

**Addiction Beliefs:**

**Do Staff Working in Substance Misuse and Mental Health Services View Clients with  
Co-existing Mental Health and Substance Use Problems in the Same Way?**

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## **Declaration**

This thesis is submitted in partial fulfilment of the Doctorate in Clinical Psychology degree. I declare that the research reported in this document is my own and that this piece of work has not been submitted for any other academic award.

## Abstract

Previous research has indicated addiction beliefs differ in staff working in Mental Health and Substance Misuse Services, but limited attention has been paid to this in the UK. Given the reported prevalence of clients who present to both types of service with co-existing mental health and substance misuse problems, and recent government guidance on the management of these clients within existing NHS services, the current study was developed. The aim was to explore whether any differences in beliefs about addiction existed between staff working in NHS Mental Health and Substance Misuse services in the UK, and identify any barriers/levers to joint-working between services to support these clients.

Staff working in Mental Health, Substance Misuse and Dual Diagnosis services across five NHS Trusts were recruited to participate in a survey study. Participants completed questionnaires designed to identify their beliefs about addiction to three substances (alcohol, cannabis and heroin) and were also asked to report their opinions about current/potential barriers/levers to these services working jointly to support clients with co-existing mental health and substance use problems.

A significant difference between Mental Health and Substance Misuse staff ratings on the 'Addiction Belief Inventory' was observed; staff in each type of service held different views about addiction on the following subscales: 'chronic disease', 'responsibility for actions', 'responsibility for recovery' and 'genetic basis'. Interaction effects between service type and demographic information were also explored. The hypothesis that staff would report significantly different beliefs about different substances was also supported. Staff comments about barriers and levers to joint-work were analysed thematically.

Given that the current study suggested that addiction beliefs differ on a number of elements across services, and substances; the implications for intervention and joint-working are discussed in light of previous research and suggestions by clinicians. A full critical appraisal of the study was included.

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What does research tell us about the influence of the media on beliefs about addiction?

A Literature Review

## Abstract

### Purpose

Given the recent government and media focus on substance misuse in the general population, and the increase in popularity of the internet and social networking sites, a systematic review of the literature was undertaken to establish the extent to which there is research evidence to support mass media exerting influence on the development and maintenance of addiction beliefs.

### Method

Thirteen articles based on research data about the influence of a variety of media formats on beliefs about addiction and substance use were reviewed. Articles were identified from several databases and included only those written in English and those that focused specifically on the influence of media messages on drug or alcohol-related beliefs.

### Results

The majority of articles reviewed used a survey design, with some presenting various visual media materials e.g. movies or television soap opera episodes, prior to the administration of a questionnaire. Articles focused on either drug or alcohol-related beliefs about addiction. A number of media formats were considered to exert some level of influence over these beliefs, although the process behind this was complicated by additional factors e.g. parental influence/support and immediacy of exposure to media materials. Articles varied in quality and generalisability of findings.

### Conclusions

Research that has focused on the influence of media messages on addiction beliefs is limited in a number of respects, however there was some evidence that television and print media can influence beliefs about drugs and alcohol in both positive and negative ways. Further research is required to understand the processes by which this influence occurs, in addition to potential remedies to such influence.

## **1 Introduction**

Individuals are thought to be socially located (Lyons, 2000) and thought to gain their beliefs about health and illness from available ideas and narratives. In recent years, a number of researchers have argued that there has been a change in the way people obtain their information about health and health topics (Bunton, 1997; Bury, 1997), with numerous ideas arising from newspapers, magazines and advertising (Hepworth & Featherstone, 1998). In addition to information about health and illness appearing increasingly in newspapers, magazines and on television, there has also been a change in whose opinions are available. A variety of perspectives can be heard in current times, including alternative therapists, medics, journalists and academics (Bury, 1997). It has also been proposed that the mass media play a major part in circulating expert and lay accounts to the public (including policy-makers and politicians) (Hepworth & Featherstone, 1998), particularly given the media ‘explosion’ at present (e.g. internet, Wikipedia, magazine/newspaper supplements, mobile phone applications and self-help guides). Policy-makers and politicians determine treatment services and tend not to be professional clinicians, specialists or researchers, therefore, their beliefs and attitudes are likely to be influenced by the media in the same way as the general population.

There has been suggestion that the news media is powerful in setting agendas (e.g. personal, policy or funding) and that issues reported in the media are viewed as being important and worthy of public discussion (Frost, Frank & Maibach, 1997). Researchers have suggested that media portrayals have significant influence in defining and shaping societal attitudes and views about health and illness (Lyons, 2000). Media representations are thought to affect individual beliefs and knowledge about health and illness and therefore perceptions of risk and health behaviours. They are also said to influence individual attitudes towards certain subgroups of the population. In the USA, campaigns have been reported to have changed tobacco-related beliefs, attitudes and intentions to smoke among teenagers (Farelly et al., 2002; Hersey et al., 2005). Mass media campaigns have been a useful tool for promoting

public health for many years (Noar, 2006) and some of the most successful are thought to be alcohol campaigns (Snyder & Hamilton, 2002). A meta-analytic study indicated that campaigns focusing on alcohol were more successful at raising awareness than campaigns focusing on other illicit drugs and that campaigns using audio and visual formats had a greater effect than print media (Derzon & Lipsey, 2002). It is also possible that media accounts influence the understandings of professionals as well as those of lay people (Lyons, 2002) on factors such as identity, blame, responsibility for illness and health-related issues, as well as on attitudes and beliefs.

A number of models exist to explain addiction and these theories are evident in a variety of interventions for substance misuse. The most prevalent in healthcare settings is the Disease Model, which assumes that individuals with a dependency on drugs or alcohol have a biological abnormality that causes the addiction (McMurran, 1994; Peterson & McBride, 2002). In this context, dependency is defined as excessive reliance on a substance with the possibility of building a tolerance to it and/or experiencing withdrawal symptoms when not taking it (Comer, 1999). Treatment approaches such as Alcoholics Anonymous subscribe to this model (Wheeler & Turner, 1997) and believe that abstinence is the only option as the 'disease' cannot be cured and should be treated medically (Jordan, Davidson, Herman & Bootsmiller, 2002). Medically-dominated services are prevalent in the UK, specifically in the drug-treatment field with substitute prescribing as the most prevalent approach (Best & Campbell, 2009).

A number of other models also exist: these may see addicts as being to blame for their difficulties (Moral Model e.g. Brickman et al., 1982), as a coping mechanism (Functional Model e.g. Rassool, 2002), or as a combination of biological, psychological and social factors (APA, 1994; McMurran, 1994; Orford, 1985; Peterson & McBride, 2002). Treatment approaches supported by the Biopsychosocial model include harm reduction, controlled drug use and psychosocial mapping (NTA, 2009), however the debate and research into

appropriate interventions continues (DH, 2002; Hides, Lubman & Dane, 2004; Hughes, 2006, 2009; Larkin, Wood & Griffiths, 2005; Raistrick et al., 2008).

Other research has demonstrated that age (Humphreys, Noke & Moos, 1996), ethnicity (Cameron, Manik, Bird & Sinorwalla, 2002; Thombs & Osborn, 2001) and professional background (Gjersing et al., 2007; Hanes & Bennett, 2008; Humphreys, Greenbaum, Noke & Finney, 1996) may influence beliefs about addiction and attitudes that determine the treatment of those with substance misuse problems.

The meanings of ‘addiction’ as a word understood in both daily and academic language is contextual and socially constructed (Howitt, 1991; Irvine, 1995). A number of authors have utilised qualitative approaches to review media narratives of drug and alcohol use (Clegg-Smith, Twum and Gielen, 2009; Elliott and Chapman, 2000; Lawrence, Bammer and Chapman, 2000; Stoddart, 2006; Zajdow, 2008). The focus of such papers has most often been print media such as magazines, newspapers and comics, but has also included television news programmes. Gender differences in mass media portrayals of alcohol use and misuse have been noted, as has a lack of coverage of negative consequences of drink-driving offences in spite of these events being considered newsworthy themselves (Clegg-Smith, Twum & Gielen, 2009). Heroin and alcohol were portrayed in a highly unfavourable light and were the most prevalent substances appearing in American comic books, with marijuana/cannabis being surprisingly absent (Stoddart, 2006).

In Australia, heroin users have been portrayed in a negative light by national newspapers, with references to them being ill, dying, criminals and victims (Elliott & Chapman, 2000). There was also some evidence to suggest that print media can offer either a supportive or antagonistic view towards substance use and misuse. Lawrence, Bammer and Chapman (2000) noted that one Australian newspaper was far more pejorative in tone of printed articles about heroin use than the majority of others regional newspapers. It would seem that public fear can be harnessed by different groups for their own purposes, which can serve as part of the maintenance of a moral panic on addiction (Zajdow, 2008).

In addition to attracting the interest of health services, the concept of addiction is also of interest to the media. As well as being defined as a ‘moral panic’ with a focus on binge drinkers, HIV and AIDS in drug users etc, there have also been numerous famous cases of addiction, ranging from Queen Victoria and Arthur Conan Doyle, who both used opium, to high profile actors, sportsmen and musicians who have developed problems with drug use (Stepney, 1996). The term ‘addict’ has been around since the 17<sup>th</sup> Century, however the concept of addiction had its origins in the early 19<sup>th</sup> Century with the increase of social and policy significance (Berridge, 1997). At different times throughout history, across different societies, the legal and regulatory control of drugs has varied, alongside changes in medical views, medical technology and an increased focus on disease (Berridge, 2004). Some drugs, such as opiates, have become less culturally acceptable over time, whereas others, like alcohol, have become more so (Berridge, 2004 a, b). At times, both in literature and in media portrayals (i.e. television, newspapers), the term ‘addiction’ is used to draw attention to a behaviour that brings disapproval to mind. ‘Addiction’ has become a term with negative connotations, perhaps through its use in the media and is also used to imply individual blame and guilt (Stepney, 1996).

Previous reviews on the role of the media have focused on the literature surrounding media portrayals of alcohol and its impact on drinking behaviour both in the general population (Baille, 1996; Hansen and Gunter, 2006) and in young people (Anderson, de Bruijn, Angus, Gordon & Hastings, 2009; Schilling & McAlister, 1990; Smith & Foxcroft, 2009; Zucker, Donovan, Masten, Matteson & Moss 2009). One article reviewed theories of media approaches to reducing drug use among youth (Schilling & McAlister, 1990) which highlighted that little empirical attention had been given to the extent to which media-based prevention messages could influence adolescents in both a positive and negative direction.

The findings of the above reviews have suggested that children and adolescents, between the ages of 4-18 years, hold definite beliefs about the characteristics of drinkers and the behavioural effects of drinking which are generally negative; however these change with age

and with increased opportunity for vicarious exposure (Anderson et al., 2009; Zucker et al., 2009). Whilst it is likely that we develop our beliefs from contact with those around us (parents, siblings and peers), it would also be naïve to think that the information presented by the media would have no influence on our belief system. A number of authors have proposed that most Americans relied on news reports to learn about public issues (e.g. Papper & Gerhard, 1997; Roper Startch, 1994). More recently, Gilliam and Bales (2001) have suggested that in the USA, increasingly the world is viewed through the eyes of the news media which has a pervasive influence on the public's understanding of social and political issues. Since Baille's (1996) review, the role of mass communications media as a source of influence on beliefs about addiction remains relatively unexplored as an area for research in the UK.

Television and print media coverage of drugs and alcohol has fluctuated over recent years (e.g. Beckett, 1994; Gozenbach, 1996) but the mass media has long had an influence on views about substance use and misuse (Jenkins, 1999; Musto, 1999). Johnson et al. (2004) stated that "few people have enough direct experience with the drug problem to gauge it's severity...they learn about the drug problem indirectly through the media.."(p190). The mass media, especially TV are key sources of information about drugs and alcohol (Blendon & Young, 1998) to both the public and to service commissioners and providers.

Although during recent times, accessibility to a variety of elements of the mass media has increased in western countries with the advances in internet and mobile phone technology, and with mounting concern about increasing drug and alcohol use in the population (e.g. BBC, 2009; Cabinet Office, 2004) no available review has tried to establish how the media might affect our beliefs about addiction. In the UK in 2009, a number of government scientific advisors on substance misuse tendered their resignation due to disagreement over the elected government's policies on drugs and alcohol and the available scientific evidence of harmfulness (*Guardian*, 31.10.09, 10.11.09., 01.12.09., 10.02.10.; *Times*, 04.11.2009; 05.11.09).

The media is a proven powerful force and is all pervasive (Schilling & McAlister, 1990; Wartella, O’Keife & Scantlin, 2000), with advertising influencing young people in particular (Young, 1990). In recent years there has been an explosion of interactive media such as social networking sites like ‘MySpace’ and ‘Facebook’ as well as the ability to access the internet from mobile phones (Lefebvre, 2009). The influence of advertising for tobacco and alcohol is a major public policy issue, particularly as advertising on the internet is relatively uncontrolled (Goldberg, 2008).

## **2 Aims**

The aims of the current review were to systematically assess and critique the scientific literature around the influence of media (television, newspapers and internet) on beliefs about addiction in the general population, specifically with regard to both alcohol and drugs such as heroin, cocaine and marijuana. This would include policy-makers, service commissioners and politicians, who are all consumers of this information as part of the general population. The review also aimed to identify how these processes of influence occurred.

## **3 Method**

Empirical studies published in English between 1989 and 2009, which were available free of charge to the author were sought from the following databases: Psychinfo, ISI Web of Science, Social Sciences Citation Index, Scopus, Sociological Abstracts and Cumulative Index of Nursing and Allied Health Literature (CINAHL). Search terms included combinations of the terms: *addiction, beliefs, drug, alcohol, substance use, substance misuse, heroin, cannabis, alcohol, attitudes, media portrayals, media, mass media, media influence, drug-related beliefs, heroin-related beliefs, cannabis-related beliefs, alcohol-related beliefs and drug/alcohol users* (see Appendix A).

Initial searches retrieved 1153 articles: titles were screened for relevance and then 66 abstracts were screened for appropriate inclusion in the review (Appendix B). Articles were included in the review if the abstract referred to the media influence on drug and or alcohol-related beliefs, across any age group. Articles using both quantitative and qualitative methodology were eligible for inclusion in the current review. Exclusion criteria were: articles describing prevalence rates only; articles on drink and drug taking behaviours that did not focus on addiction beliefs or had a media component in the study design; theoretical papers; books; dissertation abstracts and single-case designs. Finally, articles whose main focus was on tobacco or analgesic medication were excluded from the current review, given their extensive coverage in other reviews and research papers.

Following the application of the above parameters and the removal of duplicate papers and reviews, 13 papers were deemed relevant for inclusion in the current review (Appendix B). All of the final 13 papers utilised quantitative methodology. Although five qualitative articles were identified in the initial search, these were excluded as their focus was on the types of narratives used in the media to describe drug and alcohol use, rather than the influence these narratives may have on beliefs about addiction. A data extraction table was used to identify the main features of the 13 articles included in the current review (Appendix C). Geographically, the studies originated from Belgium, Denmark, the Netherlands and the United States.

#### **4 Results**

The sample of articles covered in the current review focused on beliefs related either to drugs (e.g. Ginsberg, Raffeld, Alanis & Boyce, 2006; Minnebo & Eggermont, 2007; Nielsen & Bonn, 2008; Palmgreen, Lorch, Stephenson, Hoyle & Donohew, 2007) or alcohol (e.g. Austin & Chen, 2003; Austin, Chen & Grube, 2006; Austin & Meili, 1994; Cin et al., 2009; Engels, Hermans, van Baaren, Hollenstein & Bot, 2009; Grube & Wallack, 1994; Kesmodel & Kesmodel, 2002; Russell & Russell, 2008; van Hoof, de Jong, Fennis & Gosselt, 2008).

Articles focusing on drug-related beliefs either referred to drugs/substance misuse generally or heroin, cocaine or marijuana specifically.

The 13 articles reviewed predominantly made use of survey methodology, with four exceptions. Although there appeared to be a similarity of thematic content, none of the studies utilised the same questionnaires, which made direct comparison of findings more difficult. Sample sizes varied from 80 pairs (Engels et al., 2009) to 4574 (Cin et al., 2009), as did response rates, where these were transparent. Age was another varying factor in the samples, with some studies choosing to focus on children (Austin et al., 2006; Austin & Meili, 1994; Cin et al., 2009; Grube & Wallack, 1994; Palmgreen et al., 2007), others on adolescents (Austin et al., 2006; van Hoof et al., 2008) or adults (Austin & Chen, 2003; Engels et al., 2009; Ginsberg, Raffeld, Alanis & Boyce, 2006; Kesmodel & Kesmodel, 2002; Minnebo & Eggermont, 2007; Russell & Russell, 2008). Definitions of these cohorts and ages included were different across many of the studies included in the current review. While some studies collected data using a pencil and paper survey method (e.g. Austin & Chen, 2003, Austin & Meili, 1994; van Hoof et al., 2008), others chose to administer questionnaires in a face to face (e.g. Grube & Wallack, 1994; Kesmodel & Kesmodel, 2002) or telephone interview (e.g. Austin et al., 2006; Cin et al., 2009).

There was also some variation in the type of media included in studies, ranging from television advertising (e.g. Austin & Chen, 2003; Grube & Wallack, 1994) and soap operas (e.g. van Hoof et al., 2008) to movies (Cin et al., 2009). Descriptions of how these different types of media were utilised and operationalised within the studies varied from rating exposure to TV advertising at home (e.g. Austin et al., 2006; Grube & Wallack, 1994) to watching movies/episodes of TV programmes in a laboratory (e.g. Engels et al., 2009; Russell & Russell, 2008).

#### **4.1 Alcohol Studies**

Alcohol and the influence of the media over related beliefs and behaviours were the most frequently examined by studies included in the current review. Most often included in samples were the under-18 age group (e.g. Austin et al., 2006; Palmgreen, et al., 2007, van Hoof et al., 2008), however college students (e.g. Austin & Chen, 2003; Ginsberg et al., 2006; Russell & Russell, 2008), young male adults (e.g. Minnebo & Eggermont, 2007) and pregnant women (Kesmodel & Kesmodel, 2002) were also recruited in other studies.

Although a variety of media formats (television/film adverts, soap opera episodes, newspaper/magazine articles) have been studied, none have been covered in much detail, making it difficult to draw any firm conclusions. The recent findings of Cin et al. (2009) indicated that alcohol exposure in films could exert a significant influence on beliefs about benefits of alcohol use, portrayals of drinkers as ‘cool’ or ‘popular’, peers’ alcohol use and change in consumption over time. They utilised a random digit dial telephone survey to identify 10-14 year olds in the USA, who were then contacted at 8 month intervals over a two-year period. Although the study started out with a total of 6522 participants, only 4574 remained at the final stages of the study. The reasons for drop-out were not fully explained in the article. Participants were asked about exposure to certain movies containing varying numbers of alcohol references, beliefs about alcohol norms and expectancies, and levels of alcohol consumption. It was unclear why different pieces of data were collated at different time points and unfortunately, the study did not explore in detail the psychological processes underlying the relationship between exposure to alcohol use in the media and adolescent alcohol use, as it set out to do. It was also limited in its exploration of socioeconomic, cultural or diversity issues, a point observed by the authors, but one which research appears to have paid limited attention to. It would also therefore be difficult to generalise these findings outside of the USA.

Engels et al. (2009) also used the medium of film to explore alcohol-related beliefs, however their focus was on the impact of advertisement clips during the screening of a film.

This study involved 80 pairs of male students, aged between 18-29 years, who were paid for their participation. Each pair viewed a movie clip (rated as having either few or many alcohol references) interrupted by two commercial breaks (rated as either neutral or alcohol-related). Following this, participants completed a series of questionnaires about alcohol intake and beliefs. Although this was an experiment, attempts were made to make the setting as naturalistic as possible in this Netherlands study. The authors reported that those viewing alcohol advertisements during the film screening, or those viewing films with many alcohol portrayals, were more likely immediately afterwards to select an alcoholic beverage over a non-alcoholic beverage from the laboratory bar than those who observed more neutral advertisements or films with fewer alcohol portrayals. This study tended to focus its conclusions more on the drinking behaviour than the addiction beliefs and the statistical power of the findings was not reported. The authors suggested that their findings could either be the result of imitation of behaviour seen in the movie clips or that there was an interaction between alcohol norms present in the movies and pre-existing norms and expectancies of participants' cued drinking. There was little discussion of the link between behaviours and beliefs and therefore the explanations of their findings were unclear.

Television advertisements of alcohol were utilised in two studies published in 1994. In their sample of low income families (N=154), Austin & Meili (1994) reported that for children (9-14 years), television impacted on expectancies and intentions for drinking. Participants completed questionnaires on perceptions of alcohol use at home and on television. The survey data collected were reviewed in line with a model developed in a previous paper (Austin et al., 1990), some elements of which were supported by the data. A child's intention to drink was predicted by: their perceptions of alcohol-related behaviours at home (both positive and negative); their interpretation of alcohol-related messages from the television; their desire to be like TV characters that drink; and expectancies that drinking alcohol would bring rewards. The possibility of social response bias in questionnaire ratings was acknowledged by the authors, and they suggested that the influence of alcohol-related TV

messages only occurred within the context of other influences in a child's home life e.g. parents, family, peers etc. Unfortunately, the alcohol-related beliefs reviewed in this paper were not clearly defined, making comparison with other articles difficult.

Grube & Wallack (1994) looked at the alcohol-related beliefs of 468 school children (aged 10-14 years) in California, USA. Their focus was the relationship between awareness of beer advertising and drinking beliefs/knowledge, which they measured by administering a series of short questionnaires. The authors concluded that alcohol advertising influenced children: those with a higher awareness of beer advertising showed more favourable beliefs about drinking, more intention to drink and more brand knowledge. Parental approval of drinking was noted to influence a child's positive beliefs about alcohol; however it was unclear exactly how the authors identified the five positive and negative alcohol beliefs that were rated in their study and why these were chosen for inclusion. Initial correlations supported by a structural model, highlighted the existence of a relationship between advertising and alcohol-beliefs: it would appear that awareness of alcohol advertising was related to positive beliefs about alcohol and that these beliefs maintained intentions to drink as an adult. Awareness of advertising was not significantly related to beliefs about the negative aspects of drinking.

Further attention to television media has focused on episodes of television programmes (Russell & Russell, 2008) and episodes of soap operas (van Hoof, de Jong, Fennis & Gosselt, 2008). The aim of these papers was to understand how alcohol-related beliefs and attitudes were shaped through alcohol messages in television content, as previous studies had indicated a link between beliefs and actual drinking behaviour.

Russell & Russell (2008) asked 250 college students to complete questionnaires and watch real episodes of TV dramas which contained embedded alcohol messages (either pro or anti alcohol). Participants were either warned about the embedded messages before they occurred or at the end of the episode and each received a course credit as a reward for taking part. The impact of how connected audiences felt with the TV characters was also considered,

with participants rated as having either high or low levels of connectedness. Similarly to the findings of Grube and Wallack (1994), Russell and Russell demonstrated that positive and negative beliefs about alcohol operated independently, although again the specific beliefs were not clearly defined in the paper. The authors reported that pre-advertisement warning reduced positive beliefs about alcohol for low-connected viewers, but that the opposite was true for high-connected viewers. High-connected viewers who were warned about the content of the anti-alcohol advert also reported more negative beliefs about drinking than those who received no warning. Pro-alcohol warnings did not affect the beliefs of high-connected viewers. The authors concluded that warning viewers about the content of embedded alcohol-related messages could influence alcohol-related beliefs. Although this raises some interesting complexities about alcohol-related beliefs, it remains unclear why these differences occurred between warnings about pro and anti-alcohol messages. The authors did illustrate good awareness of the limitations of this study, in particular the difficulty in generalising the findings from American university students who viewed the programmes in a computer laboratory, to a real-life situation.

Both Russell and Russell (2008) and van Hoof et al. (2009) made use of real episodes of programmes. In the first part of their study, van Hoof et al. used content analysis to determine the number and type of alcohol references (e.g. amount and type of alcohol consumed, time of day and drinking situation) in a 40 episodes of a Dutch soap opera series. Inter-rater reliability for 10% of episodes was at a satisfactory level between the three coders who found that alcohol was present in 98% of episodes. Remaining episodes were all coded by the first author. The majority of drinking in the episodes took place in the evening and wine was the most popular drink recorded which the researchers felt did not reflect Dutch drinking habits. The researchers coded approximately 35% of drinking situations in these episodes as reflecting alcohol misuse.

Following this, van Hoof et al. (2009) attempted to assess the influence of alcohol cues on 223 adolescents, aged 12-18 years, during the school day. Participants were

randomly assigned to one of four conditions: they either watched an episode of a soap opera (compiled by the researchers from a number of original episodes) with or without alcohol cues, which was pre- and proceeded by adverts for either alcoholic or non-alcoholic beverages. Participants then completed questionnaires that asked about perceived consequences of and attitudes towards alcohol use, as well as intentions to drink alcohol. They assessed whether exposure to alcohol cues led to a larger proportion of words (in a word-completion task) being alcohol-related. No significant difference was reported on the word completion task. The authors found that participants who viewed advertisements for alcoholic beverages held more positive attitudes towards alcohol and identified more positive consequences of drinking than those exposed to non-alcoholic advertisements. Participants who viewed the episode with alcohol cues reported more unfavourable attitudes towards alcohol and identified fewer positive consequences of drinking than those watching the episode without alcohol cues. Watching the episode with alcohol cues also led to lower drinking intentions in male participants. Overall, following exposure, male participants reported more positive attitudes to alcohol than female participants. The longevity of these effects was not evaluated in this study and it was unclear whether participants held the same views prior to watching the episode and adverts. Unfortunately, the attitudes and beliefs measured by the questionnaires were not explicitly listed in the paper.

Two further studies concentrated on the influence of alcohol advertising on alcohol-related beliefs (Austin & Chen, 2003; Austin, Chen & Grube, 2006). Both studies used survey methodology with an American sample and attempted to analyse the findings using structural equation modelling. Austin and Chen (2003) asked 300 U.S. college students (aged 18-33 years) to complete a survey about their alcohol-related beliefs and the influence of their parents' reinforcement of advertising/TV messages about alcohol over the development of these beliefs. The authors concluded that beliefs were based on affective processing and heuristics rather than logic and that parental reinforcement of advertising and television messages encouraged more positive beliefs about alcohol in participants. The study ignored

participants' current level of attention towards advertising and TV messages and the potential impact of this on their alcohol-related beliefs. As findings were based on student recollections of parental actions in childhood, it is possible that some inaccuracies may have been present or that memories had been recoded in light of more recent information or discussions. No corroboration was sought from parents of participants.

In 2006, Austin, Chen & Grube concluded that parents could help to counter media effects and influence alcohol-related behaviour. Both Austin and Chen (2003) and Austin et al. (2006) used the same analytical techniques, however data in the later study was not normally distributed. There was some also some similarity between the alcohol-related beliefs included in these studies, which included beliefs about alcohol desirability, perceived social norms, scepticism about alcohol and beliefs about the consequences of drinking. Austin et al. (2006) completed a three year study of 9-17 years olds in America (N=652), who completed a questionnaire after being selected by a random-digit-dialling exercise and parental screening/agreement. The authors reported that participants who described watching more hours of primetime television found alcohol advertising more desirable and held more positive alcohol expectancies. Those who watched more sports programmes on television held more negative beliefs about the consequences of drinking alcohol. Austin et al. (2006) concluded that the interpretations of messages were at least as important as the level of media exposure to alcohol use; however their method of calculating exposure to television advertising consisted of counting the number of TV hours weekly and number of occasions that sport was watched per week.

The above studies (Austin & Chen, 2003; Austin et al., 2006), have suggested that anti-alcohol campaigns need to acknowledge the desirability of media messages. The authors have proposed that strategies to increase individual awareness about advertising techniques could be helpful to counter this desirability and that further exploration of the processes by which media messages are interpreted is required to assess accurately their impact on alcohol-related beliefs.

As well as influencing beliefs about alcohol desirability, it would appear that the media may play an informative role. In their study of 439 pregnant women attending an antenatal clinic in Denmark, Kesmodel and Kesmodel (2002) concluded that alcohol-related beliefs were not associated with knowledge of official recommendations or contact with health professionals, as in self-reports, most Danish women in their sample claimed to receive information about alcohol and pregnancy from the media. Beliefs in this study focused on alcohol intake of women and their partners during pregnancy and breastfeeding. There was also a suggestion that any information gained from health professionals would be judged in light of information obtained from other sources, specifically the mass media. Whilst this raises some interesting points, it is not clear whether any elements of the mass media (e.g. television, newspapers and magazines) were more influential than others in this study. In addition, although the authors considered the influence of the interviewer on the responses given, it was not clear how responses to open-ended questions were coded; methods of calculating alcohol intake were not consistent and analysis was limited to reporting percentages of responses to each survey item. The authors recognised the potential to generalise their findings to other western countries and although they felt their findings were representative of the majority of pregnant women attending a particular clinic, a number of biasing factors were ignored e.g. interviewers at the antenatal clinic being midwives themselves which could have influenced the level of socially desirable responses.

From the current review on alcohol-related studies it would appear that there is evidence to indicate that various elements of the mass media can exert an influence on alcohol-related beliefs, although additional factors appear to complicate the picture.

#### **4.2 *Drug Studies***

Each of the four drug-related articles included in the current review covered different illicit substance and this had implications for the ability of the current review to thoroughly

explore the impact of the media on drug-related beliefs and to compare the findings of studies. Only one paper focused on cannabis/marijuana and took a slightly different slant to the other papers by aiming to evaluate the impact of an American government anti-marijuana campaign conducted through television and radio (Palmgreen et al., 2007). Other studies instead focused on: the influence of the media on beliefs about governmental drug-spending (Nielson & Bonn, 2008); on beliefs about substance use in young people (Minnebo & Eggermont, 2007); and beliefs about *in-utero* exposure to cocaine (Ginsberg et al., 2006).

Attitudes and beliefs about marijuana were found to change as a result of print and radio media giving an anti-drug message in the USA (Palmgreen et al., 2007). Participants completed monthly questionnaires about marijuana attitudes and beliefs, social norms, risk factors and exposure to anti-marijuana messages at home, on a laptop computer; a method aimed to reduce the likelihood of socially desirable responses. It was unclear from this study of 9-13 year olds (N=100), whether the change in beliefs was due to the amount of exposure to these adverts or to their style and content. Specifically, only two negative beliefs about marijuana were studied ('marijuana makes you do stupid things' and 'marijuana hurts people's coordination'), with no reference to any more positive beliefs which may have been in existence prior to this anti-drug campaign starting. On the basis of their findings, the authors reported that future anti-drug campaigns should use a 'sensation-seeking' approach to designing messages and identifying audiences, but did not clarify this statement. The primary target audience of this campaign was adolescents and although this study included 9-13 year olds, the sample size was relatively small given the countrywide nature of the campaign. There was no attempt to review the effectiveness of this campaign on marijuana-related beliefs of youths over the age of 13 years.

It has been recognised that television viewing may contribute to negative opinions of young people in relation to substance misuse (Minnebo & Eggermont, 2007). In this study of 246 over-30 year olds in Belgium, a curvilinear relationship was identified with light and heavy television viewers reporting stronger beliefs that most young people use drugs.

Participants' were randomly selected from telephone directories and then interviewed face-to-face using a closed questionnaire. Those who had their television viewing rated as 'medium' held less strong beliefs that most young people use drugs. These beliefs did not appear to alter much even when level of contact with young people was controlled for and, although a significant effect of educational level was reported, the p value was greater than the 0.5 level usually required. Many concepts were well operationalised in this study e.g. direct contact with young people, however definitions of 'perceptions of young people' lacked clarity.

Ginsberg, Raffeld, Alanis and Boyce (2006) indicated that cocaine was viewed differently to alcohol, tobacco and caffeine (N=336) by undergraduate students. In the second of their studies, scenarios and video material were presented to students (N=139) who rated a teenager exposed to cocaine *in-utero* as being less intelligent, achieving lower academic levels and being more at risk of problems than a non-exposed teen. Whilst this study appeared to highlight the value judgements that may be associated with cocaine use and that attitudes could in the short-term be modified by media portrayals, it was difficult to generalise the findings from the small group of psychology students in the U.S. who took part in the study. Media influence was assumed to be implicit in this study, rather than being directly explored.

The relationship between media exposure and drug-related attitudes was further explored by Nielsen and Bonn (2008), with a specific focus on attitudes towards governmental spending on addiction treatment in the United States. The data used in this study were collated from 30 years of an annually repeated cross-sectional survey to allow change in attitudes over time to be assessed. Problems with the data set included missing data resulting from questions changing over time and incomplete questionnaires. Actual drug spending and drug use over the same period was collated from two separate organisations. In this study, the term 'media' referred to both frequency of television viewing and newspaper reading. Frequent consumption of 'media' was argued to be related to beliefs that spending on addiction treatment was too low, particularly when TV and newspaper exposure occurred

together. It is impossible to tell from the data provided which types of television programme or newspaper article contributed to these beliefs, as exposure is recorded in terms of quantity with no reference to content.

Although Nielsen and Bonn (2008) appeared thorough in their comparison of media coverage of drugs across time and political administrations, at times the definitions of what constituted frequent and infrequent media consumption appeared blurred, although they do refer to the ambiguous wording in some of the questions included. The findings suggest that there is a relationship between the media and attitudes, however causality remains unclear: it is possible that higher levels of exposure to both print and visual media can influence drug-related attitudes; however it may also be the case that those more concerned with this subject attend to articles/programmes on this subject more, or have an attentional bias to drug-related stimuli.

## **5 Discussion**

The current review aimed to systematically critique the available scientific literature on the influence of the mass media on addiction-related beliefs in the general population and to assess the processes by which any influence occurred.

Quantitative research has mostly utilised a combination of survey methodology and laboratory experiments to explore these issues, with varying levels of clarity. A number of problems with the available research were apparent including the varying age-groups of samples, unclear and differing strategies to determine media exposure, limited definitions of alcohol-related beliefs and the potential for social response biases which limit the ability of the current review to generalise findings. Studies included in the current review recruited participants from a variety of age groups and defined these samples as being child, adolescent, adult or student in an inconsistent manner. This made comparisons more difficult and also had implications for the generalisability of findings reported. Many of the articles reported a lack of ethnic diversity in their samples, which authors acknowledged as problematic,

although felt could be rectified by study replication. There was also an absence of relevant research carried out in the U.K., although there were a small number of European studies. It is possible that legislation about advertising and inclusion of substance use in television drama may differ between America and Europe, leading to caution in generalising findings globally.

The articles included in the current review suggested that the media, in its various forms e.g. episodes of television programmes, newspapers, films and advertisements, can influence drug and alcohol-related beliefs in both positive and negative ways. There was some suggestion that advertisements on television encouraged more positive addiction beliefs (e.g. Austin et al., 2006; Grube & Wallack, 1994) than episodes of television soap operas (e.g. van Hoof et al., 2008) or anti-drug campaigns (e.g. Palmgreen et al., 2007). A number of papers also reported that beliefs and behaviours predictive of later alcohol use develop at a young age, partially in response to interpretation of drug and alcohol-related messages in the media (e.g. Austin & Chen, 2003), however the contribution of other influences, such as family and life issues, were not fully explored. The interaction between media messages and real-world influences, specifically whether they were in line with, reinforced, distracted from or contradicting of each other was not investigated. There was also some suggestion that the media can influence adult beliefs that young people are usually substance users (Minnebo & Eggermont, 2007) and that substance users are portrayed in a stereotyped fashion by some types of media (Ginsberg et al., 2006).

Although this review was systematic in nature, the quality of the literature was varied. Checklists and data extraction tables were used to increase the rigor of the review, however the poor quality of research limits the conclusions. The types of media used in the available studies focused on either visual (i.e. television or film) or print (i.e. newspaper or magazines) media, with no reference to information obtained via the internet. It was not possible to assess the impact of all media formats on the development of addiction beliefs at this time,

however, maybe in a few years when studies looking at the phenomenon of ‘social-networking’ have been completed and published, this may change.

One of the main difficulties in comparing the findings of studies included in the current review was the varying and at times, unclear definitions of the beliefs under investigation. None of the studies gave justification for the types of addiction beliefs they chose to measure and it was unclear how and where beliefs were generated. The most common way of describing beliefs was simply as ‘positive’ or ‘negative’, with some reference to desirability, perceived social norms, scepticism and beliefs about the consequences of substance use. Generally, the questionnaires used were not included in papers and beliefs being measured were not explicitly stated, making comparisons difficult and leaving the reviewer unable to assess the influence of media on specific addiction beliefs. Other studies included in the current review looked at a range of beliefs, often different from each other and not always clearly defined, making comparisons more difficult.

There was also surprisingly little reference to the processes by which various elements of the media might have influenced addiction beliefs. It was likely that these factors were difficult to measure objectively using quantitative methodology. Some researchers did attempt to discuss their findings in the light of psychological and sociological theory, however this varied widely between papers in terms of quality, relevance and theoretical perspective.

The current review found limited research in the area of media influences on addiction beliefs. Although a number of factors have prevented a detailed comparison of articles included in the current review, tentative conclusions can be drawn that media messages can influence attitudes and beliefs about substance use and misuse. It is likely that additional processes within the individual influence the way in which these messages are interpreted and this requires further exploration. The media may reinforce stereotypes, which are very powerful influences (Cape, 2003). Additional research on this topic is required to explore the consequences of media influence on addiction beliefs and to review possible strategies for organisations who may wish to address this. People need to identify with the images shown

to some degree, however if this is not pitched correctly, the relevance may be lost and stereotypes reinforced. Predominantly research has focused on alcohol-related beliefs, given its prevalence and legal status in western society, however a similar focus on other types of substances would be necessary to gain a fuller picture of the influence of a media message in their various formats on beliefs about addiction.

Further understanding of this area is crucial when considering how to influence the general population's attitudes towards the empathic treatment of individuals (including young people) who use substances problematically. Stereotypes of drug/alcohol users can bring up fearful images that have implications for healthcare treatment and policy, as well as in wider society. Beliefs about addiction are likely to influence treatment of substance misuse; for example, the belief that it is a disease implies intervention by a substance misuse service, whereas belief it is a wilful/immoral action implies some form of punishment e.g. imprisonment. Understanding the process of media influence on addiction beliefs may provide opportunities to influence policy decisions about preventative/therapeutic interventions.

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## **Main research report**

Addiction Beliefs: Do Staff working in Substance Misuse and Mental Health Services share the same view about clients with co-existing mental health and substance use problems?

## **1 Introduction**

### **1.1. Scientific Background**

The focus on addiction beliefs has increased over recent years: Policy makers, commissioners, clinicians, service users and their families, in addition to the wider population, all have opinions about the causes of and appropriate management of substance use.

Research has tried to determine what these might be and their implications for healthcare.

#### **1.1.1 Beliefs**

Attitudes, beliefs & values are terms that are often used interchangeably; although there is some overlap between them, they are not identical (Gross, 1999). An attitude is a combination of beliefs and values, and is viewed as a judgement, with an affective component. Beliefs are a form of mental construct and represent knowledge/information we have about the world, although this may be inaccurate/ incomplete. On their own, beliefs are non-evaluative and link an object to an attribute (Fishbein & Ajzen, 1975). To move a belief into an attitude, a value component is required, which links with an individual's sense of what is right, good, desirable and worthwhile. In the Expectancy-value model (Fishbein & Ajzen, 1975), attitudes are a function of beliefs and are developed and modified based on assessments about beliefs and values. We should therefore hold positive attitudes about things we believe to be good & vice versa (Hogg & Vaughan, 1995). Negative information is described as being more accessible and as being given more weight (Smith & Mackie, 2007). There are likely to be cultural differences in attitudes, beliefs and their interpretations and individual differences in beliefs about addiction.

Beliefs about the individual, other people and the world start to develop in childhood (Beck, 1995). Beliefs are thought to be formed in a number of ways, for example, internalising the beliefs of those around us in childhood (Gelman, Park, Shor, Bafumi & Cortina, 2008), adopting the beliefs of a charismatic leader (Hoffer, 2002), through physical trauma (Rothschild, 2000) or through repetition of advertising messages (Kilbourne & Pipher,

2000). Some of the beliefs we develop are so fundamental that we do not articulate them to anyone. Beliefs can operate under certain conditions and not others but influence a person's account of a situation, selectively attending to information that confirms the belief and maintains it. People need to organise their experiences coherently to allow them to function adaptively (Rosen, 1988).

According to Beck (1995) attitudes are a part of an intermediary set of beliefs, whose development is manipulated by a central set of beliefs. Beliefs influence the way in which a person thinks, feels and acts. In psychodynamic terms, attitudes and beliefs are thought to be influenced by the interaction between conscious and unconscious mental processes, which then influence behaviour (Smith & Mackie, 2007).

### ***1.1.2 Models of Addiction***

A number of models of addiction exist and are evident in both beliefs about addiction and a variety of interventions for substance misuse. The most prevalent in healthcare settings is the Disease Model, based on the belief that individuals with a dependency on drugs or alcohol have a biological abnormality that causes the addiction and therefore views them as ill and lacking control of substance use (McMurrin, 1994). Treatment approaches such as Alcoholics Anonymous subscribe to this model and believe that abstinence is the only option as the 'disease' cannot be cured and should be treated medically. The individual is seen as having minimal responsibility for causing the problem because alcoholism is seen as biological and hereditary (Brickman et al., 1982).

The Moral Model of addiction has a number of basic beliefs that include viewing substance use as a sign of low moral standing, poor character and standards (Brickman et al., 1982). This model suggests that addiction is a deviation from the socially acceptable norm and that addicts are to blame as they choose to misuse substances. Consequently, this model states that addicts are responsible for causing the problem and for their own recovery and also may deserve punishment. The reason that they fail to solve the problem without help is due to

low motivation levels (Brickman et al., 1982). Some individuals have appeared to retain a moralistic view of substance dependence that is not exhibited towards other diseases (Schaffer, 1987).

Others have suggested that individuals, who use drugs and alcohol, do so of their own volition and that this behaviour also has a function in their lives. According to the Functional Model, individuals drift in and out of problems with substances and the basis of treatment should be the reasons for substance use e.g. depression, anxiety.

A number of psychological theories have been applied to addiction (McMurrin, 1994; Peterson & McBride, 2002), each with a different emphasis on the influences that determine behaviour e.g. culture, family, thoughts and feelings. Often cited is Social Learning Theory (Bandura, 1977), which considers the influence of the person, the environment and behaviour and suggests that we learn not only directly from experience but also from modelling the behaviour of others. Individuals who have deficits in social coping skills or low self-efficacy beliefs, or who have learned that substance use helps them cope in the short term may be likely to show continued use.

A multifactorial theory that incorporates some of the ideas of other models is the Biopsychosocial Model, which is used in the DSM-IV Criteria (APA, 1994) for Substance Dependence. This model proposes that addiction is influenced by a variety of biological, psychological and social factors (McMurrin, 1994; Orford, 1985; Peterson & McBride, 2002). It distinguishes between experimentation with drugs and problems in later life and considers substance use as a continuum of fluctuating influences across the lifespan. Treatment approaches supported by this model include harm reduction and controlled drug use.

The Disease, Moral and Biopsychosocial Models of addiction have in particular shaped treatment services for individuals with problematic substance use. There is an ongoing debate in the field of addiction research on the utility of these models for intervention, with different services and practitioners advocating different interventions. Substance misuse services in the UK are starting to introduce psychosocial mapping approaches (NTA, 2009).

In addition to conflicting beliefs about the nature, course and treatment for substance use problems, there has been evidence of individuals holding contradictory beliefs about addiction. Moyers and Miller (1993) reported a factor that contained both Disease and Moral Models of addiction when they were factor analysing addiction belief statements advocated by treatment staff. Staff addiction beliefs also influenced perceptions of their clients in this study and there is also evidence that staff beliefs differ across disciplines (Humphreys, Greenbaum, Noke & Finney, 1996).

More recently several authors (Griffiths & Larkin, 2004; Kay-Lambkin, Baker & Lewin, 2004; Larkin, Wood & Griffiths, 2006; Larkin & Griffiths, 1998) have reviewed the concept of addiction and discussed the limitations of the disease model. Addiction has been reframed as a dynamic relationship between several integrating factors and as a ‘complex system’. Comorbid substance use and mental health problems have also been described as a ‘roundabout’ (Kay-Lambkin, Baker & Lewin, 2004) on which numerous factors influence substance use and potential for change. The debate and research into appropriate interventions continues due to differences in the models held by clinicians, commissioners, families and service users themselves.

### ***1.1.3 ‘Dual Diagnosis’***

The terms ‘comorbidity’ and ‘dual diagnosis’ are often used interchangeably in the UK to describe the coexistence of one or more mental health problems in individuals who also use substances problematically or vice versa (Wittchen, Perkonig & Reed, 1996; Todd et al., 2004). The UK National Treatment Agency for Substance Misuse (NTA) defines ‘dual diagnosis’ as “psychiatric comorbidity, meaning a combination of mental illness and substance misuse” (NTA, 2002, ch4, sec 3.1). In clinical practice the term specifically relates to individuals with severe mental illness e.g. psychosis and problematic substance use.

A number of studies, across different countries have reported high rates of combined severe mental health and alcohol/drug problems within mental health settings (Graham et al., 2001; Johnson, 1997; Lehman et al., 1994; Menezes et al., 1996) and also within substance

misuse treatment settings (Graham et al., 2001). Reported prevalence rates have varied between ten and sixty five percent (Mueser et al., 1990; MIND, 2005; Afuwape et al., 2006) although the differing methodologies and settings used within reporting studies, as well as participant characteristics may in some part explain this (Weiss, Minn & Griffin, 1992; Warner et al., 1994). Most UK prevalence studies have been limited to inner city London or specific severe mental illness populations (Todd et al., 2004). Menezes et al. (1996) reported prevalence rates of 32% for alcohol use and 16% for drug use in clients with a severe mental illness in South London. Studies suggest that those working within mental health/ substance misuse services are likely to come into regular contact with individuals who have severe mental health problems and use substances problematically (DH, 2002; Frisher et al., 2004; Lowe & Abou-Saleh, 2004; Maslin et al., 2001; NHS Confederation, 2009). In Community Mental Health Teams in the UK, 44% of clients are reported to have problematic substance use, with 75% of drug-service users and 85% alcohol-service users having an identified mental illness (Weaver et al., 2003). Research indicates that such clients may fall between mental health and specialist substance misuse services (Graham, 1998; Todd, Sellman and Robertson, 2002). Assessing the exact levels of substance misuse within the general and mental health population can present significant obstacles, due to lack of substance-specific assessment in mental health services, problems in definition and changeability of diagnoses (Todd et al., 2004).

The National Service Framework for Mental Health (DH, 1999) emphasises the importance of tackling ‘dual diagnosis’ but does not include standards/service models to address the challenges posed by ‘dual diagnosis’ clients, or clients who use substances problematically. This was later covered by the ‘Dual Diagnosis Good Practice Guide’ (DH, 2002) and Complementary Models of Care (NTA, 2002), which indicate that substance use is usual among people with mental health problems, rather than being an exception. In the UK, ‘dual diagnosis’ has been associated with a number of significantly poorer treatment outcomes including: worsening psychiatric symptoms, poor medication adherence,

homelessness and contact with criminal justice services. The relationship between these outcomes and co-morbidity is complex and in 2002, The Dual Diagnosis Good Practice Guide (DH, 2002) was published, which stated that high-quality, patient-focused and integrated care for those with a dual diagnosis should be delivered by mainstream mental health services, supported by specialist substance misuse services.

The majority of research in relation to service models in 'dual diagnosis' treatment has come from the USA, Canada and Australia. In the USA, services are designed to meet primarily one disorder and there has been some uncertainty in the past about what kind of treatment 'dual diagnosis' clients should receive depending on which theoretical model clinicians use for guidance (Polcin, 1992). In Canada, research has identified that 'dual diagnosis' clients have high levels of use of emergency services, out-patient clinics, private practices and hospitals and are a heterogeneous group (Kêdoté, Brousselle & Champagne, 2008), which has led to calls for more flexible and diverse treatment approaches (Hien et al., 1997; Lehman et al., 1989; Zimbert, 1999). Historically, systems to treat severe mental illness and substance misuse have been separate in the UK, with substance misuse services at times being provided by the non-statutory sector. This has led to queries about whether clinicians in these services feel they have the expertise to deal with clients with co-existing mental health and substance misuse problems (Lowe & Abou-Saleh, 2004). In addition, the funding streams for the different types of services are separate and bridging the gap has not always been a priority for either system. Issues in relation to risk management, responsibility, coercion into treatment and confidentiality have tended to separate general psychiatric and substance misuse service in the UK. In more recent years there has been a reduction in the differences between substance misuse and mental health services, though issues still remain.

It has been suggested by the NTA that integrated care, carried out by one team produces better outcomes than serial care (DH, 2002). Concurrent treatment under two systems could be problematic due to differing treatment philosophies, leading to fragmented and contradictory care (Ridgely et al., 1990). More UK-based research is required to assess

whether well-organised parallel care can be a useful stepping stone. Ley et al. (1999) reviewed 'dual diagnosis' treatment programmes and found no clear evidence supporting an advantage over standard care of any type of programme. The improved management of 'dual diagnosis' remains a current priority in the NHS (Coombes & Wratten, 2007).

A significant factor in successful treatment in both substance misuse and mental health is the quality of the therapeutic relationship (Graham, 2004). Barriers to optimal treatment have been identified as including clinician's judgmental attitudes about clients who use substances and aversion towards certain treatment models. Such attitudes may be influenced by a variety of factors such as past experiences, knowledge, education, culture and religion (Rassool, 2007) and may impact on the quality of intervention that clients receive. The beliefs of staff members who work with substance use clients may influence their perceptions and treatment of these clients (Moyers and Miller, 1993). A number of other studies have highlighted the importance of staff attitudes in the therapeutic alliance because they apparently influence the willingness of clinicians to address substance misuse with clients (Albery et al., 2003; Watson, Maclaren & Kerr, 2006). The National Service Framework for Mental Health (DH, 1999) highlights the risk of stigmatisation and exclusion from services that people with a 'dual diagnosis' face, although there is little plan for how to counter this.

Research by the COMPASS programme in Birmingham, UK, has indicated that the integration of substance misuse treatment in mainstream mental health services was one of the factors in increases in staff confidence in dealing with cocaine/crack-cocaine use in their clients (e.g. Clutterbuck et al., 2008). Raistrick et al. (2008) postulated that a positive attitude was a pre-requisite of engaging in training that leads to effective intervention. Previous research has also indicated that 'therapists' report moderate confidence in dealing with 'dual diagnosis' clients (Hanes & Bennett, 2008) but the definition of this term is unclear. There has also been some suggestion that clinicians may find it more difficult to address their client's problems with certain illicit drugs e.g. cannabis, over other substances (Clutterbuck et

al. 2008 a, b). Difficulties in dealing with illicit drug use may be due to underlying attitudes and beliefs.

#### ***1.1.4 Staff Attitudes and Beliefs***

A diverse range of addiction beliefs have been identified and authors have found different ways of conceptualising these. Whilst some authors compared the beliefs of professional groups with the traditional theoretical models of addiction (e.g. Cunningham et al., 2007; Grella, 2003; Humphreys et al., 1996), others clustered together groups who shared elements of a number of these models (e.g. Luke et al., 2002; Shinebourne & Adams, 2007; Thombs & Osborn, 2001; Toriello & Leierer, 2005). Those authors focusing on traditional models of addiction often found that they could generally distinguish participants on the basis of these, however also reported incidents where their sample had incorporated some element of another model into their belief system. Perhaps these findings support recent work, which suggest that addiction should be viewed as a ‘complex relationship’ (Griffiths & Larkin, 2004; Kay-Lambkin et al., 2004; Larkin et al., 2006; Larkin & Griffiths, 1998).

A limited number of papers have tried to study the addiction beliefs of staff working in either mental health or substance use services and, to date, only one paper has attempted to compare these groups directly by use of a survey methodology with a focus on staff in both types of services who reported contact with ‘dual diagnosis’ clients (Grella, 2003). The vast majority of papers with a focus on addiction beliefs and co-morbid mental health and substance use have been based on either American, Canadian or Australian services and so there may be difficulties in applying these findings to the services in the UK, due to differences in healthcare. Previous attempts to study the area have made use of surveys as the primary method of investigation.

A number of articles have demonstrated the presence of staff and client beliefs in the Disease Model (Cunningham, Blomqvist & Cordingly, 2007; Humphreys, Greenbaum, Noke & Finney, 1996; Humphreys, Noke & Moos, 1996; Thombs & Osborn, 2001; Wheeler & Turner, 1997). Other studies suggested that there had been a shift away from the rigid

adherence to the traditional Disease Model in substance use staff (Toriello & Leierer, 2005) with some clients viewing substance use as a coping strategy and seeing themselves as responsible for change (Luke et al., 2002).

Belief in the Disease Model of addiction was attributed to a number of factors including profession (specifically being a non-psychologist) and lower level of education (Humphreys et al., 1996), older age, being in recovery (Humphreys et al., 1996), ethnicity (Cameron et al., 2002; Thombs & Osborn, 2001) and perception of own alcohol use (Cunningham et al., 2007). Differences were reported both within and between groups of mental health and substance use staff (Gjersing et al., 2007; Grella, 2003; Shinebourne & Adams, 2007; Thombs & Osborn, 2001; Toriello & Leierer, 2005) and within and between groups of clients accessing 'dual diagnosis' interventions or substance use interventions (Larkin & Griffiths, 2002; Luke et al., 2002).

Studies have indicated that there may be capacity for beliefs about addiction to change in clients as well as staff. Such change may occur in clients between commencing and completing a particular treatment program (Larkin & Griffiths, 2002; Luke et al., 2002) or in clinicians as a result of employment with a particular service (Gjersing et al., 2007; Humphreys et al., 1996). Limited capacity to change could therefore impact on treatment outcomes, job satisfaction and motivation, however further investigation of these ideas would be required before any conclusions could be drawn.

Although education was identified by several studies as having an effect on addiction beliefs of staff (Graham, 2004; Grella, 2003; Humphreys et al., 1996; Toriello & Leierer, 2005), it remains unclear exactly how this influence occurs. Whilst it is likely that individuals engaging in higher levels of education may be exposed to alternative ways of thinking and of appraising evidence, it seems somewhat reductionist to say that this is the only factor. Training courses are likely to be incredibly diverse in content and standards and there may be a number of elements that interact with individual and social characteristics to influence beliefs about addiction. Graham (2004) also demonstrated that training could allow mental

health staff to appreciate a more integrative model of addiction, which positively influenced their approach to treatment.

The available research indicates that services differ in their beliefs about appropriate interventions, for example on the extent to which abstinence or a harm reduction approach is acceptable (e.g. Grella, 2003). Given the scarcity of specific services and limited research on appropriate interventions for 'dual diagnosis' clients, the importance of conflicting beliefs within and between services should be considered. The wide geographical range of studies should be considered as it is possible that reported differences in addiction beliefs between groups of staff and clients may reflect international differences in training and culture. Although differences within and between services were identified, the effect of any differences of addiction beliefs between colleagues was not followed up and this may be an interesting avenue for future research.

As different disciplines have differing ways of conceptualising and treating substance use problems, the type and level of professional training may well relate to their beliefs about drug and alcohol addiction. In their survey study, Humphreys, Greenbaum, Noke & Finney (1996) found that most professional disciplines, with the exception of psychologists, endorsed the Disease Model of addiction. Psychologists tended to show a preference for more psychosocial learning and eclectic beliefs. The study also indicated a relationship between the type of programme that clinicians worked in and their beliefs about addiction. For example, endorsement of the Disease Model related to working in treatment programmes where Alcoholics Anonymous/12-Step ideas were emphasised. Other studies have attached higher levels of confidence to 'therapists' above other professions (Hanes & Bennett, 2008), and significantly different therapeutic attitudes in doctors, nurse and healthcare assistants have been recorded towards substance misuse patients (Raistrick, Russell, Tober & Tindale, 2008). In the past, there has been a tendency among mental health nurses to assume that dealing with substance misuse is a specialist's job and therefore their role is seen as a referring agent (Gafoor & Rassool, 1998). Yet, there continues to be the suggestion that dual

diagnosis clients would be better managed by general psychiatric services (e.g. DH, 2002; Minkoff, 1989), albeit supported by specialist substance misuse services.

Differences in addiction beliefs were also evident where some counsellors were deterred from referring to Alcoholics Anonymous as they did not agree with the disease model of addiction promoted there (Wheeler and Turner, 1997). This raises the issue of problems in co-working between services due to differences in values and philosophies. Counsellor beliefs and values are thought to influence the success of therapeutic work: Humphreys, Noke & Moos (1996) reported that clinicians in recovery from alcoholism were more likely to endorse an eclectic approach but often tended to work in a 12-step type programme. According to Kloss & Lisman (2003), mental health staff in the USA attributed more blame to dual diagnosis clients than substance misuse staff. Attributions in respect of control over substance use were the same across both services. Drug use has been seen as a major problem by mental health nursing staff, who identified a need for co-ordinated training aimed at increasing knowledge and use of appropriate interventions (McKeown & Liebling, 1995).

Grella (2003) also proposed that services for clients with co-existing mental health and substance use problems were hindered by the different treatment approaches utilised by mental health and substance misuse service providers. Significantly different views were highlighted between the two types of service on issues such as the need for abstinence and reasons for discharge. These were endorsed more by substance misuse workers; substance misuse workers placed more emphasis on experiential knowledge and self-help than mental health staff, who typically had more advanced educational training. Grella queried whether differences in training and education led to these opposed attitudes and hindered the development of an integrated training protocol.

Level and type of education has been identified in other studies as factors relating to differences in beliefs about addiction between service providers and professional groups. In addition to Humphreys, Greenbaum, Noke & Finney's (1996) findings, Thombs and Osborn

(2001) reported that clinicians with a higher degree level were more likely to use client-directed treatment approaches where heterogeneity among clients was recognised and listened to in relation to intervention planning. Raistrick et al. (2008) have argued that workers with the least amount of training and experience have the most positive attitudes to clients with a dual diagnosis. Educational level has also been identified as influencing particular addiction beliefs endorsed by clinicians (Toriello & Leierer, 2005; Gjersing, 2007), however exploration of this topic has been limited.

A recent study by Clutterbuck et al. (2008) has suggested that clinicians in mental health services adopt an individual approach when working with clients who use cannabis. It would appear that staff held many conflicting views about cannabis use and mental health and used a number of variables to plan a therapeutic approach e.g. client vulnerability, professional & personal views and engagement. In another study by the same team, mental health workers identified crack/cocaine as being more serious than alcohol and cannabis in terms of its effects on clients. In addition, an individual's beliefs will affect a service's goals/activities as staff try to implement their own perspectives with clients (Humphreys, Noke & Moos, 1996).

In the process of developing a scale to assess personal beliefs about addiction, Luke, Ribisi, Walton and Davidson (2002) aimed to discover whether addiction beliefs had an influence on various treatment approaches. The authors hypothesised that addiction beliefs of clients would be influenced by the treatment programs (dual diagnosis and alcohol) they had experienced. This was difficult to establish given the lack of information about the two programs involved and about previous experience of treatment approaches. Luke et al. (2002) found evidence that individuals in both treatment programs shared similar beliefs about addiction; addiction being a chronic disease, that people who use substances problematically are responsible for their own recovery and substances are used to cope with stressful life events. The 'dual diagnosis' and 'alcohol' groups differed on views about alcohol use and also drugs being a sign of moral weakness and control over substance use. The authors

acknowledged the possibility of a shift in beliefs in between starting and completing a treatment program, but did not explore this.

Additional demographic factors such as age and ethnicity have been identified as having a link to beliefs about addiction in staff. Age has been associated with endorsement of the Disease Model, with older clinicians showing higher levels of endorsement (Humphreys, Noke & Moos, 1996). It was unclear whether this was a shift in training ethos or due to differences in experience. Working in a 12-step programme was also associated with less endorsement of a psychosocial model. Thombs and Osborn (2001) suggested that Caucasian counsellors were more likely to adopt a client-centred approach to addiction than their African-American counterparts; however representation of different ethnic groups in this study was unclear. Cameron, Manik, Bird & Sinorwalla (2002) also tentatively suggested that differences in addiction beliefs between white and ethnic minority individuals in the East Midlands existed. Their study suggested that ethnic minority groups tended towards an abstinence view that was linked with the idea of 'izzart' or honour. Views of the white population were less clear.

Although collectively research has tried to examine the addiction beliefs of substance use and mental health staff, and also those of clients, there is little consensus, aside from acknowledging that these beliefs are varied and reflect a number of theoretical models. Previous personal experience of treatment approaches and the type of service that staff work in and clients engage with has also been suggested to affect these beliefs. It is unclear what the relationship is between these factors and addiction beliefs and indeed what the impact of this is, for the service user.

A small number of qualitative studies have highlighted that understanding of addiction was influenced by personal values and beliefs, including cultural and religious beliefs, which impact on therapist understanding and practices. These beliefs also related to certain types of intervention and qualitative studies reviewed identified a number of different factors as being

important in recovery (Cameron, Manik, Bird & Sinorwalla, 2002; Larkin & Griffiths, 2002; Shinebourne & Adams, 2007).

Although qualitative research papers are disparate in their approaches, they have identified that certain groups may indeed hold different beliefs about addiction. These beliefs could have implications for the type of intervention offered to clients and also the clients' ability to engage in and respond positively to these approaches. The idea that beliefs about addiction are susceptible to change and when and why these changes may occur are areas that require further investigation.

There exists a small body of evidence that describes both mental health and substance use services as being littered with a number of differing beliefs about addiction. At times these divergent beliefs have been identified as complimentary, however selected research suggested the oppositional nature of some beliefs, between individuals/services had the potential to be problematic. Such ideas become increasingly prominent when comorbid mental health/substance use was considered, given the propensity for joint-working, or indeed the idea that such clients should be managed within mental health services (DH, 2002).

The quality of the research available on this topic is mixed, with particular difficulties related to sampling. Limited transparency when reporting sampling techniques and demographics of participants themselves may have reflected difficulties in recruiting representative populations. Given the small number of 'dual diagnosis' services, particularly in the UK, it is perhaps understandable that participants were sourced from separate mental health and substance misuse services. Difficulties in recruiting clients with coexisting mental health/substance use problems may be inherent in the nature of participants, given the particular problems associated with comorbidity.

Understanding beliefs about addiction can be helpful in ensuring treatment integrity, for understanding treatment goals set by professionals, for understanding whether clients adopted the belief system that was promoted during the intervention and for matching up treatments with clients. Individuals who possess varying sets of addiction beliefs may well differ in their

preferred choice of and adherence to interventions and levels of satisfaction with intervention and outcome. An improved understanding of beliefs about addiction could allow appropriate interventions to be matched to the individual needs of clients, which may make sure of quality and effective treatment. This is important given recent policy guidance (DH, 2002) and may be useful for guidance that is currently in development.

## ***1.2 Main Research Questions***

In view of these latter considerations, the present study was conducted. The aim was to investigate whether given the current climate where there is an unmet expectation that services will work jointly to support individuals with co-existing mental health and substance use problems, clinicians across services share similar beliefs about addiction. The study also aimed to continue the recent trend in research by identifying whether addiction beliefs vary according to substance.

The emphasis of this piece of research was on improving NHS services for ‘dual diagnosis’ clients as UK services are not thought to be consistently following the Government’s 2002 guidelines and working jointly with clients with co-existing mental health/substance use problems. The study also aimed to identify barriers/levers to joint-working between mental health and substance misuse services and to follow up initial studies which suggested that different beliefs are attached to different substances, whilst comparing these beliefs across services, given all have contact with ‘dual diagnosis’ clients.

- Do staff working within substance use and mental health services share the same beliefs about addiction?
- Are there any demographic variables that are linked with certain beliefs?
- What are staff views about barriers/levers to working jointly to support ‘dual diagnosis’ clients?

### ***1.3 Aims and Objectives***

- To compare the addiction beliefs of staff working in a number of mental health and substance use services (and dual diagnosis services where appropriate).
- To look at the impact these beliefs have on joint-working
- To look at staff views of how clients with co-existing mental health and substance use difficulties could be most effectively managed within local NHS services.

### ***1.4 Research Hypotheses***

More specifically, in light of previous research, it is predicted that:

- 1. Staff working in mental health and substance misuse services will report significantly different beliefs about addiction on the Addiction Belief Inventory (Luke et al., 2002).*
- 2. Staff members will report significantly different beliefs on the ABI according to the type of substance it refers to.*
- 3. Staff beliefs about addiction will be influenced by a number of demographic factors i.e. age, ethnicity and professional background.*

## 2 Method

### 2.1 Study 1: Questionnaire Development

In order to inform the final methodology of the study, a brief pilot was conducted, in light of indications of previous research findings that suggested individuals hold markedly different beliefs about different types of substances (Clutterbuck et al., 2008). This potential difference in beliefs may have been confounded by presenting participants with a questionnaire related to substances in general and therefore needed investigating. Most previous studies have either focused on beliefs about alcohol or beliefs about illicit drugs, without considering this issue. In addition, the Addiction Belief Inventory (ABI) has only been used in a few publications since its development, and the pilot study was therefore necessary to determine whether it would be suitable for the current study.

Four clinicians with experience of working with clients with mental health and/or substance use problems were approached and agreed to take part in the pilot study. These were individuals who were unlikely to be approached for the main study, given the clinical areas in which they worked. Pilot participants differed from each other in terms of professional backgrounds and consisted of one Trainee Clinical Psychologist, one Assistant Psychologist, one Social Worker and one Nurse.

All pilot participants completed the ABI, (Luke et al., 2002) whilst talking through the decision making process and ideas behind each rating on the scale. These comments were recorded by the principal investigator using the method described by Clutterbuck et al. (2008) where detailed notes were taken about interviewees' responses to questions, including direct quotes, verbatim words and phrases that served to illustrate what their participant had said. This was then written into a short report by the principal investigator within 24 hours (Appendix F). This was a more economical and practical way of collecting data and allowed the interviewer to capture the essence of what was meant during the interview. Further information about this type of recording is available in Orford et al. (2005).

After completing the ABI, each of the pilot participants was asked by the principal investigator whether they felt that they would have responded differently to any/all of the statements if illicit drugs and alcohol had been separated. All clinicians involved in the pilot felt that for at least a few statements, they might have responded differently when thinking about alcohol versus drug use. Pilot participants were then asked whether they felt that they may have responded differently to any items in the ABI had they completed it in respect of either Cannabis or Heroin. Again all respondents felt that they might have answered some items differently, depending on to which of these two drugs the ABI was referring.

In summary, all clinicians involved in the pilot stated that they would complete the ABI differently depending on whether it referred specifically to alcohol, cannabis, or heroin; therefore this issue was deemed necessary for consideration for the methodology in the main study. Pilot participants found it confusing rating the ABI in the form which included a combination of both alcohol and drug addiction in the majority of items.

Due to concern over the length of the ABI and potential time for participants to complete it, two composite versions, in addition to the original version were developed. All three formats of the measure were completed by three volunteers. Their feedback was used to determine the most appropriate format for the ABI in the current study (Appendix F). Although the original one-page version of the ABI, adapted for each of the three substances took slightly longer to complete, feedback was that it was easier to complete and allowed volunteers to focus more easily on each statement and give more honest and accurate responses. Volunteers described how on the composite versions (one page (Appendix H) and two pages (Appendix I)) they tended to rate all three substances in the same way without considering them separately. For these reasons, in addition to maintaining the psychometric properties of the ABI, the original version, with separate versions of the ABI for each substance, was selected for use in the current study.

## **2.2 Study 2: Main Study**

### **2.2.1 Design**

The current study was a mixed design utilising survey methods. The study contained both between groups (e.g. service type) and within groups variables (e.g. ABI scores for each of three substances).

### **2.2.2 Sample**

**Stage 1:** Service representatives (e.g. Clinical Directors, Service Managers) in each NHS Trust were contacted by the principal investigator in order to establish what type of addiction/mental health/'dual diagnosis' services existed within their geographical area and to ascertain relevant contact details for Stage 2.

**Stage 2:** Stage 2 comprised 102 clinicians either working in substance misuse, mental health or 'dual diagnosis' services. An initial power calculation indicated that a total sample size of 56 would provide at least medium effect size at the 0.8 power level. Observed power in the main study was 0.9. All staff groups who had clinical client contact within these services were invited to participate. It was necessary to recruit participants over multiple NHS Trusts (e.g. Leicestershire, Nottinghamshire, Birmingham, Northamptonshire and Derbyshire), to ensure that individual participants and services were not identifiable as a result of study findings and to allow sufficient opportunity for a 'dual diagnosis' staff group to be identified. These Trusts were all involved in the Heart of England Research Hub and its affiliations and contact was determined as a result of this. The response rate for questionnaire completion was 45.1%, with 102 questionnaires returned out of 226 distributed.

Participants were 30 males and 72 females, aged between 19 and 65 years. The majority of participants identified themselves as 'White-British' (84.3%). Of the 102 participants, 47 (46.1%) identified themselves as being 'skilled dual diagnosis workers'. Participants were also drawn from a range of professional backgrounds: Psychiatrists (6.9%), Counsellors (5.9%), Clinical Psychologists (4.9%), Nurses (52%), Social Workers (10.8%),

Occupational Therapists (4.9%). A number of workers (12.8%) had no formal clinical professional qualifications.

The within-groups variable of the study utilised a repeated measures design which kept the number of participants desirable to a more achievable level. Had an independent samples design been utilised, participant numbers would have needed to triple and such numbers would not have been realistic to recruit from local services within the time constraints.

Inclusion Criteria: NHS staff with clinical client contact, between the ages of 18-65 years (standard working ages) who were based within mental health services, substance misuse services or ‘dual diagnosis’ (specialist mental health & substance use) services.

Exclusion Criteria: NHS staff working in mental health/addiction/dual diagnosis services who did not have clinical client contact or NHS staff not working in these services. No participants were recruited from voluntary or local authority services for the purpose of the current study.

### **2.2.3 Materials**

The ABI, developed by Luke et al. (2002), is made up of 30 items and contains 8 subscales: ‘inability to control’, ‘chronic disease’, ‘reliance on experts’, ‘responsibility for actions’, ‘responsibility for recovery’, ‘genetic basis’, ‘coping’ and ‘moral’ (Appendix K). A decision was made to exclude the eighth subscale (moral weakness) from the study as it had poor internal consistency and when added to Luke et al.’s (2002) model it dramatically lowered indices. The internal consistency for the remaining subscales has a range of .62-.83 and moderate test-retest reliability (.46 on average) was also been demonstrated. There was also some preliminary evidence of criterion validity. Three versions of the ABI were used in the current study, with each referring to a different substance: cannabis (Appendix N), heroin (Appendix O) and alcohol (Appendix P). In addition, demographic information relating to age, profession, time since qualification and time working in area of mental health/substance use was requested (Appendix M) and some qualifying questions about views of joint-working

to support clients with co-existing mental health and substance use problems (Appendix Q). Participant information sheet (Appendix L) and Debrief form were also included (Appendix R).

#### **2.2.4 Ethical and R&D approval**

Following an initial university-based peer review, the principal investigator applied to the NHS Regional Ethics Committee for approval of the study (Appendix J). Permission to conduct the current study was also sought from the Research and Development (R&D) Units in each of the five Trusts that were included in the study. As each Trust approved the study, the data collection process started.

#### **2.2.5 Procedure**

Stage 1: The principal investigator made contact with Service Leads in each NHS Trust (either by telephone or email) to discuss the study. Details of how substance misuse/mental health services were set up in the relevant NHS Trust was requested and permission sought to contact relevant individuals (i.e. team/service managers) in the specific mental health/substance misuse/'dual diagnosis' services.

Stage 2: A participant questionnaire pack was compiled by the principal investigator, which contained a Participant Information Sheet (Appendix L), Demographic Information Sheet (Appendix M), three versions of the ABI (Appendices N, O & P), a sheet asking two open-ended questions (Appendix Q) and a Debrief sheet (Appendix R). Consent to participate in the study was implicit: It was assumed that completion and return of questionnaires was evidence of consent. This reduced the amount of paperwork that participants had to read through and was made clear on the Participant Information Sheet. Each version of the ABI specifically referred to one of the three substances identified in the pilot study and these versions of the ABI were randomly ordered in the packs to reduce any order effects. The principal investigator approached service representatives identified in stage 1 to establish whether they were interested in their staff taking part in the study. At this point the principal

investigator spoke to a contact person in the service and asked which process would best suit that service i.e. attending staff meetings to hand out packs or posting participant packs to individuals or managers. Where possible, the principal investigator attended the relevant team meetings in order to explain the study and to hand out the questionnaire packs. In some team meetings, there was space for the questionnaires to be completed and returned directly to the principal investigator. In these cases completed packs were handed back at the end of the meeting in a sealed envelope. Where this was not possible due to time constraints, questionnaires were given out by the principal investigator and then either collected by the principal investigator at a later date or posted back in the envelope provided. Prior to this, information explaining the study and proposed data collection times had been sent to teams to allow individuals adequate time to consider whether they would like to participate. In a small number of cases it was not possible for the principal investigator to meet the teams in this way due to time pressures on the content of meetings and managerial preference, so questionnaire packs were posted to the relevant team managers, with a return envelope, to be distributed. A follow-up reminder email was also sent out to team contacts (email addresses were obtained by the principal investigator through stage 1) approximately 2-3 weeks after questionnaires were distributed. This latter correspondence included another electronic copy of the pack which could be printed off and returned to the researcher. At the end of the data collection period, data were inputted onto an SPSS spreadsheet and analysed by the principal investigator.

#### **2.2.6 Data analysis**

The current study used a between-groups design with five independent variables. Each of the independent variables (service type, age, further training, years since qualification and skilled 'dual diagnosis' workers) had a number of levels. In addition, there were 21 dependent variables (i.e. different subscales of ABI for three substances) being measured and so to reduce the likelihood of a Type I error, data were analysed using a multivariate analysis of variance (MANOVA), with additional ANOVAs being conducted where significant results

were highlighted. Repeated-measures ANOVAs were used to examine differences in addiction beliefs for different substances. Open-ended questions were analysed using Template Analysis.

### **2.2.7 Ethical Considerations**

Although the potential amount of harm to participants in the current study was low, questionnaires did ask individuals to identify their own personal beliefs about addiction, therefore all responses were anonymous and all data kept confidential. Unfortunately, the anonymity removed participants' ability to withdraw from the study after their data had been submitted to the researcher as it was not then possible to identify individual responses.

If surveys were completed during/after team meetings, at least 24 hours notice was given to prospective participants, via the team leader, to allow them sufficient time to consider whether they would wish to participate. There was potential for participants to feel awkward about leaving a meeting early, making it obvious to colleagues that they did not wish to participate, which may have put pressure on an individual to say that they would take part in the study. This was avoided by arranging for those willing to participate to be present at the start of the meeting, with others attending at a later time, reducing any undue influence to participate in the study. Where there was not time in the meetings for questionnaires to be completed, the principal investigator attended the start of the meeting to hand out packs, then left. This allowed consenting participants to send back completed packs using a pre-paid addressed envelope.

In order to protect the identity of individual staff/services, it was important to recruit participants from more than one NHS Trust. Findings from the study were reported according to type of service rather than by specific Trust, team or department. This increased levels of anonymity and prevented individual staff responses from being identified by any individual, allowing them to feel more able to provide honest responses.

## Results

### 3.1 Quantitative Analysis

The current study had initially hoped to compare ABI scores for staff working across three types of service: mental health, substance misuse and dual diagnosis. As only 12 responses were received from dual diagnosis services, there were not sufficient cases to include a third group in the analysis. Mean and median scores between the three types of service were compared, and dual diagnosis cases were generally found to be more similar to substance misuse cases than mental health cases (Appendix S). It was therefore decided to include dual diagnosis cases with substance misuse cases.

Participants rated their levels of confidence and experience in working with ‘dual diagnosis’ clients, on a scale of 1-10, with 10 being extreme confidence/extensive experience. Levels of confidence ranged from 3-9 (mean = 6.29) in the mental health group and 5-10 (mean = 7.52) in the substance misuse group. Levels of experience ranged from 2-8 in the mental health group (mean = 5.54) and 5-10 in the substance misuse group (mean = 7.59). Participants also rated whether or not they felt skilled as a ‘dual diagnosis’ worker: 64.4% of substance misuse workers described themselves as skilled ‘dual diagnosis’ workers in comparison to 20% of mental health workers.

Descriptive statistics for two groups on each of the ABI subscales were calculated (Table 1). Initial observations suggested that there were differences in mean scores of all subscales, between services. These were particularly pronounced on the following subscales: ‘chronic disease’, ‘reliance on experts’ and ‘genetic basis’, and were present across all three substances.

**Table 1: ABI subscale mean ratings: groups and substances**

	<b>Alcohol</b>		<b>Cannabis</b>		<b>Heroin</b>	
	<b><i>Mental Health (SD)</i></b>	<b><i>Substance Misuse (SD)</i></b>	<b><i>Mental Health (SD)</i></b>	<b><i>Substance Misuse (SD)</i></b>	<b><i>Mental Health (SD)</i></b>	<b><i>Substance Misuse (SD)</i></b>
<b>Inability to control</b>	11.75 (2.942)	12.92 (3.539)	13.02 (2.913)	14.19 (3.071)	10.95 (3.381)	11.93 (3.557)
<b>Chronic disease</b>	12.12 (2.928)	9.03 (3.090)	10.68 (2.325)	7.83 (2.567)	12.08 (2.805)	8.64 (2.778)
<b>Reliance on experts</b>	8.82 (2.818)	6.56 (2.890)	7.80 (2.710)	5.37 (2.243)	8.92 (3.033)	6.56 (3.098)
<b>Responsibility for actions</b>	6.30 (1.843)	5.51 (2.079)	5.92 (1.831)	5.42 (1.877)	6.15 (1.819)	5.53 (2.037)
<b>Responsibility for recovery</b>	11.85 (1.673)	11.98 (1.805)	11.80 (1.870)	12.10 (1.936)	11.90 (1.823)	12.02 (1.824)
<b>Genetic basis</b>	6.35 (2.248)	4.97 (2.220)	5.35 (2.167)	3.97 (1.752)	6.58 (2.521)	4.83 (2.069)
<b>Coping</b>	17.05 (3.559)	16.42 (2.686)	16.18 (3.241)	15.88 (2.526)	16.32 (3.331)	16.20 (3.027)

Data were analysed in two sections to test the experimental Hypotheses. Any interaction effects between independent variables were also calculated. Data were interval, independent and there were more cases than dependent variables in each cell.

### 3.1.1 Assumption Testing:

Univariate outliers were observed in six dependent variables. As outliers were considered to be sampled from the target population, the scores were altered for these cases so they remained deviant, but not as deviant (Tabachnick and Fidell, 2007). Outlying cases were assigned a score of one point larger/smaller than the next most extreme score in the distribution, as transformation did not reduce outlying cases.

Normality of distribution of dependent variables was assessed using the Kolmonov-Smirnov statistic, as the sample size was over 50 (Field, 2000; Tabachnick & Fidell, 2007). This statistic was significant for 19/21 dependent variables, indicating that only 2 dependent variables were normally distributed. Values for skewness and kurtosis were also checked for these variables and were not extreme and roughly similar. Transformation of these variables did not produce non-significant results on the Kolmonov-Smirnov statistic or more favourable

skewness and kurtosis figures. If variables are skewed to a similar extent, improvements in analysis after transformation are often marginal (Tabachnick and Fidell, 2007). Therefore, non-transformed data was used in the analysis. As each cell had a sample size of more than 20, robustness to non-normality should be ensured (Stevens, 2002).

Multivariate outliers were checked using Mahalanobis distance (Pallant, 2001). When compared with the critical value of 46.797, the maximum Mahalanobis value was 62.059, suggesting multivariate outliers were present. Mahalanobis values of three cases (in different groups) exceeded this (62.05895, 57.30573, 51.71725) and were excluded from analysis as recommended by Tabachnick & Fidell (2007), leaving 99 cases (40 participants in the mental health group and 59 in the substance misuse group).

Screening occurred for multicollinearity: each pair of dependent variables was correlated, with two pairs of variables producing correlation coefficients of above 0.8 ('genetic basis': alcohol and cannabis; 'coping': alcohol and heroin). Although this level of correlation could be considered to violate the multicollinearity assumption, correlations above 0.9 are more likely to result in statistical problems (Tabachnick & Fidell, 2007). Given that the two pairs of variables with bivariate correlations of 0.8 are repeated subscales of the ABI, but for different substances, it did not make sense to combine or delete variables. Indeed, some collinearity could be expected given the repeated administration of the within-subjects variables of the ABI in the current study.

3.1.2 Hypothesis 1(H<sub>1</sub>): *Staff working in mental health and substance misuse services will report significantly different beliefs about addiction on the Addiction Belief Inventory (Luke et al., 2002).*

A between-groups multivariate analysis of variance was performed to investigate differences in addiction beliefs between mental health and substance misuse services. Twenty one dependent variables were used (Appendix K). The independent variables were 'service type', 'age group', 'identified dual diagnosis worker', 'further training' and 'years since

qualification'. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers and multicollinearity, with some assumptions violated (see above). Box's Test of Equality of Covariance Matrices was significant ( $p < 0.001$ ) indicating that the assumption of homogeneity of variance-covariance matrices was violated, which may have resulted from small sample size differences between groups (Tabachnick & Fidell, 2007). As cells with larger samples produced larger variances and covariances, the alpha level was considered conservative and null hypotheses could therefore be rejected with confidence (Stevens, 2002). Levene's test of homogeneity of variance of dependent variables was significant for 13 of 21 dependent variables, so the analysis was run again with a more conservative alpha level ( $p = 0.025$ , instead of 0.05) (Pallant, 2001; Tabachnick & Fidell, 2007). There was a statistically significant difference between mental health and substance misuse workers on the combined dependent variables:  $F(21,22) = 2.523$ ,  $p = .018$ ; partial eta squared = .707. Observed power was calculated at .908. This meant that  $H_1$  was supported.

When the results for individual dependent variables were considered, the differences to reach statistical significance were 'chronic disease' (alcohol, cannabis & heroin), 'reliance on experts' (alcohol, cannabis and heroin), 'responsibility for actions' (alcohol) and 'genetic basis' (alcohol, cannabis and heroin) (Table 2). An inspection of the mean scores (Table 1) indicated that Mental Health workers had higher levels of agreement with the notion of substance use being a 'disease' than substance misuse workers, for all three substances; Substance Misuse workers had lower ratings for 'reliance on experts' than mental health workers across all three substances; Mental Health Workers showed higher levels of agreement with substance use having a 'genetic' basis than Substance Misuse workers for all substances; Mental Health workers rated individuals as having more 'responsibility for their actions' than substance misuse workers, for alcohol only. There were no significant three-way interactions between independent variables. A number of two-way interactions existed (Table 7).

When both groups were combined, there was also a statistically significant difference between participants who had completed ‘further training’ (in mental health, substance misuse or dual diagnosis) and those who had not on combined dependent variables, but no significant difference between those who identified themselves as ‘skilled dual diagnosis workers’, and those who did not (Table 3). No statistically significant differences were observed as a result of ‘years since qualification’, however there was a significant effect of age (Table 3).

**Table 2: MANOVA: Statistical significance for dependent variables.**

ABI Subscale		Df	F value	Sig	Partial eta squared
<b>Alcohol</b>	<i>Chronic disease</i>	1,91	22.742	.000	.200
	<i>Reliance on experts</i>	1,91	12.793	.001	.123
	<i>Responsibility for actions</i>	1,91	4.285	.041	.045
	<i>Genetic basis</i>	1,91	6.972	.010	.071
<b>Cannabis</b>	<i>Chronic disease</i>	1,91	33.022	.000	.266
	<i>Reliance on experts</i>	1,91	22.532	.000	.198
	<i>Genetic basis</i>	1,91	7.983	.006	.081
<b>Heroin</b>	<i>Chronic disease</i>	1,91	28.925	.000	.241
	<i>Reliance on experts</i>	1,91	11.759	.001	.114
	<i>Genetic Basis</i>	1,91	11.772	.001	.115

**Table 3: Relationship of additional independent variables with ABI scores**

	Df	F	Sig	Wilks' Lambda	Partial eta squared
<b>Skilled DD</b>	21,22	1.148	.375	.410	.523
<b>Further training</b>	21,22	2.227	.034	.359	.680
<b>Age Group</b>	42,44	2.368	.003	.110	.693
<b>Years since qualification</b>	42,44	1.349	.164	.230	.563

3.1.3 Hypothesis 2 (H<sub>2</sub>): *Staff members will report significantly different beliefs on the ABI according to the type of substance it refers to.*

A series of one-way repeated-measures ANOVAs were conducted to explore the impact of service and substance type on each subscale of the ABI, for each of three substances (alcohol, cannabis and heroin). Participants were divided into two groups according to the type of service in which they worked (mental health or substance misuse). Means and standard deviations are presented in Table 1. Main effects of the analyses are presented in Table 4 and results for interaction effects are displayed in Table 5.

Mauchley's Test of Sphericity (Field, 2000) did not produce significant Chi values for the within-subjects variable of substance, therefore assumptions of ANOVA were met. Levene's Test of equality of variance was not significant with the exception of the 'genetic' and 'coping' subscales. A more stringent alpha level ( $p=0.025$ ) was used with these variables (Pallant, 2001).

**Table 4: Influence of substance type on ABI subscale scores**

	<b>Wilks' lambda</b>	<b>Df</b>	<b>F</b>	<b>P</b>	<b>Partial eta squared</b>
<b>Inability to control</b>	.568	2,97	36.938	<b>.001</b>	.432
<b>Disease</b>	.732	2,97	17.743	<b>.001</b>	.268
<b>Experts</b>	.671	2,97	23.784	<b>.001</b>	.329
<b>Actions</b>	.983	2,97	.809	.448	.017
<b>Recovery</b>	.999	2,97	.033	.967	.001
<b>Genetic</b>	.627	2,97	28.821	<b>.001</b>	.373
<b>Coping</b>	.882	2,97	6.504	<b>.002</b>	.118

**Table 5: Interaction effects between substance type and service type**

	<b>Wilks' lambda</b>	<b>Df</b>	<b>F</b>	<b>P</b>	<b>Partial eta squared</b>
<b>Inability to control</b>	.999	2,96	.071	.932	.001
<b>Disease</b>	.984	2,96	.793	.456	.102
<b>Experts</b>	.998	2,96	.077	.926	.061
<b>Actions</b>	.994	2,96	.300	.742	.006
<b>Recovery</b>	.995	2,96	.239	.788	.005
<b>Genetic</b>	.990	2,96	.462	.631	.010
<b>Coping</b>	.982	2,96	.890	.414	.018

ANOVA analysis indicated that there was support for H<sub>2</sub> on the following subscales of the ABI: ‘inability to control’, ‘chronic disease’, ‘experts’, ‘genetic’ and ‘coping’. This indicates that ratings on these subscales differ according to type of substance (alcohol, cannabis and heroin). Cannabis use was rated as being more ‘controllable’ than either alcohol or heroin. Alcohol use was more associated with the notion that ‘addiction is a disease’ than heroin and cannabis. Heroin users were rated as needing more support to reduce use/become abstinent than alcohol or cannabis users. The notion that ‘addiction is genetic’ was more associated with heroin and alcohol than cannabis and alcohol and heroin were rated as being used to cope with stressful life situations, more so than cannabis. There was no support for H<sub>2</sub> on the remaining two subscales, indicating that beliefs about ‘responsibility for actions’ and for ‘recovery’ do not significantly differ across type of substance (Table 4).

3.1.4 Hypothesis 3(H<sub>3</sub>): *Staff beliefs about addiction will be influenced by a number of demographic factors i.e. age, ethnicity and professional background.*

‘Professional background’ or ‘ethnicity’ were not analysed in the current study, due to large differences in frequencies of each professional group and small number of participants who described themselves as being non-White-British. Although there was a main effect of age (Table 3) in the MANOVA conducted to answer H<sub>1</sub>, there were a number of interaction effects involving ‘age’, ‘years since qualification’ and participants identifying themselves as a ‘skilled dual diagnosis worker’ (Table 7).

**Table 6: Mean scores on ABI subscales for each substance**

ABI subscale	Substance (mean scores)		
	Alcohol	Cannabis	Heroin
Inability to control	12.33	13.61	11.44
Chronic disease	10.58	9.25	10.36
Reliance on experts	7.69	6.59	7.74
Responsibility for actions	5.90	5.67	5.84
Responsibility for recovery	11.91	11.95	11.96
Genetic basis	5.66	4.66	5.70
Coping	16.74	16.03	16.26

**Table 7: MANOVA two-way interaction effects**

Interaction	Wilks' Lambda	Df	F	P	Eta
Group*skilled D.D. worker	.255	21,22	4.036	.001	.794
Group*further training	.264	21,22	2.195	.008	.736
Group*age group	.136	42,44	1.794	.029	.631
Group*years since qualified	.066	42,44	3.039	.001	.744
Skilled DD worker*age group	.106	42,44	2.177	.006	.675
Skilled DD worker*years since qualified	.143	42,44	1.725	.038	.622

‘Further training’ produced higher mean scores on ‘control’ and ‘experts’ for alcohol. Mental Health staff who undertook further training had lower scores on ‘experts’, ‘actions’, ‘recovery’, ‘genetic’ (cannabis), ‘disease’, ‘experts’, ‘actions’ (heroin). In Substance Misuse, increases in scores on ‘disease’, ‘actions’ (heroin) and ‘coping’ were observed in participants who had received further training. Age tended to impact on scores in different ways between groups; in mental health, the 19-35 age group had higher scores on ‘control’, ‘experts’, ‘genetic’ and ‘coping’. The reverse was true in substance misuse, where the 19-35 age groups had the lowest scores on these subscales. There was also a tendency for mean ratings to reduce on ‘disease’, ‘experts’, ‘genetic’ and ‘coping’ subscales when participants rated themselves as a ‘skilled dual diagnosis worker’. Being a ‘skilled dual diagnosis worker’ and being qualified for over 16 years produced higher scores on ‘control’ across all three

substances. This was also true for ‘genetic’ in the alcohol questionnaire, but the reverse was observed for the heroin questionnaire. Participants who had been qualified for less than 5 years, and who were not specialist dual diagnosis workers, tended to have higher scores for ‘recovery’ and ‘coping’ (cannabis).

### Summary

In the current study, participants in mental health and specialist substance misuse services had significantly different beliefs about ‘addiction’, according to the ABI. Specifically, these differences related to the concept that addiction is a disease, that expert help is needed to reduce substance use, that users are responsible for their actions while using and that there may be a genetic element to addiction. Recorded beliefs in the current study also differed according to the type of substance in question: Beliefs about heroin, alcohol and cannabis were significantly different, as rated on the ABI.

### **3.2 Thematic Analysis**

Participants were also asked to record their opinions on the barriers and levers to mental health and substance misuse services working jointly to support clients with a ‘dual diagnosis’. This section provides an account of those comments.

Thematic analysis allows the identification, analysis and reporting of patterns (i.e. themes) within a data set. Thematic analysis is not strongly attached to any pre-existing theoretical framework and can therefore be used to achieve different aims within different frameworks (Braun & Clarke, 2006). In the current study, themes were identified using an

inductive approach, however in thematic analysis themes could also be identified using a deductive approach (Boyatzis, 1998). The six phases of thematic analysis are described by Braun and Clarke (2006) p87 (Appendix T).

Each comment supplied by participants on the questionnaire which related to either levers or barriers, was considered a thematic unit. This decision was reached prior to commencing analysis, in accordance with the Braun & Clark (2006) approach to thematic analysis. The researcher was also transparent about the stages of analysis and the procedures involved in the current study, as this has been deemed an important characteristic of qualitative approaches (Yardley, 2000): data for barriers and levers were initially analysed separately and then themes were later amalgamated. This felt appropriate given the overlap between and repetition of comments made about barriers and levers to joint working (Appendix U).

A thematic map (Figure 1), constituting four main themes and 16 sub-themes is presented in diagrammatic form. A description of each main theme is provided, along with an overview of the corresponding sub themes, each illustrated by direct quotes from participant questionnaires<sup>1</sup>. Further evidence for each theme and corresponding sub-themes can be found in Appendix V.

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<sup>1</sup> Numbers beside each quote refer to the participant number. Full details can be found in Appendix U.

Theme 1: Organisational Factors: Systemic and organisational factors which influence the way NHS services are commissioned and run.

#### Policies, guidance & objectives

“better & quicker referral pathways” 59  
“policies – different in each type of service” 91

#### Trust organisation & funding

“Targets on identification and brief advice for all psychiatric settings with financial penalties for non-compliance”79  
“Poor organisation of trust” 6

#### Ethos & Language

“An ethos from on high that joint working is encouraged”12  
“Dual diagnosis is not a helpful term – encourages agencies to consider remit too narrow and doesn’t encourage professional responsibility” 2

#### Logistics

“Having both services in the same building/close proximity”38  
“Clients generally do not like having appointments here there and everywhere” 38

#### Substance Misuse V Mental Health

“Diagnosis – chicken & egg- what came first when actually isn’t relevant to treatment” 41

Theme 2: Clinician Factors: Individual and group factors which influence both substance misuse and mental health clinicians' ability to work jointly to support clients with co-existing mental health and substance misuse problems.

### Stigma, Attitudes & Understanding

“Being more accepting of individuals addiction problems and working with them rather than against them” 17

“Staff attitudes and beliefs about people with substance misuse creates barriers to acceptance in mental health – this may be due to ignorance of the subject, personal beliefs or both” 18

### Confidence

“Supporting each other” 63

“Lack of confidence of mental health teams to work with substances and vice versa” 101

### Flexibility

“Staff reduce boundaries – not be so precious about skills” 54

“Staff stick to their own areas of expertise” 42

### Communication & Support

“More communication – writing in MDT notes, not having separate files” 65

“Poor communication” 89

Theme 3: Access to resources: Availability of and access to (or lack of) resources, including specialist workers.

#### Staff resources

“Having more time to devote to care planning and intervention” 46

“More defined time to attend MDT group supervision” 64

#### Lack of supportive resources

“Lack of resources/staffing levels” 66

“Lack of training” 28

#### Specialist workers

“Effective link worker system – dual diagnosis worker in each setting” 7

“Although significant improvements, dual diagnosis services are not as integrated into substance misuse services” 57

Theme 4: Joint strategies: Strategies and factors identified by clinicians which would support joint working between mental health and substance misuse services to support clients with co-existing mental health and substance misuse problems.

#### Training

“Interagency training” 87

“Training, education around dual diagnosis” 26

#### Joint work and information sharing

“More joint assessments, working and supervision” 101

“Joint working and care planning” 73

#### Experience

“Staff shadowing staff” 42

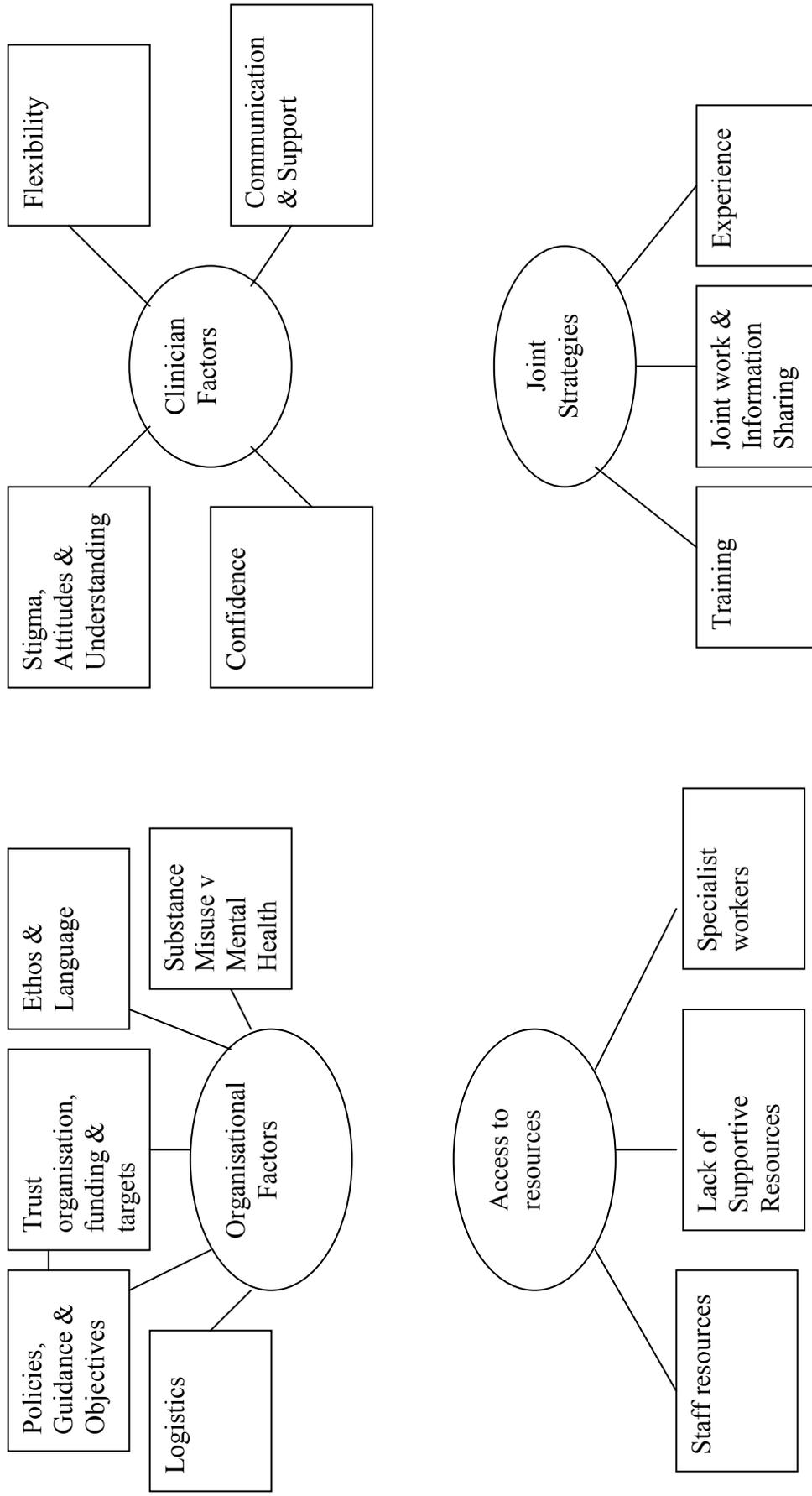


Figure 1: Thematic Map

The current study aimed to compare the addiction beliefs of staff working in mental health and substance use services, across three different substances (alcohol, cannabis and heroin). In addition, the study aimed to identify staff views of barriers and levers to effective management of clients with co-existing mental health/substance use difficulties within local NHS services.

The results show that the research hypothesis regarding service type was supported. This means that scores on the ABI (Luke et al., 2002) were significantly influenced by the type of service (mental health/substance misuse) in which participants worked. Specifically, Mental Health workers were more likely than Substance Misuse workers to believe that problematic substance use is a chronic disease that does not improve, leaving abstinence as the only treatment option. Substance Misuse workers were less likely than Mental Health workers to see recovery as only being possible with help from others. Although both groups had low scores on the 'genetic basis' subscale, Mental Health workers showed higher levels of agreement with the idea that substance misuse has genetic causes. One further difference was apparent only in relation to alcohol, where Mental Health workers showed higher levels of agreement with the view that substance users are responsible for their actions and substance use. Interaction effects, involving 'age' and 'years since qualification', may be related to level of experience with the client group in question or linked to changes to professional training programmes over time (e.g. Grella, 2003).

In addition, the hypothesis that participants would report different beliefs on the ABI for different substances was also supported, for five of the seven subscales of the ABI. This indicated that participants' beliefs in relation to 'inability to control', 'chronic disease', 'experts', 'genetic' and 'coping' were different for each substance. For cannabis; 'disease', 'experts', 'genetic' and 'coping' all had lower mean scores than alcohol and heroin,

indicating slightly less agreement with these beliefs about cannabis ‘addiction’. A high level of ‘control’ was apparent for cannabis than for alcohol and heroin. Alcohol had a higher rating than heroin on this subscale. This was not the case for the remaining two subscales, which indicated that beliefs related to ‘responsibility for actions’ and ‘responsibility for recovery’ did not differ significantly across substances. A number of implications exist of addiction beliefs being different across different services and substances; these include patient care, care planning and training.

Participants also provided their opinions about barriers/levers to joint-working between local NHS services, which were analysed using thematic analysis. The main themes that developed from these comments were based around a number of factors (Figure 1). Participants indicated that organisational issues such as commissioning and funding of services, as well as having different recording systems, processes and locations presented barriers to joint-work, however streamlining suggestions were made to remedy these issues. Access to available resources, for example, clinician time, training and specialist workers were also felt to be issues that prevented the opportunity for joint-work, although again, participants identified solutions to these issues. Stigma/attitudes towards clients who used substances were highlighted as a factor in clinician confidence in joint-work, which is reflected in the quantitative analysis in the current study. Similar comments and themes emerged from both groups of clinicians suggesting that awareness of issues was shared across groups, even if addiction beliefs differed.

The findings of the current study support the conclusions of Clutterbuck et al. (2008), in relation to addiction beliefs being substance specific, rather than being generalised in the same way to all substances. The findings of other studies, suggesting that addiction beliefs differ within and between mental health and substance misuse staff (e.g. Gjersing et al., 2007; Grella, 2003; Shinebourne & Adams, 2007; Thombs & Osborn, 2001; Toriello & Leierer, 2005) were also supported by the current study.

Historically, systems to treat severe mental illness and substance misuse have been separate in the UK. Recent attempts have been made to bridge these gaps (e.g. DH, 2002; Graham, 2004), however this has varied between NHS Trusts and local services. It is not clear from the current study whether differences in beliefs about addiction, between clinicians in mental health and substance misuse services, are the result of different training pathways, different clinical experiences, or whether longstanding beliefs developed through systemic or media influence impact on the choice of clinical area in which professionals choose to specialise. Humphreys, Noke & Moos (1996) have speculated that the culture of individual treatment programmes/services shapes current staff members and filters out individuals who do not fit with the service's perspective through recruitment.

It is not immediately apparent what would help to move the beliefs of staff in the two types of service closer together. In a series of studies involving the C-BIT approach in Birmingham, (e.g. Graham, 2004, Maslin et al., 2001) it was identified that further training of mental health staff led to a shift in beliefs, towards more understanding of a client's beliefs about addiction and an increase in optimism and competence for interventions. Mental health workers rated feeling more competent in dealing with substance misuse clients than they had prior to completing the C-BIT training (Clutterbuck et al., 2008). Other research has suggested that initial changes to beliefs after training are not transferred to clinical practice and not maintained long-term (Kavanagh, 1994; Milne, Gorneski, Westerman, Leck & Keegan, 2000; Miller & Mount, 2001) and that certain beliefs are not improved by training (Martinez & Murphy-Parker, 2003). The development of positive attitudes is only partly related to education (Rassool, 2002) and experience is thought to improve gains from didactic teaching (Martinez & Murphy-Parker, 2003). It has been acknowledged that health professionals' attitudes influence how knowledge is accepted and used, therefore staff attitudes are fundamental to therapeutic activity (Watson, Maclaren & Kerr, 2006). Continued supervision was shown to be effective in implementing change within staff groups

(Berger & Mizrahi, 2001; Wensing & Grol, 1994) and in maintaining skills following training (Miller & Mount, 2001).

If further training is a suitable option, it is not immediately clear what the starting point for this would be, given that both groups have different beliefs about addiction. Joint training has been recommended above separate training (ACMD, 1990) in order to improve communication. If clinical experience/exposure is more likely to produce longer-lasting changes in addiction beliefs, then the suggestion of shadowing/joint-working between services from the point of referral and assessment, through the care-planning stage and through intervention seems the most effective option. Identified link-workers (substance misuse or mental health) within each team would be a useful resource and point of contact/supervision for other clinicians and may ease the difficulties caused by lengthy and complicated referral processes. An alternative to this could be the provision of a duty rota within each service to enable professionals in other teams/services to seek advice about mental health/substance misuse problems, however this would impinge on current resources without some reorganisation of team structures/services. Involvement of service users, in peer support groups or 'buddy systems', who have previously experienced these difficulties and have started their recovery journey, might be a useful way to start this process, given the pre-existing high case loads of clinicians and their limited resources. Such input from service users 'in recovery' would no doubt be a useful resource for both clinicians, and clients in between their clinical appointments, and would fit with the current recovery agenda (NTA, 2010).

#### ***4.1 Future Research***

On basis of the findings of the current study, further research should explore the deficiencies in training that staff in mental health and substance misuse services report. Evaluation to ascertain which aspects of this could be usefully incorporated into training packages to improve knowledge/awareness of the issues facing clients with co-existing mental health/substance misuse problems, would be a relevant focus for research. It would

also be of interest to examine addiction beliefs held by clients in these services, to see how clinician-client beliefs compared. Exploration of differences in addiction beliefs between professional groups, which was not possible in the current study, would provide additional insight on this topic, as would consideration of the impact of culture and ethnicity on beliefs about addiction. Given the connection between beliefs and behaviour (e.g. Beck, 1995), research needs to pay attention to the impact of shadowing, supervision and joint-work between mental health and substance misuse services on beliefs. This could follow either pilot studies in specific localities or wider changes to service guidelines and protocols.

Recently, the difference between implicit and explicit beliefs has been discussed, in addition to debate about the ability of questionnaires to measure one or both of these (e.g. von Hippel, Brener & von Hippel, 2008). It remains difficult to determine whether the ABI and therefore the current study measured implicit and/or explicit beliefs and this would affect predictions of the impact of such beliefs on clinicians' behaviour. A useful progression for research would be to continue to develop questionnaires to ascertain if implicit and explicit beliefs can be measured objectively, and if so, apply this knowledge to develop a questionnaire about addiction beliefs which reflects this. This type of development is necessary to truly explore the implication of different types of addiction beliefs on clinician behaviours and interactions with clients with co-existing mental health and substance misuse problems.

#### ***4.2 Critique***

The current study had some important shortcomings that have to be taken into account when evaluating the results. Initially, there was the issue of recruitment: The current study had a response rate of 45.1 %, which is comparable to some other studies in this field (e.g. Thombs, 2001; Toriello, 2005; Wheeler, 1997), however could have been improved by arranging for all teams to complete questionnaires when the principal investigator visited, or perhaps by closer liaison with each service. Many of the published papers in this field utilised survey methodology and as a consequence experienced low response rates. This is one of the

difficulties with this type of design and comparability does not necessarily allow generalisation of findings to a wider population.

Another limiting factor was the number of responses from clinicians in dual diagnosis services: These services, where they existed, were usually small in size and it was not possible to recruit enough clinicians in these services to allow comparison of addiction beliefs of a third group. Although mean scores of the dual diagnosis clinicians were similar to those of substance misuse clinicians, it remains a small possibility that amalgamating these groups could have skewed the findings of the current study. Replication of this study in another area of the UK with a third group would be of value.

The current study was successful in recruiting clinicians from five local Trusts, so findings could be seen as representative of this area. It remains possible that this might differ in other areas of the UK. Due to potential for a variety of staff, with different cultural, educational and professional backgrounds to be working with clients with comorbid substance use problems, it is possible that different beliefs about addiction will be present within teams, particularly if services work jointly with a client, which may explain non-normal distributions of data.

The current study used a different questionnaire to previous studies to measure addiction beliefs. While some surveys were designed specifically for individual studies, some were more widely used tools such (e.g. Understanding Alcohol Scale (UAS), Abstinence Orientation (AO) and Disapproval of Drug Use (DDU) scales), however these scales focused either on one substance or on substances generally. Although this is likely to influence comparisons between findings, it was felt that the ABI provided a greater range of beliefs about addiction as opposed to just comparing the Disease and Moral Models. The ABI was developed in the USA and uses terms to describe substance misuse that are not widely used in the UK. This difference in language may have affected responses and may have been a factor in reducing response rates. Adjusting the ABI to reflect three substances individually may

have altered its psychometric properties: With additional time and resources it would have been useful to check the reliability and validity of the adjusted scales.

## Critical Appraisal

During the process of study design, ethical and R&D approval, data collection and analysis, a research diary was kept by the researcher. This helped the researcher to reflect on the study as a whole, on some of the challenges that arose and on ways that these challenges were managed.

One of the most significant issues that arose from the current study, was the language used in the Addiction Belief Inventory (ABI) (Luke et al., 2002). The questionnaire was selected above others which aimed to measure addiction beliefs because it was able to highlight a variety of different components of such beliefs. The ABI allowed a number of models of addiction to be compared within one questionnaire, unlike similar measures which focus on two or three models of addiction. The researcher felt that it was important to represent as many beliefs as possible given the limited research on this topic in the UK and given the variety of findings reported in other countries.

The ABI was developed in the USA and therefore makes use of terminology related to the substance misuse field, that is not generally used in substance misuse services in the UK i.e. the terms 'addict' and 'addiction' and 'alcoholic'. These terms are available in UK language, however are seen as being value-laden and having negative connotations (Elliott & Chapman, 2000; Stepney, 1996). The language used within the ABI was different to that used by the researcher, and in that sense felt somewhat uncomfortable. There was a sense of dissonance between the language used by the ABI and the language used by the researcher in both personal and professional capacities. Attempts were made by the researcher to contact the author of the ABI to discuss its use in the current study and to discuss the use of language, however these were unsuccessful. If more time had been available to conduct the current study, it would have been worthwhile adjusting the language of the questionnaire to reflect that which is more commonly acceptable in UK services. This version of the questionnaire could then have been piloted locally to assess levels of reliability and validity, and if suitable

used in the study. Unfortunately this was not feasible in the time-frame of a doctoral thesis, which is why a pre-existing, standardised questionnaire was used.

During the process of data collection, a number of clinicians commented on the use of language in the ABI: Their comments reflected the difficulties the researcher had previously expressed, however generally clinicians felt able to complete the questionnaire after a brief discussion about the reasons for the use of language in the ABI. This was a benefit of being able to attend team meetings to present the study and collect questionnaires. It is possible that language may have been a factor in clinicians' deciding not to complete and return the questionnaire, particularly where the researcher was unable to attend team meetings in person. The researcher was aware that one particular team felt so strongly about the use of language in the ABI, particularly the term "addict" that the majority of clinicians declined to participate in the study unless the language was altered. In this instance, discussion about the reasons for the ABI being included in the study was not productive. The researcher found it difficult to be told that she lacked understanding about the area of beliefs about addiction on the basis of the language of the questionnaire presented in the study. This felt an uncomfortable situation to be in and perhaps the researcher had underestimated the impact that the choice of questionnaire might have on others' perception of her credibility as a researcher. In this situation, the researcher was able to discuss the reasons for selection of the questionnaire, however it did not feel appropriate to spend time defending the researcher's personal views and levels of knowledge in a professional team meeting. Generally, the study was well received, though the researcher would give additional consideration to the ways in which others may make judgements about credibility based on questionnaire language, in the future.

One of the logistic challenges of conducting the current study was arranging for the researcher to meet team leaders and attend team meetings to present the study to potential participants and collect questionnaires. Teams were spread out across the Midlands and often held their team meetings on the same days. Teams often distinguished between clinical and business meetings, and requested that the researcher attend the business meetings to avoid

breaches of clinical information. One of the difficulties with this was that business meetings were held far less frequently (sometimes monthly) and there were usually significant other pressures to discuss non-research issues in these meetings. Although this presented a challenge to the researcher, it was generally overcome by good organisation and regular contact with team leaders and their secretaries. Often the easiest way to approach this challenge was to attend the meeting at either the start or very near to the end, to ensure that sufficient time could be given to the study, without impinging on clinicians' other requirements for the meetings. Attending a large number of team meetings was particularly demanding on the time of the researcher, in terms of preparation, travelling, and presentation. As a result of this process, the researcher further developed and defined their presentation skills and confidence as a presenter, which will be invaluable for any future research or clinical and teaching activities post-qualification. It was also necessary for the researcher to be continually flexible when attending these meetings, as the amount of time allocated for the study often changed. As a result, it was important to have the ability to give concise descriptions of the current study, including the important information and adapting the pitch of the presentation according to the requirements of the audience.

Where the researcher was able to attend team meetings and meet with clinicians or team leaders, response rates were improved. Where the researcher had to rely on postal return of questionnaires, response rates were reduced. This is one of the difficulties with a survey design, particularly where questionnaires are returned by post, rather than being collected by the researcher. An attempt was made to increase postal response rates by providing stamped, addressed return envelopes. Another issue with attending team meetings to give out/collect questionnaires was absence of clinicians from those meetings. At times, clinicians were either unable to attend the meeting due to other work commitments or were on leave. To ensure that as many clinicians as possible had the opportunity to participate in the study, additional questionnaires were left with the team leader for absent staff, where the team leader

consented to this. The current study aimed to provide a representative picture of addiction beliefs of clinicians in local NHS services and significant effort was made to support this aim.

As contact was made with a number of different services, across different NHS Trusts, it was apparent to the researcher that services were commissioned and run in a variety of ways. This was particularly the case for Substance Misuse services, which were either funded to work with drug or alcohol problems separately, or were funded to run a service that combined clients using both types of substances. Access to these services also varied across Trusts, with some Trusts utilising a 'gate-keeping' service, which added an extra dimension to the referral process. There was also a degree of variation in the availability, size and set-up of Dual Diagnosis services: these existed in three of the five NHS Trusts involved in the current study with between 2-10 clinicians. One Trust had Dual Diagnosis workers attached to a small number of Mental Health teams. Some Dual Diagnosis teams took direct referrals, whereas another worked indirectly to support clinicians in Mental Health teams to manage substance misuse problems with their clients. It was beyond the remit of the current study to explore the impact that the different set-up of services may have had on beliefs about addiction and part of the justification for including five NHS Trusts was to reduce the likelihood that beliefs were related to a specific service set-up and therefore make their generalisability limited. Service set-up would be likely to have an influence on the utility of and ease of implementation of strategies suggested by the current study to improve the frequency and quality of joint-working between Mental Health and Substance Misuse services.

One of the things that struck the researcher when talking to clinicians working in Mental Health, Substance Misuse and 'Dual Diagnosis' services, during the process of data collection was how topical the issues of 'dual diagnosis' and joint-working were. The researcher was aware at times of tension between services in individual Trusts and high levels of frustration felt by clinicians about the way in which services were commissioned, which impinged on their abilities to meet client needs in the way they would wish to. It was important for the researcher to be sensitive to these issues, and to try and remain open to the

variety of opinions that were expressed. This highlighted the importance of presenting a thorough account of the study, as well as being able to make appropriate and feasible recommendations as a result of the findings. It also made the researcher appreciate the importance of providing a summary of results to each of the services involved in the current study, as a way of completing the research cycle.

The current study was conducted at a time when a number of services were under review and waiting to discover whether they would be either re-commissioned or de-commissioned. This understandably had an impact on the mood of clinicians and also on the researcher when presenting the study in these services. This was a stark reminder to the researcher of the clinical relevance of the research topic but also of the additional demands placed on clinicians which could influence their decisions to participate in the current study. It also highlighted that although the current study focused on NHS services, there were a number of non-statutory agencies in the UK which provided Substance Misuse services instead of NHS agencies and the issues related to joint-working were likely to be further complicated by this factor in some areas. This could be an avenue for further research. Again, sensitivity to these issues was important and the ability to adapt research presentations to reflect and consider these issues was a helpful skill used by the researcher.

This was the first time that the researcher has been responsible for applying for ethical and R&D approval within an NHS setting, despite being previously involved in research in an applied setting. A number of delays occurred within the process of applying for permission to conduct the current study, which led to a delay in starting to collect data in a number of NHS Trusts. This was one of the difficulties with a multi-site study and the researcher underestimated both the variation in requirements for each individual Trust and also the time it would take to obtain approval. This had a knock on effect on the time available for data collection in some NHS Trusts and also report writing. Fortunately, some elements of the report could be constructed prior to any data collection, which reduced some of the time pressures on writing up the current study. Delays were managed by continuous liaison with

named individuals in each R&D department and by persistence in chasing up the progress of the study. Flexibility to meet requests for additional information was important, as were assertiveness skills. In any future research, a more realistic view of the time frame required to go through the approval process would be considered, with a greater degree of understanding of some of the complexities and idiosyncrasies that may occur. The researcher would think carefully before considering undertaking a multi-site study alone in the future, given its time consuming nature, but would feel more prepared for research in the complexities of balancing clinical work and research in the NHS in the future.

An additional delay occurred during the process of statistical analysis of data: The researcher again underestimated the amount of time it would take to complete this task. The researcher had not fully anticipated the deviations of the data from the assumptions of multivariate statistics and therefore had not fully considered the amount of time it would take to address and write up these issues. This was however a valuable learning process, which provided the researcher with a more detailed understanding of multivariate statistics, the process of analysis and potential remedies to distortions in data collated. The researcher found it challenging to describe and interpret all of the observed effects within the confines of the word limit and chose to focus on the main effects. In future, additional consideration of this issue would be given when planning and writing up statistical analysis. Such information and experience has improved the confidence of the researcher in using and interpreting complex statistical calculations.

One of the disappointments of the current study for the researcher, was the lack of a suitably sized third 'dual diagnosis' group. It would have been of interest to compare the addiction beliefs of this group to the addiction beliefs of staff in mental health and substance misuse services. Measures of central tendency indicated that there was more difference between 'dual diagnosis' and 'mental health' groups than between 'dual diagnosis' and 'substance misuse' groups. Analysis of any differences may have provided an indication of the shift required in beliefs to bridge the gap between mental health and substance misuse

services. Unfortunately, this study did not consider the beliefs held about mental health problems, and the impact that this may have on joint-working. The current study did also not specifically assess beliefs held about individuals with co-existing mental health and substance misuse problems, to ascertain if these were different or similar to addiction beliefs. This may be a potential avenue for additional research.

Approaching clinicians who already felt pressured by high caseloads, targets and numerous administration demands may have been a factor in reduced response rates. Completion of a series of questionnaires was an additional time pressure, which was more likely to impact on response rates where the researcher was unable to visit teams and arrange for allocated time to be set aside in meetings for questionnaires to be completed. The researcher did consider this in the development of the questionnaire pack, however the longer questionnaire was selected to allow more accurate responses and to maintain the psychometric properties of the ABI.

The ability of the researcher to remain impartial when undertaking qualitative analysis processes has long been contested (e.g. Boyatzis, 1998; Braun & Clarke, 2006). As such it would seem relevant to discuss the position of the researcher in relation to the development of the study, which may have influenced interpretation of themes reported in the current study. The researcher had previously worked in Mental Health and Forensic services and consequently come into contact with a large number of individuals with severe mental health problems who used substances problematically. This is where the researcher's interest in and awareness of some of the barriers to joint-working started to develop. The researcher had both positive and more frustrating experiences of working jointly with other services to support clients with co-existing mental health and substance misuse problems, and therefore had an appreciation of both barriers and levers to successful joint working prior to commencing the current study. At the time of data collection, the researcher was working in a Substance Misuse service and was able to appreciate some of the issues associated with joint-working from a different perspective. The researcher had also been able to develop a good

understanding of the commissioning process as a result of this latter placement, which was invaluable in understanding the relationship between the two types of NHS services and the issues faced at a clinical and an organisational level. The researcher was mindful of how staff working in mental health services may perceive her, given that she was working in a substance misuse service at the time of data collection. Although the researcher tried to remain balance and impartial, it was a possibility that she may have been received differently by mental health staff had she worked in a mental health service, and vice versa.

With this in mind, the researcher used an inductive approach to the thematic analysis of participant comments about barriers and levers to joint working between Mental Health & Substance Misuse services. Themes were drawn directly from the data, rather than by the use of a deductive approach which would have used theoretical ideas to develop themes. The researcher had used this technique previously as a way of describing responses to open questions in a survey. The aim in the current study was to find a way of conceptualising clinicians' opinions about what, if anything, got in the way of joint-working and what solutions they felt there were to these issues. It was hoped that enough detail of and transparency over the emergence of themes was provided. The researcher appreciated that this was a topic in itself which could have been the focus of an in-depth qualitative study, with a greater degree of interpretation than was used in the current study.

The researcher found access to participants in Substance Misuse services came more easily than access to participants in Mental Health services. One of the reasons for this could have been that both the researcher and research supervisor were based with Substance Misuse services at the time. In addition, the researcher had to identify local clinicians in four of the NHS Trusts where she was not employed, as part of the R&D process. These 'local collaborators' also worked in Substance Misuse services and were identified as a result of their contact with the researcher's supervisor. In hindsight, it would have perhaps been beneficial to identify 'local collaborators' who also worked in Mental Health settings, in order to increase the level of access to participants with a view to increasing response rates. This

would be a consideration for future research projects. Staff reception to the study varied across teams and NHS Trusts; for some this was politically a topic of interest and staff were keen to receive a summary of the findings. Other teams felt that the area of the current study was less relevant to them, which may have had an impact on response rates.

Whilst there are some criticisms that can be aimed at the current study, the researcher's opinion is that its findings have the potential to be useful at both a clinical and organisational level. Issues with the study were considered during the design process and decisions based on information available at the time. Whilst some of the themes related to barriers and levers to joint-working require consideration at an organisational level of the NHS e.g. development of a link-worker system, training, staff resources and possible secondments, there appears to be a willingness among clinicians to bridge the current gaps. Additional research is required to evaluate the effectiveness of any training or secondment programmes that are developed, which should also include the views of service users and their families.

The current study was a lengthy and at times complex process to undertake, particularly alongside other clinical and academic requirements: Valuable lessons have been learned about the design process, process of ethical approval in the NHS, data analysis and write up. The researcher had developed a fuller appreciation of the need to continue to produce clinically relevant research in the NHS and also of the challenges this can present. This will be beneficial both for any future research projects that the researcher undertakes and also if the researcher is in a position to provide advice about research as a qualified clinical psychologist.

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## **Appendix**

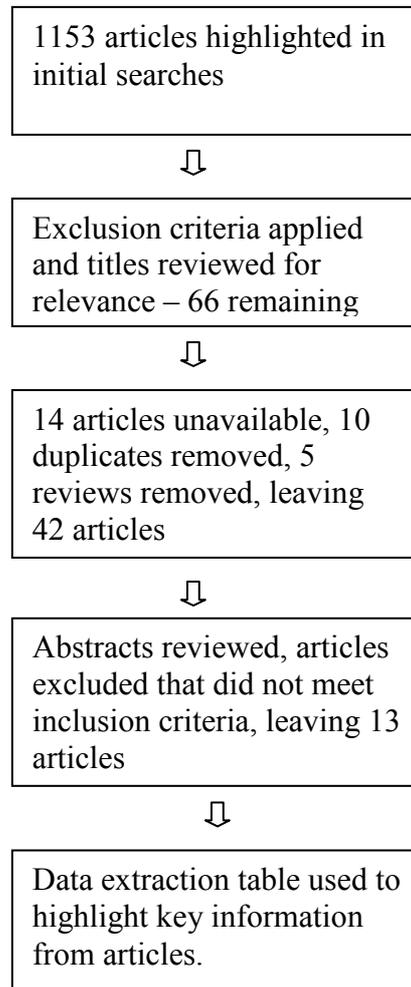
**Appendix A - Literature Review: table of search terms**

<b>Database</b>	<b>Search terms</b>	<b>Number of results</b>
Psychinfo	Media portrayals of drug and alcohol users	0
	Media portrayals + drug + beliefs	2
	Media portrayals + drug	14
	Media portrayals + alcohol	10
	Media portrayals + cannabis	0
	Media + cannabis + beliefs	2
	Media + alcohol + beliefs	72
	Media + heroin + beliefs	3
	Media + addiction beliefs	1
	Media + addiction + beliefs	34
	Media + substance misuse + beliefs	0
	Media + substance use + beliefs	11
	Beliefs + addiction + staff	46
CINAHL	Media portrayals of drug and alcohol users	0
	Media portrayals + drug/alcohol + beliefs/attitudes	3
	Mass media + alcohol + beliefs/attitudes	5
	Mass media + cannabis + beliefs/attitudes	0
	Mass media + heroin + beliefs/attitudes	0
	Media + alcohol + beliefs	5
	Media + cannabis + beliefs	1
	Media + heroin + beliefs	0
Media + substance use + beliefs	3	
Social Sciences Index	Media influence + addiction beliefs	6
	Media + drug-related beliefs	1
Web of science	Media portrayals + alcohol-related beliefs	3
	Media portrayals of drug/alcohol users + beliefs/attitudes	0
	Media portrayals of heroin users + beliefs/attitudes	0
	Media portrayals of cocaine users + beliefs/attitudes	0
	Media portrayals of cannabis users + beliefs/attitudes	0
	Media + heroin + attitudes/beliefs	8
	Media + cocaine + attitudes/beliefs	11
	Media + alcohol + attitudes/beliefs	237
	Media + cannabis + attitudes/beliefs	9
	Media portrayals + drug/alcohol + attitudes/beliefs	3
	Media + addiction beliefs	19
	Media + beliefs about addiction	19
	Media portrayals + heroin + attitudes/beliefs	0
Media portrayals + cocaine + attitudes/beliefs	1	
Media portrayals + alcohol + attitudes/beliefs	21	
SCOPUS	Media portrayal + addiction beliefs	0
	Media influence + drug-related beliefs	1
	Media + substance misuse	47
	Media + addiction beliefs	20
	Media portrayals of drug & alcohol users + beliefs/attitudes	2
	Media portrayals of heroin users + beliefs/attitudes	2
	Media portrayals of cocaine + attitudes/beliefs	2
	Media portrayals of alcohol + attitudes/beliefs	19
	Media portrayals of addiction + attitudes/beliefs	1
	Media + heroin + attitudes/beliefs	22
	Media + cocaine + attitudes/beliefs	32
	Media + alcohol + attitudes/beliefs	321
	Media portrayals + cannabis + attitudes/beliefs	1
Media + cannabis + attitudes/beliefs	40	

Sociological Abstracts	Media portrayals + addiction beliefs	0
	Media portrayals + drug-related beliefs	0
	Media portrayals + alcohol-related beliefs	0
	Media + alcohol-related beliefs	1
	Media + drug-related beliefs	1
	Media portrayals of drug and alcohol users	0
	Media influence + addiction beliefs	0
	Media + heroin + beliefs	10
	Media + cannabis + beliefs	9
	Media + alcohol + beliefs	10
	Portrayal of drug and alcohol users in the media	0
	Mass media + drug use	120

## Appendix B

### Literature Review – Selection Process Flow Diagram



## Appendix C: Data Extraction Table

AUTHOR & YEAR	substance	sample	Method	Beliefs	Media type	Country	analysis	results	Critique
Austin & Chen (2003)	Alcohol	College students, 300, 18-33 years	Survey – pencil & paper	Desirability, social norms, expectancies, scepticism	Adverts – recollection of parental reinforcement	USA	Structural equation modelling	Good fit to model Reinforcement of tv messages= more +ve beliefs about alcohol Anti-alcohol campaigns need to target desirability	Based on student recollections; low ethnic diversity; not all aspects of beliefs reviewed; ignored current level of attention to media
Austin, Chen & Grube (2006)	Alcohol	652, 9-17 year olds. Selected by random digit dialling	computer assisted, self administered interviews	Scepticism, desirability, identification, alcohol expectancies	Alcohol advertising TV viewing/ magazine reading	USA	Structural equation modelling	Watching more primetime TV led to seeing alcohol as more desirable with more desire to emulate and more positive alcohol expectancies. Parents can help counter these effects	Data not normally distributed. Reduced impact of socially desirable responses. Measure not included.
Engels, Herman, van Baaren et al. (2009)	Alcohol	80 pairs of male students, aged 18-29 years	Bar lab at uni. Watched 1 of 2 movies (few or many alcohol references) with either alcohol or neutral adverts, then questionnaires. Could select drinks and nibbles during and after screening	Drinking intentions and behaviour.	Movies & adverts	Netherlands	ANCOVA	Alcohol portrayal in the movie effected drinking behaviour – more drinking when exposed to films and adverts	Good ecological validity, minimal demand characteristics, good review of implications. Possibility of participants in alcohol conditions biased to reporting more drinking. lack of statistical power (figures absent), influence of pair not considered, what about females? both movies had some alcohol portrayals.
Grube & Wallack (1994)	Alcohol	468 school children. Gender, ethnicity and class data given	Questionnaires and structured interviews completed at home	Positive: friendship & sociability; reward for work; relaxation; Negative: birth defects, drinking & driving, general health problems -not specifically defined	TV advertising of beer	USA, california	Structural equation analysis	Awareness of TV beer advertising related to more favourable beliefs about drinking	Limitations of structural model. Age group.

Van Hoof et al. (2009)	Alcohol	223, 12-18 year olds in a secondary school. Gender demographic given	Soap episode watched, then questionnaires completed at school	Perceived consequences of alcohol use – not clearly identified	Soap operas	Netherlands	Content analysis of soap series	Adolescents exposed to alcohol portrayals in soaps had a less positive attitudes to alcohol and lower drinking intentions	Some attempt at inter-rater reliability. Impact of completing questionnaires at school.
Russell & Russell (2008)	Alcohol	250 college students, given a course credit. Only gender demographics given	Laboratory experiment – watch TV then rate beliefs. Warned about embedded messages	8 positive & 8 negative beliefs rated on likert scale – not defined	Real TV drama episodes + adverts	USA California	Content analysis 2x2 ANOVA	Warning viewers about embedded messages in content of TV series can impact on beliefs about alcohol	No differences examined between types of ad, just whether more attention was paid. Good evaluation of limitation of studies. Issues with generalisability
Kesmodel & Kesmodel (2002)	Alcohol	439 pregnant women on 1 <sup>st</sup> antenatal clinic. Every other woman invited to attend over 2 month period	Face to face interviews	Alcohol-related: drinking during pregnancy	TV/ newspapers/ magazines/ posters – assessed during interview	Denmark	Percentages of similar responses to each question. No inferential statistics	Alcohol-related beliefs were not associated with knowledge of official guidance, most women reported receiving information from the mass media	Impact of interviewers being midwives? May be generalisable? No exploration of how the media influenced beliefs and beliefs unclear.
Austin & Meili (1994)	Alcohol	154 9-14 year olds, deemed at risk of alcohol abuse in later life (unclear) majority white, low income families	Questionnaires, completed during lesson	Social norms, desirability, expectancies.	TV	USA	Multiple regressions – forward stepwise & hierarchical	Perceptions of TV norms affected perceptions of social reality, which were the same as perceptions of personal reality, so alcohol use on TV influences beliefs and intent to drink in children. TV influences take place in context of other influences eg home	By which processes does this influence operate? Low statistical power. Predictions about influence of ethnicity based on v low numbers... Substituted missing values rather than excluding cases. Level of missing data unclear. Social response bias.
Cin et al. (2009)	Alcohol	6522 in first wave but 4574 at end (random selection – random digit dialling). No demographic information	Longitudinal telephone survey	Normative beliefs; alcohol prototypes; alcohol expectancies – not clearly defined	Movies	USA	Structural model	Movie alcohol exposure had a significant effect on beliefs	Clear inclusion & exclusion criteria; unclear why data collected at different time points; drop out rate unclear; model not illustrated

Palmgreen et al. (2007)	Marijuana	100 youths aged 9-13 years. Random stratified sampling. Telephone recruitment. No demographic information	Interviews and surveys (over 2 years)	Attitudes to marijuana use scale (5 items). Marijuana beliefs scale – negative 'marijuana makes you do stupid things', 'hurts peoples' coordination'. Unclear where these came from.	TV/Radio	USA	USA	Time-series regression (although unclear)	Campaign significantly reduced positive marijuana attitudes and beliefs	Confusing response rates. Differences in samples across areas unclear. What about negative beliefs? Are results due to exposure OR content/style of ads – this was not explored.
Nielsen & Bonn (2008)	Drugs	Data from general social survey, collected 1975-2004	Data from national, cross-sectional survey	Drug spending attitudes – relevant questions clearly listed	TV & newspaper	USA	USA	Logistic regression	Greater frequency of TV viewing and newspaper reading associated with higher likelihood of saying too little money spent to address addiction	As questions changed over the years, not all were answered by all participants. 20% missing data
Minnebo & Eggermont (2007)	Substance use	Middle-aged & elderly people (246 over 30s). Age and education demographics reported in brief. Selected using telephone directory – unclear exactly how	Self-reports of TV exposure, direct experience of adolescents & estimates of adolescent substance use	'All young people are substance users'	TV	Belgium	Belgium	ANCOVA	Curvilinear relationship between TV exposure and belief that young people are substance users. Moderated by educational level but not exposure to adolescents	Unclear why selected over-30s Sampling unclear Unclear how assessed content of TV viewing – looks like just reviewed number of hours watched.
Ginsberg et al. (2006)	Cocaine	Study 1: 336 psychology undergraduates. Gender, age and ethnicity demographics given Study 2: 139 psychology undergraduates. No demographics given	Study 1: rate legal sanctions against pregnant women using 1 of 4 substances Study 2: positive, neutral and negative media conditions. Rate teens with exposed to cocaine in-utero or not on academic performance and risk of problems at 18.	Beliefs about punishment, education and life difficulties e.g. LD, teenage pregnancy, violent	Video	USA	USA	ANOVA	Study 1: greater legal sanctions for cocaine. Cocaine perceived as more harmful than alcohol, nicotine or caffeine. Study 2: neutral & negative media conditions; lower grades and more problems for cocaine-exposed teen, limited statistical significance for positive media, therefore stereotypes can be reduced or enhanced by the media	Paper measures included in article. Findings may not be generalisable Focus was on women who had been exposed to cocaine – are these effects gender specific? Article written in incoherent fashion, with results presented before method etc.

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## Appendix E

### **Statement of Epistemological Stance**

For the purposes of the current study, the researcher adopted a positivist, deductive and objective approach to the main research question.

Positivism is based on the belief that there is an objective reality and that this is something that can be measured (Easterby-Smith, Thorpe & Lowe, 1991; Nwokah, Kiabel & Briggs, 2009). The current study was designed to formulate and test out a number of hypotheses, using operationalised measures. The researcher therefore adopted a deductive approach to examine the research questions of the main study, by collecting evidence to prove/disprove the hypotheses (Hussey & Hussey, 1997). The key aim of the current study was prediction and explanation.

## Appendix F: Transcripts and scores from Study 1

		Pilot Participant Number			
		1	2	3	4
<b>Role</b>		Trainee Clinical Psychologist	Assistant Psychologist	Nurse	Social Worker
<b>Subscale Scores</b>	<b>Inability to control</b>	11/20	10/20	14/20	8/20
	<b>Chronic disease</b>	11/20	12/20	17/20	13/20
	<b>Reliance on experts</b>	9/15	11/15	8/15	11/15
	<b>Responsibility for actions</b>	8/15	5/15	3/15	7/15
	<b>Responsibility for recovery</b>	14/15	12/15	13/15	15/15
	<b>Genetic basis</b>	5/15	6/15	4/15	6/15
	<b>Coping</b>	19/25	16/25	15/25	20/25
	<b>Moral weakness</b>	13/25	14/25	16/25	12/25

Volunteer number	Time taken to complete 3-page ABI (standard format)	Time taken to complete 2-page ABI	Time taken to complete 1-page ABI	Comments
1	10 minutes	3 mins. 12 secs.	3 mins. 50 secs	“Tended to rate the 3 page questionnaire differently and not look back at previous answers.” “One page questionnaire was the easiest to complete but tended to rate each substance the same for each item.” “The two page questionnaire was easy to complete but I had more tendency to rate each substance the same.”
2	8 minutes	5 minutes	3 minutes	“The 3 page questionnaire was the longest but I tended to read and rate each item separately, without looking back”. “The 1 page sheet was the easiest but I tended to compare scores for each substance.” “The 2 page survey was easy to use but there was more temptation to rate the same.”
3	9 minutes	5 minutes	6 mins. 15 secs.	Re 3 page: “not comparing” “easier” “not tedious” Re 1 page: “too complicated” “instructions not clear” “comparing a lot” “rushed it after half way through” “tedious” Re 2 page: “easier than 1 page because of numbers and substances” “comparing scores”

### Results from trials of re-formatted ABI vs Original format

**Participant 1:**

Control depends on the person and some people can learn to control their problematic substance use. Some people can be capable of using socially but this is difficult; treatment may help with this but it will still be difficult and depends on the substance. This would be more difficult for heroin and alcohol. Substance problems may get worse but this is not the only outcome. To an extent, recovery is a lifelong process but it is not a lifelong problem. I am unsure whether you have to stop using all substances to recover. I don't see substance use as a disease but others do. I agree that people cannot solve their problems on their own but don't think people necessarily need to seek professional help but some may rely on this. People are accountable for their actions while using substances but may have diminished responsibility. Substance use may be influenced by past experience of genetics. Individuals are responsible for their actions while using but they may not have made a decision deliberately to cause harm. People are responsible for their own recovery and can only decide to stop using when they are ready. You can't make someone do something they don't want to. People are not born 'addicts' but there may be some inherited vulnerability; it depends how they are shaped in life and what they have learned that affects them. Having parents who are addicts is not a prerequisite to a child being an addict. Lots of people use substances to avoid personal problems but not everyone and people can use substances to feel better about themselves. Substances can be used to lessen depression if self-medicating. Some people might start using because they cannot cope with life or to escape from bad family situations at times. Problematic substance use is not a sign of personal weakness but individuals need to accept personal responsibility for their recovery. Relapse is not a sign of personal failure but some people may start drinking because they want to. It is an individual's responsibility if they start drinking again but they may have no other skills to manage life so blame is not helpful.

I may have answered some questions differently if alcohol and heroin had been separated e.g. question on depression. A lot would be similar but I see alcohol and cannabis as different in terms of accountability. I would probably say the same for other drugs but I don't think cannabis is as severe as an addiction. It would make it easier to answer if substances were separated.

**Participant 2:**

Strongly disagree that addicts can control their use, although there may be some element of control but not much. I think that control can be learnt with the right support. I don't think that you can drink in social situations if you find it difficult to control your use, and treatment does not permit you to do this. It depends on the person whether a problem gets worse or not, but I would agree that recovery is a continuous process. Not sure if you have to give up everything to recover – it depends what you are addicted to most and what you are trying to work on. I don't see addiction as a disease. (Gave a disgusted sigh) What would it be a disease of? I think once addicted you need help from somewhere (professional or non-professional), but this can depend on the person at times. Reliance depends upon the impact on the body, relationships and life. You need to take responsibility for your own behaviour and shouldn't rely on others too much. I think it is an addict's fault that they drink – think about normal people. People aren't fully responsible for things they do when addicted to alcohol or drugs but it depends on the circumstances/what has led someone to use. There can be an element of blame but this is not helpful. People are responsible for their own drinking but also need support from other areas. Although there are circumstances when others tell you that you need to stop using e.g. if you have children, ultimately only the person can decide unless they are sent to rehab or locked up. If someone's mother was a heroin user during pregnancy you could be physically addicted at birth. Not sure if addiction is inherited but there may be some social learning. Alcohol is not always used to avoid personal problems but I think people do use it to feel better about themselves but not sure how to justify this. Alcohol is a depressant so it wouldn't lessen depression – not everyone knows this though. People don't always use alcohol because they can't cope with life or because of bad family situations; they may feel helpless or this may be the result of being an addict. I don't agree that alcohol use is a sign of personal weakness and users are not always personally responsible for their actions; it depends on age etc. Relapse is not a personal failure but part of the cycle of change. Some relapses are about how to overcome obstacles. I agree that people start drinking because they want to but don't think it is helpful to see relapse as someone's fault.

I see alcohol as different to cannabis, cocaine and heroin, but may not distinguish between illicit drugs. I may have answered separate questionnaires slightly differently to the generic questionnaire.

**Participant 3:**

Personally, I don't feel that addiction can be controlled but sometimes it might be possible for someone to control their substance use socially, with support. I think that these kind of problems generally get worse before they get better and I think it is a lifelong battle to maintain changes that are made. I'm not sure that you have to give up everything to be healed. I tend to agree with the disease model of addiction as it fits with my training. I'm not sure how well people can solve addiction problems on their own but again am not sure if help needs to come from a professional. People need to take responsibility for their choices to drink and for their behaviour when drinking, for the decision to stop and for their recovery. I don't agree with a genetic model of addiction but can see how substances are used to cope with difficult life situations, although not to cope with life in general. Substance use does not indicate personal weakness, but relapse can be viewed as a personal failure and again choice is important – there is always a choice as to whether to start drinking/using again.

I would view alcohol in a different way to other drugs, and probably think about heroin in a different way to other illicit drugs.

**Participant 4:**

I don't think you can have control if addicted because the addiction controls you. Addiction takes over your life and you will do anything to get more alcohol if you are addicted. It's hard to use socially as others around you will also be using and treatment won't help; based on personal experience of coping with smoking you will end up being addicted again. You build up a tolerance to substances therefore use can only get worse, once a smoker, always a smoker etc. Based on experience of smoking, I think you need to give up everything or you will still be addicted. Addiction is not a disease; diseases are physical problems with the body or brain. It is a choice because a disease means it's out of your control. You can be strong minded enough to solve your own problems but you will probably need some support. This is different for different people. Often you do need support and expertise, but you should not rely on this, you need to do some things for yourself. Substance use is just an excuse for not knowing what you are doing, you are still responsible and you need to realise the problem. People use for their own benefit, no one forces them although they probably feel as though they need it. People should seek help, otherwise addiction could be an excuse for anything. I believe people are responsible for their own recovery because they know they have a problem and need to make changes themselves, with support. You can't give up unless you want to. You need to initiate change by yourself. No one else can so this for you. Others can only help after you have made this decision. I have two views: once an addict always an addict but there may also be a genetic component that makes you what you are as a person. There is also a link with family behaviour but addiction is not inherited; just because your dad is an alcoholic doesn't mean you have to be. Everyone has a choice in life therefore you don't have to use just because your parents do. Substance use is definitely a way of coping, avoiding issues and escaping. You may know that you have a problem but won't admit it; using may help you to forget bad things and feel better. People may use because they have nothing else in their lives or because they get so addicted before they realise. Substance use is a choice and so not a personal weakness. It is always possible to find help and stop. People are responsible for their addiction because it is a choice – no one forced them. If they were forced they have the option to get help. Relapse is just hitting a hurdle, you can get over it. People start using because they want to; they may not intend to get addicted – it may start as social use but get worse. It is no ones fault if someone relapses, it is just another hurdle you need to get over and carry on.

I would have different views for alcohol and drugs. These views would be slightly different between cannabis and class A drugs.





15	Alcoholics/addicts are responsible for their recovery	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
16	Only the alcoholic/addict themselves can decide when to stop drinking/using drugs	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
17	Ultimately, the addict is responsible to fix him/herself	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
18	Some people are alcoholics/addicts from birth	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
19	Alcoholism/drug addiction is inherited	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
20	Children of alcoholics/addicts who drink or use drugs will become alcoholics/addicts	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
21	An addicted person uses alcohol/drugs to avoid personal problems	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
22	People use drugs/alcohol to feel better about themselves	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
23	People use substances to lessen their depression	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
24	Alcoholics/addicts use because they cannot cope with life	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
25	Alcoholics/addicts use substances to escape from bad family situations	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
26	Abusing alcohol/drugs is a sign of personal weakness	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
27	Alcoholics/addicts are personally responsible for their addiction	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
28	Relapse is a personal failure	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
29	Alcoholics/addicts start drinking/using because they want to	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5
30	It is their fault if an alcoholic/addict relapses.	ALCOHOL	1	2	3	4	5
		CANNABIS	1	2	3	4	5
		HEROIN	1	2	3	4	5

*Thank you for taking the time to complete this questionnaire*

**Appendix J - Ethical approval letter**





## Appendix K

### ABI subscales: Definition and Corresponding Item numbers

<b>Subscale</b>	<b>Definition/Description</b>	<b>ABI Item numbers</b>
<b>'Inability to control'</b>	Addicted persons cannot regulate their own alcohol/drug use. Social uses of substances are not possible	1-4
<b>'Chronic disease'</b>	Addiction is a chronic disease that doesn't get better. The only chance for management is abstinence.	5-8
<b>'Reliance on experts'</b>	Recovery is only possible with help from others, especially experts and professionals	9-11
<b>'Responsibility for actions'</b>	Addicted persons are responsible for their own actions and drug use.	12-14
<b>'Responsibility for recovery'</b>	Addicted persons are personally responsible for their recovery.	15-17
<b>'Genetic basis'</b>	Addiction has genetic causes.	18-20
<b>'Coping'</b>	Alcohol/drugs are used to cope with stressful life situations.	21-25
<b>'Moral Weakness'</b>	Using alcohol/drugs is a sign of moral weakness and is a wilful action.	26-30

*Adapted from Luke et al. (2002), p99*

### Scoring

Each item is rated on a scale of 1 (strongly disagree) to 5 (strongly agree). Scores for each subscale is totalled on completion.

## Appendix L

### Participant Information Sheet (*version 1, April 2009*)

Title of Study: "Addiction Beliefs"

Chief Investigator: Melanie Millward

You may contact Melanie Millward at University of Leicester, Clinical Psychology Dept., 104 Regent Road, Leicester, LE1 7LT.

**1. What is the purpose of the study?**

The aim of this study is to understand what type of beliefs staff working in mental health and addiction services, have about addiction and about people who use substances.

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

This study will involve completing a few basic demographic questions about yourself (e.g. age, ethnicity, area of work), followed by a questionnaire asking you to rate your belief in a number of statements about addiction to each of three substances. Finally, you will be asked to describe your views about services for individuals with co-existing mental health and substance use problems.

Completing these questionnaires should take about 15 minutes of your time.

**3. Will information obtained in the study be confidential?**

All questionnaires will be anonymous and no personal information will be collected or retained for the purpose of this study. In addition, all responses returned to the principal investigator will remain anonymous and confidential. Staff from a number of NHS Trusts will be approached to participate in the study, which will mean that individual staff and teams will not be identifiable from the data or write up of this study. This hopefully means that you will feel able to be as open and honest as possible, although it will mean that data cannot be withdrawn after it has been submitted to the principal investigator as I will be unable to distinguish it from that of other participants. Statistical findings reported as a result of the study will be according to groups rather than individuals or specific teams/services in order to retain anonymity and confidentiality.

**4. What if I am harmed by the study?**

Medical research is covered for mishaps in the same way as for patients undergoing treatment in the NHS i.e. compensation is only available if negligence occurs.

**5. What happens if I do not wish to participate in this study or wish to withdraw from the study?**

If you wish to take part in the study, please read & complete the questions which follow. Completion & return of questionnaires will be taken as evidence that you consent to the study. If you do not wish to take part, you need do nothing further and can ignore/return blank/dispose of the enclosed questionnaires.

If you do not wish to participate in this study or if you wish to withdraw from the study you may do so without justifying your decision and your current/future employment will not be effected. Due to the anonymous nature of the survey, it will not be possible to withdraw data after it has been submitted to the principal investigator, however individuals may withdraw their consent (i.e. stop completing & dispose of the questionnaires) at any point prior to this.

## Appendix M



**Information about you**

Please complete the following...

**Which type of service do you currently work in: (tick one box only)**

- Mental Health Services
- Addiction - Drug Service
- Addiction - Alcohol Service
- Addiction - Combined Drug & Alcohol Services
- Specialist Dual Diagnosis Service

**Professional Qualification(s):** please specify \_\_\_\_\_

**Number of years since professional qualification:** \_\_\_\_\_ years

**Number of years experience in current role:** \_\_\_\_\_ years

**Number of years experience working in current setting:** \_\_\_\_\_ years

**Have you completed any further formal training since main qualification: (please tick one box)**

- Yes  No

**If yes, please identify type of training by ticking one of the following boxes:**

- Mental Health Training
- Substance Use/Addiction Training
- Dual Diagnosis Training

**Gender:** male  female

**Age:** \_\_\_\_\_ years

**Ethnicity: (please tick one box)**

- |   |   |
|---|---|
| British <input type="checkbox"/>                    | Pakistani or British Pakistani <input type="checkbox"/>     |
| Irish <input type="checkbox"/>                      | Bangladeshi or British Bangladeshi <input type="checkbox"/> |
| Any other white background <input type="checkbox"/> | Any other Asian Background <input type="checkbox"/>         |
| White & Black Caribbean <input type="checkbox"/>    | Caribbean <input type="checkbox"/>                          |
| White & Black African <input type="checkbox"/>      | African <input type="checkbox"/>                            |
| White & Asian <input type="checkbox"/>              | Any other black background <input type="checkbox"/>         |
| Indian or British Indian <input type="checkbox"/>   | Chinese <input type="checkbox"/>                            |
|   | Any other ethnic background <input type="checkbox"/>        |

**How confident do you feel in working with clients with a ‘dual diagnosis’ (clients with co-existing mental health & substance use problems)? Please rate using the scale below:**

1 2 3 4 5 6 7 8 9 10  
 Not at all confident Extremely confident

**Do you consider yourself to be skilled as a specialist ‘dual diagnosis worker’ i.e. you feel competent in working with individuals with both mental health and substance use problems: (please tick one box below)**

- YES  NO

**Thank you - please now answer the following questions**

## Appendix N



School of Psychology, DClinPsy

Please read each of the statements below and rate your level of agreement to each one using the following scale:

Strongly Disagree

Strongly Agree

		1	2	3	4	5
		Agree			Strongly Disagree	Strongly Agree
1	A person addicted to cannabis can control their use	1	2	3	4	5
2	Cannabis addicts can learn to control their using	1	2	3	4	5
3	Addicted persons are capable of using cannabis socially	1	2	3	4	5
4	Treatment can allow cannabis addicts to use socially	1	2	3	4	5
5	A cannabis problem can only get worse	1	2	3	4	5
6	Recovery is a continuous process that never ends for cannabis addicts	1	2	3	4	5
7	To be healed, cannabis-addicted persons have to stop using all substances	1	2	3	4	5
8	Cannabis abuse is a disease	1	2	3	4	5
9	Cannabis addicts are not capable of solving their drug problem on their own	1	2	3	4	5
10	A cannabis addict must seek professional help	1	2	3	4	5
11	A recovering cannabis addict should rely on other experts for help and guidance	1	2	3	4	5
12	An addict should not be held accountable for things they do while high on cannabis	1	2	3	4	5
13	It is not an addict's fault they use cannabis	1	2	3	4	5
14	Addicts are not responsible for things they did before they learned about their cannabis addiction	1	2	3	4	5
15	Cannabis addicts are responsible for their recovery	1	2	3	4	5
16	Only the addict themselves can decide when to stop using cannabis	1	2	3	4	5
17	Ultimately, the cannabis addict is responsible to fix him/herself	1	2	3	4	5
18	Some people are cannabis addicts from birth	1	2	3	4	5
19	Cannabis addiction is inherited	1	2	3	4	5
20	Children of cannabis addicts who use drugs will become addicts	1	2	3	4	5
21	An addicted person uses cannabis to avoid personal problems	1	2	3	4	5
22	People use cannabis to feel better about themselves	1	2	3	4	5
23	People use cannabis to lessen their depression	1	2	3	4	5
24	Cannabis addicts use because they cannot cope with life	1	2	3	4	5
25	Addicts use cannabis to escape from bad family situations	1	2	3	4	5
26	Abusing cannabis is a sign of personal weakness	1	2	3	4	5
27	Cannabis addicts are personally responsible for their addiction	1	2	3	4	5
28	Relapse is a personal failure for cannabis addicts	1	2	3	4	5
29	Cannabis addicts start using because they want to	1	2	3	4	5
30	It is their fault if a cannabis addict relapses.	1	2	3	4	5

Thank you for taking the time to complete this questionnaire

Please turn the page

## Appendix O





Please read each of the statements below and rate your level of agreement to each one using the following scale:

**Strongly Disagree**

1

2

3

4

**Strongly Agree**

5

		Strongly Disagree				Strongly Agree
		1	2	3	4	5
1	An alcoholic can control their use of alcohol	1	2	3	4	5
2	Alcoholic can learn to control their drinking/using	1	2	3	4	5
3	Addicted persons are capable of drinking socially	1	2	3	4	5
4	Treatment can allow alcoholics to drink socially	1	2	3	4	5
5	A drinking problem can only get worse	1	2	3	4	5
6	Recovery is a continuous process that never ends for alcoholics	1	2	3	4	5
7	To be healed, alcoholics have to stop using all substances	1	2	3	4	5
8	Alcoholism is a disease	1	2	3	4	5
9	Alcoholics are not capable of solving their drink problem on their own	1	2	3	4	5
10	An alcoholic must seek professional help	1	2	3	4	5
11	A recovering alcoholic should rely on other experts for help and guidance	1	2	3	4	5
12	An alcoholic should not be held accountable for things they do while drunk/high	1	2	3	4	5
13	It is not an alcoholic's fault they drink	1	2	3	4	5
14	Alcoholics are not responsible for things they did before they learned about their addiction	1	2	3	4	5
15	Alcoholics are responsible for their recovery	1	2	3	4	5
16	Only the alcoholic themselves can decide when to stop drinking	1	2	3	4	5
17	Ultimately, the alcoholic is responsible to fix him/herself	1	2	3	4	5
18	Some people are alcoholics from birth	1	2	3	4	5
19	Alcoholism is inherited	1	2	3	4	5
20	Children of alcoholics who drink will become alcoholics	1	2	3	4	5
21	An addicted person uses alcohol to avoid personal problems	1	2	3	4	5
22	People use alcohol to feel better about themselves	1	2	3	4	5
23	People use alcohol to lessen their depression	1	2	3	4	5
24	Alcoholics use because they cannot cope with life	1	2	3	4	5
25	Alcoholics use substances to escape from bad family situations	1	2	3	4	5
26	Abusing alcohol is a sign of personal weakness	1	2	3	4	5
27	Alcoholics are personally responsible for their addiction	1	2	3	4	5
28	Alcoholic relapse is a personal failure	1	2	3	4	5
29	Alcoholics start drinking because they want to	1	2	3	4	5
30	It is their fault if an alcoholic relapses.	1	2	3	4	5

*Thank you for taking the time to complete this questionnaire*

Please turn the page

## Appendix Q



## Appendix R

Addiction Beliefs: Debrief form  
(Version 1 - April 2009)

Thank you for taking the time to participate in this study.

This investigation focuses on service related differences in staff beliefs about alcohol, cannabis and heroin addiction. In addition, the study will look at whether there are any demographic factors (e.g. age, gender, profession and ethnicity) that are associated with particular beliefs about addiction to specific substances. This study also aims to identify whether or not staff perceive any facilitators and/or barriers to co-working with colleagues in either addiction/mental health services or accessing support for their clients from these services and in addition what solutions may be possible to allow for the development of improved access to and effective services for people with co-existing mental health and substance use problems.

General findings will be sent out to service/team managers on conclusion of the study. Findings will be described according to type of service i.e. addiction, mental health & dual diagnosis services or in relation to demographic factors and not in relation to specific teams so your anonymity will be protected. The study is also inviting participants from a number of NHS Trusts in the UK, thereby hopefully maximising the anonymity of individual responses.

All responses will be treated with strict confidence and any questions can be directed to the principal investigator via email: [mjm55@le.ac.uk](mailto:mjm55@le.ac.uk)

Melanie Millward  
Principal Investigator

## Appendix S

Substance	ABI subscale	Mental Health		Substance Misuse		Dual Diagnosis	
		<i>Mean</i>	<i>Median</i>	<i>Mean</i>	<i>Median</i>	<i>Mean</i>	<i>Median</i>
<b>Alcohol</b>	<i>Inability to control</i>	11.75	12	12.70	12	13.75	14.5
	<i>Chronic disease</i>	12.12	12	9.17	9	8.50	8
	<i>Reliance on experts</i>	8.82	9	6.60	6	6.42	5.5
	<i>Responsibility for actions</i>	6.30	6	5.04	5	7.33	7
	<i>Responsibility for recovery</i>	11.85	12	12.26	12	10.92	11.5
	<i>Genetic basis</i>	6.35	6	4.94	4	5.08	4.50
	<i>Coping</i>	17.05	18	16.21	15	17.25	18
<b>Cannabis</b>	<i>Inability to control</i>	13.02	13	14.02	14	14.83	15
	<i>Chronic disease</i>	10.68	10.5	7.81	7	7.92	8
	<i>Reliance on experts</i>	7.80	8	5.43	6	5.17	4
	<i>Responsibility for actions</i>	5.92	6	5.32	5	5.83	5
	<i>Responsibility for recovery</i>	11.80	12	12.19	12	11.75	12
	<i>Genetic basis</i>	5.35	6	4.00	3	3.83	3
	<i>Coping</i>	16.18	16	15.77	15	16.33	16
<b>Heroin</b>	<i>Inability to control</i>	10.95	10	11.72	12	12.75	13.5
	<i>Chronic disease</i>	12.08	12	8.70	8	8.42	8
	<i>Reliance on experts</i>	8.92	9	6.49	6	6.83	6.5
	<i>Responsibility for actions</i>	6.15	7	5.34	5	6.25	6
	<i>Responsibility for recovery</i>	11.90	12	12.26	12	11.08	11.5
	<i>Genetic basis</i>	6.58	7	4.85	4	4.75	4
	<i>Coping</i>	16.32	17	16.06	15	16.75	17

Mean scores for ABI subscales across the three types of service

## Appendix T

<b>Phase</b>	<b>Description of the process</b>
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion, across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

*Taken from Braun & Clarke (2006), p 87.*

## Appendix U

Pp no.	Service	Barriers	Levers
1	SM		
2	SM	Silo services, dual diagnosis not a helpful term – encourages agencies to consider their remit too narrowly – doesn't encourage professional responsibility. Doubtful if dual diagnosis should be labelled specialist territory.	Current guidelines – both national and local not being adhered to. Need closer liaison with busy services. Boundary disputes – who does what and nonsense arguments/discussion about semantics all fouls it up for clients.
3	SM	Patients are often passed from one service to another – often alcohol services are left to manage both the addiction & mental health issues as mental health services can be reluctant to take on patients with substance misuse problems.	Clearer referral pathways Better understanding of services Joint working
4	SM	Refusal by some psychiatrists in mental health services to accept that some drinkers have co-existing mental health problems (“it's all down to their drinking”).	A willingness for mental health practitioners to work with drinkers & a willingness for alcohol workers to make more time to be pro-active in liaising with CMHTs.
5	SM	Reluctance of CMHT to joint work	
6	SM	Poor organisation of our Trust, agencies trying to protect their work levels, prejudice against mental health and substance abuse clients.	
7	SM	Lack of training Lack of confidence in staff to work with DD Attitudes	Effective link worker system – DD worker in each setting More training, supportive supervision c/o DD Joint working/assessments
8	SM	Mental health services often unwilling to work with clients with alcohol problems	Further training and more stringent use of dual diagnosis protocols
9	SM	Pressure of work	Getting to know one team well
10	MH	Trust organisation Some staff prejudice towards people who use illicit substances. Judgements given to non-prescribed medication, not given to prescribed medication even if used for same reason	More working together A dual diagnosis team recognised as such Space, groups, time, No DNAs!
11	MH	Resources Prejudice on both sides	Resources
12	SM	Pressure of work in both areas is the main barrier	Clear guidelines on areas of responsibility reduced work load in both areas. An ethos from “on high” that joint working is encouraged.
13	MH	Sorry don't know	Sorry, don't know
14	MH	No barriers at all	Liais with substance misuse team about clients and advice for appropriate treatment and help on time
15	MH		
16	MH	Within our team it is established practice for use to address both aspects of the dual diagnosis	Specialist help is available should we feel it is needed. Service works reasonably well.
17	MH	There can be a tendency for the two regimes becoming exclusive to their own specialism. Addicted persons are often viewed in a negative way and can experience discrimination.	Being more accepting of individuals addiction problems and working ‘with’ them rather than against them.
18	MH	Staff attitudes and beliefs about people with substance misuse creates a barrier to acceptance in mental health. This may be due to ignorance of the subject, personal beliefs or both.	1) Further education for mental health staff around substance misuse and the effects on mental state. 2) Each team to have a substance misuse specialist
19	SM	Services are extremely busy so are quick to want to ‘pass the buck’. Mental health services in my experiences often stigmatise substance use and assume substance is cause of everything.	Secondments Mutual training
20	SM		
21	DD	Funding, commissioning of drug services. Understanding of substance misuse in mental health fields	Collaborative working Joint meetings Attendance at MDMs Training
22	SM		Education for MH workers, Encouraging liaison and joint sessions

23	MH	Don't know local services much, I am new to this locality	The more mental health teams skill/knowledge and experience on drugs/alcohol increases the more they would feel confident to include dual diagnoses people in their service scope. Regular addiction training for MH services.
24	MH		
25	SM	Failure of the parallel model	Joint working of CMHT and drug services along with working with carers
26	SM	Unclear pathways e.g. between mental health services CMHTs and substance misuse Unclear objectives for services/teams	Clear pathways Training/Education around dual diagnosis Reduce stigma around substance misuse clients
27	SM	It often seems that mental health services want to close cases and handover to us to meet a client's needs. Substance issues don't always need a specialist worker but there seems to be a 'fear factor' that discourages mental health workers from trying even brief interventions	Where there are good networks and relationships across services there is a shared understanding of the issues and often some brilliant joint working
28	SM	Understanding of drug/alcohol addictions in other services Prejudice Lack of training	Increasing dual diagnosis services Better training and improved understanding may reduce prejudice in MH services and fear of those using substances
29	SM	CMHT & addiction services have a different remit. MH teams need the substance removed in order to work on MH issues and addiction services need the MH addressed in order to work on the addiction??	More joint working A better understanding of what each service does Joint care plans??
30	SM	Difficult to arrange review meetings for clients due to unavailability of all members involved in patients care at one time.	To improve communication among different workers involved in patients care
31	SM		
32	SM	Our experience in addiction services is that mental health services seem to be inconsistent in their willingness to work with clients who have problems with alcohol or substance use. This is in spite of the succession of policies and advice from above.	Person-to-person collaboration and networking is often the most effective means of achieving co-ordinated provision of services. In our district "complex needs workers" who link up service users with services in the community have been invaluable
33	SM	Blaming the mental health on substance misuse so will not take on the client	To meet with services and educate one another on each area
34	SM	A lot of mental health teams refuse to treat people with addictions until they are clean	
35	SM		
36	SM	Community and crisis teams regularly refuse to work with clients who have a substance misuse issue – what do they want to work with them when they are "better".	Education on ways/means of working with substance misuse – link nurses or members of their team that specialise in substance misuse
37	SM	Mental health services frequently refuse to accept referrals for people who still use alcohol or drugs. Our service ends up carrying these clients and we are not specialist mental health workers	Mental health services being more willing to work with addiction and not constantly refusing to do so.
38	SM	Clients generally do not like having appointments here there and everywhere	Better communication/information sharing Having both services in same building/close proximity
39	SM		
40	SM	Some professionals in mental health have the attitude that if substance misuse exists then the associated mental health problem is self inflicted Lack of understanding about dual diagnosis itself Services exist separately and geared up to work with dual diagnosis	More joint working and joint training
41	SM	Diagnosis-chicken and egg- what came first which actually isn't relevant to the treatment plan	Being based in the same building
42	SM	Preconceived ideas	Better understanding of how each department works Staff shadowing staff
43	SM		
44	SM		
45	MH	Don't know	
46	DD	Pressure of work Lack of resources (staff, time) Attitudes, judgements	Training Having more time to devote to care planning and intervention

47	DD	Staff stick to their areas of expertise Blaming mental health or substance use as exclusion to treatment	Joint training Flexibility of staff to work in both areas – MH and substance use
48	DD	I think separate policies and procedures and ways of working can possibly get in the way of joint working Also staff confidence and skills	Using and integrated treatment approach, including training support and supervision
49	DD		
50	SM	Assessment process can be intimidating to service users so they do not keep appointments	
51	SM	Degree of silo working Risk of the most chaotic and damaging individuals stop through the gaps between services	Better communication between substance misuse services and generic mental health services. Better training-both ways Greater use of assertive outreach
52	SM	Mental health services tend to see drug use as a separate issue-one to be treated first before a mental health problem, not in conjunction with Substance teams end up holding mental health cases	A dual diagnosis service that knows what its doing and is taken seriously by mental health services
53	MH		
54	SM	Time Resources	Staff reduce boundaries – not be precious about skills
55	SM		
56	SM		
57	SM	Although there have been significant improvements dual diagnosis services are not as integrated into substance misuse services	Greater communication by workers
58	SM		
59	SM	Mental health services often refuse to see people who are using Referral processes are too complicated	Better and quicker referral pathways
60	MH		
61	MH		Shared care promoted by care coordinator
62	MH		
63	MH	Communication Supporting each other	
64	MH	Availability at short notice to discuss risk issues – significant of misuse of drugs/substances to the m/h of that service user	More defined time for example to attend MDT group supervision, do joint visits, attend training for refreshers on current issues
65	MH	More with agencies outside health who have zero tolerance on substance misuse	More communication – writing in MDT notes, not having separate files More substance misuse training-harm minimisation Information sharing
66	MH	No barriers other than lack of resources/staffing levels	More resources/staff
67	MH		
68	MH		
69	MH	Having a separate dual diagnosis service has created a barrier to clients in AO as referral process is required, would be better if we had a worker in team	
70	MH	Uncooperative Refusal due to confidentiality Autonomy	Involve people who have endured the same problems-explore from their experiences
71	MH	As long as they will engage with services to seek help and cooperative it will work	Learning from experience of other people
72	MH	Addiction services not acknowledging holistic/joint working for mental health needs. Communication/involvement in decision making/treatment plans	Working alongside rather than separate services. Follow up once being discharged having undergone detox. Currently expected that mental health team does this

73	MH	We have an addiction service and gate way to alcohol/addiction/counsellor called CAN. The CAN workers are (not trained they are support workers) relying on NDAS and CMHT. The alcoholics who needed detox and also having severe mental health issues get lost in the systems. These are the people DNA appts. Though the clients have 50% addiction and 50% mental health problem, the burden eventually lie on CMHT. These are the very risky clients who take their lives. We do not have a system joint working with NDAS like joint care plans, joint risk assessment etc. Some of these clients had forensic referrals and professional meetings. The NDAS medics doesn't attend even invited. Frustrating.	There should be an easy way to jointly work together with NDAS team and CMHT team. The NDAS team should take responsibility and do the care plan and risk assessment and pass it on to us or we should do it jointly. There is a confidentiality issue when we send info to CAN: we ignore this is client is very risky.
74	MH	I know the theory but people with a primary diagnosis of substance misuse get diverted to drug and alcohol services as the team doesn't feel comfortable holding them	Clearer criteria as to what services are most appropriate for dual diagnosis clients Further training and regular updates for staff in both sorts of teams More coherent working between teams-not sure how though
75	MH	Users cannot be referred directly to drug and alcohol services, they are screened by CAN, making it a lengthy process and meaning users are seen by lots of different people	More time for mental health workers to give to service users. Caseloads so high only essentials get done. Would be good to jointly coordinate care
76	MH	Lack of joint working Logistically services based in different towns etc to existing mental health teams	Improved more available training Better networking Less restrictive referral process for professionals
77	MH	There is at times no discussion as to what is a person's primary diagnosis/source of support needs (ie MH/SM)	Incorporating specialist dual diagnosis worker within CMHTs
78	SM	The whole notion that substance misuse is a disease or that certain individuals can be labelled as 'alcoholic' (this applies to all areas not just dual diagnosis) The whole notion that substance misuse is a psychiatric/mental health condition	
79	SM	Psychiatry can exclude substance users-can blame them for their problems and fail to help users make sense of their situation-thus creates a lack of effective working between psychiatry and substance misuse services	Willingness to work collaboratively Effective education for psychiatry staff-compulsory! Targets on identification and brief advice/referral for all psychiatric settings with financial penalties for non-compliance
80	MH	We used to have a 'dual diagnosis' worker which was a great help and support who acted as a link between services. I find many drug and alcohol workers in the NHS very judgemental about people who are addicts and I cannot work with them (my own fault I guess), as in staff not clients	Have more social workers based in drug and alcohol services and less nurses who seem (not all) to be very judgemental and uncaring. CAN workers are generally great! A named link worker in both CMHTs and drug services
81	MH	Often mental health services will not get involved when a person is drunk or high, or their mental health problems are blamed on their addictions	
82	MH	The appointments services for clients are separate-there is little joint working. There is reasonable liaison between services	Joint working-regular meetings between the two services
83	MH		
84	MH		
85	MH	Not enough beds on wards-so waiting lists are long	
86	MH		
87	MH		Interagency training Shadowing
88	MH		
89	DD	Stigma-views like alcoholic or addict Lack of confidence of staff-feeling they can't cope Procedures/policies Poor communication	Joint working Flexible working
90	DD	Lack of confidence in staff Different policies	Joint working Same building for MH and SM services
91	DD	Lack of confidence Policy-different in each type of service Poor communication	Flexible joint working Shared training

92	SM	Inconsistency in approaches Different recording systems/care plans High case load	Collaborative/joint working Link workers Collaborative policies, same systems
93	SM	Lack of confidence Time and resources Stigma	Education/training for MH staff on substance use and vice versa Liaison and joint sessions
94	SM	Stigma Time and targets	Better training
95	SM	Dual diagnosis services limited Unclear referral/policy guidance	Better communication between services eg joint meetings or link workers
96	DD	Chicken and egg-each feel other problem needs sorting first Lack of time due to high caseloads and targets	Joint teaching/training Time allocated for joint working which is recognised in targets
97	DD	Complex referral procedures Lack of confidence Lack of staff time	Incorporate joint working into policies Evaluate parallel care model Training
98	DD	Different policies High caseloads	Being in the same site Joint training Link staff
99	MH	Mental health services feel drug/alcohol issues need to be managed before the real mental health work can start High case loads	Clearer criteria developed between services so people stop falling through gap Training and regular updates Joint working/meetings
100	DD	Funding for services Understanding of link between MH and SM	Joint meetings Training Link working
101	MH	Lack of confidence of MH teams to work with substances and vice versa Different policies and targets	More joint assessments/working/supervision Better training
102	MH	Referral process and different systems	Link workers Joint assessment and meetings

## Appendix V

### Coding: Stage 1

Each comment was written onto a separate card and organised into groups of identical/similar comments. These groups are shown below with corresponding participant numbers ().

#### Levers:

Guidelines (8, 12, 2)

Joint care plans (29)

Referral pathways (76, 74, 3, 26, 59)

Stigma (17, 26)

Targets (79)

Communication (30, 38, 81, 57, 65, 95)

Ethos from on high (12)

Experience (23)

Boundaries (2, 54)

Link workers (102, 7, 36, 80, 98, 100, 18)

Joint working (14, 61, 79, 99, 100, 3, 7, 10, 21, 25, 29, 40, 64, 72, 73, 74, 75, 82, 89, 90, 91, 92, 93, 96, 96, 97, 101, 102)

Clearer criteria (99)

Resources (66, 10, 11, 12, 64, 75, 80)

Evaluate parallel care model (97)

Networking (27, 32, 76)

Dual diagnosis service (10, 28, 69, 77, 52)

Training/Education (7, 8, 18, 19, 21, 22, 23, 26, 28, 33, 36, 46, 47, 51, 64, 65, 74, 76, 79, 87, 91, 93, 94, 96, 97, 98, 99, 101)

Use Assertive Outreach (AO) (51)

Integrated approach (48)

Others' experience (70, 71)

Flexibility (47)

Follow up (72)

Support (63)

Closer liaison (2)

Information sharing (65)

Location (38, 41, 90, 98)

Access to specialists (16, 32)

Shadowing/secondments (1, 9, 42, 87)

Better understanding (3, 9, 29, 42)

Willingness (4, 37)

Not enough beds (85)  
No joint working (82, 73, 76, 25, 5)  
Logistics (76, 38)  
Silo working (51)  
Clients (71)  
Uncooperative/refusal (70)  
Zero tolerance (65)  
Policies (89, 90, 91, 95, 98, 101)  
No barriers (14)  
Funding (100, 21)  
Lack of training (7, 23, 28)  
Unclear objectives (26)  
Referral (72, 59, 73, 75, 97, 102, 26)  
Different recording systems (92)  
Understanding links (100, 21, 28, 40)  
Trust organisation (6, 10)  
Risk (51)  
Inconsistency (92, 32)  
Chicken and egg (96, 41)  
High case loads (92, 96, 99, 6, 9, 12, 19, 46)  
Lack of time & resources (73, 30, 54, 64, 66, 93, 94, 97, 11)  
Stigma/Attitudes (80, 89, 93, 94, 6, 7, 40, 10, 11, 18, 19, 28, 42, 46, 78)  
Communication (63, 72, 77, 89, 91)  
Dual diagnosis (57, 80, 95, 16)  
Separate issues (52, 99)  
Language (2)  
Passed on (3)  
Refusal (59, 8, 34, 36, 37)  
Expertise (47)  
Blame (79, 81, 4, 33, 47)  
Separateness (29, 17, 40, 48)  
Lack of confidence (74, 89, 90, 91, 93, 97, 101, 7, 27, 48)  
Assessment (50)

### Coding: Stages 2-3:

Stage 2: Initial groups were then organised into similar/associated groups.

Stage 3: At this point, it did not feel that levels of themes had been exhausted so groups were organised into themes and sub-themes.

<u>Levers:</u>		
<b>Organisational: Factors</b>	Policies & guidance:	<i>Referral Guidelines Collaborative policies Clearer criteria Follow up</i>
	Ethos:	<i>Ethos from on high</i>
	Targets:	<i>Targets</i>
	Location:	<i>Location</i>
	Evaluation:	<i>Evaluate parallel care model</i>
<b>Personal: Factors</b>	Stigma:	<i>Stigma</i>
	Flexibility:	<i>Flexibility/Willingness Boundaries Better understanding</i>
	Communication & Support:	<i>Communication Support</i>
<b>Joint Strategies:</b>	Training:	<i>Training/Integrated approach</i>
	Joint work:	<i>Joint work Shadowing Closer liaison Networking Others' experience</i>
	Experience:	<i>Experience</i>
	Information sharing:	<i>Joint care plans Information sharing</i>
<b>Access to: Resources</b>	Team resources:	<i>Resources</i>
	Link workers:	<i>Link workers</i>

**Coding: Stages 2-3 continued:**

<b>Barriers:</b> <b>Available:</b> <b>Resources</b>	Staff resources:	<i>Lack of staff time &amp; resources</i> <i>Pressures of work</i> <i>Assessment</i>
	Lack of supportive: Resources	<i>Lack of training</i> <i>Not enough beds</i>
	No joint working:	<i>No joint working</i>
<b>Clinician:</b> <b>Factors</b>	Attitudes:	<i>Stigma/Attitudes</i> <i>Blame</i> <i>No barriers</i>
	Lack of confidence:	<i>Lack of confidence</i>
	Understanding:	<i>Understanding links</i>
	Communication:	<i>Communication</i>
<b>Organisational:</b> <b>Factors</b>	Trust organisation &: funding	<i>Funding</i> <i>Trust organisation</i>
	Policies & objectives:	<i>Unclear objectives</i> <i>Separateness</i> <i>Different recording systems</i> <i>Policies</i> <i>Inconsistencies</i> <i>Risk</i>
	Referral:	<i>Referral</i> <i>Zero tolerance</i>
	Logistics:	<i>Logistics</i>
	Language:	<i>Language</i>
	<b>Substance Misuse:</b> <b>Vs Mental Health</b>	Dual diagnosis:
‘Chicken & Egg’:		<i>Separate issues</i> <i>Chicken and egg</i> <i>Passed on</i>
Area of expertise:		<i>Refusal</i> <i>Expertise</i>
<b>Miscellaneous:</b>		<i>degree of silo working</i>

**Coding: Stage 4:**

Given the similarities in themes between ‘barriers’ and ‘levers’, it felt appropriate to combine these two groups of themes to provide an overall group of main themes and sub-themes that covered both the barriers and levers to joint working, given that there were often related. Definitions were then developed for each main theme (see main report).

<b>Organisational Factors:</b>	Policies, guidance & objectives Trust organisation & funding (including <i>targets</i> ) Ethos/Language Logistics Substance Misuse Vs Mental Health
<b>Clinician Factors:</b>	Stigma, Attitudes & Understanding Confidence Flexibility Communication & Support
<b>Access to resources:</b>	Staff resources Lack of supportive resources Specialist workers
<b>Joint strategies:</b>	Training Joint work and information sharing Experience