1, 118) = 58.75; Wilks' Lambda = .67; p < .001; partial eta squared = .33 (large effect size) with both groups showing improvement in physical health at Time 2. The main effect for comparing the two different groups was not significant: F (1, 118) = .097; p = .76; partial eta squared

< .01. Both groups self-reported significant within group improvement in their physical well- being at Time 2 compared to Time 1, but this was greater in the group who waited 21 days or more to commence the IG.

Self-Reported Quality of Life in a 28 Day Period

There was a no significant interaction between time and group: F (1, 118) = .03; Wilks' Lambda = 1.0; p = .867; partial eta squared <.01. So, whilst both groups did show an improvement in quality of life over a 28-day period, it was at about the same rate between the groups. There was a substantial main effect for time: F (1, 118) = .60; Wilks' Lambda = .10; p < .001; partial eta squared < .01 with both groups showing a small increase in their quality of life at Time 2. The main effect for comparing the two different groups was not significant: F (1, 118) = .01; p = .939; partial eta squared < .01.

AUDIT Scores

There was a no significant interaction between time and group: F (1, 118) = .83; Wilks' Lambda = 1.0; p = .774; partial eta squared < .01. for self-reported improvement on AUDIT scores, with participants in both groups reporting improved AUDIT scores at Time 2 at about the same rate. There was no main effect for time: F (1, 118) = .95; Wilks' Lambda = .99; p = .333; partial eta squared < .01. The main effect for comparing the two different groups was not significant: F (1, 118) = .84; p = .362; partial eta squared <.01.
The summary of the p values is presented in Table 13 below:

Table 13: p values for TOP & AUDIT outcomes using the ANOVA mixed between-within group for interaction effect, main effect for time, main effect for group (wait less than 21 days or 21 days or more).

Outcome measure	Interaction effect time/group	Main effect for time	Main effect for group
alpha level = .05	ANOVA p value =	ANOVA p value =	ANOVA p value =
Daily unit consumption	<.001	<.001	.981
Number of days drinking	.263	<.001	.162
Psychological well-being	<.001	<.001	.952
Physical health	<.001	<.001	.76
Quality of Life	.867	<.001	.939
AUDIT	.774	.333	.362

Overall, the results demonstrated that both groups showed significant reductions in daily unit consumption, number of days drinking and self-reported significant improvements in feelings of psychological well-being, physical health and quality of life between Time 1 and Time 2. Improvements were greater among participants who waited 21 days or more for daily unit consumption and self-reported psychological well-being and physical health than those who waited less than 21 days. Therefore, the experimental hypothesis that participants will 'recover' without any psychosocial structured interventions (PSI), is partially supported.

Hypothesis 2:

Participants will be more likely to drop out before treatment start (Relapse Prevention Treatment Group) if they wait 21 days or more to commence treatment.

As 3 participants dropped out after the second assessment and did not re-engage, the period of waiting could not be calculated and so they were removed from the dataset. All were male and so the mean age of males changed to 44.01 with a SD of 8.89.

Table 14 below shows the percentage of participants in each group (Wait more than 21 days or less than 21 days) who started the RPTG compared to those who did not.

Table 14: % of participants in each group split by waiting time.

	Start RPTG	Not Start RPTG	Total
Days wait: 21 days or more	48 (85%)	6 (15%)	54 (100%)
Days wait: less than 21 days	57 (76%)	16 (24%)	73 (100%)

Results

A Chi-square test was conducted to assess the impact of wait on treatment start and to examine the experimental hypothesis that participants will be more likely to drop out before treatment start (RPTG) if they wait 21days or more to commence treatment. This indicated no significant association between waiting time of more than 21 days and dropping out of treatment; χ^2 (1, n = 127) = 1.8, p = .176; *phi* = .14. The experimental hypothesis is therefore not supported.

Discussion

Overall the results showed that by not accessing treatment within 21 days, participants seemed to do about the same as participants who accessed treatment within the 21 days recommended waiting times (NATMS, 2009). This finding supports the Best et al. (2002) study. Specifically, the research found that both groups showed significant reductions in daily unit consumption, number of days drinking and self-reported significant improvements in feelings of psychological well-being, physical health and quality of life between Time 1 and Time 2. However, for daily unit consumption and self-reported psychological well-being and physical health, these improvements were greater among the group who waited 21 days or

more than those who waited less than 21 days for treatment. There was also no demonstrated association between waiting longer than 21 days for treatment and the likelihood of dropping out of treatment.

This was not an entirely unexpected finding given the contradictory evidence in the literature that on the one hand longer waiting times are associated with poorer outcomes (e.g. Standards for Better Health, 2004; MoCAM, 2006) and on the other hand a waiting list can act as a 'prompt for sobriety' or provide an opportunity for 'natural' or 'spontaneous' recovery (Redko, et al., 2006).

However, there are some limitations with concluding that the period of wait made no difference to the outcomes between the two groups. For example, on daily unit consumption, there was a significant reduction within both groups between assessment (Time 1) and the start of the Induction Group (Time 2), but participants who waited more than 21 days to commence the IG reduced daily unit consumption to a greater degree So whilst both groups did significantly improve between the two-time periods and were drinking at about the same daily rate (approximately 18 units at the first assessment point) it might be tempting to consider that this outcome is consistent with the notion of spontaneous recovery proposed by Redko et al., 2006), However, an important consideration is the different length of time between the two testing periods between the two groups. For the 'less than 21 days' group this was an average of 11 days between the first and second assessment point and for the 'over 21 days' group this was an average of 30 days. Therefore, another way of looking at this could be that the group who waited less than 21 days reduced their level of daily unit consumption at a faster rate as there was less time available to make changes to daily unit consumption. Therefore, it poses the question that did they actually do better than the group who waited over 21-days to start, as they made significant reductions to their daily unit consumption in a much shorter period of time? This may say something about their level of motivation to change compared to the other group. Unfortunately, a limitation of the current study was a failure to assess 'readiness to change' and this will be discussed in the concluding chapter.

In future studies, another way to control for this limitation would be to repeat test each group on a 7-day basis so that the rate of changes to daily unit consumption

over the same time periods can be more accurately compared and properly calculated.

These limitations aside, the current study is consistent with other findings that the evidence for the impact of waiting times on treatment outcome is both inconsistent and inconclusive (e.g. Addenbrook et al., 1990; Best et al., 2002). The study outcomes also support the finding that there was no association between a waiting time of more than 21 days and dropping out of treatment (Addenbrook et al., 990).

It also cannot be concluded that participants who waited more than 21 days to commence treatment had naturally began to recover without a structured and formal treatment intervention (Redko et al., 2006). In the current research, the referral route into the service is an important consideration as 90% of the referrals in the group came from professional agencies (either Community Alcohol Team or Alcohol Advice Centre), so the majority of this group will have accessed structured support immediately prior to the referral and may have continued to access this support during the period of waiting (Marshall et al., 2010. It is also unknown if this group accessed self -help or mutual aid groups such as AA or SMART during the waiting period and if they did, this may have helped get participants more 'treatment ready' (Redko et al., 2006). Not having a clear understanding of this is another study design limitation, making it unwise to make any firm conclusions about natural recovery for the cohort who waited more than 21 days to commence treatment. Qualitative research would also be a key step in understanding what service users do to help themselves during a period of wait and which will help to gain a better understanding of the role of other variables such as family support and mutual aid in recovery (Marshall et al., 2010).

It also is a consideration that during the longer period of wait, service users who are actually not motivated to enter treatment de-select themselves (Robin, 1976). If this is the case, then this adds little to the understanding of the impact of waiting and natural recovery. Service users who fail to engage following a referral into treatment are an important group and further research is needed to help understand the reasons why people don't access treatment when they have been referred.

Throughout the alcohol treatment system there is a standard set by Public Health England that service users should access treatment within 21 days. Although not

explicitly stated, the assumption is that this creates the optimum opportunity in which service users will do better, because they have been engaged quickly and therefore the momentum to change has been acted upon as opposed to a period of wait creating the opportunity for attrition. Whilst this study has a very small cohort and therefore it is not wise to draw any firm conclusions, this 'trend' that, service users in this case who accessed treatment within 21 days didn't do any better than service users who waited more than 21 days, is an interesting one.

The current research sought to replicate the findings of Best et al., (2002). The findings did concur in that reduced waiting times were not associated with retention in treatment as there was not difference between groups. This research also sought to address a limitation of other studies in relation to assessing the impact of waiting on daily unit consumption. This research found that there was no difference between the groups on daily unit consumption, with both groups significantly reducing their alcohol intake between assessment and commencement of treatment. However, in addressing the limitations of other research in this area, this research has identified its own limitation in relation to comparing daily unit consumption between two groups but over different periods of time.

In conclusion, the current research therefore cannot conclude that service users will naturally recover without accessing structured treatment (Redko et al., 2006). It also cannot be concluded that there is a significant association between waiting time and dropping out of treatment (Addenbrook & Rathod, 1990). The further consideration in understanding how treatment engagement can be enhanced is to consider the impact of pre-treatment preparation. This is examined in the next chapter.

Chapter 5: The role of an Induction Group in Improving Outcomes for the Treatment of Alcohol Dependency in a Structured Group Work Programme.

Introduction

This chapter will examine the impact of a pre-treatment Induction Group (IG), described in Chapter Three. Firstly, the strategies to improve engagement in treatment will be reviewed and secondly, for every service user who does engage in treatment, the additional variable of a service user's willingness to access group work as part of their structured treatment is discussed. Based on these latter points, the role of preparing service users for structured group work to improve engagement and outcomes is considered and underpins the research question and experimental hypothesis for this chapter. Specifically, service users who attend a minimal treatment group (IG) will be better prepared for more intensive group work compared to service users who did not attend the IG.

Improving access to specialist treatment

In addition to waiting times (discussed in the previous chapter), the reasons why service users don't engage in treatment despite being referred include accessibility to treatment services, such as the hours of opening or more remote location of services, making access difficult (Booth & Bennett, 2004). Securing suitable child care, having poor social networks and poor motivation are also cited as contributory factors (Marshall, Humphreys, & Bell, 2010). It is also suggested that some service users simply forget to attend (Booth, Dale, Slade, & Dewey, 1992; Sawyer, Zalan, & Bond, 2002). Motivation to engage in treatment is also clearly a crucial factor. Marshall et al. (2010) argue that "changing drinking behaviour is impossible without significant motivation on the part of the patient, and such motivation must be nurtured by the clinician before virtually any other therapeutic task" (p. 182). Methods to enhance motivation was studied by Batel, Pessione, Bouvier, and Rueff (1995). They found a simple 'open' letter suggesting that the patient makes an appointment with an alcohol specialist was an effective means of engaging service users into alcohol treatment. Booth and Bennett (2004) found that making a telephone call between referral and first assessment increased attendance at the assessment appointment in an alcohol service. Other studies found that by telephoning clients (i.e. 'prompting) to encourage attendance, or follow up calls if they missed

appointments resulted in clients being significantly more likely to start treatment and attend further sessions compared to clients who were not prompted (e.g. Jackson, Booth, Salmon, & McGuire, 2009; Passetti, Jones, Chawla, Boland, & Drummond, 2008). Gilburt, Drummond, and Sinclair (2015) found phoning and chasing people up, using an assertive manner of interaction that challenged individuals was highlighted as particularly important by service users as a helpful way to re-engage them in treatment if they had dropped out. The more 'personal nature' of a phone call was found to be preferable and more effective than a letter reminder (Budd, Budd & Budd, 1980) and this was possibly because the phone call either acted as a reminder to attend or may have provided a greater opportunity to motivate the service user to attend or re-engage. This is especially important if the patient's motivation to change is flagging or non-existent (Marshall et al., 2010). A reminder telephone call communicates concern and caring for clients (Lash & Blosser, 1999) and provides them with an opportunity to voice worries or questions (Jackson et al., 2008).

Bamford, Booth, McGuire and Salmon's (2005) study extended the concept of phone calls to 'prompt' attendance by looking at the use of a minimal treatment intervention (provision of a self- help leaflet with advice about alcohol) to improve attendance at the assessment appointment. However, they found that this didn't impact on the likelihood of attendance. Kouimtsidis and Ford (2011) developed this idea further by looking at the role of pre-treatment preparation in their study. The first stage was a Preparation Group (PG) including Cognitive Behavioural Therapy sessions, followed by a medical detox as the second stage and a third stage follow-up of a Relapse Prevention Group. They found that participants who had completed the PG had significantly higher detoxification completion rates (increased from 57% to 85%) and reduction in drop-outs by 55%, indicating that preparation for treatment can improve retention in treatment (Kouimtsidis, Drabble, & Ford (2012). The importance of preparation for treatment is further supported by Gilburt, Drummond and Sinclair's (2015) qualitative research which found that participants in treatment felt they had been "insufficiently prepared for treatment" and were therefore more likely to drop out (p. 446).

Overall, there is some research evidence that supports the positive impact of some kind of preparation prior to attending treatment and these 'interventions' help service users to both engage with and be retained in treatment. Given some of the difficulties engaging service users into treatment, potentially, this reluctance to engage can be further exacerbated by the offer of group work interventions, with it being acknowledged that many service users have concerns about being in a group (Sobell & Sobell, 2011).

Engaging Service Users into Group Work

Several studies emphasise the importance of preparing service users for group work to address their fears and anxieties (e.g. Douglas, 1991; Wanigaratne, Wallace, Pullin, Keaney & Farmer, 1990). Hogg and Williams (2000) note that although a group starts when a collection of individuals perceive that they share some social category which enables them to bond over a shared identity, this shared identify does not automatically create an environment in which individuals will get the most out of being in a group. Douglas (1991) found that service user assumptions about group work were not always helpful and were essentially 'fears' about what to expect rather than any actual experience. These negative perceptions could be real barriers to engaging with a group work programme. Douglas (1991) identified several common themes including "Will I get along with the group?", "I don't know what to expect?" and "I wish we had a residential weekend to start to enable members to get to know one another and to break down barriers" (p.174).

In considering the evidence for the benefits of preparing service users for group work, two preparation methods were utilised in the current intervention to enhance engagement:

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1. *Group Work Leaflets*

Sobell and Sobell (2011) suggested that a group work preparation leaflet is given to all potential participants to help alleviate some of their fears about group therapy and to emphasise the value of groups over individual therapy. In the current study, service users were given a group work leaflet which explained the psychosocial

approach (i.e. learning in groups) as opposed to the more therapeutic approach of group discussions and personal disclosures (see Appendix G). During the pilot phase of the study, client testimonials were collated and made into a leaflet which was given to service users to enhance their motivation (see Appendix H: used with permission).

2. *Preparation for Treatment through a Minimal Treatment Group (Induction Group)*

The content of the Induction Group is described in detail in Chapter 2, but its function was to develop the Wanigaratne et al. (1990) methodology to reduce drop-outs from alcohol group work programmes by enhancing motivation. In their programme structure, they used a pre-group individual session to explain the group work programme, understand the client's expectations and address anxieties. In the current study, the aim therefore of the six session Induction Group (minimal treatment group) was to prepare service users for the more intensive and structured Relapse Prevention Treatment Group, by providing sessions to encourage group development with a specific focus on the forming and storming stages of group development suggested in Tuckman's (1965) Model of Group Life. This model describes how a new group develops through four stages: Forming, Storming, Norming and Performing (Tuckman, 1965). Some groups will pass through these stages sequentially, whilst others will pass back and forth between the four stages (Dainow & Bailey, 1988). Dainow and Bailey (1988) also suggested that it is during these first two stages that the group is characterised by anxiety, not knowing what to expect, conflict and feelings of impossibility or resistance to address the task ahead. They concluded that these factors did not create the optimum environment in which to settle to the task in hand (Dainow & Bailey, 1988).

Other research is clear on the role of group cohesion and the resulting improved outcomes (e.g. Barlow & Burlingame, 2006; Burlingame, Fuhriman & Johnson, 2002; Sobell, Sobell & Agrawal, 2009), with Burlingame et al. (2002) describing group cohesion as the therapeutic relationship in group psychotherapy. This they propose, is developed through the aggregate of member-leader, member-member and member-group relationships guided by six principles as follows: pre-group

preparation; early group structure; leader interaction; feedback and member contributions. The considered evidence therefore suggested that group development was crucial to the performance of the group and that a newly formed group may not be at the optimum for learning and this could impact on outcomes. Importantly, the RPTG goes straight in to the business of learning, with the first session being Alcohol Education. It was hypothesised that if the group was more developed and settled then they would be ready to learn instead of being distracted and even consumed by the developing dynamics of the group.

The aim of the Induction Group was to resolve some of the issues that may arise during the first two stages. It was hoped that the IG would better facilitate the transition to the 'norming stage' (Tuckman, 1965), so that by the end of the six weeks' minimal intervention, group cohesion and mutual support was established (Burlingame et al., 2002; Dainow & Bailey, 1988). Participants also had the opportunity to develop confidence in being in a group environment and be more willing to engage in the group discussions (Burlingame et al., 2002).

By attending the IG, this study proposed that service users would be better prepared for group work because as service users moved into the RPTG, they would be moving towards the fourth stage of Tuckman's group life model, i.e. the performing stage'. In this stage, the group was ready to get on with the task that had brought them together i.e. relapse prevention. This occurred firstly, through the processes of learning in groups, with the group acting as the main agents of change via group processes and dynamics (Burlingame et al., 2002). Secondly, as an educational aid to enable the practice and rehearsal of new skills and techniques with participant feed-back (Burlingame et al., 2002; Velleman, 1992).

This study examined the impact of preparing service users for group work based on the previous findings already described around the value of preparing service users to engage in treatment and the associated benefits on outcomes. There are three experimental hypotheses in the current chapter: specifically, participants who completed the Induction Group would do better than those participants who started but did not complete the Induction Group for:

H1: Demonstrate better post induction group outcomes

H2: Be more likely to complete the follow-on treatment group (RPTG)

H3: Have better post treatment (RPTG) outcomes

These three hypotheses were examined in three mini-studies.

Study 1 Post induction group outcomes

Method

Participants

There were 130 participants who were eligible for the study.127 participants attended the assessment and gave their consent to participate in the study. All participants were offered a place on the Induction Group. 29 participants were excluded from the analysis due to incomplete data, leaving a remaining cohort of 98 participants in this study. Of this remaining group, 63 participants were males, with a mean age of 44.36 years (SD = 8.88) and range of 18 to 65 years. The remaining participants were female (n = 35) with a mean age of 43.71 years (SD = 8.23) and range of 20 to 61 years.

For analysis, the participants were split into two groups. Group 1 were those participants who had completed 5 or more of the six Induction Group sessions and then commenced the RPTG (n = 52). Group 2 were those participants who had completed less than 5 of the six Induction Group sessions and then commenced the RPGT (n = 46).

The completion criteria were set as 5 sessions or more indicating a successful completion. Less than 5 sessions were designated as a non-completion. The rationale for the completion criterial was based on the mixed nature of the programme structure in that the first two sessions were ‘open’ after which the group became ‘closed’ meaning no new participants could then joint the group. This meant that some service users could have missed the first session but as this session was mostly about introductions and settling in to the group, it was not felt that this would significantly impact on the overall experience of preparation for group work. In addition, one missed session could be easily caught up on a one to one basis.

Missing any more sessions than that could mean the benefit of a group environment for learning would have been reduced. In line with accepted practice (e.g. Sobell & Sobell, 2011), a maximum of eight participants were in each IG cycle.

Outcome Measures

Two outcome measures were used in this study, which are described in Chapter 3:

1. The Treatment Outcome Profile (TOP; Marsden, Farrell, Bradbury, Dale-Perera, Eastwood, Roxburgh, Taylor, 2008).

2. The Alcohol Use Disorders Identification Test (AUDIT; Babor, Higgins-Biddle, Saunders, Monteiro, 2001)

Comparisons of pre-and post-outcomes were at the start of Induction Group (Time 2) and the end of the IG/start of the RPTG (Time 3). See General Method Chapter 3 for details about assessment times.

Results

A mixed between-within subject's analysis of variance was conducted to assess the impact of completing or not completing the IG (IV/group), across two assessment times: (start of IG = Time 2 and end of IG/start of RPTG = Time 3), on participants' scores (DV) for TOP (daily units, number of days drinking, psychological well-being, physical well-being and quality of life) and the AUDIT.

The descriptive statistics for the outcome measures TOP: (daily units, days drinking, psychological well-being, physical health, quality of life) & AUDIT at the start (Time 2) and end of the IG (Time 3) for completers and non-completers are presented in Table 15 below:

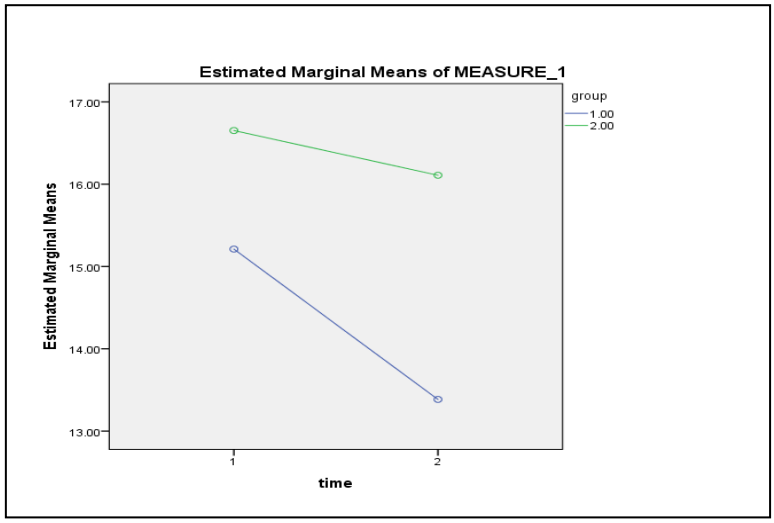
Table 15: Descriptive statistics for the TOP & AUDIT at T2 and T3 for IG completers and non-completers.

	Daily Units		Drinking Days		Psychological Well Being		Physical Health		Quality of Life		AUDIT	
Time 2	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
IG completers *(n = 52)*	*15.21*	*5.59*	23.40	5.18	10.61	4.05	11.67	3.66	12.23	3.89	*24.63*	*6.40*
IG non-completers n = 46)	*16.65*	*6.61*	22.54	5.40	9.56	4.18	10.26	4.27	11.04	4.23	*26.50*	*7.47*
Time 3	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
IG completers *(n = 52)*	13.38	4.70	20.42	5.36	*11.26*	*3.32*	12.21	3.04	*12.82*	*3.08*	*22.82*	*6.48*
IG non-completers n = 46)	16.10	6.02	21.02	4.76	*10.04*	*3.86*	10.76	*3.91*	*11.56*	*3.95*	*25.19*	*7.78*

TOP: Daily Unit Consumption:

There was a significant interaction between time and group: F (1,96) = 6.66; Wilks' Lambda = .94; p = .011; partial eta squared = .06 for daily unit consumption. The decrease was greater for the IG completers. (see Figure 10 below)

Figure 10: Daily Unit Consumption at pre-post for IG completers and non-completers.

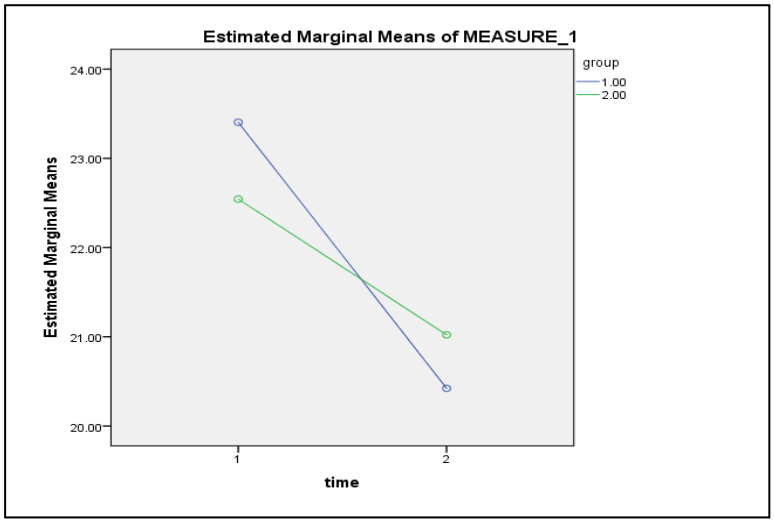


There was a substantial main effect for time: F (1, 96) = 22.75; Wilks' Lambda = .81; p < .001; partial eta squared = .19 (large effect size) with both groups showing a reduction in daily alcohol consumption between the start and end of the IG. The main effect for comparing the two different types/levels of intervention was not significant: F (1,96) = 3.37; p = .070; partial eta squared = .03.

TOP: Number of drinking days in last 28 days:

There was a significant interaction between time and group: F (1, 96) = 4.78; Wilks' Lambda = .95; p = .031; partial eta squared = .05 for number of days drinking in the last 28 days. The decrease was greater for the IG completers. (see Figure 11 below).

Figure 11: Drinking days in the previous 28 days at pre-post for IG completers and non-completers.



There was a substantial main effect for time: F (1, 96) = .45.57; Wilks Lambda = .69; p < .001; partial eta squared = .32 (large effect size) with both groups showing a reduction in number of drinking days between the start and end of the IG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 96) = .01; p = .896; partial eta squared <.01.

TOP: Self-reported Psychological Well Being in a 28 -day period

There was no-significant interaction between time and group: F (1, 96) = .33; Wilks' Lambda = .99; p = .566; partial eta squared <.01 for self-reported improvement in psychological well-being. There was a substantial main effect for time: F (1,96) = 13.82; Wilks' Lambda = .87; p <.001; partial eta squared = .12 (large effect size) with participants in both groups reporting improved psychological well-being between the start and end of the IG. The main effect for comparing the two different types/levels of intervention between groups was not significant: F (1, 96) = 2.20; p =.141; partial eta squared = .02.

TOP: Self-Reported Physical Health in a 28 Day Period:

There was no significant interaction between time and group: F (1, 96) = .01; Wilks' Lambda = 1.00; p = .900; partial eta squared <.01 for self-reported improvement in physical well-being, with participants in both groups self-report improved physical health between the start and end of the IG. There was a substantial main effect for time: F (1, 96) = 11.67; Wilks' Lambda = .89; p = .001; partial eta squared = .10 (large effect size). The main effect for comparing the two different types/levels of intervention between groups was not significant: F (1, 96) = .02; p = .900; partial eta squared < .01.

TOP: Self-Reported Quality of Life in a 28 Day Period:

There was no significant interaction between time and group: F (1,96) =.04; Wilks' Lambda =1.00; p = .837; partial eta squared < .01, but both groups did self-report improved quality of life at almost the same rate between the start and end of the IG. There was a substantial main effect for time: F (1, 96) = 9.63; Wilks Lambda = .91; p =.003; partial eta squared =.09 (large effect size). The main effect for comparing the two different types/levels of intervention between groups was not significant: F (1, 96) = .04; p =.105; partial eta squared = .03. (No effect size)

AUDIT:

There was no significant interaction between time and group: F (1, 96) = .77; Wilks' Lambda =.99; p = .380; partial eta squared < .01 for AUDIT scores. There was a substantial main effect for time: F (1, 96) = 29.7; Wilks' Lambda = .76; p < .001; partial eta squared = .24 (large effect size) with both groups showing a reduction in AUDIT scores between the start and end of the IG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 96) = .77; p = .380; partial eta squared < .01.

The results for hypothesis 1 showed that both groups showed significant reductions in daily unit consumption and number of days drinking and a significant improvement in between Time 2 and 3. These improvements were greater for the IG completers. Both groups reported no improvements in feelings of self-reported psychological well-being, physical health, quality of life and reductions on AUDIT scores. Therefore, the experimental hypothesis that participants who completed the IG will show better post Induction Group improvement is partially supported.

Table 16: p values for TOP & AUDIT outcomes using the ANOVA mixed between-within group for interaction effect, main effect for time and main effect for group for IG completers and commence RPTG (n = 52) and incomplete IG and commence RPTG (n = 46).

Outcome measure	Interaction effect time/group	Main effect for time	Main effect for group
alpha level = .05	ANOVA p value =	ANOVA p value =	ANOVA p value =
Daily unit consumption	.011	<.001	.070
Number of days drinking	<.001	<.001	.896
Psychological well-being	.566	<.001	.141
Physical health	.900	.001	.900
Quality of Life	.837	.003	.105
AUDIT	.380	<.001	.380

Study 2 Completion of IG and RPTG

Method

Participants

For this study, there was a total of 130 participants. Of these 87 were males, with a mean age of 44.1 years (SD = 8.85) with a range from 18 to 65 years, and 43 were females with a mean age of 44.2 (SD = 10.59), with a range from 20 to 61 years. These fell into the following four groups:

Group 1: Participants who had completed 5 or more of the six Induction Group sessions and then completed 10 or more RPTG (n = 35).

Group 2: Participants who had completed less than 5 of the six Induction Group sessions and then completed 10 or more RPTG (n = 17).

Group 3: Participants who had completed 5 or more of the six Induction Group sessions and then completed less than 10 sessions of the RPTG (n = 19)

Group 4: Participants who had completed less than 5 of the six Induction Group sessions and then completed less than 10 sessions of the RPTG (n = 59)

Results

A Chi-square test for independence (with Yates Continuity Correction) indicated a significant association between completing the induction group and completion of the RPTG. χ^2 (1, n = 130) = 22, p < .001 *phi* = 0.4. The results therefore indicate that participants were significantly more likely to complete the RPTG if they had completed the IG group first compared to participants who had not completed the IG.

Table 17 below shows that participants were over twice as likely to drop out of the RPTG if they didn't complete the IG first. The experimental hypothesis is therefore supported.

Table 17: Cross tabulation demonstrating percentage of participant in each of the four groups (complete IG & RPTG/ complete IG & incomplete RPTG/ incomplete IG & complete RPTG/ incomplete IG & RPTG).

		Comp RPTG	Incomplete RPTG	Total
Completed IG	n =	35	19	54
	%	65%	35%	100%
Incomplete IG	n =	17	59	76
	%	22%	78%	100%
Total	n =	52	78	130
	%	40%	60%	100%

Study 3: IG completion and pre-to post RPTG outcomes

Method

Participants

For this study, participants continued the service pathway into the RPTG. A total of 67/130 participants commenced the RPTG. 78 participants did not successfully complete or engage with the RPTG. 52 of the remaining cohort had engaged with the IG to some degree and then successfully completed the RPTG with full sets of outcome data for analysis being available.

31 participants were males, with a mean age of 41.6 years (SD = 9.47) and with a range from 18 to 58 years, and 21 were females with a mean age of 45.6 (SD = 10.26), with a range from 27 to 61 years. These fell into the following two groups:

Group 1 Participants who had completed 5 or more of the six Induction Group sessions and then completed 10 or more sessions of the RPTG (n = 35).

Group 2 Participants who had completed less than 5 of the six Induction Group sessions and then completed 10 or more sessions of the RPTG (n = 17).

Outcome Measures

Eight outcome measures were used in this study, which are described in Chapter 3.

1. The Treatment Outcome Profile (TOP; Marsden, Farrell, Bradbury, Dale-Perera, Eastwood, Roxburgh, Taylor; 2008)
2. The Alcohol Use Disorders Identification Test (AUDIT; Babor, Higgins-Biddle, Saunders, Monteiro, 2001)
3. Irritability, Depression and Anxiety Scale (IDAS; Snaith & Zigmond, 1994).
4. Assertiveness questionnaire
5. Thinking Style Questionnaire
6. Rosenberg Self Esteem Scale (Rosenberg, 1965)
7. Locus of control (Rotter, 1966)
8. Alcohol Knowledge Questionnaire

A base line of pre-treatment outcomes was established at the End of the IG/start of the RPTG (Time three) with comparisons at the end of the RPTG (Time four)**.** See General Method Chapter 3 for details about assessment times.

Results

A mixed between-within subjects' analysis of variance was conducted to assess the impact of completing the IG on post treatment outcomes (IV/group), across two-time periods: end of IG and end of RPTG, on participants outcome scores (DV) described above.

The descriptive statistics for the outcome measures TOP: (daily units and days drinking, psychological well-being/physical health and quality of life) & AUDIT at the end of the IG (Time 3) and end of the RPTG (Time 4) for completers and non-completers are presented in Table 18 below:

Table 18: Descriptive statistics for the TOP & AUDIT at T3 and T4 for IG completers and non-completers.

	Daily Units		Drinking Days		Psychological Well Being		Physical Health		Quality of Life		AUDIT	
Time 3	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
IG completers *n = 35*	*13.09*	*4.57*	*19.20*	5.11	11.17	3.39	12.22	3.09	12.91	3.11	22.14	6.36
IG non-completers *n = 17*	*14.82*	*5.61*	*21.29*	*4.67*	9.59	4.03	10.65	3.97	11.24	4.42	23.23	7.44
Time 4	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
IG completers *n = 35*	*6.54*	*5.89*	*9.51*	*9.31*	13.57	2.55	14.00	2.46	14.86	2.73	11.14	9.99
IG non-completers *n = 17*	*8..00*	*5.99*	*12.06*	*9.63*	12.29	3.51	12.82	3.61	13.65	3.79	13.23	10.10

Daily Unit Consumption:

There was no significant interaction between time and group: F (1, 50) = .045; Wilks' Lambda = .99; p = .833; partial eta squared <.01 for daily unit consumption.
There was a substantial main effect for time: F (1, 50) = 101.89; Wilks' Lambda = .33; p < .001; partial eta squared = .67 (large effect size). This suggests that there was a significant reduction in daily unit consumption in both groups between the start and end of the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = .05; p =.833; partial eta squared <.01; indicating that although both groups did significantly reduce their daily unit consumption, the difference between groups was not significant.

Number of drinking days in last 28 days:

There was no significant interaction between time and group: F (1, 50) = .04; Wilks' Lambda = .99; p = .842; partial eta squared <.01 for number of drinking days.
There was a substantial main effect for time: F (1, 50) = 70.42; Wilks' Lambda = .42; p < .001; partial eta squared = .59 (large effect size). This suggests that there was a significant reduction in drinking days in the last 28 days in both groups between the start and the end of the RPTG.

The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = 1.46; p = .233; partial eta squared = .03 indicating that although both groups did significantly reduce their number of drinking days, the difference between groups was not significant.

Self-reported Psychological Well-being in a 28-day period:

There was a no significant interaction between time and group: F (1, 50) = .23; Wilks' Lambda = .99; p = .632; partial eta squared < .01 for psychological well-being. There was a substantial main effect for time: F (1, 50) = 64.87; Wilks' Lambda = .44; p < .001; partial eta squared = .57 (large effect size). This suggests that there was a significant increase in self-reported psychological well-being in both groups between the start and end of the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = 2.45; p = .124; partial eta squared = .05, indicating that although both groups did significantly improve in their psychological well-being, the difference between groups was not significant.

Self-reported Physical Health in a 28 Day Period:

There was no significant interaction between time and group: F (1, 50) = .349; Wilks' Lambda = .99; p = .557; partial eta squared <.01 for physical health. There was a substantial main effect for time: F (1, 50) = 31.19; Wilks' Lambda = .60; p < .001; partial eta squared = .40 (large effect size). This suggests that there was a significant increase in self-reported physical well-being in both groups between the start and end of the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = 2.54; p = .118; partial eta squared = .05, indicating that although both groups did significantly improve in their physical well-being, the difference between groups was not significant.

Self -Reported Quality of Life in a 28 Day Period:

There was no significant interaction between time and group: F (1, 50) = .45; Wilks' Lambda = .99; p = .507; partial eta squared <.01 for Quality of Life. There was a substantial main effect for time: F (1, 50) = 38.47; Wilks' Lambda = .57; p < .001; partial eta squared = .44 (large effect size). This suggests that there was a significant increase in self-reported Quality of Life in both groups between the start and end of

the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = 2.42; p = .126; partial eta squared = .05, indicating that although both groups did significantly improve in their quality of life, the difference between groups was not significant.

Audit:

There was no significant interaction between time and group: F (1, 50) = .24; Wilks' Lambda = .99; p = .629; partial eta squared < .01 for AUDIT scores. There was a substantial main effect for time: F (1, 50) = 104.52; Wilks' Lambda = .32; p < .001; partial eta squared = .68 (large effect size). This suggests that there was a significant decrease in self-reported levels of dependant drinking behaviours in both groups between the start and the end of the RPTG.

The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = .48; p = .493; partial eta squared < .01; indicating that although both groups did significantly reduce their scores on the AUDIT, the difference between groups was not significant.

Irritability, Depression and Anxiety Scale (IDAS):

The descriptive statistics for the outcome measures IDAS at the end of the IG (Time 3) and end of the RPTG (Time 4) for IG completers and non-completers are presented in Table 19 below:

Table 19: Descriptive statistics for the IDAS at T3 and T4 for IG completers and non-completers.

	Irritability		Depression		Anxiety	
Time 3	*M*	*SD*	*M*	*SD*	*M*	*SD*
IG completers n = 35	6.06	2.90	7.14	3.47	8.57	3.13
IG non-complete n = 17	6.00	3.50	8.23	3.27	9.06	4.01
Time 4						
IG completers n = 35	4.80	2.01	5.51	2.81	5.71	2.19
IG non-complete n = 17	4.23	2.86	5.52	2.65	6.00	2.47

Irritability:

There was no significant interaction between time and group: F (1, 50) = .74; Wilks' Lambda = .99; p = .394; partial eta squared < .02 for Irritability. There was a substantial main effect for time: F (1, 50) = 26.16; Wilks' Lambda = .66; p < .001; partial eta squared = .34 (large effect size). This suggests that there was a significant decrease in self-reported levels of irritability in both groups between the start and end of the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = .17; p = .682; partial eta squared <.01, indicating that although both groups did significantly report lower levels of irritability, the difference between groups was not significant.

Depression:

There was no significant interaction between time and group: F (1, 50) = 3.39; Wilks' Lambda = .94; p = .071; partial eta squared = .06 for depression. There was a substantial main effect for time: F (1, 50) = 54.92; Wilks Lambda =.48; p < .001; partial eta squared = .52 (large effect size). This suggests that there was a significant decrease in self-reported levels of depression in both groups between the start and end of the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = .41; p = .527; partial eta squared < .01, indicating that although both groups did significantly report lower levels of depression, the difference between groups was not significant.

Anxiety:

There was no significant interaction between time and group: F (1, 50) = .059; Wilks' Lambda = .99; p = .809; partial eta squared < .01 for Anxiety. There was a substantial main effect for time: F (1, 50) = 50.66; Wilks' Lambda = 50.66; p < .001; partial eta squared = .50 (large effect size). This suggests that there was a significant decrease in self-reported levels of anxiety in both groups between the start and end of the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = .26; p = .613; partial eta squared < .01, indicating that although both groups did significantly report lower levels of anxiety, the difference between groups was not significant.

The descriptive statistics for the outcome measures Assertiveness/Thinking Style/Rosenberg and Locus of Control Questionnaires at the end of the IG (Time 3) and end of the RPTG (Time 4) for completers and non-completers are presented in Table 20 below:

Table 20: Descriptive statistics for Assertiveness/Thinking Style/Rosenberg and Locus of Control Questionnaires at T3 and T4 for IG completers and non-completers

	Assertive		Think Q		Rosenberg		Locus of Control	
Time 3	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
IG completers n = 35	21.17	11.48	29.34	9.52	23.46	8.28	42.71	15.20
IG non-completers n = 17	27.88	10.47	31.65	9.77	23.35	7.34	39.00	13.04
Time 4	*M*	*SD*	M	SD	*M*	*SD*	*M*	*SD*
IG completers n = 35	17.94	8.36	25.17	8.77	27.31	6.35	53.80	11.20
IG non-completers n = 17	22.36	9.49	26.59	7.60	26.65	5.11	51.35	11.90

Assertiveness questionnaire:

There was no significant interaction between time and group: F (1, 50) = 2.23; Wilks' Lambda = .96; p = .141; partial eta squared = .04 for assertiveness. There was a substantial main effect for time: F (1, 50) = 32.35; Wilks Lambda = .61; p < .001; partial eta squared = .39 (large effect size). This suggests that there was a significant improvement in assertiveness skills in both groups between the start and end of the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = 3.78; p = .058; partial eta squared = .07, indicating that although both groups did significantly report more assertive attitudes, the difference between groups was not significant.

Thinking Style Questionnaire:

There was no significant interaction between time and group: F (1, 50) = .89; Wilks' Lambda = .98; p = .349; partial eta squared = .02 for thinking style. There was a substantial main effect for time: F (1, 50) = 96.73; Wilks' Lambda = .34; p < .001; partial eta squared = .66 (large effect size). This suggests that there was a significant improvement in more helpful thinking styles in both groups between the start and end of the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = .50; p = .482; partial eta squared = .01, indicating that although both groups did significantly improve in developing more helpful thinking styles, the difference between groups was not significant.

Rosenberg's Self Esteem Scale

There was no significant interaction between time and group: F (1, 50) = .21; Wilks' Lambda = .99; p = .653; partial eta squared <.01 for self- esteem. There was a substantial main effect for time: F (1, 50) = 33.03; Wilks Lambda = .60; p < .001; partial eta squared = .40 (large effect size). This suggests that there was a significant improvement in self-reported levels of self-esteem in both groups between the start and end of the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = .04; p = .847; partial eta squared < .01, indicating that although both groups did significantly increase feelings of self-esteem, the difference between groups was not significant.

Locus of control:

There was no significant interaction between time and group: F (1, 50) = .14; Wilks' Lambda = .99; p = .714; partial eta squared < .01 for locus of control. There was a substantial main effect for time: F (1, 50) = 46.35; Wilks' Lambda = .52; p < .001; partial eta squared = .48 (large effect size). This suggests that there was a significant improvement in self-reported levels of being in control of their own destiny in both groups between the start and end of the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = .79; p = .378; partial eta squared = .02, suggesting that while both groups showed an improvement in self- reported levels of being in control of their own destiny, the difference between groups was not significant.

The descriptive statistics for the outcome measures Alcohol Knowledge Questionnaire at the end of the IG (Time 3) and end of the RPTG (Time 4) for completers and non- completers are presented in Table 21 below:

Table 21: Descriptive statistics for Alcohol Knowledge Questionnaire at T3 and T4 for IG completers and non-completers

	Alcohol Q1 -12		Alcohol Q13		Alcohol Q14		Alcohol Q15		Alcohol Q16	
Time 3	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
IG completers n = 35	8.51	2.15	4.29	1.54	3.80	1.62	3.57	1.63	2.89	1.49
IG non-completers n = 17	8.82	2.77	4.29	1.67	3.59	1.70	4.06	1.56	3.00	1.46
Time 4	*M*	*SD*	M	SD	*M*	*SD*	*M*	*SD*	*M*	*SD*
IG completers n = 35	12.00	2.25	5.54	1.89	5.60	1.77	5.49	1.90	5.69	2.33
IG non-completers n = 17	11.82	2.38	5.53	1.42	5.47	1.42	5.41	1.18	6.06	1.56

Alcohol Knowledge Questionnaire:

Questions 1 – 12:

There was no significant interaction between time and group: F (1, 50) = .62; Wilks' Lambda = .99; p = .436; partial eta squared = .01 for alcohol knowledge. There was a substantial main effect for time: F (1, 50) = 110.02; Wilks' Lambda = .31; p < .001; partial eta squared = .69 (large effect size). This suggests that there was a significant improvement in self-reported levels of alcohol knowledge in both groups between the start and end of the RPTG and this was an expected finding as one of the RPTG modules specifically targets Alcohol Awareness. The main effect for comparing the two different types/levels of intervention was not significant; F (1, 50) = .01; p = .914; partial eta squared < .01.

Alcohol Questionnaire - Question 13:

There was no significant interaction between time and group: F (1, 50) < .01; Wilks' Lambda = 1.0; p = .972; partial eta squared < .01 for understanding the impact of alcohol. There was a substantial main effect for time: F (1, 50) = 16.32; Wilks' Lambda = .75; p < .001; partial eta squared = .25 (large effect size). This suggests that there was a significant improvement in self-reported awareness of alcohol harm in both groups between the start and end of the RPTG and this was an expected finding as one of the RPTG modules specifically targets how alcohol use impacts on people's lives. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) <.01; p = .995; partial eta squared < .01.

Alcohol Questionnaire - Question 14:

There was no significant interaction between time and group: F (1, 50) = .02; Wilks' Lambda = 1.0; p = .895; partial eta squared < .01. There was a substantial main effect for time: F (1, 50) = 35.37; Wilks' Lambda = .59; p < .001; partial eta squared = .41 (large effect size). This suggests that there was a significant improvement in self-reported levels associated physical harm knowledge in both groups between the start and end of the RPTG. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = .66; p = .655; partial eta squared < .01, with both groups increasing their scores at about the same rate the end of the RPTG.

Alcohol Questionnaire - Question 15:

There was no significant interaction between time and group: F (1, 50) = .78; Wilks' Lambda = .99; p = .383; partial eta squared = .02. There was a substantial main effect for time: F (1, 50) = 26.25; Wilkes Lambda = .66; p < .001; partial eta squared = .34 (large effect size). This suggests that there was a significant improvement in levels of awareness of triggers for alcohol use in both groups between the start and end of the RPTG and this was an expected finding as one of the RPTG modules specifically targets triggers for drinking. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = .31; p = .581; partial eta squared < .01.

Alcohol Questionnaire - Question 16:

There was no significant interaction between time and group: F (1, 50) = .13; Wilks' Lambda = .99; p = .716; partial eta squared < .01. There was a substantial main effect for time: F (1, 50) = 68.54; Wilkes Lambda = .42; p < .001; partial eta squared = .58 (large effect size). This suggests that there was a significant improvement in awareness of strategies to control drinking in both groups between the start and end of the RPTG and this was an expected finding as one of the RPTG modules specifically targets how to control drinking as part of the relapse prevention module. The main effect for comparing the two different types/levels of intervention was not significant: F (1, 50) = .36; p = .553; partial eta squared < .01.

Overall, the results showed that participants in both groups showed significant reductions on all of the outcome measures between Time 3 and 4. However, this improvement was similar for IG completers and non-completers Therefore, the experimental hypothesis that participants will have better pre-to post treatment (RPTG) outcomes if they had completed the IG beforehand is not supported.
The summary of the p values is presented in Table 22 below

Table 22: p values for TOP & AUDIT, HADS, Assertive Q, Thinking Style Q, Rosenberg, Locus of Control and Alcohol questionnaire (1 – 16) using the ANOVA mixed between-within group for interaction effect, main effect for time and main effect for group for IG completers and completed RPTG (n = 35) and incomplete IG and completed RPTG (n = 17).

Outcome measure	Interaction effect time/group	Main effect for time	Main effect for group
alpha level = .05	ANOVA p value =	ANOVA p value =	ANOVA p value =
Daily unit consumption	.833	<.001	.833
Number of days drinking	.842	<.001	.233
Psychological well-being	.632	<.001	.124
Physical health	.557	<.001	.118
Quality of Life	.507	<.001	.126
AUDIT	.629	<.001	.493
Irritability	.394	<.001	.682
Depression	.071	<.001	.527
Anxiety	.809	<.001	.613
Assertiveness	.141	<.001	.058
Thinking Style	.349	<.001	.482
Rosenberg	.653	<.001	.847
Locus of Control	.714	<.001	.378
Alcohol Q1-12	.436	<.001	.914
Alcohol Q13	.972	<.001	.995
Alcohol Q14	.895	<.001	.655
Alcohol Q15	.383	<.001	.581
Alcohol Q16	.716	<.001	.553

Discussion

This chapter examined the impact of having a pre-treatment Induction Group to see if it would improve both engagement and retention in treatment. The results found that participants who completed the Induction Group did better than non-completers for daily unit consumption and number of days drinking. This was not an expected finding as the main focus of Induction Group was to begin to build group dynamics and prepare service users for more intensive treatment. However, on all the measures, both groups showed significant improvements over time, but at about the same rate. This generalised improvement in both groups was also not expected but

may be explained by two factors that were not controlled for. Firstly, all participants will have attended some of the sessions so will have had some benefit from both peer support and discussions around alcohol and associated harms.

Secondly, as previously mentioned, most of the participants had been referred via other treatment agencies so will already have some knowledge and understanding of strategies to reduce alcohol consumption. Further research to understand the impact of pre-treatment specific activities would isolate these findings more so that the preparation element could be better understood. It is also interesting to note that both groups reported significant improvements on their psychological well-being. For some this can be explained by the 'feel good factor' of getting on and doing something about the problem. Engaging with others in similar situations to themselves may also have a positive impact on a sense of psychological well-being.

The results did find that participants were significantly more likely to complete the RPTG if they had completed the IG group first compared to participants who had not completed the IG. Participants were also over twice as likely to drop out of the RPTG if they didn't complete the IG first. This effect replicates the findings of Gilburt et al, (2015) and Kouimtsidis et al., (2012) which recognised the importance of preparation for treatment to improve engagement outcomes. One of the aims of the IG had been to prepare participants for treatment in groups. The structure of the IG was therefore specifically designed to begin to build the group dynamics and take participants through the first two stages of group development (Tuckman, 1965), so that by the time participants who had completed the IG commenced treatment, the dynamics of the group were settling and participants would be more 'ready' to learn in a group (Velleman, 1992) as they were feeling less anxious and fearful about the process (Dainow, 1988). This 'preparation' included providing a structured environment in which participants met on a weekly basis to learn more about the group work programme, begin to feel confident being in a group work environment and feel more confident talking in a group setting as well as begin to build relationships within the group by getting to know each other and thus address some of the group work engagement issues identified by Douglas (1991). Therefore, the increased rate of RPTG completion among those who completed the Induction Group suggests that it was successful in preparing clients for both treatment and

group work. Unfortunately, it isn't possible to know what it was about the Induction Group that helped, but further qualitative research could help to understand the service user's perspective more.

However, the results also found that completing the Induction Group first did not have any impact on improving treatment outcomes on the Relapse Prevention Group compared to non-completers, with both groups (IG completers and non- completers) doing equally as well i.e. participants in both groups showed significant improvements on all of the outcome measures between Time 3 and 4. This is a mixed result for two reasons.

Although completing the IG first meant it was more likely that participants would both start and complete the RPTG compared to non-completers, completing the IG first appears to have given no advantage to completers over non-completers in engaging with group work. It is possible that individual motivation is a factor here and that participants who were motivated to change, engaged with the programme and those that were not motivated dropped out quickly.

Assessing motivation to change as part of an assessment process in further research would help to identify the kind of pre-treatment preparation that might be most helpful to engage service users in to treatment. In the current research, the pre-treatment element was deliberately kept to a minimal level so as not to 'contaminate' any more than necessary, the ability to 'measure' the effectiveness of the RPTG.

A major limitation of this study is the small sample size across all the groups, especially in the analysis for study 3, which limits any wider conclusions on the generalisability of the findings to other groups. A second weakness is that the impact of sending service users a group work leaflet and client testimonials was not evaluated. This may have improved the understanding of how to enhance service user's motivation to engage. Clearly, this study demonstrated the significant issue of service user's reluctance to engage effectively in treatment (ANARP, 2004; Mitchell & Selmes, 2007) with only 52/130 (40%) of the total cohort engaging or remaining in treatment to the point of completing the structured treatment intervention.

In the current treatment system (2015), with reducing investment in alcohol treatment, the Public Health payment by results (PBR), increasing focus on

successful completions and low or no re-presentations back into treatment within six months, delivering effective treatment has never been more important. If preparing service users for treatment, especially group work which is a more cost-effective intervention (Sobell & Sobell, 2011), helps to facilitate better engagement and retention in treatment, then further research should be undertaken to understand exactly what pre-treatment preparation is most effective.

Chapter 6: Is Multimodal Structured Alcohol Treatment Effective in Changing Dependant Drinking Behaviours and Improving Quality of Life?

Introduction

The two previous chapters considered the impact of waiting to commence a minimal treatment intervention (Induction Group) and the impact of completing/not completing this Induction Group. From these two chapters, it was concluded that participants who waited more than 21 days to commence treatment did the same on treatment outcomes as participants who commenced treatment within 21 days. The study also found that the length of waiting time did not correlate with treatment disengagement and participants who completed the Induction Group (IG) did not do any better on post IG treatment outcomes than non-IG completers. However, IG completers were more likely to complete the Relapse Prevention Treatment Group (RPTG) successfully and that participants who had not completed the IG were twice as likely to drop out of the RPTG. It was concluded that there is some evidence to support the value of treatment preparation in improving retention in more intensive treatment. However, there remains considerable debate as to what works best in alcohol treatment in relation to one theoretical approach over another, or whether a multimodal approach is more likely to be effective. The focus of this chapter is to consider the effectiveness of a treatment programme that takes a multimodal recovery orientated approach.

Effective Alcohol Treatment

The empirical evidence and systematic reviews discussed in Chapter One, concluded that there was no clear methodological treatment approach producing significantly better outcomes (e.g. Miller, Wilbourne & Hettema, 2003; Raistrick, Heather & Godfrey, 2006; United Kingdome Alcohol Treatment Trials, 2005). The Raistrick et al. (2006) study was clear in the opinion that “there is no ‘best’ treatment for alcohol problems or ‘treatment of choice’, but a number of effective treatments that are known to be of potential benefit to clients” (pp. 41-42). Whilst intensive treatment is not specifically defined, the current study considers effectiveness of an intensive structured group work programme that used a combination of different evidence based treatment approaches

(i.e. a multimodal treatment protocol) to match the wider treatment needs of the more complex dependant drinker cohort.

Multimodal Treatment

In their model of relapse prevention Wanigaratne, et al. (1990) proposed that interventions are classified into two groups, specific intervention strategies and global intervention strategies which McMurran and Hollin (1993) suggested includes skills training, relapse prevention, motivational techniques and behavioural self-control techniques to help reduce alcohol consumption and more global lifestyle changes to help maintain positive change such as problem solving skills, relaxation training and developing leisure activities. Miller and Hester (2003) define this type of multimodal approach as 'informed eclecticism' based around three general assertions: no single superior approach to treatment for all individuals; treatment programmes should be constructed with a variety of approaches that have been shown to be effective; and different types of individuals may respond best to different treatment approaches.

The National Institute for Clinical Excellence (NICE, Clinical Guideline 115, 2011) defines multimodal treatment as involving "a combination of a number of interventions that have been developed and evaluated as stand-alone interventions for alcohol misuse. Components of multi-modal treatment could include motivational aspects (such as Motivational Enhancement Therapy), Twelve Step Facilitation, Alcoholics Anonymous or self-help group participation, group counselling, CBT-based relapse-prevention training and psychoeducational sessions. The intention is that by combining a number of effective interventions the combined treatment will be greater than any one individual treatment" (NICE CG 115, 2011 section 6.16.1, p. 312).

There is a paucity in the literature for studies examining the effectiveness of multimodal treatment that meets the methodological standard. Only two studies met the criteria for inclusion[31] in the NICE (CG 115, 2011) review with a combined sample size of n = 427, and with 80% of the cohort meeting the alcohol dependence

[31] Inclusion criteria was a RCT (minimum 10 participants (over 18 years with at least 80% meeting criteria for alcohol dependence or harmful alcohol use) and comparator control or other active intervention (NICE CG, 115, 2011, p 313).

threshold. Firstly, the Davis, Campbell, Tax, and Lieber (2002) study compared a standard multimodal treatment (ST) with a psychoeducational intervention (minimal treatment, MT). Components of the six-week standard or multimodal treatment included a 3-week orientation period of six group therapy sessions, three alcohol education sessions, three community meetings and minimum of six AA meetings. After the first three weeks, participants were allocated to an individual therapist for a combination of individual and group therapy for the remainder of their engagement with the programme (maximum 26 weeks). The group sessions were not manualised but included problem solving and managing emotions. Minimal treatment consisted of alcohol related educational films (13 in total) and monthly group discussion sessions which incorporated discussions around the content of the films.
In total 89 patients completed the programme (49 in ST and 40 in MT). Davis et al. (2002) reported that at 6 months, ST patients surpassed those in MT in terms of complete abstinence, reduction in amount of alcohol consumed, length of sobriety at follow-up, improvement in employment status, number of AA meetings attended, and lower initial drop-out during treatment. Davis et al. (2002) concluded that "a ST approach is more helpful than MT in treating severely alcohol-dependent individuals who have not been able to cut down drinking on their own" (p. 9).

A second study by John, Veltrup, Driessen, Wetterling, and Dilling (2003), compared a multimodal groupwork programme with individual counselling sessions. The primary objective of both interventions was to motivate participants to seek further help for their alcohol problem. The multimodal group therapy programme (GT) was delivered over a 14-day period on an in-patient basis followed by four appointments over a month, post discharge. The GT included 9 group work sessions including Motivational Enhancement Therapy (MET), relapse prevention and psychoeducational films. The individual counselling (IC) sessions comprised three 40-minute sessions covering an understanding of alcohol related problems, difficulties of daily living and accessing further help. Sessions were delivered in-line with the principles of MET. The authors examined two hypotheses: GT does not outperform the IC intervention in the rate of those seeking help after 6 months; and neither intervention will lead to a higher abstinence rate (John et al., 2003). The study found that firstly, at six -months post treatment, the GT group showed a higher rate of participation in self-help groups compared to the IC group, but this effect was

not present at 12-months follow-up. Secondly, the two interventions did not differ in the rate of abstinent individuals at either 6 or 12 months' post discharge. However, there was a non-significant trend in greater levels of maintained abstinence in the GT group at 12 months compared to IC: GT n = 38/161 (23.6%); IC n = 28/161 (17.4%). As time to first lapse was the only drinking outcome measured in this study and with the focus of the intervention primarily being to encourage participants to seek further help through attending mutual aid groups such as AA, no reliable conclusions can be made about the impact of the intervention on participants who were drinking at the start of the study (IC n = 68/161, GT n = 64/161) and drinking at 12 months follow up (IC n = 58/161, GT n = 60/161).

In considering the limitations of the two studies, there lacks a consistency of content in the multimodal intervention between the two studies. This inconsistency makes it difficult to make firm conclusions about the efficacy of a multimodal approach to treatment. When considering the evidence of the Mesa Grande (Miller, Wilbourne & Hettema, 2003), both programmes lacked inclusion of some of the more effective components such as behavioural self-control training, cognitive therapy, social skills training and problem solving (ranked 7, 9, 13 & 24 respectively), although the Davis et al. (2002) study did include motivational interviewing (ranking of 2). A second factor was that the main evaluation used in both studies was drinking outcomes, so the impact of more global intervention strategies (Wanigaratne et al., 1990), was not evaluated for effectiveness. Thirdly, a lack of a manualised approach to the delivery of group sessions means that it is not possible to assess the delivery quality and programme integrity in these studies. Therefore, it is possible that the findings were skewed by a variable delivery style and session content.

Overall, NICE (CG 115, 2011) concluded there was little evidence for high-levels of effectiveness for this approach, although it was noted that the available empirical evidence was of a low quality so recommended that further studies were needed to build on the available evidence.

A further study was identified in the literature review for the effectiveness of a multimodal treatment programme in a hospital setting, including in and day patients (Long, Kidger & Hollin, 2001). The authors describe the programme as a "partially informed eclecticism (Miller & Hester, 2003), based on a mixture of evidence-based

and unproven strategies for treating alcoholics" (p. 459). The research paper gives a clear overview of the programme which included sessions on coping skills training, relapse prevention, functional analysis (ABC model), expanding recreational pursuits, dealing with negative emotional states, relaxation, assertiveness training and problem solving. Long, Williams and Hollin (1998) found abstinence or non-problem drinking was achieved by 55.6% of all patients at 1 year (n = 189), who had previously been alcohol dependant. However, the outcomes were limited to days abstinent, daily unit consumption and a Likert rating scale of alcohol related problems. Therefore, this said little about the specific effectiveness of the global intervention strategies (Wanigaratne et al., 1990) such as problem solving and managing negative emotional states. In addition, there was no control or comparator group against which to measure the effectiveness of the programme.

Whilst the three reviewed studies all seemed to demonstrate some degree of effectiveness, there was one main difference between the Davis et al. (2002) and John et al. (2003) studies compared to the multimodal programme developed by Long et al., (2001). Specifically, there were more components in the Long et al. (2001) multimodal treatment, which retrospectively were ranked as being effective treatment modalities in the Mesa Grande (Miller at al., 2003). How this might have influenced the degree of treatment effectiveness compared to Davis et al. (2002) and John et al. (2003) is not known.

Like the Long et al. (1998) study, the current programme (discussed in Chapter Two) provided skills for changing behaviour in relation to not only the alcohol misuse, but some of the more common problems which correlated with the reasons for drinking and the continuation of drinking. For example, the functional analysis for drinking as a coping strategy included identification of negative emotional states such as anxiety, anger and depression, interpersonal conflicts with family and friends and associated social pressure as well as focusing on key relapse prevention strategies such as dealing with high risk situations, goal setting and alternatives to drinking (Dupuy, 2013; Mason & Norris, 1984; McMurran & Hollin, 1993; Spada, 2006; Wallace, Pullin, Keaney, & Farmer, 1990). This combined approach focused on the broader aspects of treatment such as improving quality of life and family functioning. In the context of the most recent Government Alcohol Strategy (2012), the current study treatment paradigm was shifted

towards a Recovery Orientated Model (Best et al., 2010; Betty Ford Institute Consensus Panel, 2007) by moving beyond the traditional specialist clinical alcohol treatment and therapeutic model towards a community based recovery orientated social approach. (Groshkova & Best, 2011).

The Recovery Orientated Model

Whilst there is no universally accepted definition of what recovery means, some academics have applied the concept of recovery in the broadest sense in that recovery goes well beyond becoming sober (Betty Ford Institute Consensus Panel, 2007). The Consensus Panel proposed a three-part definition of recovery: sobriety; personal health (improved quality of life); and citizenship (social functioning) and are clear that this definition should only be applied to individuals who met the DSM-IV criteria for substance abuse or dependence. The authors differentiate stages of recovery, classed as "early sobriety" (the 1st year), "sustained sobriety" of between 1 and 5 years, and "stable sobriety" of more than 5 years (p. 224). Laudet's (2008) study supports the view that recovery is more than just becoming sober with only 43% of participants defining recovery in terms of substance use (control or abstinence), with over half the cohort describing recovery in non-substance related outcomes such as 'a process of working on yourself', 'living life on life's terms', and 'recovery as a new life' (p. 204). As has already been mentioned, many of the reviewed empirical studies only focused on alcohol consumption as the outcome of effectiveness either measured by days drinking, amount consumed and maintenance of abstinence or time to first lapse therefor not measuring recovery in its broadest sense. This narrow approach to outcome monitoring limits what can be understood about the different components of treatment i.e. which parts are effective for building long term and sustainable recovery which include the specific skills to achieve sobriety, improve quality of life and social functioning.

The current study sought to address some of the previous empirical limitations by evaluating the effectiveness of a manualised multimodal relapse prevention treatment programme for dependant drinkers. A broad range of outcome measures were used (described in Chapter 3), evaluating the impact of both specific intervention strategies (strategies to reduce alcohol consumption) and global intervention strategies (alternative skills to deal with the common problems

associated with drinking as being the main coping strategy) (Wanigaratne, et al. 1990).

There are two experimental hypotheses in the current chapter: specifically, participants who completed the Relapse Prevention Treatment Group will have better outcomes than those people who did not complete. The RPTG completers will:

H1. Demonstrate better pre-to post RPTG outcomes

H2. Demonstrate better post RPTG outcomes at 6 months follow-up

These two hypotheses were examined in two studies.

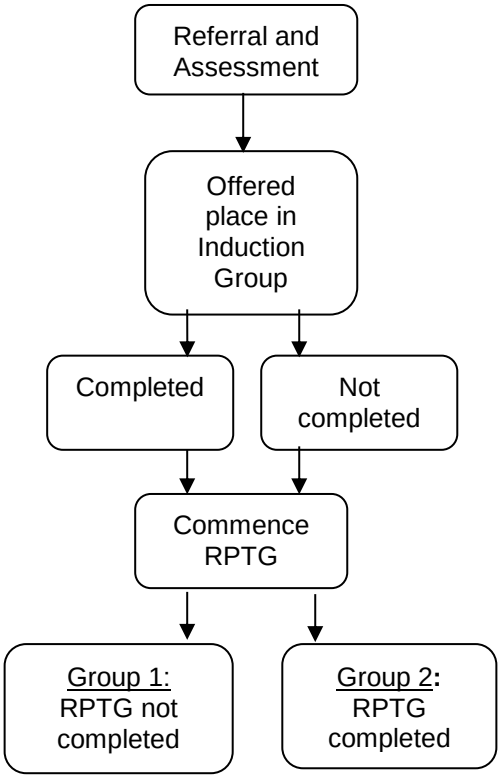
Study 1: Pre- to post RPTG outcomes

Method

Participants

Following referral and assessment to the structured day programme, participants were offered an optional place on the 6-week Induction group. Regardless of the attendance in the IG, at the end of the 6-week IG cycle, service users continued the service pathway into the 6-week RPTG. At the end of the 6-week RPTG cycle, two 'naturally' occurring groups emerged. See Figure 12 below:

Figure 12: Pathway from Referral to RPTG completion.



In total, 105 participants were eligible to commence the RPTG. Of this cohort, 38 started the RPTG but then quickly dropped out so data was incomplete at Time 4. For this study, there were 67 participants with complete data available for analysis. Of these, 42 participants were males, with a mean age of 42.2 years (SD = 8.75) with a range from 18 to 58 years, and 25 of the participants were females with a mean age of 45.2 (SD = 9.92), with a range from 27 to 61 years. The participants were split into the two groups below:

Group 1: Participants who commenced the RPTG (Time 3) and who then completed less than 10 sessions of the RPTG (Time 4), n = 15.

Group 2: Participants who commenced the RPTG (Time 3) and who then completed 10 or more sessions of the RPTG (Time 4), n = 52.

Outcome measures

Eight outcome measures were used in this study, which are described in Chapter 3:

1. The Treatment Outcome Profile (TOP; Marsden, Farrell, Bradbury, Dale-Perera, Eastwood, Roxburgh, Taylor; 2008)
2. The Alcohol Use Disorders Identification Test (AUDIT; Babor, Higgins-Biddle, Saunders, Monteiro; 2001)
3. Irritability, Depression and Anxiety Scale (IDAS; Snaith & Zigmond, 1994).
4. Assertiveness questionnaire
5. Thinking Style Questionnaire
6. Rosenberg Self Esteem Scale (Rosenberg, 1965)
7. Locus of control (Rotter, 1966)
8. Alcohol Knowledge Questionnaire

A base line of pre-treatment outcomes was established at the start of the RPTG (Time 3) with comparisons at the end of the RPTG (Time 4)**.** See General Method Chapter 3 for details about assessment times.

Results

A mixed between-within subject's analysis of variance was conducted to assess the impact of completing or not completing the RPTG on post treatment outcomes (IV/group), by comparing change between two-time periods: the start and end of RPTG, on participants outcome scores (DV) described above. All post treatment outcome measure was collected at the same point in time (i.e. 6 weeks later) regardless of whether participants completed the RPTG or not.

The descriptive statistics for the outcome measures TOP: (daily units, days drinking, psychological well-being, physical health, quality of life) & AUDIT at the start (Time 3) and end of the RPTG (Time 4) for completers and non-completers are presented in Table 23 below:

Table 23: Descriptive statistics for TOP & AUDIT at T3 and T4 for RPTG non-completers and completers.

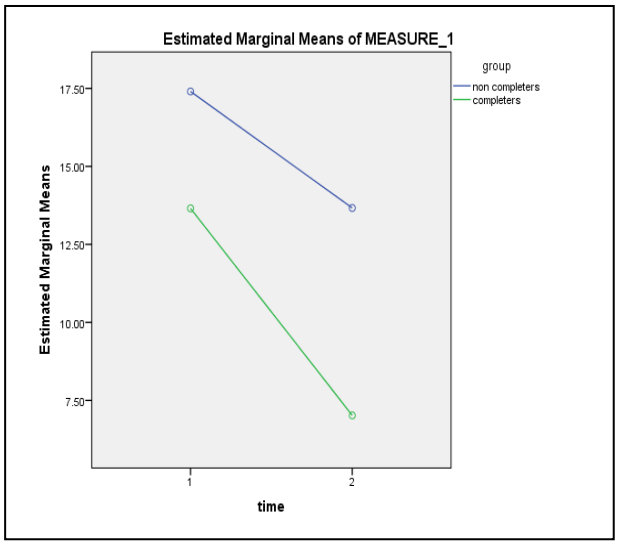
	Daily Units		Drinking Days		Psychological Well Being		Physical Health		Quality of Life		AUDIT	
Time 3	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
RPTG non-completers *(n = 15)*	*17.4*	*5.37*	*21.67*	6.59	10.20	3.93	10.93	3.49	11.33	3.96	26.6	7.74
RPTG completers *(n = 52)*	*13.66*	*4.95*	*19.88*	*5.02*	10.65	3.14	11.71	3.44	12.37	3.64	22.5	6.68
Time 4	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
RPTG non-completers *(n = 15)*	*13.67*	*6.91*	*18.67*	*9.49*	10.93	3.14	11.40	3.56	12.13	3.98	21.00	11.14
RPTG completers *(n = 52)*	*7.01*	*5.90*	*10.35*	*9.40*	13.15	2.92	13.61	2.90	14.46	3.13	11.83	9.97

Daily Unit Consumption:

There was a significant interaction between time and group: F (1, 65) = 5.40; Wilks' Lambda = .92; p = .023; partial eta squared = .08 for daily unit consumption and a substantial main effect for time: F (1, 65) = 68.99; Wilks' Lambda = .49; p < .001;

partial eta squared = .52. So, whilst both groups reduced their daily unit consumption between the start and end of the RPTG, the group who had completed the RPTG did better than the RPTG non-completer group (See Figure 13 below):

Figure 13: Daily Unit Consumption at pre-post for RPTG completers and non-completers.

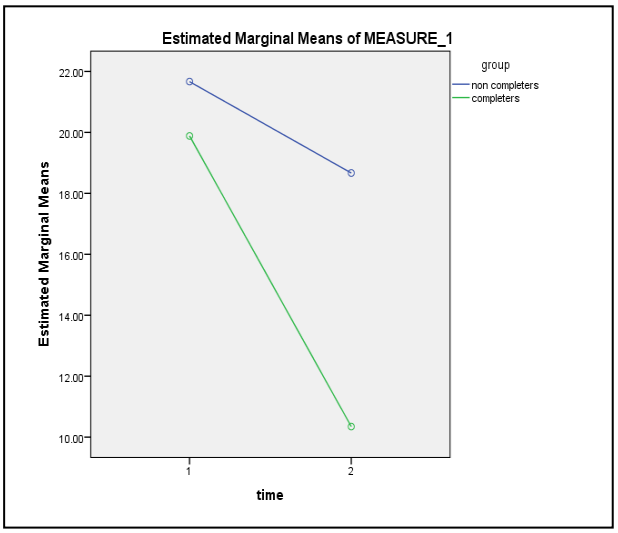


The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant; F (1, 65) = 11.64; p = .001; partial eta squared = .15 (large effect size).

Number of drinking days in last 28 days:

There was a significant interaction between time and group: F (1, 65) = 9.68; Wilks' Lambda = .87; p = .003; partial eta squared = .13 and a substantial main effect for time: F (1, 65) = 35.61; Wilks' Lambda = .65; p < .001; partial eta squared = .35. So, whilst both groups reduced the number of days drinking between time 3 and 4, the difference between the two groups was also significant with the group who had completed the RPTG doing better than those who did not complete it (see Figure 14 below):

Figure 14: Drinking days in the previous 28 days for pre-post RPTG completers and non-completers.

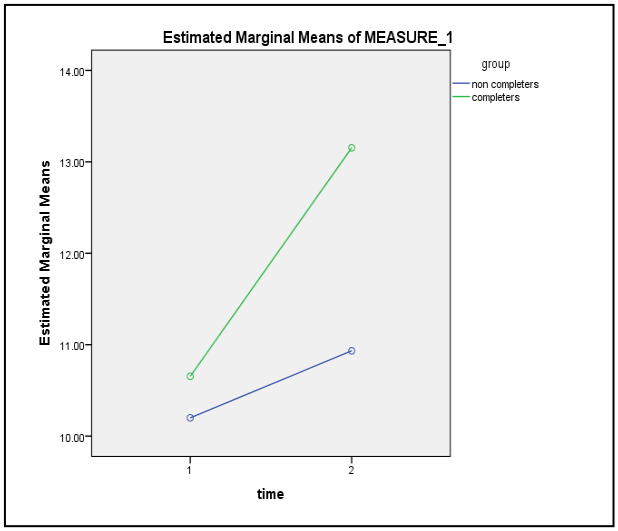


The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant: F (1, 65) = 6.44; p = .014; partial eta squared = .09 (medium effect size).

Self-reported Psychological well-being in a 28- day period:

There was a significant interaction between time and group: F (1, 65) = 9.76; Wilks' Lambda = .87; p = .003; partial eta squared = .13 and a substantial main effect for time: F (1, 65) = 32.70; Wilks' Lambda = .67; p < .001; partial eta squared = .34. So, whilst both groups self-reported improvements in their psychological well-being between time 3 and 4, the difference between the two groups was also significant with the group who had completed the RPTG doing better than those who did not complete it (see Figure 15 below):

Figure 15: Psychological Well Being scores in a 28-day period for pre-post RPTG completers and non-completers.

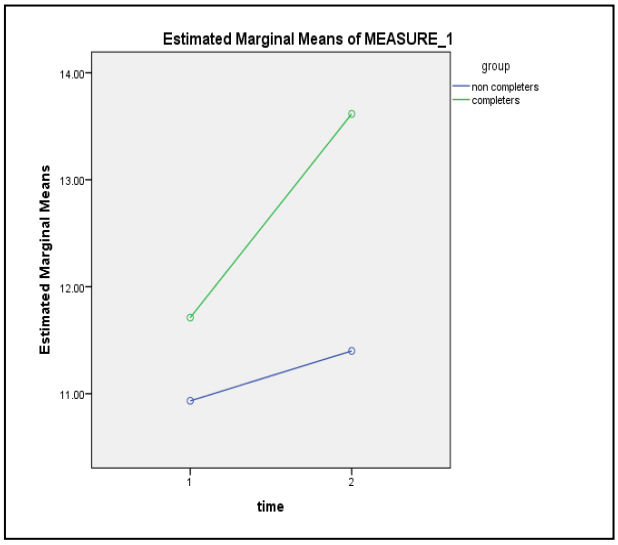


The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 1.97; p = .165; partial eta squared = .03 (small effect size).

Self-reported Physical Health in a 28 Day Period:

There was a significant interaction between time and group: F (1, 65) = 5.42; Wilks' Lambda = .923; p = .023; partial eta squared = .08 and a substantial main effect for time: F (1, 65) = 14.75; Wilks' Lambda = .82; p < .001; partial eta squared = .19. So, whilst both groups self-reported improved feelings of physical health between time 3 and 4, the difference between the two groups was also significant with the group who had completed the RPTG doing better than those who did not complete it (see Figure 16 below):

Figure 16: Physical Health scores in a 28-day period for pre-post RPTG completers and non-completers.

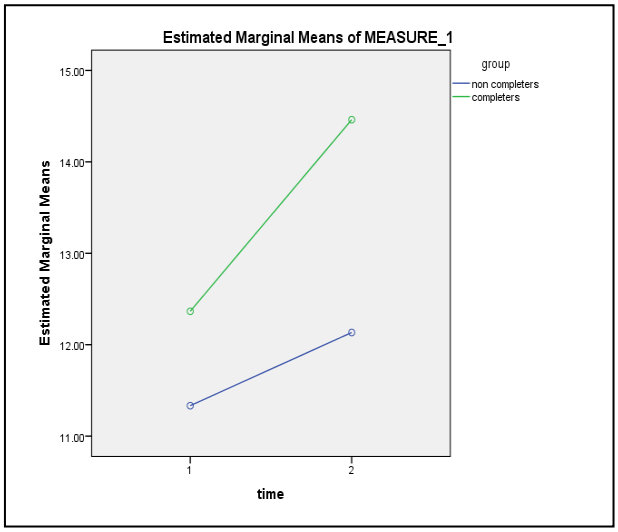


The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 2.73; p = .103; partial eta squared = .04 (small effect size).

Self-Reported Quality of Life in a 28 Day Period:

There was a significant interaction between time and group: F (1, 65) = .404; Wilks' Lambda = .94; p = .049; partial eta squared = .06 and a substantial main effect for time: F (1, 65) = 20.16; Wilks' Lambda = .76; p < .001; partial eta squared = .24. So, whilst both groups self-reported improved feelings of quality of life between time 3 and 4, the difference between the two groups was also significant with the group who had completed the RPTG doing better than those who did not complete it (see Figure 17 below):

Figure 17: Quality of Life scores in a 28-day period for pre-post RPTG completers and non-completers.

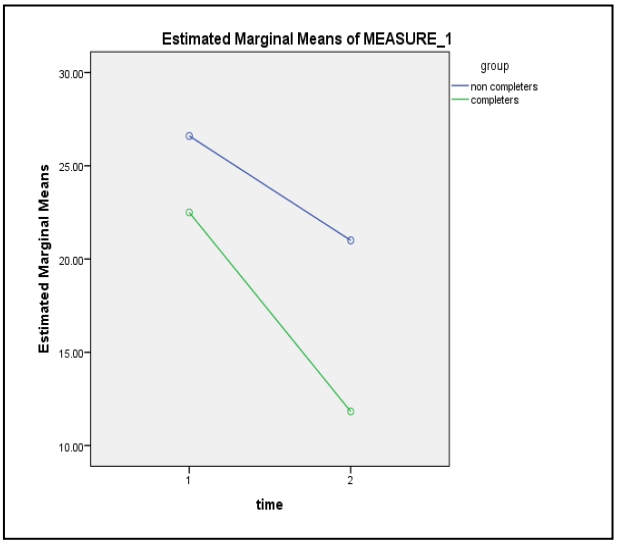


The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 65.73; p = .092; partial eta squared = .04 (small effect size).

AUDIT:

There was a significant interaction between time and group: F (1, 65) = 6.65; Wilks' Lambda = .91; p = .012; partial eta squared = .09 and a substantial main effect for time: F (1, 65) = 68.46; Wilks' Lambda = .49; p < .001; partial eta squared = .51. So, whilst both groups self- reported improvements on levels of drinking and associated behaviours between time 3 and 4, the difference between the two groups was also significant with the group who had completed the RPTG doing better than those who did not complete it (see Figure 18 below):

Figure 18: AUDIT scores for pre-post RPTG completers and non-completers.



The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant: F (1, 65) = 7.88; p = .007; partial eta squared = .11 (moderate effect size).

Irritability, Depression and Anxiety Scale (IDAS):

The descriptive statistics for the outcome measures IDAS at the start (Time 3) and end (Time 4) of the RPTG for RPTG completers and non-completers are presented in Table 24 below:

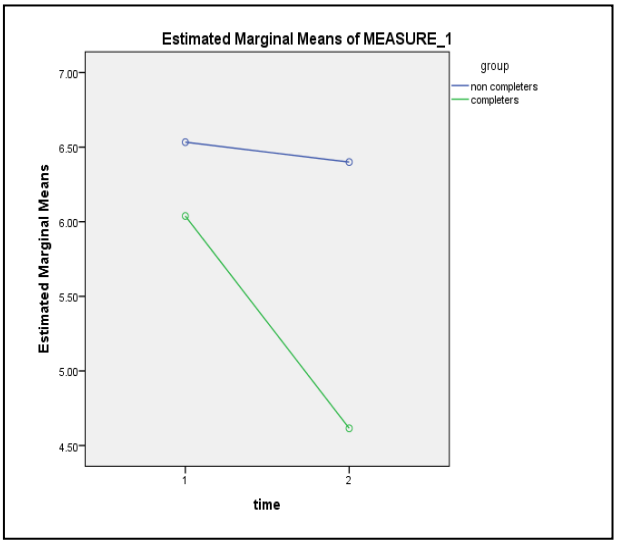
Table 24: Descriptive statistics for IDAS at T3 and T4 for RPTG non-completers and completers.

	Irritability		Depression		Anxiety	
Time 3	*M*	*SD*	*M*	*SD*	*M*	*SD*
RPTG non-completers *(n = 15)*	6.53	2.83	7.47	3.34	8.67	4.06
RPTG completers *(n = 52)*	6.04	3.08	7.50	3.42	8.73	3.43
Time 4	*M*	*SD*	M	SD	*M*	*SD*
RPTG non-completers *(n = 15)*	6.40	3.04	7.40	2.97	8.27	3.86
RPTG completers *(n = 52)*	4.62	2.31	5.52	2.73	5.81	2.27

Irritability:

There was a significant interaction between time and group: F (1, 65) = 6.04; Wilks' Lambda = .92; p = .017; partial eta squared = .09 and a substantial main effect for time: F (1, 65) = 8.79; Wilks' Lambda = .88; p =.004; partial eta squared = .12. So, whilst both groups self-reported reductions in feelings of irritability between time 3 and 4, the difference between the two groups was also significant with the group who had completed the RPTG doing better than those who did not complete it (see Figure 19 below):

Figure 19: Irritability scores for pre-post RPTG completers and non-completers.

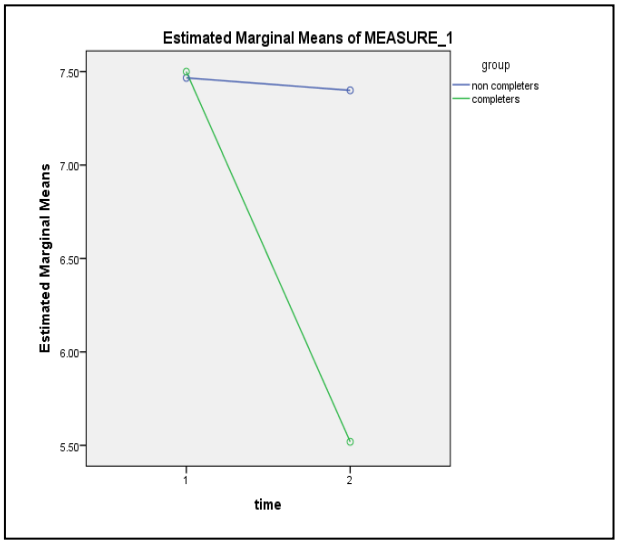


The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 2.20; p = .143; partial eta squared = .03 (small effect size).

Depression:

There was a significant interaction between time and group: F (1, 65) = 12.06; Wilks' Lambda = .84; p = .001; partial eta squared = .17 for self-reported improvements and a substantial main effect for time: F (1, 65) = 13.80; Wilks' Lambda = .83; p < .001; partial eta squared = .18. So, whilst both groups self-reported reductions in feelings of Depression between time 3 and 4, the difference between the two groups was also significant with the group who had completed the RPTG doing better (than those who did not complete it (see Figure 20 below):

Figure 20: Depression scores for pre-post RPTG completers and non-completers.

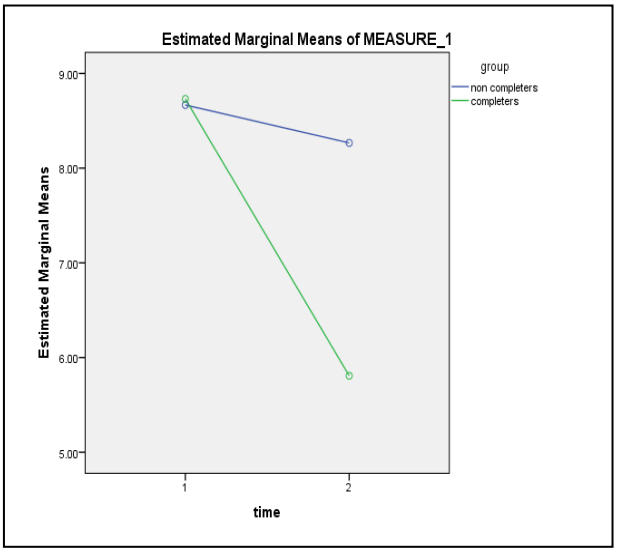


The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 1.13; p = .291; partial eta squared = .02 (small effect size).

Anxiety:

There was a significant interaction between time and group: F (1, 65) = 11.02; Wilks' Lambda = .86; p = .001; partial eta squared = .15 and a substantial main effect for time: F (1, 65) = 19.11; Wilks' Lambda = .77; p <.001; partial eta squared = .23. , whilst both groups self-reported reductions in feelings of anxiety between time 3 and 4, the difference between the two groups was also significant with the group who had completed the RPTG doing better than those who did not complete it (see Figure 21 below).

Figure 21: Anxiety scores for pre-post RPTG completers and non-completers.



The main effect for comparing the groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 2.00; p = .162; partial eta squared = .03 (small effect size).

The descriptive statistics for the outcome measures Assertiveness/Thinking Style/Rosenberg and Locus of Control Questionnaire at the start (Time 3) and end (Time 4) of the RPTG for RPTG completers and non-completers are presented are Table 25 below:

Table 25: Descriptive statistics for Assertiveness/Thinking Style/Rosenberg and Locus of Control Questionnaire at T3 and T4 for RPTG non-completers and completers.

	Assertive		Think Q		Rosenberg		Locus of Control	
Time 3	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
RPTG non-completers (n = 15)	24.20	10.73	30.93	7.26	22.47	6.57	40.60	14.66
RPTG completers (n=52)	23.37	11.50	30.10	9.57	23.42	7.91	41.50	14.51
Time 4	*M*	*SD*	M	SD	*M*	*SD*	*M*	*SD*
RPTG non-completers (n = 15)	21.27	9.42	27.47	9.60	23.47	6.16	46.53	13.71
RPTG completers (n=52)	19.38	8.90	25.66	8.36	27.10	5.93	53.00	11.37

Assertiveness questionnaire:

There was no significant interaction between time and group: F (1, 65) = .50; Wilks' Lambda = .99; p = .481; partial eta squared = .01 and a substantial main effect for time: F (1, 65) = 21. 90; Wilks' Lambda = .75; p < .001; partial eta squared = .25. So, whilst both groups self-reported improvement in assertiveness skills between time 3 and 4, this was similar for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = .22; p = .642; partial eta squared < .01 (small effect size).

Thinking Style Questionnaire:

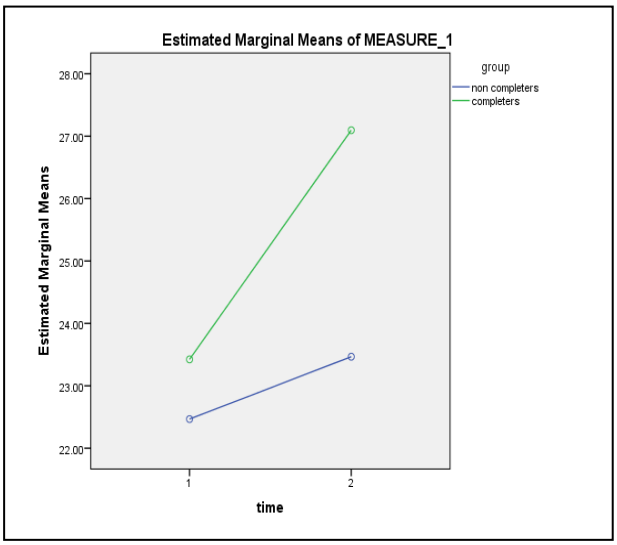
There was no significant interaction between time and group: F (1, 65) = .80; Wilks' Lambda = .99; p = .373; partial eta squared = .01 and a substantial main effect for time: F (1, 65) = 52.80; Wilks' Lambda = .55; p < .001; partial eta squared = .45. So, whilst both groups continued to self-report less cognitive rigidity in their thinking style between time 3 and 4, this was similar for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers)

was not significant: F (1, 65) = .27; p = .605; partial eta squared < .01 (small effect size).

Rosenberg's Self Esteem Scale

There was a significant interaction between time and group: F (1, 65) = 5.31; Wilks' Lambda = .92; p = .024; partial eta squared = .08 and a substantial main effect for time: F (1, 65) = 16.24; Wilks' Lambda = .80; p < .001; partial eta squared = .20. So, whilst both groups continued to report improvement in feelings of improved levels of self-esteem between time 3 and 4, the difference between the two groups was also significant with the group who had completed the RPTG doing better than those who did not complete it (see Figure 22 below):

Figure 22: Rosenberg scores for pre-post RPTG completers and non-completers.



The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 1.42; p = .238; partial eta squared = .02 (small effect size).

Locus of control:

There was no significant interaction between time and group: F (1, 65) = 3.02; Wilks' Lambda = .96; p = .087; partial eta squared = .04 and a substantial main effect for time: F (1, 65) = 29.60; Wilkes Lambda = .69; p < .001; partial eta squared = .31. So, whilst both groups continued to self-report improvement in feeling of being in control

of their own destiny between time 3 and 4, this was similar for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 1.08; p = .304; partial eta squared = .02 (small effect size).

Alcohol Knowledge Questionnaire:

The descriptive statistics for the outcome measure Alcohol Questionnaire at the start (Time 3) and end (Time 4) of the RPTG for RPTG completers and non-completers are presented are Table 26 below:

Table 26: Table 25: Descriptive statistics for Alcohol Questionnaire at T3 and T4 for RPTG non-completers and completers

	Alcohol Q1 -12		Alcohol Q13		Alcohol Q14		Alcohol Q15		Alcohol Q16	
Time 3	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
RPTG non-completers (n =15)	7.93	1.91	3.6	1.72	3.27	1.83	2.93	1.71	2.40	1.12
RPTG completers (n= 52)	8.62	2.34	4.29	1.58	3.73	1.63	3.73	1.61	2.92	1.47
Time 4	*M*	*SD*	M	SD	*M*	*SD*	*M*	*SD*	*M*	*SD*
RPTG non-completers (n = 15)	10.67	2.16	5.28	2.15	5.07	2.15	5.13	2.33	4.80	2.37
RPTG completers (n= 52)	11.94	2.27	5.54	1.74	5.56	1.65	5.46	1.69	5.81	2.11

Alcohol Questionnaire: Questions 1 – 12:

There was no significant interaction between time and group: F (1, 65) = 1.01; Wilks' Lambda = .99; p = .319; partial eta squared = .02 and a substantial main effect for time: F (1, 65) = 105.12; Wilks' Lambda = .38; p < .001; partial eta squared = .62. So, whilst both groups demonstrated improvements in self-reported levels of alcohol

knowledge between time 3 and 4, this was similar for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 2.78; p = .100; partial eta squared = .04 (small effect size).

Alcohol Questionnaire: Question 13:

There was no significant interaction between time and group: F (1, 65) = .51; Wilks' Lambda = .99; p = .479; partial eta squared = .01 and a substantial main effect for time: F (1, 65) = 24.85; Wilks' Lambda = .72; p < .001; partial eta squared = .28. So, whilst both groups demonstrated improvements in knowledge on how alcohol use impacts on people's lives between time 3 and 4, this was similar for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 1.35; p = .250; partial eta squared = .02 (small effect size).

Alcohol Questionnaire: Question 14:

There was no significant interaction between time and group: F (1, 65) = < .01; Wilks' Lambda = 1.00; p = .965; partial eta squared = <.01 and a substantial main effect for time: F (1, 65) = 35.83; Wilks' Lambda = .65; p < .001; partial eta squared = .36. So, whilst both groups demonstrated improvements in self-reported levels of associated alcohol related physical harm knowledge between time 3 and 4, this was similar for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 1.39; p = .242; partial eta squared = .02 (small effect size).

Alcohol Questionnaire: Question 15:

There was no significant interaction between time and group: F (1, 65) = .56; Wilks' Lambda = .99; p = .456; partial eta squared = .01 and a substantial main effect for time: F (1, 65) = 39.42; Wilks' Lambda = .62; p < .001; partial eta squared = .38. So, whilst both groups demonstrated improvements in levels of awareness of triggers for alcohol use between time 3 and 4 this was similar for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs.

non-completers) was not significant: F (1, 65) = 1.95; p = .167; partial eta squared = .03 (small effect size).

Alcohol Questionnaire: Question 16:

There was no significant interaction between time and group: F (1, 65) = .54; Wilks' Lambda = .99; p = .466; partial eta squared = .01 and a substantial main effect for time: F (1, 65) = 63.86; Wilks' Lambda = .50; p < .001; partial eta squared = .50. So, whilst both groups demonstrated improvements in awareness of strategies to control drinking between time 3 and 4, this was similar for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 65) = 3.33; p = .073; partial eta squared = .05 (small effect size).

Overall, the results showed that participants who completed the RPTG did significantly better than the RPTG non- completers on the following outcomes between Time 3 and 4: daily unit consumption, number of days drinking, AUDIT, psychological and physical well-being and quality of life. Completers also did significantly better on the IDAS, and Rosenberg self -esteem scale. Both groups (completers and non-completers) showed improvements on all of the remaining outcome measures. However, the difference between groups was not significant. Therefore, the experimental hypothesis that participants will have better pre-to post treatment (RPTG) outcomes if they have completed the RPTG is partially supported.

The summary of the p values is presented in Table 27 below:

Table 27: p values for pre-and post RPTG TOP & AUDIT, HADS, Assertive Q, Thinking Style Q, Rosenberg, Locus of Control and Alcohol questionnaire (1 – 16) outcomes using the ANOVA mixed between-within group for interaction effect, main effect for time and main effect for group for RPTG completers (n = 52) and incomplete RPTG (n = 15).

Outcome measure	Interaction effect time/group	Main effect for time	Main effect for group
alpha level = .05	ANOVA p value =	ANOVA p value =	ANOVA p value =
Daily unit consumption	.023	<.001	.001
Number of days drinking	.003	<.001	.014
Psychological well-being	.003	<.001	.165
Physical health	.023	<.001	.118
Quality of Life	.049	<.001	.092
AUDIT	.012	<.001	.007
Irritability	.017	.004	.143
Depression	<.001	<.001	.291
Anxiety	<.001	<.001	.162
Assertiveness	.481	<.001	.642
Thinking Style	.373	<.001	.605
Rosenberg	.024	<.001	.238
Locus of Control	.087	<.001	.304
Alcohol Q1-12	.319	<.001	.100
Alcohol Q13	.479	<.001	.250
Alcohol Q14	.965	<.001	.242
Alcohol Q15	.456	<.001	.167
Alcohol Q16	.466	<.001	.073

Study 2: Outcomes at 6-month follow-up

Method

Participants

In total, 105 participants commenced the RPTG. Of this cohort, 38 participants dropped out of treatment so full data sets were not available for analysis. 52 completed 10 or more sessions of the RPTG. The remaining 15 participants completed less than 10 sessions. There was a total of 67 participants with full data sets at Time 4. A total of 53 participants then moved to the third stage of the programme and continued in treatment for up to a further 3-month period. Interventions included further group work including the Discussion Group, Moving on Group, Parenting programme and Social groups (see Chapter 3 for full details). All service users had 1-1 key work as part of a continuing care plan (see Table 29 and 30 below)

Table 29*:* Follow up interventions in participants who completed the RPTG and continued in treatment: (Group 1); n = 41/52 (79%).

Discussion Group (DG)		Moving on Group (MOG)		Parenting Group (PG)		1-1 Key Work	
n	%	n	%	n	%	n	%
39/41	95%	11/41	27%	10/41	24%	41/41	100%

Table 30*:* Follow up interventions in participants who dropped out of the RPTG, and continued in treatment: (Group 2); n = 12 (80%).

Discussion Group (DG)		Moving on Group (MOG)		Parenting Group (PG)		1-1 Key Work	
n	%	n	%	n	%	n	%
8/12	67%	2/12	17%	1/12	8%	12/12	100%

For this study 53 participants met the criteria for inclusion with full data sets for analysis. Of these, 32 participants were males, with a mean age of 41.9 years (SD = 8.61), with a range from 18 to 58 years; and 21 were female with a mean age of 44.7 (SD = 8.92), with a range from 27 to 57 years. These were split into the two groups below:

Group 1: Participants who had completed 10 or more sessions of the RPTG and remained in treatment for up to 6 months (n = 41).

Group 2: Participants who had completed less than 10 of the RPTG and remained in treatment for up to 6 months (n = 12).

Outcome measures

Seven outcome measures were used in this study, which are described in Chapter 3:

1. The Treatment Outcome Profile (TOP; Marsden, Farrell, Bradbury, Dale-Perera, Eastwood, Roxburgh, Taylor; 2008)
2. The Alcohol Use Disorders Identification Test (AUDIT; Babor, Higgins-Biddle, Saunders & Monteiro, 2001)
3. Irritability, Depression and Anxiety Scale (IDAS; Snaith & Zigmond, 1994).
4. Assertiveness questionnaire
5. Thinking Style Questionnaire
6. Rosenberg Self Esteem Scale (Rosenberg, 1965)
7. Locus of control (Rotter, 1966)

A base line of pre-treatment outcomes was established at the end of the RPTG (Time four) with comparisons at six months from treatment start (Time five)**.**
See General Method Chapter 3 for details about assessment times.

Results

A mixed between-within subject's analysis of variance was conducted to assess the impact of completing the RPTG on post treatment outcomes (IV/group), across two-

time periods: Time 4 the end of RPTG, and Time 5 at 6 months treatment follow up on participants' outcome scores (DV) described above.

The descriptive statistics for the outcome measures TOP (daily units, drinking days, psychological well-being and physical health) & AUDIT at the end of the RPTG (Time 4) and at 6 months follow-up (Time 5) for RPTG completers and non-completers are presented in Table 31 below:

Table 31: Descriptive statistics for TOP & AUDIT at T4 and T5 for RPTG completers and non-completers.

	Daily Units		Drinking Days		Psychological Well Being		Physical Health		Quality of Life		AUDIT	
Time 4	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
RPTG completers *(n = 41)*	*7.54*	*6.05*	*11.29*	9.79	12.80	3.10	13.32	3.13	14.07	3.36	12.59	10.23
RPTG non-completers (n = 12)	*15.50*	*5.42*	*21.17*	*8.11*	9.83	2.82	10.50	3.35	10.92	3.40	23.92	9.03
Time 5	*M*	*SD*	*M1*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
RPTG completers *(n = 41)*	*3.41*	*4.43*	*6.07*	*8.07*	14.39	1.81	14.71	1.82	15.80	1.82	6.00	7.45
RPTG non-completers *(n = 12)*	*11.45*	*7.27*	*15.92*	*10.48*	10.66	3.03	11.50	3.21	12.25	3.11	18.33	10.95

Daily Unit Consumption:

There was no significant interaction between time and group: F (1, 51) = <.01; Wilks' Lambda = 1.00; p = .979; partial eta squared < .01 for daily unit consumption and a substantial main effect for time: F (1, 51) = 32.88; Wilks' Lambda = .61; p < .001; partial eta squared = .39. So, whilst both groups continued to reduce their alcohol consumption between time 4 and 5, this was at a similar rate for both completers and non-completers. The main effect for comparing the two groups (RPTG completers

vs. non-completers) was significant: F (1, 51) = 22.60; p < .001; partial eta squared = .31 (large effect size).

Number of drinking days in last 28 days:

There was no significant interaction between time and group: F (1, 51) < .01; Wilks' Lambda = 1.00; p = .989; partial eta squared <.01 and a substantial main effect for time: F (1, 51) = 20.93; Wilks' Lambda = .71; p < .001; partial eta squared = .29. So, whilst both groups continued to reduce their number of drinking days between time 4 and 5, this was at a similar rate for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant: F (1, 51) = 12.90; p = .001; partial eta squared = .20 (large effect size).

Self- reported Psychological well-being in a 28-day period:

There was no significant interaction between time and group: F (1, 51) = 1.33; Wilks' Lambda = .98; p = .255; partial eta squared = .03 and a substantial main effect for time: F (1, 51) = 13.74; Wilks' Lambda = .79; p = .001; partial eta squared = .21. So, whilst both groups continued to report increased feelings of psychological well-being between time 4 and 5, this was at a similar rate for both completers and non-completers. The main effect for comparing the groups (RPTG completers vs. non-completers) was significant: F (1, 51) = 17.58; p < .001; partial eta squared = .27 (small effect size).

Self-reported Physical Health in a 28 Day Period:

There was no significant interaction between time and group: F (1, 51) = .38; Wilks' Lambda = .99; p = .538; partial eta squared = .01 and a substantial main effect for time: F (1, 51) = 14.41; Wilks' Lambda = .78; p < .001; partial eta squared = .22. So, whilst both groups continued to report increased feelings of physical well-being between time 4 and 5, this was at a similar rate for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant: F (1, 51) = 12.91; p = .001; partial eta squared = .20 (large effect size).

Self-Reported Quality of Life in a 28 Day Period:

There was no significant interaction between time and group: F (1, 51) = .26; Wilks' Lambda = 1.0; p = .611; partial eta squared = .01 and a substantial main effect for time: F (1, 51) = 15.51; Wilks' Lambda = .77; p < .001; partial eta squared = .23. So, whilst both groups continued to report increased feelings of quality of life between time 4 and 5, this was at a similar rate for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant: F (1, 51) = 15.84; p < .001; partial eta squared = .24 (large effect size).

AUDIT:

There was no significant interaction between time and group: F (1, 51) = .21; Wilks' Lambda = 1.0; p = .651; partial eta squared <.01 and a substantial main effect for time: F (1, 51) = 30.58; Wilks Lambda = .63; p < .001; partial eta squared = .38. So, whilst both groups continued to report improvements on levels of drinking and associated behaviours between time 4 and 5, this was at a similar rate for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant: F (1, 51) = 17.73; p < .001; partial eta squared = .26 (large effect size).

Irritability, Depression and Anxiety Scale (IDAS):

The descriptive statistics for the outcome measure IDAS at the end of the RPTG (Time 4) and at 6 months follow-up (Time 5) for RPTG completers and non-completers are presented in Table 32 below:

Table 32: Descriptive statistics for IDAS at T4 and T5 for RPTG completers and non-completers.

	Irritability		Depression		Anxiety	
Time 4	*M*	*SD*	*M*	*SD*	*M*	*SD*
RPTG completers *(n = 41)*	4.76	2.31	5.88	2.61	5.88	2.38
RPTG *non-completers (n = 12)*	7.33	2.31	8.00	2.63	9.58	2.81
Time 5	*M*	*SD*	M	SD	*M*	*SD*
RPTG completers *(n = 41)*	4.05	1.90	4.78	2.10	4.90	1.79
RPTG *non-completers (n = 12)*	7.08	2.19	6.83	2.29	8.66	2.64

Irritability:

There was no significant interaction between time and group: F (1, 51) = 1.95; Wilks' Lambda = .96; p = .168; partial eta squared = .04 and a substantial main effect for time: F (1, 51) = 8.55; Wilks' Lambda = .86; p =.005; partial eta squared = .14. So, whilst both groups continued to report reduced feelings of irritability between time 4 and 5, this was at a similar rate for both completers and non-completers.
The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant: F (1, 51) = 16.80; p < .001; partial eta squared = .25 (large effect size).

Depression:

There was no significant interaction between time and group: F (1, 51) = .03; Wilks' Lambda = 1.00; p = .876; partial eta squared < .01 and a substantial main effect for time: F (1, 51) = 26.59; Wilks' Lambda = .66; p < .001; partial eta squared = .34. So, whilst both groups continued to report reduced feelings of depression between time 4 and 5, this was at a similar rate for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant; F (1, 51) = 7.68; p = .008; partial eta squared = .13 (moderate effect size).

Anxiety:

There was no significant interaction between time and group: F (1, 51) = .02; Wilks' Lambda = 1.00; p = .904; partial eta squared <.01 and a substantial main effect for time: F (1, 51) = 15.15; Wilks' Lambda = .77; p < .001; partial eta squared = .23. So, whilst both groups continued to report reduced feelings of anxiety between time 4 and 5, this was at a similar rate for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant: F (1, 51) = 28.61; p < .001; partial eta squared = .36 (large effect size).

The descriptive statistics for the outcome measures Assertiveness/Thinking Style/Rosenberg and Locus of Control Questionnaire at the end of the RPTG (Time 4) and at 6 months follow-up (Time 5) for completers and non-completers are presented in Table 33 below:

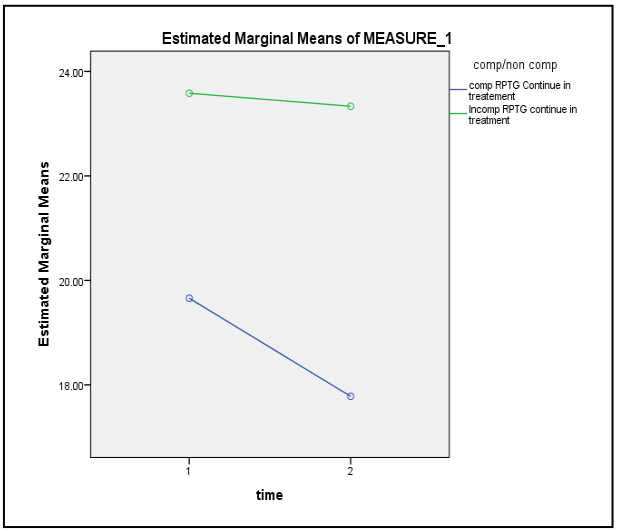
Table 33: Descriptive statistics for Assertiveness/Thinking Style/Rosenberg and Locus of Control Questionnaire at T4 and T5 for RPTG completers and non-completers.

	Assertive		Think Q		Rosenberg		Locus of Control	
Time 4	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
RPTG completers *(n = 41)*	19.66	9.67	26.17	8.85	26.17	5.42	53.98	10.98
RPTG *non-completers (n = 12)*	23.58	8.36	29.75	8.69	21.42	4.78	46.08	11.87
Time 5	*M*	*SD*	M	SD	*M*	*SD*	*M*	*SD*
RPTG completers *(n = 41)*	17.78	8.68	24.29	8.11	29.59	4.39	57.80	9.57
RPTG non-completers *(n = 12)*	23.33	8.77	28.83	9.29	23.75	5.77	46.66	11.83

Assertiveness questionnaire:

There was a significant interaction between time and group: F (1, 51) = 7.53; Wilks' Lambda = .87; p = .008; partial eta squared = .13 and a substantial main effect for time: F (1, 51) = 12.87; Wilks' Lambda = .80; p =.001; partial eta squared = .20. So, whilst both groups continued to report improvement in assertiveness skills between time 4 and 5, the difference between the two groups was also significant with the group who had completed the RPTG doing better (see Figure 23 below):

Figure 23: Assertiveness scores at end of RPTG and at 6 months follow up for RPTG completers and non-completers.



The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 51) = 2.57; p = .115; partial eta squared = .05 (small effect size).

Thinking Style Questionnaire:

There was no significant interaction between time and group: F (1, 51) = 2.68; Wilks' Lambda = .95; p = .108; partial eta squared = .05 and a substantial main effect for time: F (1, 51) = 22.64; Wilks' Lambda = .69; p < .001; partial eta squared = .30. So, whilst both groups continued to report less cognitive rigidity in their thinking style between time 4 and 5 this was at a similar rate for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was not significant: F (1, 51) = 2.09; p = .154; partial eta squared = .04 (small effect size).

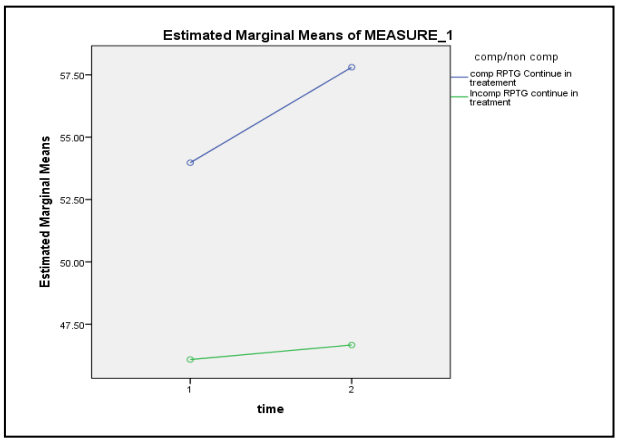
Rosenberg's Self Esteem Scale

There was no significant interaction between time and group: F (1, 51) = 1.42; Wilks' Lambda = .97; p = .238; partial eta squared = .03 and a substantial main effect for time: F (1, 51) = 51.10; Wilks' Lambda = .50; p < .001; partial eta squared = .50. So, whilst both groups continued to report improvements in their levels of self-esteem between time 4 and 5, this was at a similar rate for both completers and non-completers. The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant: F (1, 51) = 11.27; p = .001; partial eta squared = .18 (large effect size).

Locus of Control:

There was a significant interaction between time and group: F (1, 51) = 5.89; Wilks' Lambda = .90; p = .019; partial eta squared = .10 and a substantial main effect for time: F (1, 51) = 10.89; Wilks' Lambda = .82; p =.002; partial eta squared = .18. So, whilst both groups continued to report improvement in feeling of being in control of their own destiny between time 4 and 5, the difference between the two groups was also significant with the group who had completed the RPTG doing better (see Figure 24 below):

Figure 24: Locus of Control scores at end of RPTG and at 6 months follow up for RPTG completers and non-completers.



The main effect for comparing the two groups (RPTG completers vs. non-completers) was significant: F (1, 51) = 7.69; p = .008; partial eta squared = .13 (medium effect size).

Overall, the results showed that both groups (completers and non-completers) continued to show improvements on the programme targets for change between Time 4 and Time 5, but the difference between the two groups was not significant except for the assertiveness questionnaire and locus of control where the completer group demonstrated a significant improvement compared to the non-completer group therefore the experimental hypothesis was partially supported.

The summary of the p values is presented in Table 34 below:

Table 34: p values RPTG 6 months follow up on TOP & AUDIT, HADS, Assertive Q, Thinking Style Q, Rosenberg, and Locus of Control outcomes using the ANOVA mixed between-within group for interaction effect, main effect for group and main effect for time for RPTG completers (n = 41) and incomplete RPTG (n = 12).

Outcome measure	Interaction effect time/group	Main effect for time	Main effect for group
alpha level = .05	ANOVA p value =	ANOVA p value =	ANOVA p value =
Daily unit consumption	.979	<.001	<.001
Number of days drinking	.989	<.001	.001
Psychological well-being	.255	.001	<.001
Physical health	.538	<.001	.001
Quality of Life	.611	<.001	<.001
AUDIT	.651	<.001	<.001
Irritability	.168	.005	<.001
Depression	.876	<.001	.008
Anxiety	.904	<.001	<.001
Assertiveness	.008	.001	.115
Thinking Style	.108	<.001	.154
Rosenberg	.238	<.001	.001
Locus of Control	.019	.002	.008

Discussion

Raistrick et al. (2006) concluded that “there is no ‘best’ treatment for alcohol problems or ‘treatment of choice’, but a number of effective treatments that are known to be of potential benefit to clients” (pp. 41-42). The RPTG which was the intervention being evaluated in this chapter used a multimodal approach to treatment based on the evidence of effectiveness in the Mesa Grande Study (Miller et al., 2003). The two studies in this Chapter focused on the effectiveness of this approach to treatment for alcohol dependant service users by looking at the impact of completing the RPTG compared to service users who started the RPTG but did not successfully complete the programme. Several different outcome measures targeting changes in alcohol consumption, physical and psychological well-being and other programme targets for change around coping with life problems associated with alcohol misuse were used. Initial measures were pre-and post-treatment, with follow up post treatment at 6 months.

The hypothesis that RPTG completers would do better than non-completers from pre-to post programme was partially supported. Although both groups did reduce their drinking, participants who had completed the RPTG had a significantly greater reduction on number of days drinking and daily unit consumption than RPTG non-completers. Participants who had completed the RPTG also self-reported significantly greater improvements on self-reported feelings of psychological well-being, physical health, and better quality of life compared to participants who did not complete the RPTG.

The results for the IDAS also showed that whilst both groups did reduce their scores post treatment, the group that completed the RPTG had significantly reduced their post treatment scores on the measures of Irritability, Depression and Anxiety. Two separate modules in the programme addressed managing emotional states specifically targeting anger and anxiety, so it may well be that the knowledge and skills learnt during these two modules had been applied to everyday living and resulted in the improvements of managing negative emotional states. The findings are consistent with the measure of psychological wellbeing in the TOP, so there is some consistency across the specific targeted outcomes in the questionnaires.

An unexpected finding was the improvements in Depression scores as no direct intervention was given around managing depression in the programme. However, the module on ‘Managing Worrying Thoughts’ did look at the core CBT methodology in that it emphasised that if participants changed the way they were thinking they could change the way they felt and behaved. Therefore, it is possible that some participants applied these new skills and were able to reframe some of their negative thinking styles associated with depressed feelings to a more positive thinking style. Tentatively, this finding is in line with the Mesa Grande (Miller et al., 2003) ranking of 13 for effectiveness of Cognitive Therapy. It is also important to note that none of the initial recorded scores for depression fell within the scoring range where further investigations into a diagnosis of clinical depression was needed.

Post treatment scores for both groups on the assertiveness scale, thinking skills questionnaire and locus of control showed improvements in scores for both groups with the difference between the two groups not being significant. It could therefore not be concluded that the module on assertiveness and managing worrying thoughts contributed to a significant improvement in skills in this area. This was a disappointing finding which may in part be explained by a weakness in the data collection in that it is not known if all participants included in the study actually completed the relevant sessions. Given the completion criteria of 10 or more sessions, it is possible that these sessions could have been missed. In hindsight, collating the data from attendance records on each module would have meant that this could have been clarified. It is also a consideration that the second session in the assertiveness module involved role playing of social skills scenarios with group feedback. There was anecdotal feedback from service user post session evaluations that role-play is not something they always felt comfortable with so this module in particular may benefit from further review. In relation to the thinking style questionnaire, using a more specific questionnaire in relation to the beliefs underpinning the choice to drink would have provided a better understanding on how thinking might have changed and said more about the actual effectiveness of the CBT session content.

For the alcohol questionnaire, both groups showed improvements in their knowledge of alcohol and associated harms and were able to identify more triggers for use,

reasons to cut down and alternatives to drinking at the end of the RPTG. As before, the lack of data from attendance records for this module means that no firm conclusions can be made about the impact of alcohol education, but it is likely that completion of this module did have some impact on scores as no other alcohol targeted intervention took place during the treatment period. The structure of the programme is also a factor as this was the first module out of six and therefore the one that most participants would have attended. So tentatively, it can be concluded that completion of this module was high across all participants therefore it is not surprising that there was little difference between the groups.

Overall, as a preliminary conclusion, the different elements of the RPTG did show some effectiveness across all target behaviours for change suggesting that a multimodal treatment approach for dependant drinkers may have some value. In considering the principles of a recovery orientated model and the key point of improved quality of life being central to sustained recovery (Best et al., 2010), how a multimodal approach facilitates this, needs to be better understood through further research before any firm conclusions can be made.

The hypothesis that RPTG completers would demonstrate better post RPTG outcomes at 6 months follow-up was only partially supported. At the six months follow up period, both groups continued to self-report improvements on the programme targets for change but the difference between the two groups was only significant for assertiveness and locus of control which was significant. For these two outcomes, the RPTG completers did better than the RPTG non-completers. What is unknown is the impact of continued treatment and the opportunity this provided to embed the skills learnt in the RPTG. The majority of participants in both groups attended the Discussion Group where the primary focus was to live life in the community, use the new skills learnt and then feedback to the group on how this had gone. Understanding more about the impact of skills rehearsal to embed learning is an area for further research as is the impact of the workbooks which were completed by participants throughout the life of the RPTG. However, anecdotal feedback on the value and effectiveness of these work books was that they were described by service users as ‘my bible’ and ‘my manual for living life alcohol free’. In the Mesa Grande (Miller, et al., 2003) ranked a self-change manual at 4.5 for effectiveness.

Whilst a self-change manual is not described, the RPTG workbook may well sit within this category of a personalised self-change manual. Having a better empirical understanding of the value and role of the workbooks particularly in helping service users sustain their recovery is an important next step.

Given the difference in sample size in the two groups only tentative conclusions can be made about follow-up effectiveness. However, the key point is that there was evidence that treatment gains continued at six months and this finding is consistent with other studies in the field for multimodal programmes that followed up outcomes at 6 months (Davis et al. 2002; John et al., 2003 and Long, et al. 1998)

The original design had incorporated a 12 month follow up. However, as very low numbers completed the follow up questionnaires, with no comparison group it was not possible to conduct this analysis. However, the data did indicate an overall trend in improvement at 12 months across the completer cohort (n = 20), with 5 participants becoming abstinent at 12 months, 9 remained abstinent, 3 lapsing and 3 continuing to consume alcohol at a dependant level. However, the data was skewed by the 3 participants who had lapsed which reduced the overall level of sustained improvement across the cohort. Whilst a firm conclusion about any potential treatment gain not being lost at 12 months cannot reliably be made, this tentative finding contradicts some of the evidence for single theoretical approaches (e.g. UKATT; 2005a) where treatment gains are lost by 12 months. However, this tentative finding is consistent with the Long et al. (1998) finding of maintained abstinence or non-problematic drinking at 12 months follow up in 55.6% of their original cohort. In terms of the Betty Ford Institute Consensus Panel (2007), the current study group would be classified as being in the early sobriety stage of recovery.

The current studies examined two empirical questions in relation to the effectiveness of a 12-session structured and manualised multimodal treatment programme for dependent drinkers. The overall findings suggested that there was something about the programme content that helped facilitate some change on several of the outcomes measures that examined both specific and global intervention strategies (McMurran & Hollin, 1993). However, the limitations of the study design and small

sample sizes in the groups limits the conclusions that can be made. Therefore, as NICE (CG 115, 2011) recommends, further longitudinal studies into the effectiveness of a multimodal treatment programme for dependant drinkers will help answer the question as to which treatment or combined treatment is more effective for achieving sustained sobriety of between 1 and 5 years, and stable sobriety of more than 5 years for this cohort of alcohol dependant drinkers (Betty Ford Institute Consensus Panel (2007).

Chapter Seven: Discussion and Conclusions

Introduction

The research presented in the thesis was based around the evaluation of a multimodal alcohol treatment programme (National Institute for Clinical Excellence, Clinical Guideline 115, 2011). The ambition was to produce a piece of empirical research which would contribute to the evidence base of what constitutes effective alcohol treatment for dependant drinkers. The literature review in Chapter 1 identified several theories that were both complementary and contradictory for the risk or predisposition of developing alcohol dependency. Because of this conflicting evidence, the literature review did not identify a totally integrated theory to explain this phenomenon (Drummond, Tiffany, Glautier & Remington, 1995) and this will be discussed further in this Chapter. The impact of a lack of a leading theory has left the alcohol addictions field in a dilemma when considering what constitutes effective treatment. The overall conclusion in the literature was that there is no one approach that is more effective (Miller & Hester, 2003; Raistrick, Heather & Godfrey, 2006).

Other important variables that were considered was the impact of waiting times on engaging in treatment. The predominant opinion is that the longer the waiting time, the less likely service users are to engage in treatment or more likely to drop out prematurely (e.g. Capoccia et al., 2007: Hoffman, Ford, Choi & McCarty, 2011; Leigh, Ogborne & Cleland, 1984). The review also identified conflicting evidence in the literature which proposed that the longer waiting times were associated with spontaneous or natural recovery without the need to access formal treatment (Redko, Rapp & Carlson, 2006). It was also suggested that longer waiting times correlated with the less motivated de-selecting themselves (Robin, 1976). This study's examination of these empirical questions was reported in Chapter 4.

The literature review also identified the role of preparing service users for treatment and how this both enhanced engagement and retention in treatment (e.g. Bamford, Booth, McGuire & Salmon, 2005; Kouimtsidis, Drabble & Ford, (2012). The importance of preparing service users for group work was also recognised, as many participants have fears and anxieties about attending groups (e.g. Douglas, 1991; Wanigaratne, Wallace, Pullin, Keaney & Farmer, 1990). This thesis examined the

impact of a minimal treatment group on both these factors and the outcomes of this research was reported in Chapter 5.

The outcome of these studies all have implications for how service providers engage potential service users into treatment and how they are prepared for treatment. These service delivery implications will be discussed later in this Chapter.

The literature review also exposed a lack of clarity over which theoretical approach to the treatment of alcohol dependency works best. Generally, the empirical studies that were reviewed compared a single theoretical approach with another theoretical approach, with most of studies finding little or no difference in outcomes. This lead some researchers to conclude that there are several promising treatment approaches supported by the efficacy research and that current practice reflects very little of this knowledge (Miller, Wilbourne & Hester, 2003). Much of the evidence is based around individual treatment and yet group work is a very common method of treatment delivery. Partly because it is deemed to be more cost effective, but also, there are aspects of alcohol treatment and recovery which benefit from group discussions and mutual support (Sobell and Sobell, 2011). If alcohol treatment is delivered in a group work setting is considered effective, then it is also considered to both cost and resource efficient compared to individual therapy (Brownlee et al., 2017, Hill & Harris, 2011).

Three separate studies were identified in the literature which demonstrated some treatment effectiveness of a multimodal group work programme compared to individual therapy but all the studies lacked a control group and the measure of success was based only around alcohol outcomes (Davis, Canpbell Tax & Lieber, 2002; John, Veltrup, Driessen, Wetterling & Dilling, 2003; Long, Kidger & Hollin, 2001). However, the Recovery literature is clear that dealing with the alcohol is only one part of recovery and measures of success should include quality of life and social functioning (Betty Ford Institute Consensus Panel, 2007; Best et al., 2010; Laudet, 2008).

The current thesis sought to address some of the methodological limitations in the previous studies into the effectiveness of multimodal group work by basing the programme content on some of the elements of the effective treatment modalities identified in the Mesa Grande (Miller et al., 2003). It also utilised a manualised

treatment delivery methodology and broadened the range of the outcome measure to include pre- and post-treatment and 6 months follow up on both alcohol outcomes and measures of quality of life and social functioning. The outcomes of this research were reported in Chapter 6.

The next section of this chapter provides a results summary for all seven studies.

Impact of waiting times on engaging in Structured Alcohol Treatment

To understand the impact of waiting times on engaging in treatment, changes in outcomes were examined at assessment and the start of the Induction Group:

The results found that between groups there were significant improvements on the outcome measure scores over time for reductions in daily unit consumption, number of days drinking and self-reported improvements in psychological well-being, physical health and quality of life. Of these, there was an interaction between time and group for reductions in daily unit consumption and self-reported psychological well-being and physical health, with the group waiting 21 days or longer showing more improvement than those people who waited less than 21 days. However, no differences were found for group, time or interaction between the two groups for AUDIT scores.

There was no significant finding for the main effect for comparing the two groups across all outcome measures. This finding indicated that the waiting time period alone could not be attributed to any differences between the groups on outcome measures. The results suggest that waiting longer for treatment does not necessarily lead to poorer outcomes, and so the experimental hypothesis was partially supported.

However, whilst the participants who waited longer to commence treatment overall did seem to demonstrate better improvements on some outcomes, the variability of the different length of waiting time between the two groups does limit the conclusions that can be drawn from these finding. Specifically, there was a longer waiting period between the initial base line assessments and first repeat measures in the group who waited 21 days or more. This meant that this group had a longer to demonstrate change and given that in the less than 21 days wait group, some participants waited less than 5 working days before commencing treatment, it is therefore not surprising

that significant changes were not observed. In considering the experimental design of this study, if both groups had waited for the same length of time and then one commenced treatment and the other group didn't, with repeat outcome measures at specified times, then it is possible that the outcomes may have demonstrated with better clarity, if natural recovery does occur during a waiting period. However, for ethical reasons this was not appropriate as this would be deemed to be withholding treatment.

In considering the changes within both groups, most of the results did demonstrate significant change, which suggests some evidence of recovery during the waiting period. This supports the empirical findings that this change could be attributed to spontaneous or natural recovery (Redko, Rapp & Carlson, 2006). However, given that most participants had accessed some form of treatment prior to referral to the programme (80%), this resulted in the lack of a 'treatment naïve' cohort in both groups. The impact of previous exposure to treatment and its cumulative effect was not known. This meant that despite the study findings for the whole cohort which suggested that all participants had made some improvement in the alcohol related outcomes, measures of psychological and physical well-being and quality of life, it would be an unreliable assertion to make any firm conclusions about how this has come about in relation to spontaneous or natural recovery. Therefore, the study findings are more in line with Marshall, Humphryes and Ball (2010) who challenged the notion of natural recovery by arguing that most people will have accessed some form of treatment or support at some point in their recovery journey. The findings therefore only partially supported the experimental hypothesis that participants will naturally recover without psychosocial interventions (e.g. Redko, Rapp & Carlson, 2006).

There was no significant association between waiting 21 days or more and dropping out of treatment. The finding that the longer waiting times did not impact on dropping out of treatment contradicts other research which did find an association (e.g. Capoccia et al., 2007; Hoffman, Ford, Tilloston, Choi & MaCarty, 2011; Rees, Beech & Hore, 1984). The experimental hypothesis was therefore not supported. Whilst the Capoccia et al. (2007), Hoffman et al. (2011) and Rees et al. (1984) studies describe an association between dropping out of treatment and excessive waiting times, the actual length of an excessive waiting times period is not well defined. It may well be

that the current study's mean waiting time in the group who had a waiting period of 21 days or more, was 30 days with a range of 21 days to 51 days, does not meet the 'excessive' criteria for waiting periods in the cited studies and which may explain why in this study, the longer waiting times did not correlate with dropping out of treatment.

Overall in these two studies, there was something about the cohort who waited 21 days or more to commence treatment which suggested that the longer waiting period was linked to improved outcomes during the waiting time period. However, this could not necessarily be directly attributed to natural or spontaneous recovery. The longer waiting time also did not impact on dropping out of treatment. This mixed finding is in line with Addenbrook and Rathod (1990) who argued that studies into the impact of waiting times and dropping out of treatment are both inconsistent and inconclusive.

Some of the questions posed by the results of the waiting times analysis could be further explored utilising qualitative methodology to understand the types of support service users accessed during any period of waiting to commence formal treatment (if any) and how useful they found it. It would also be useful to follow up service users who do not engage so that there is a far greater empirical understanding of both the impact of waiting times on treatment engagement and if, how and why spontaneous or natural recovery does occur without access to formal treatment. This would provide further evidence to either support or refute the empirical question of whether spontaneous or natural recovery does occur without formal support?

Impact of Treatment Preparation

Chapter 5 considered the impact of the minimal treatment group (Induction Group), specifically, whether completers of the IG group would do better on the recovery outcomes than those who did not complete the IG group.

The results found improvements over time between the start of the IG and end of the IG/start of the RPTG for both completers and non-completers on all the outcome measures. However, greater improvements were shown by completers for reductions in daily unit consumption and number of days drinking. The group who completed the IG showed a mean reduction of 1.8 units a day and 3 days abstinence in the 28-day period. This compared with the mean reduction of .5 units a day and 1.5 days abstinence in the 28-day period in the non-completer group. On the remaining outcomes, both groups showed improvements but this was similar for both

groups overtime. As there were larger improvements among the completer group on daily unit consumption and number of days drinking, it is suggested that the completing the IG did have an impact. The experimental hypothesis was therefore partially supported.

There was a significant association between completing the induction group and completion of the RPTG. The results indicated that participants were significantly more likely to complete the RPTG if they had completed the IG group first, compared to participants who had not completed the IG. The experimental hypothesis was supported. This finding replicates the findings of Kouimtsidis et al. (2012) who found that minimal treatment preparation enhanced completion rates.

The impact of IG completion on pre-post RPTG outcomes was also examined. The results found that both groups demonstrated significant improvements on all pre-post outcomes. However, there were no significant interactions with both the IG completers and non-completers showing similar levels of improvements. This finding indicated that completion of the IG made no difference to the post treatment outcomes after participating in the RPTG. The experimental hypothesis therefore was not supported.

Engaging service users into treatment and reducing disengagement

The impact of waiting tomes ion enhancing engagement into treatment was examined in Chapter 4. In summary, the findings were inconclusive in relation to if the longer waiting time made a difference to treatment engagement and then remaining engaged. (Addenbrook & Rathod).

Chapter 5 considered other methods of how to best optimise both engagement and retention in treatment by examining the impact of preparation for treatment on these two factors. The methodology replicated Kouimtsidis et al. (2012) who found that preparing service users for detox treatment by encouraging them to attend a minimal treatment pre-detox group did significantly increase detox completion rates. By way of explaining the value of pre-treatment preparation, Gilburt, Drummond and Sinclair (2015) found in their qualitative research, that services users often felt that they had not been well prepared for treatment and this was a contributory factor in them disengaging. Chapter 5 also outlined other engagement methods used in the current thesis including the provision of group work literature to service users that not only

outlined the content of the programme but also explained the exact nature of group work (psychoeducational as opposed to therapeutic). Client testimonials were also used to help service user's 'normalise' some of their worries and fears about attending groups and see that their peers had benefitted from treatment. Whilst this replicated the methodology of Sobell and Sobell (2011), it was beyond the scope of this thesis to undertake any detailed analysis of these two methods of engagement. However, further studies into different methods of engaging service users into treatment are necessary to gain a better understanding of which methods are most effective in getting service users into treatment and retaining them.

Whilst both groups did continue to show continuing pre-post IG improvements on all the outcomes, the completer group demonstrated larger improvements on daily unit consumption and number of days drinking which suggested that something about the IG group had an impact. In looking at the content of the IG intervention, there may have been something about the material which might explain this. For example, the content of session 2, looked at a video on alcohol use and associated harms, the group discussions in session 3 focused on the impact and consequences of alcohol related crime, and parenting capacity and a presentation of the facts and figures on alcohol related harm cost and impact in session 4. These discussions may have acted as a motivational factor in reinforcing the need for individual change. Although session evaluations (see Appendix D) for each of these sessions were collated, a systematic analysis of them was not undertaken and this is a limitation of the current study, as it would have revealed what a service user had learnt in the session and what it was about the session content that had been useful. In retrospect, it was also a limitation in the evaluation form design, in that it did not ask service users to comment on what they would do differently (if anything) in relation to their drinking levels after the session.

Also requiring of further discussion is the cohort who did not complete the minimal treatment group (IG) and to theoretically explore some of the reasons as to why this might have been the case, to inform future practice. Of relevance would have been to understand more about the question of if being assigned to group work was a factor in dropping out, as other studies (e.g. Sobell & Sobell, 2011) acknowledge that service users do have worries about group work. Brownlee et al. (2017) go further and have identified specific factors linked to group work drop-out rates including a

reluctance to disclose in groups, trusting other group members and group discussions acting as a trigger for lapse.

Brownlee et al. (2017) also identified that the repetition of discussions in groups was also a factor in service user attrition rate. Firstly, in considering the lack of a treatment naive cohort, this may partly explain attrition rates as service users had 'heard it all before'. Secondly, the pathways into treatment may be a contributory factor with repeated treatment episodes covering the same material. The literature on the best pathway into treatment is contradictory. On the one hand in their review of effective treatment, Raistrick et al. (2006) discussed a 'stepped care' approach to organising services and delivering treatment. The principles of this approach are that "services users are initially offered the least intrusive and least expensive intervention that is likely to be effective" (p. 27). If this first line of treatment is not successful, then service users are referred on to progressively more intensive forms of treatment. On the other hand, is the treatment matching approach (Project Match, 1997; & UKATT, 2005), in which service users are matched to the intensity of treatment which best meets their need. Whilst the stepped care model suggests that service users should choose where they enter the stage of treatment and this should not be based on professional judgement alone, (Raistrick et al., 2006), anecdotally, in practice this does not routinely happen. It is inevitable therefore that the more treatment is repeated (as is more likely in a stepped care approach), the greater the risk that some service users will become demotivated by this repetition and drop-out.

This leads to a further limitation in the current study which was to assess service user's motivation to change. Raistrick et al. (2006) recommend that measuring readiness to change should be part of the assessment process. Had assessing motivation to change been included, two things could have been achieved. Firstly, service users who were motivated to engage, i.e. identified as being at the 'action stage of change', (Prochaska et al., 1991), could have been better matched to the right stage in the programme instead of routinely starting everyone at the same place in the group work programme (i.e. at Stage I, see Figure 5). Entry into the IG was not based on the stage of motivation or previous treatment episodes. The risk of this 'stepped care' approach is the inevitable repetition of interventions and may not be seen as being helpful by service users and they quickly disengage. This approach could also be setting a service user up to 'fail' and maintain their belief that treatment

is not effective for them. In their study, Brownlee, et al. (2017) are clear that clients do not benefit from repeating a group and as any previous treatment disengagement can be considered a proxy indication of client motivation, proper consideration of motivation at treatment start is essential for the overall retention and outcomes for clients in treatment.

The current study did find that by attending the minimal treatment group, and having the opportunity to engage with other group members for mutual support and group preparation, service users were significantly more likely to remain in and complete treatment which was consistent with other studies (e.g. Kouimtsidiset al., (2012). Secondly therefore, service users identified as being at the contemplation stage of change may potentially benefit from pre-treatment preparation to enhance motivation, so that treatment engagement can be optimised.

In general, it is a consideration that service providers need to take a less process driven approach to treatment by pushing service users through a treatment system regardless of an individual's motivation to engage, their previous treatment experiences and their assessed level of need. Given the on-going concerns about the lack of engagement and drop out levels in alcohol services (Alcohol Needs Assessment Research Project, 2004), this has the potential to be an equally effective approach to enhancing engagement and retention in treatment, as the 'within 21 days to commence treatment' guidelines (NATMS, 2009).

Following the significant association between completing the induction group and completion of the RPTG, it was concluded that the IG group played some role in enhancing retention in treatment. This was an expected finding and is in line with the findings of Kouimtsidis, et al. (2012) study. However, the exact function of this treatment preparation is not entirely understood and there are several possible theoretical explanations for this finding. For example, participants may have experienced an enhanced degree of motivation to continue to engage (Wanigaratne, Wallace, Pullin, Keaney & Farmer, 1990). The experience of group work may have addressed some of the worries and fears participants may have had about group work (e.g. Douglas, 1991; Sobell & Sobell, 2011) resulting in participants being more willing to continue with group work. Finally, the completion of the IG may also have allowed this completer group to be further advanced in the group dynamics such as

a sense of group cohesion and mutual support compared to non-completers (e.g. Barlow & Burlingame, 2006; Burlingame, Fuhriman & Johnson, 2002; Sobell, Sobell & Agrawal, 2009), which created a better group environment in which to optimise learning (Dainow & Bailey, 1988).

Given these possible explanations, it would have been useful to have undertaken a qualitative element in this thesis to help understand more about what it was about the group preparation embedded in the IG material that helped participants remain in treatment.

The finding that completion of the IG made no difference to the post treatment outcomes in both groups after participating in the RPTG was not unexpected, as the overall intention of the IG was to prepare participants for structured treatment, not provide an intensive intervention to directly address the alcohol use, quality of life and social functioning.

A further limitation in these studies was the sample size which firstly had a very small overall cohort size, and secondly, the disparity between the group sizes means that any generalisation of the reported findings does have limited reliability and validity to the wider alcohol treatment population.

Multimodal Treatment

Chapter 6 looked at the impact of the main RPTG programme. The results found that for both groups there was significant improvements in the pre-post RPTG outcome measure scores for daily units, number of days drinking, psychological wellbeing, physical health, quality of life, AUDIT, Irritability, Depression, Anxiety, Rosenberg and Locus of Control, with the RPTG completers demonstrating a greater degree of improvement on all measures compared to the non-completers. On the other measures, the RPTG completers demonstrated an improvement on the mean scores. The experimental hypothesis was therefore, partially supported.

In considering the outcomes, the finding that both groups demonstrated significant improvements on several of the measures was unexpected. There may however be several explanations for this finding. Firstly, there is a need to look at the threshold point that was set for completion (10 or more sessions). In analysing the number of RPTG completed sessions in the non-completer group, the mean number of

sessions attended was 6.7 (SD = 2.05) with a range of 2 – 9 sessions. Overall, 80% of the non-completer group completed 6 or more sessions (i.e. 50% or more of the programme), so potentially did gain some benefit from the programme. Secondly, the programme structure may also have been a contributory factor as the first half of the programme covered alcohol education, relapse prevention and managing anxiety. When this is compared with the significant outcomes in both groups, it is likely that there is an association as the programme content that would have directly impacted on these improvements, was covered in the first half of the course so it is most likely to have been completed by all participants. Thirdly, all the non-completers continued in treatment after dropping out of the RPTG. The impact of this is not known. The last point to consider is the RPTG completers demonstrated a greater degree of improvement on all measures compared to the non-completers so this does suggest that completing the programme enhanced improvements and change. However, the small sample size in both cohorts limits how these findings can be applied to the wider alcohol dependent cohort.

The question of the impact of completion of the RPTG on 6 months follow-up was also examined. The results found that at six months follow-up there were significant improvements for both RPTG completers and non-completers on all measures. However, there was only a differential impact of RPTG completion for assertiveness and locus of control, for which the RPTG completer group showed a greater level of improvement. The experimental hypothesis was therefore, partially supported. There are similar explanations for these findings as the pre-post study discussed in the previous section. However, the differential impact of the assertiveness and Locus of Control outcomes between completers and non-completers requires further explanation. As described before, it is more likely that the completer group attended the assertiveness session as it was towards the end of the programme (session 8) and therefore the completer group had the opportunity to learn about and rehearse drink refusal skills and general assertiveness, leaning to be more confident in saying ‘no’ appropriately. These new skills may in turn have impacted on the difference in the Locus of Control psychometric which focused on how much an individual feels they have control over their own actions (internal locus of control). Therefore, a tentative conclusion is made that there was something about completing the

assertiveness module that may have improved participants feelings of being more in control over the choices they make.

The original design had incorporated a 12 month follow up. However, the data that was obtained was too small to analyse, although the observed trend from the mean scores between 6-12 months follow-up was for a small continued improvement. Whilst no reliable conclusions can be made, the continuing trend for improvement is consistent with the Long, Williams and Hollin (1998) finding for improvement at 12 months follow up in their study.

There is a paucity in the empirical literature of research on group therapy with the main methodological approach being to compare various combinations of group work and or with individual therapy, group work programmes with different theoretical orientations and differing levels of intensity and length (Weiss Jaffee, deMenil, & Cogley, 2004). Weiss et al. (2004) found that no one approach produced better outcomes and this is a consistent finding over time with a later systematic review by Orchowski and Johnson (2012) concluding that none of the alcohol group work programmes reviewed were found to be clearly and uncontroversially effective, although some studies did demonstrate a modest effect, but this was contradicted by the findings of other studies in the review.

As a result, determining how the findings of the pre-post and 6-month follow up studies in Chapter 6 compared with other empirical findings in the field, has been problematic as a similar comparison pre-post and follow up studies with a similar range of outcome measures was not identified in the literature review. There are several possible reasons for the lack of research in this area which are proposed by the Morgan-Lopez and Fals-Stewart (2006) review. They found that the dearth in the literature examining the effectiveness of substance misuse group work treatment was because there are several barriers to conducting research in this area which might explain this. Morgan-Lopez and Fals-Stewart (2006) suggested that the continuing changes in group membership in open and rolling groups limits the potential to empirically evaluate the effectiveness of the intervention. They argued that that the interdependence of members serves as a primary curative mechanism for change and that the constant change in group membership may influence

participants' treatment response and eventual outcomes. As an example, they suggest that new members may not be as motivated to engage with treatment or become abstinent. They may also tempt more stable group members to lapse or relapse by seeking companions with whom to continue their substance misuse. Also cited is the fact that participants may miss multiple sessions which impacts on the ability to demonstrate programme effectiveness, and limited control over treatment delivery components resulting in the lack of a standardised group work intervention that can be replicated over time with different treatment cohorts.

However, some comparisons can be made with the finding of the Long et al. (1998) study when comparing daily unit consumption between the two studies.
Long et al. (1998) found at intake, the average daily use was 18.77 units a day. At 6 months post treatment, this had dropped to an average of 9.35 units a day. This compares to the current study finding of 13.66 units a day at RPTG start and at 6 months follow up, 3.14 units a day. There are however limitations in making any generalisations about this comparison. Firstly, was the difference in sample size, with the Long et al. (1998) study having 212 participants at intake and 193 participants at 6-month follow-up compared to the RPTG of 52 at intake and 41 at 6 months follow up. Secondly, although the programme material covered broadly the same theoretical approach, the content was different and so a direct comparison could not be made. Further comparisons were also complicated by the use of different outcome measures in the two studies. Long et al. (1998) did examine global measures of change, finding improvements on the alcohol related life problem outcomes at 6 months follow-up. Whilst this was a similar finding to the current study, this finding was not directly comparable as the global outcome measures in the current study (Treatment Outcome Profile) was different to the psychometric tool used in Long et al. (1998) and it is not clear if the same quality of life and social functioning constructs were being measured.

The later studies of Sobell and Sobell (2009) also have some value in making some comparisons. Whilst the focus of their study was to compare the delivery method of the Guided Self-Change Treatment Model (GSCTM) (individual versus group therapy), they reported pre-post outcomes for each group, so some comparisons can

be made with the current study. Also, the programme content was similar (Cognitive Behavioural theoretical orientation with problem solving, drink refusal skills training, relapse prevention, functional analysis, homework feedback, group discussions and feedback) and like the RPTG, groups were 'closed' with no new participants joining after the first session.

The Sobell and Sobell (2009) pre-and within[32] treatment group outcomes found that at pre-treatment, average daily unit consumption was 6.67 units a day and at the within treatment[33] time, this had reduced to 4.06 units a day. This is a similar finding to the current study, but there are two points to consider. Firstly, the pre-treatment average of 6.67 units a day confirms that the Sobell and Sobell (2009) did not target an alcohol dependant cohort, so direct comparisons are not so valid. Secondly, the programme consisted of 4 sessions of 60 minutes, meaning that the intensity of the GSCTM group was not comparable with the current RPTG study, with the latter providing 24 hours of treatment in total compared to 4 hours. This relates back to the first point in that the intention of the GSCTM was to provide a brief group work intervention for non-dependant alcohol service users.

However, of interest in the Sobell and Sobell (2009) study was also the finding that there were no significant differences in outcomes for delivering GSCTM as either individual or group therapy at 12-month follow up. This finding suggests the possibility that providing programme content and delivery is effective, the method of delivery could make no difference on outcomes, but has clear implications for both time and cost efficiencies of delivering treatment with multiple participants being seen in group sessions compared to individual therapy (Brownlee et al., 2017, Hill & Harris, 2011).

Is Multimodal Treatment effective?

The current study proposed that central to being able to achieve sustainable recovery was the need to not only learn new skills to address specific intervention strategies to address the alcohol use itself, but also to learn more global intervention strategies to address some of the casual factors of alcohol dependency (McMurran &

[32] Within treatment was measured from somewhere between the commencement of treatment and treatment end 4 weeks later (Sobell & Sobell 2009).

Hollin, 1993). The later shift in the treatment paradigm from harm reduction towards a recovery oriented model (Best et al., 2010) further supports the need to look beyond providing alcohol treatment that focuses solely on reducing alcohol consumption and effective ways to achieve this. The use of pharmacological enhancements to treat alcohol dependency (discussed in Chapter One), is supported by evidence of treatment effectiveness in the empirical literature (e.g. Chick et al., 2000; Maisel, Blodgett, Wilbourne, Humphreys & Finney, 2013; Rasitrick et al., 2006; Rösner, Leucht, Lehert & Soyka, 2008). However, the empirical evidence of pharmacological interventions as a stand-alone treatment was contradictory. The main conclusions were that pharmacological interventions are move effective when delivered as part of a package of care including psychosocial interventions (NICE, 2011; Rasitrick et al., 2006; Vuoristo-Myllys, Lipsanen, Lahi Kalska & Alho, 2014), but the question remains as to which alcohol treatment is effective, given that the evidence on effective alcohol treatment is inconclusive (Miller & Hester, 2003; Raistrick et al., 2006). However, the current study in considering the recovery model, which is clear that recovery goes beyond becoming sober and includes improvements in quality of life and social functioning (Betty Ford Institute Consensus Panel, 2007), concluded that a multimodal treatment protocol may be more effective in supporting service users to achieve sustainable recovery by providing structured treatment to address both the strategies to reduce the level of alcohol use and the causal factors underpinning alcohol use.

The evidence of effectiveness of multimodal treatment was limited with NICE (CG 115, 2011) concluding that further studies were needed to build on the available evidence. The current study sought to address the weakness in the empirical literature. The study results found that post multimodal treatment, both groups demonstrated significant improvements on several outcomes and overall, the completer group did better and this was maintained at 6 months follow up, with a small trend for continuing improvement at 12 months. This finding is in concordance with the main findings of Davis, Campbell, Tax, and Lieber (2002) who concluded that multimodal treatment is more helpful in treating severely alcohol dependant individuals.

Whilst the Long et al. (1998) multimodal treatment did demonstrate effectiveness on both alcohol outcomes and global measures of change at 12 months follow-up

(55.6% of all patients either abstinent or non-problem drinkers having previously been dependant), there were no reported pre-post outcomes in the study, so it was not possible to make a direct comparison between pre-post measures of effectiveness of multimodal treatment with the current study. However, it is worth commenting on the comparable six months' follow-up outcomes in the current study with the Long et al., (1998) study findings. They found that at 6 months after discharge from the treatment unit, 112 participants (58.0% of those contacted) reported abstinence or non-problem drinking. The current study is consistent with this finding where 6 months follow-up data found that 63% (n = 41) self-reported abstinence or non-problem drinking (≤ 3 units daily) compared to17% (n = 12) in the non-completer group. This is further supported by the AUDIT scores which demonstrated that 21% of the post treatment completer group were still self-reporting alcohol dependency compared to pre-treatment levels of 81%.

Overall a tentative conclusion is that there was something about the multimodal treatment programme that was effective with an alcohol dependent cohort, but further studies are needed before any firm conclusions can be made.

Practical Research Issues and Study Limitations

There were several practical issues and study limitations encountered during the research and these are discussed next.

Lack of a Treatment Naïve Cohort

Overall, most participants had accessed some form of treatment prior to their engagement with the programme and therefore could not be considered as treatment naive. This was a major limitation in being able to truly isolate the success of the RPTG as a stand-alone effective treatment. The cumulative effect of treatment may in part, have been due to the inappropriateness of treatment matching with many participants being encouraged to accept briefer interventions in the first stages of treatment before graduating to more specialist and intensive treatment (Models of Care for Alcohol Misuse, 2006). As it was not possible to control for the cumulative effect of separate treatment episodes, it has to be considered a major limitation when considering the potential success of the RPTG and restricts any conclusions about the effectiveness of multimodal treatment. Having a better understanding of

the components of previous treatment would have provided a greater insight into this issue.

Sample Bias

Participants were not randomly assigned to the experimental conditions, but fell into one of the experimental groups through a naturally occurring selection process of how quickly they engaged with the programme, whether they completed the minimal treatment group and then if they continued and completed the RPTG. It therefore has to be a consideration that participants who engaged with the programme and then remained engaged, were more likely to be more motivated to make changes and therefore naturally predisposed to do better than less motivated individuals. In hindsight, it would have been useful to have assessed participants motivation to change at the initial assessment using a simple psychometric such as The Readiness to Change Questionnaire (Heather, Gold & Rollnick, 1991) as this would have helped understand if individual motivation was a further factor which impacted on engagement.

Psychometrics

Some limitations of the selection of the psychometrics used in the study have been considered. Firstly, the use of the Thinking Skills questionnaire didn't accurately measure attitudes in changes to thinking styles, i.e. attitudes and beliefs about alcohol specific automatic thoughts that reinforce and maintain drinking. As this was one of the main focuses of the managing worrying thoughts module, the lack of a more relevant questionnaire could impact on the ability for improvement to be identified for this session.

Secondly, this study utilized several outcome measures which in some cases may have caused completer fatigue. This was especially evident at the 6 and 12 months follow up with a low return rate which did impact on the sample size available for analysis and the generalizability of the findings.

Thirdly, there were some limitations to the self- report completion method in that there is a risk of either over stating or understating the degree of alcohol misuse and associated problems. The Long et al. (1998) study used blood tests to confirm alcohol use but this was not feasible in the current study as a third sector provider,

the cost of arranging this would have been prohibitive. However, several psychometrics were selected to help demonstrate consistency between the different questionnaires. For example, AUDIT scores were consistent with the TOP daily unit consumption and number of days drinking questions and the IDAS was consistent with the TOP psychological wellbeing question.

Ethics

It is recognised that an important component of any good quality research is that it is structured around a randomised control experimental design where participants are randomly assigned to one of the experimental conditions and that one of the experimental conditions should be a non-treatment condition (Hollin, 2006). Whilst in the current study, if this methodology had been used, considerably more could have been understood about spontaneous or natural recovery without accessing more formal treatment (Redko, Rapp & Carlson, 2006), there were ethical constraints of not withholding treatment to any participants. Firstly, when a service user is referred to treatment, to then withhold treatment places that individual at risk of continued physical and psychological harm. Secondly, to withhold treatment would mean that the service provider would be breaching their contractual agreement with Commissioners. The compromise therefore was to have a control group that was 'naturally' formed through the referral process.

Re-Commissioning Framework

The National Commissioning Framework for substance misuse services since early 2000 has resulted in frequent changes of service providers. For the current research, this meant that all data became unavailable from 2011 with a change in provider. Retrospectively, demographic data has been identified that would have been helpful in gaining a better understanding. For example, if service user was a parent and how if at all this impacted on their ability to engage.

It is acknowledged that more research into effective alcohol treatment needs to be undertaken (e.g. National Institute for Clinical Effectiveness, 2011; Raistrick, Heather & Godfrey (2006), but with these current re-commissioning arrangements, any longitudinal studies may be more problematic to undertake if there is a risk to a change in provider

Developing an Integrated Theory of alcoholism

From what has been discussed, an integrated theory of alcoholism would need to cut across several different theoretical perspectives and this is problematic as combining the different theories will not necessarily work well, as this is not a linear relationship. Service users will not necessarily tick 'each box' for each theoretical explanation to reach the conclusion that they are at risk or their circumstances are predictive of later alcoholism. The theoretical dynamic is more in symmetry with considering several different and equally valid theoretical explanations for the risk of and or prediction of alcoholism. In other words, an overarching theory underpinned by a multifaceted framework of the different theoretical approaches.

The reason why this is important is that it is theory that underpins and drives effective treatment. Key to the provision of effective treatment is a solid understanding of what the individual treatment needs are and which are identified through the comprehensive assessment process. Raistrick et al. (2006) identify the components of a comprehensive assessment as including socio-demographic data, social networks, family relationships, employment or daily activity routine, physical health history, mental health history and personality characteristics.

These different domains should then form the basis of treatment if it is an identified need. These domains target direct alcohol impacts such as physical health with possible treatment including prescribing and indirect recovery targets include, social behavioural network therapy to strengthen social networks, family therapy to improve family relationships and employment support. This supports the shift in the treatment paradigm towards recovery orientated practice (Best et al., 2010) and arguably in relation to treatment, multimodal treatment holds promise in being able to best meet the multifaceted treatment needs.

Theory Informing Practice

The literature review sought to identify an integrated theory that could unify and explain the risk factors associated with and/or predictive of alcoholism. The overall conclusion from this review was that there is currently no consensus on an integrated conceptualization of addiction that combines biological, social and psychological perspectives (Batra, 2004). Miller and Hester (2003) postulate that

this lack of consensus has resulted in a confusion on how to treat people with alcohol problems and dependency.

From an applied perspective, the empirical evidence from these different theoretical explanations does require further consideration. Kalb, Vincent, Herzog and Austin (2017) explored the usefulness of genetic counselling for individuals with personal or family history of alcohol addiction. Participants were offered genetic counselling and its effectiveness was then evaluated. Kalb et al. (2017) found that the provision of genetic counselling was effective as it could help facilitate a better understanding of the causes of addiction, clarify misconceptions about recurrence risk and help encourage the development of risk reduction strategies. Kalb et al. (2017) concluded that despite its potential usefulness, genetic counselling was not routinely availability in treatment services. However, despite the limited evidence of the effectiveness of genetic counselling, its wider provision is debated. It is argued that a clinically useful prediction of risk based on specific gene identification will be challenging as the specific genes that have been identified so far, have a much smaller impact on the development of alcoholism compared to the impact of family history (Pirya et al., 2014) so the value of genetic counselling at this time, may well be limited.

A further consideration is the cost of genetic testing prior to genetic counselling, which in the current financial climate of austerity and cutbacks, is unlikely to gain little support. It is also unclear at this stage what the treatment options would be for those who test positive for a genetic disposition. In fact, there is potentially a clear risk to any psychosocial treatment success if alcoholism is seen by service users as being wholly explained by the presence of certain genes in an individual's genetic makeup. The risk is that this view may diminish the sense of an individual's personal choice and the responsibility of choosing to drink in the first place. Genetic testing by virtue of the fact there is little an individual can do about their genetic make-up, may also help facilitate the development of personalised cognitive distortions and schemas which rationalise the drinking behaviour as being something they can do nothing about as it is 'all in the genes'.

However, some aspects of genetic empirical research may have more clinical value in relation to the development of appropriate treatment for those identified as having

a genetic disposition for alcoholism. Specifically, the ALDH2 gene has been found to be associated with adverse reactions such as nausea, flushing and headaches. This appears to 'mimic' the reaction of the sensitizing agent disulfiram which causes an adverse reaction if alcohol is consumed. Researchers have concluded that the ALDH2 gene is a protective factor in the risk of developing alcoholism (Forund et al., 2010; Iyer-Eimerbrink & Nurnberger, 2014). It is beyond the scope of this thesis to consider the scientific implications of this genetic research, but it does seem that in the future, 'positive genetic testing' could be mitigated with more advanced medical treatments such as genetic modification therapy. There is also some scope to consider longer term disulfiram prescribing to those at risk of developing alcoholism due to genetic factors, although this would need to be balanced with the risks of longer term use of disulfiram.

Personality theories of alcoholism have identified a well-established link between the personality trait of impulsiveness and alcohol use, with alcohol being seen as the disinhibiting trigger for impulsive acts (e.g. Dick et al., 2010; Marczinski, Abroms, Van Selst & Fillmore, 2005) or impulsivity correlating with heavy alcohol consumption (e.g. Janssen, Larsen, Peeters, Pronk, Vollebergh & Wiers, 2014; Ray, McGeary, Marshall and Hutchinson, 2006). Essentially, this is a 'chicken and egg' relationship. Clinically speaking, it may not matter which has come first (being dis-inhibited by the alcohol and becoming impulsive, or being impulsive and drinking more) as in both scenarios, alcohol is consumed and this in itself, may cause physical, psychological and quality of life harms. However, understanding this relationship does have clear implications for treatment. For example, in the group who become impulsive after drinking standard practice would be to offer a more psychoeducational approach such as relapse prevention support. In contrast, the group who are impulsive by nature may benefit from a more intensive therapeutic approach such as cognitive behavioural therapy. If the main causal factors for alcoholism are not addressed, it is arguable that any form of treatment will not contribute to treatment effectiveness.

In order therefore, to effectively target treatment needs such as personality traits associated with alcohol misuse, there is a clear need for an assessment tool to help identify this impulsivity relationship so the right intervention can be provided. However, the literature has also identified some problems with the current psychometric tools used to measure impulsivity, which have measured it as either a

single construct or as multifaceted (Dick et al., 2010). This has resulted in there being some difficulty around the validity of some of the empirical research conclusions about the correlation between impulsivity and risk of alcoholism because of the different impulsivity construct threshold between psychometrics, with multifaceted measures being more sensitive to the trait measurement (Dick et al., 2010). So, whilst there is some evidence for a link between impulsivity and alcoholism, the relationship between them theoretically, is not well defined. To begin to understand this relationship would require a more robust assessment process that includes a psychometric tool that not only standardized how the impulsivity construct is measured (single or multifaceted) but was able to identify the nature of the relationship with impulsivity and risk of alcoholism as this will inform treatment. Given that Raistrick et al., (2006) have identified that personality traits should form part of a comprehensive assessment, anecdotally, this does not currently seem to be standard practice. In relation to the appropriate treatment for impulsivity and alcoholism, in reviewing the Mesa Grande (Miller et al., 2003), there is not obviously a treatment that is identified as being effective in addressing this issue. Therefore, this can be seen as a gap in both theory and practice and which may be a contributing factor in establishing what is effective treatment.

Conclusions

This thesis has identified several key themes that have implications for clinical practice and service delivery. It is concluded that preparing service users for treatment can enhance both engagement and retention in treatment (Kouimtsidis et al., 2011). However, more research needs to be undertaken to understand which methods work best. Service users should enter treatment at the stage that best meets their needs and repetition of treatment content may be a contributory factor in service users disengaging prematurely. Qualitative studies will help clarify if this is a factor.

Assessing levels of motivation at treatment episode start (Raistrick et al., 2006) may help to better match services users to the correct level and intensity of treatment. Assessments should also include impulsivity questions (Raistrick et al., 2006) as this has been identified as a personality characteristic that has an association with alcoholism (Dick et al., 2010; Janssen, Larsen, Peeters, Pronk, Vollebergh and

Wiers's , 2014; Marczinski, Abroms, Van Selst & Fillmore, 2005; Ray, McGeary, Marshall & Hutchinson, 2006). However, there appears to be a gap in the literature in both how this is assessed and the interventions that may help service users facilitate change in their impulsive behaviour. This area would benefit from further research and depending on the findings may help to develop more effective treatment in the future.

It was also concluded that there was some degree of effectiveness in the outcomes from a multimodal relapse prevention treatment group that went beyond treating the alcohol problem and provided psychosocial interventions to improve quality of life and social functioning. This approach is a better fit with recovery orientated practice (Best et al., 2010). However, this an area that also requires further investigation which looks more at examining the effectiveness of both the different components of multimodal therapy and its combined impact, so that a standardized definition of what constitutes effective multimodal therapy can be developed. Given the current financial constraints in treatment services, effective group work is both a cost and time efficient treatment compared to individual therapy, so understanding what components are needed to deliver effective structured alcohol treatment programme for dependent drinkers that supports sustainable recovery is important.

Finally, conducting this thesis has highlighted the difficulties in undertaking applied research that will meet a methodologically acceptable standard (Miller et al., 2003; NICE, CG 115, 2011), so that it doesn't result in the outcomes being dismissed because of these limitations. There continues to be a lack of empirical evidence in the literature into effective alcohol treatment for the dependent drinker cohort and this has limited an extensive comparison of this study findings with existing knowledge. This paucity may well be because much of the research that has been undertaken is not included in systematic reviews because of methodological limitations, but this limits how fast the evidence base on effective alcohol treatment can be developed.

Appendix A: Sample section of session 1 treatment manual.

Session one: Alcohol Education

Length of session – two hours plus a 30-minute break.

Minimum of one tutor to deliver

Equipment:

flip chart and pens,

pens for clients

Tutor manual

Reference material manual

Calculator

OHP's:

OHP 1:1 Daily Drinking Guidelines

OHP 1:2 Unit Guide

OHP 1:3 Alcohol-Related Harms & Costs

Handout's

Marked Alcohol Questionnaire (completed in pre-course session)

Alcohol Fact Sheet

'Health impacts of Alcohol' (Alcohol Concern - 2003)

Social and Psychological Effects of Using Alcohol

Drink Drive Leaflet (Department of Transport)

Evaluation forms

Alcohol-Related Harms & Costs

Aims and Objectives of the session:

- To assess participants knowledge of alcohol
- To provide alcohol information
- To complete the relevant pages of the Life Skills handbook
- To evaluate the effectiveness of the session
-

Introduction

Tell the group:

Today's session is looking at alcohol education. The session starts with going through the alcohol questionnaire that you completed in session one and then goes on to look in some detail as to how alcohol affects our health and emotional wellbeing as well as the consequences that drinking has for other people.

Answers to Alcohol Assessment Questionnaire

Hand out alcohol assessment questionnaires. Provide pens if needed. Go through the questions with the group using the questionnaire answer sheet and alcohol fact sheet. (max 30 mins.)

OHP 1:1 and 1:2 can be used to illustrate points about daily drinking guide lines and units.

Hand out Alcohol Fact Sheet

Collect in Alcohol Assessment Questionnaires

Group Exercise:

Short and Long Term Physical Effects of Using Alcohol and Associated Health Problems

Divide the group in to two groups. Provide them with a piece of flip chart paper and pens. Ask them to draw the outline of a body. Then in their groups ask one group to identify the short term physical effects of drinking and the other group to identify the medium and longer-term effects. Groups to write their thoughts on the body.

Each group to feed back - tutor to listen and clarify or provide further information as necessary.

The following should be included in the group discussion:

Acute short-term physical effects include:

Hangovers – vomiting, diarrhea, headache, nausea, blurred vision,
Smell of drink
Acute alcohol poisoning
Trembling hands
Blood shot eyes
Dehydration
Loss of balance
Black outs/unconsciousness (if vomit whilst unconscious you can choke to death)
Memory loss
Inflammation of the stomach

Appendix B

Corresponding section of participant work book for session 1:

Introduction

Welcome to the first session of the Relapse Prevention Treatment Group. This handbook is your personal record of the work that you will cover during the 'structured' part of the Day Care Services Programme.

Over the next six weeks you will be encouraged to complete the relevant sections in the handbook. Most of the time you will have time set aside during the sessions to do this. However, on occasions you may be asked to complete work outside of the group. Although this might be difficult, as far as possible if you can complete the exercises, you will get more out of the Programme.

You will also be given some additional written material which you should place in this folder.

When you leave Day Care Services, this handbook is yours to keep for your future reference. If you have a key worker from another organisation, they may find it helpful to have a look at this handbook with you, so that they can have some idea of the work that you have covered. It will also help them in supporting you in the future.

If you have any difficulties completing this handbook, please speak with your Day Care key worker.

Good Luck with the Course.

How has my alcohol use affected my health?

What social and behavioural problems has my alcohol use caused?

What psychological problems has use alcohol use caused me?

Who's affected by my alcohol use?

Why do I drink?

_____

Appendix C

Programme Summary of the Relapse Prevention Treatment Group

1. Alcohol Education - part 1

This first session provides a knowledge base of Alcohol facts, including effects of alcohol on the body, and the short and long-term consequences of alcohol misuse. This includes looking at how an individual's health has become harmed, as well as discussing other problems including relationship, behavioural & legal consequences. Throughout the session, a number of teaching aids are used which helps emphasise some of the harm that is caused by alcohol misuse.

2. Poly Use – part 2

This session asks participants to consider the impact of mixing alcohol and either prescribed or illicit drugs, raising their awareness of the risks associated with poly drug use.

3. Relapse Prevention – part 1

The relapse prevention session begins to develop a problem-solving approach to alcohol misuse by getting participants to identify the reasons for their own drinking, the consequences to themselves and others and both short and long-term costs and benefits drinking. Continuing in the problem-solving approach, cues and triggers for drinking are explored and then alternatives to drinking are discussed.

4. Relapse Prevention – part 2

Further developing the use of problem solving skills, this session aims to help participants identify their own high- risk situations for lapse and relapse situations. Techniques for managing high- risk situations are then explored.

5. Managing Emotions – part 1

This session looks at the different range of emotions that might lead to misusing alcohol. Learning how to identify their own current emotional state is discussed and then the emotion of anxiety is explored in some detail including the physical, psychological and behavioural aspects of anxiety and how this links to drinking. Coping strategies for managing anxiety are then explored.

6. Managing Worrying Thoughts (CBT) – part 1

This session builds upon the previous one in that it focuses on how our thoughts control our behaviour, which in turn affects our emotions. The main focus of this session is the identification of irrational or distorted thinking errors and then learning how to challenge these unhelpful thoughts and then to consider alternatives to this thinking style to help reduce the negative impact associated with this style of thinking.

7. Stinking Thinking and your drinking– part 2

This session helps participants to identify the ‘stinking thinking’ that helps to maintain the drinking. The material looks in detail at the specific thoughts (uncontrollability, positive and permissive thoughts) people have about drinking which can make it hard for people to change their behaviour. Ways to challenge this thinking style is an important part of this session.

8. Assertiveness

This session introduces aspects of social skills training, namely assertiveness. More specifically, it looks at the consequences in relation to drinking taking behaviour when individuals are not assertive. Aggressive, passive aggressive and passive behaviours are also explored. In the second part of the session participants have the opportunity to demonstrate an understanding of assertiveness techniques in role play exercises including managing high risk situations and drink refusal skills. Participant support and feedback are an important part of this session.

9. Managing Emotions – part 2

This session continues looking at emotions with specific reference to the management of anger. The physical, psychological and behavioural aspects of anger are explored. Personal triggers for anger are identified and coping strategies for managing anger are discussed. The consequences of getting angry and the use of alcohol to calm down are also explored and challenged.

10. Problem Solving – part 1

This session begins to look at the problem-solving process starting with problem recognition, problem identification and selecting goals. Alternative problem solutions are then discussed. To assist in the learning of these skills a problem situation is discussed with the group to illustrate how the skills apply to each stage of the problem-solving process. Participants are also asked to work on their own problem situation in this session.

11. Problem Solving – part 2

In this next session, the problem-solving process is continued by completing a creative thinking exercise and summarising what has been learnt so far. The session continues by looking at the consequences of the solutions and finally the decision-making process is explored. Participants have an opportunity to complete their own problem-solving exercise.

12. Problem Solving – part 3 - Pulling it all together

This session provides participants with the opportunity to present their problem situation to the rest of the group and demonstrate their use of the problem-solving skills discussed to create possible solutions. Participant support and feedback are part of this learning process.

Appendix D

Evaluation Sheet

Session Number: Date:

What was today's session about?

Was the information presented in a clear and understandable way?
(Please circle the response which best fits your impressions)

Yes, it was all clear Mostly clear No, I didn't understand it

If you didn't understand the session, which parts did you find difficult?

How useful has today's session been to you?
(please circle the number you feel is closest to your views with 1 being not useful, 5 being very useful)

(not useful) 1 2 3 4 5 (very useful)

Did you learn anything new today?
(Please circle the response which best fits your impressions)

Yes, I learned a lot I learned something new I learned nothing

What did you like about today's session?

What didn't you like about today's session?

Do you have any suggestions as to how the session might be improved?

Thank you.

Appendix E

Participant Information Sheet

Evaluation of Alcohol Relapse Prevention Treatment Programme

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 the time to read the following information carefully.

What is the purpose of the study?

The Relapse Prevention Treatment Programme (RPTP) has been developed by Gill Le Page over the past 12 years. It has been running as a pilot study at LCPT for the last 5 years and some changes have been made to the programme. With any programme that is written, it is helpful to be able to see how successful it has been (if at all). The purpose of the study will be to compare the pre-course questionnaire results with the post course results and then follow up results at 6 months and then at one year.
By comparing the questionnaire results, the researcher can then assess how helpful the programme has been for our service users.

Why have I been chosen?

We are asking everybody who might attend the RPTP if they would like to take part.

What will be involved if I take part in the study?

All of our service users who attend the RPTP are already asked to complete a set of questionnaires before and after the programme. This helps you to see what changes you have been able to make in your life to help you achieve your goals. The questionnaires will be completed again at 6 and 12 months after the end of the programme to help see if the changes have been maintained or identify any areas for additional support, so you won't be asked to do anything different to what you are already doing for the RPTP. The only extra thing that you are being asked to think about is to give your consent for your questionnaire scores to be used for research purposes. You will not be named in any reports and it will not be possible for anyone

to see that the scores are yours. Only staff who work at LCPT will see you individual scores and these are shown to you when you are reviewed at the end of the RPTP.

Do I have to take part?

No, it is up to you to decide whether or not to take part (i.e. give permission for your questionnaire results to be used in the research). If you do say 'yes', then you will be asked to sign a consent form. You can change your mind about giving your permission at any time and without giving a reason. This will not affect the standard of care you receive.

Will my taking part in the study be kept confidential?

Yes, your name will not be given, only your scores from the questionnaires will be included in the research. No staff or workers outside of LCPT will have sight of your completed questionnaires, know your name or know any other identifying details about you (e.g. your address or date of birth). You will not be identified in any reports/ publications that will be produced at the end of this study.

What if I am harmed by the study?

You will not be asked for any extra information that is distressing or upsetting because of taking part in this study. However, because you are being asked about your alcohol use during the programme, some people do feel upset by this. Should you feel upset, you should speak to your keyworker or group worker on the programme.

Who has reviewed the study?

This study has been approved by Leicester University School of Psychology Ethics Committee. LCPT's Board of Trustees have also given permission for this study.

Thank you for taking the time to read this sheet and for considering taking part in this study. If you have any questions or queries about the study, please speak to Gill Le Page or another member of the team at the Alcohol Structured Day Programme.

This research study should take about 2 years to complete. If you would like a summary of the results after the project has finished, please contact:
Contact details removed.

Appendix F

Research Consent Form

Evaluation Study of The Relapse Prevention Treatment Programme

1. I confirm that I have read and understood the information sheet for the above study. I have been able to think about what the study involves, ask questions and have had these answered.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason and without my legal rights being affected.
3. I agree to take part in the study as outlined in the information sheet.

Name of participant: _____

Signature: _____

Dated: _____

Programme Aims

The aim of the Structured Day Programme is;

To provide information, advice and support to individuals who have either stopped drinking or taking drugs and are concerned about relapsing or for those who have regained some control over their drinking or drug use but would like to make further changes to achieve or maintain a healthier and safer lifestyle. We also provide services for individuals who are still chaotic in their substance use but are motivated to look at making changes. 

Most of our programme is delivered in groups, sometimes people feel worried about being asked to attend groups. They may not want to talk about "personal stuff" in front of strangers. Don't worry—you won't be expected to.

What is Group Work?

The Structured Day Programme runs two main types of group.

The first is:

Learning in Groups:

This type of group is where one of the Team talks you through a series of sessions that will provide you with information about some of the following topics:

- Motivation
- Substance education
- Relapse prevention
- Managing worrying thoughts
- Assertiveness
- Problem solving
- Managing emotions

You can join in with some of the discussions or you can just listen if you want to. Remember though—the more you put into the session the more you'll get out of it. Most people start off feeling a bit shy, but quickly find that they want to join in.

The second kind of group is the:

Discussion group:

This is an opportunity to talk in a confidential, non-judgemental environment about the things that have happened to you during the week and how you have coped.

Hopefully you will have had the opportunity to practice some of the new skills that you have learnt in the Relapse Prevention Treatment Group so that you can tell the others in the group how you are getting on. You will not be expected to discuss very personal or highly emotional issues.

Each group member has about 15 minutes to talk about their week and any other matters that they want to discuss. It is expected that all group members take part in the group discussions and they agree to the Structured Day Programme Confidentiality Policy.

What other service users think about our service

I found the Day Care service a safe, constructive and supportive environment in which I was able to learn new skills and discuss any problems with alcohol usage. I have been abstinent since I came here three months ago.

Anon

I have found this service is helpful in challenging the issues that surround becoming substance free. Friendly and non-judgmental. Useful in meeting new people in the same situation. It is easy going and enjoyable. Use it by going at your own pace. Is also good for the everyday problems we face in life. The Social Group is very fun!

Emma

What other service users think about our service

The service is fantastic. The support is always there. It has also given me confidence and the ability not to look at things so negatively. There's always another way of looking at situations. I don't have to rely on alcohol to get me through life. This is what I have learnt through LCPT. One to ones are extremely helpful. The Social Group activities are good because they help you to interact with other people.

Angela

In general, I have found being part of a group is incredibly helpful as everyone is pretty much in the same boat. The support from my key worker and other members of the group has been fantastic

Rob

What other service users think about our service

I find the staff extremely friendly and approachable. I have found the group very supportive and offers a great time occupancy, avoiding the temptation to drink and also the social group which is great to avoid boredom. I've met nice friends.

Carys

A very helpful service. The Life Skills and other groups have been extremely useful in maintaining abstinence. Also added structure to my weekly routine and good for a (substance-free) social life.

Norris

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