UNIVERSITY OF HULL

Substance Use and Psychosis: An Exploratory Study.

Being a dissertation submitted in partial fulfilment of the requirements for the Degree of Doctor of Clinical Psychology.

In the University of Hull.

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ABSTRACT

The needs of individuals who have a diagnosis of psychosis and use substances pose one of the greatest challenges faced by mental health services today (Department of Health, 2002). A large amount of research has been undertaken attempting to understand why apparently higher rates of substance use are observed in this population, yet the findings are equivocal at best. As such there is little understanding of the process by which substance use might be maintained in this population.

This study aimed to address the research questions posed by investigating the experiences of the client group (individuals with a diagnosis of psychosis and substance use), a group whose experiences are notable by there absence from the research to date (Dixon et al, 1990). The objectives of the study were fulfilled, these being the exploration of individuals' experiences of use and the impact that this has upon their lives and the development of a model by which to understand the process by which substance use is maintained.

Twelve qualitative interviews were analysed using Interpretative Phenomenological Analysis. Three super-ordinate themes were identified as emerging from the participants' transcripts; 'Increased control', 'Feeling out of control', and 'Ambivalence'. Ten composite themes contributed to the formation of these themes.

The stages of change model and dialectical theory were used to understand the ambivalence that was seen to maintain participants' substance use. Further hypotheses were drawn from the literature regarding the process of change and a model of compiled. The implications for clinical practice and future research were discussed.

CHAPTER ONE

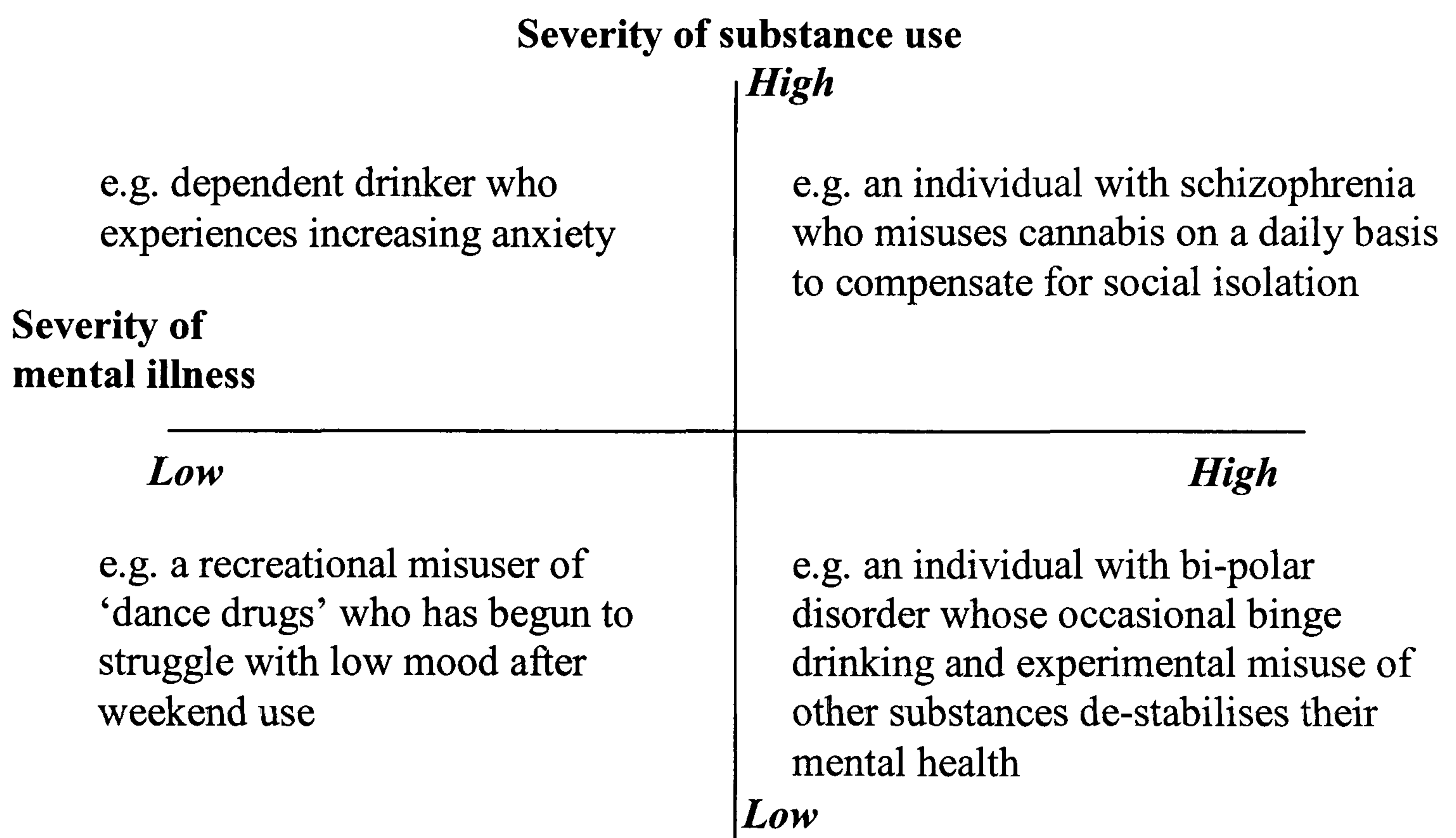
INTRODUCTION

Section 1: Definition and Description of Dual Diagnosis

1.1 : Terms and definitions

The term `dual diagnosis' can be used to cover a wide range of mental health and substance misuse problems that an individual may experience concurrently (Department of Health, 2002). The Dual Diagnosis Good Practice Guide (Department of Health, 2002) advocates a framework that plots the person's experience on two axes (see Figure 1).

Figure 1: The Spectrum of Co-existing Psychiatric and Substance Use Disorders (taken from the Dual Diagnosis Good Practice Guide, Department of Health, 2002)



Recognition of the serious problems of patients with a dual diagnosis began in the early 80s, as authors described the `new generation' of patients having multiple problems often compounded by substance misuse (Bacharach, 1977; Bergman and Harris, 1985; Pepper et al, 1981). It has been suggested that drug and alcohol use by

individuals with a diagnosis of schizophrenia is one of the most pressing issues faced by the mental health system today (Department of Health, 2002). This study is solely concerned with the experiences of individuals with a diagnosis of psychosis who use or misuse substances. As Figure 1 illustrates, individuals can experience varying degrees of severity with regards to their mental health problems and their substance use. As such, the term 'dual diagnosis' will used throughout this document as an abbreviation, capturing the spectrum of experience and not necessarily a clinical diagnosis of the two disorders. However the phrase most commonly used to define the population under study is 'individuals with a diagnosis of psychosis who use substances'. The term 'misuse' is avoided as much as possible because it is a value judgement.

1.2: Prevalence of Dual Diagnosis

Is substance use more prevalent among people with a psychotic illness than the general population? Phillips and Johnson (2001, pp.270) state that it is vital to answer this question, as *'explanations of the mechanisms of dual diagnosis are only necessary if people with a psychotic illness misuse substances more than the general population'*. This explanation may go some way to explain the vast quantity of research devoted to the establishment of the prevalence rates of dual diagnosis. It also serves as an appropriate start point for this study.

Research findings from U.S. based projects have estimated a prevalence of substance misuse within the psychiatric population as being between 20-75% (Barbee et al, 1989; Drake et al, 1989; Regier et al, 1990) This wide variability can be attributed to a number of methodological factors which will be discussed fully at a later stage. The most comprehensive of prevalence studies is the Epidemiological Catchment Area [(ECA), Regier et al, 1988]; over a period of 4 years (1980-1984) it drew a sample of

20,000 from community and institutional based populations and generated data regarding co-morbidity from structured clinical interviews. The findings of the ECA study concluded that psychiatric patients in general, and individuals with a diagnosis of psychosis in particular, are more prone to use substances (Mueser et al, 1992). A lifetime prevalence of substance use for the population of individuals with a diagnosis of psychosis was calculated to be 47% compared to 16.7% in the general population (Dixon, 1999). These findings are consistent with those drawn from treatment-based research samples collected in the same chronological period (Cuffel et al, 1993) and a number of other epidemiological studies (Ananth et al, 1989; Mueser et al, 1990; Siris et al, 1988). Prevalence rates vary depending on the population from which the sample is drawn, for example for individuals with a diagnosis of schizophrenia in prison, lifetime prevalence rates of substance misuse are as high as 90% (Regier et al, 1990). Estimates of recent or current substance misuse range from 20-40% (Drake, Osher and Wallach, 1989; Mueser et al, 1990).

Far fewer studies have examined prevalence rates of dual diagnosis in the U.K. (Phillips and Johnson, 2001). The National Psychiatric Morbidity Survey (Farrell et al, 1998) is one of those few studies. It measured the rates of substance and alcohol use in three populations, general, institutional (residential), and the homeless but they did not identify enough individuals in their general population sample with a diagnosis of schizophrenia to allow for like with like comparison. Their findings showed lower rates of heavy drinking in the sample of individuals with a diagnosis of schizophrenia, 2%, in comparison to the general population, 5% (Farrell et al, 1998). Farrell et al (1998) found higher rates of drug use within the last year in the sample of individuals with a diagnosis of schizophrenia in the institutional group, 7%, in comparison to the general population, 5%. These findings are greatly limited in their generalisability due to the lack of an identified group within the general population

sample with a diagnosis of schizophrenia. There may exist differences between individuals with a diagnosis of schizophrenia living in the community and those living in residential settings. Often residential establishments operate strict anti-drug policies and residency depends on adherence to such policies. People living in such establishments may also have more limited opportunity to access drugs in comparison to those people living in community settings. It seems somewhat surprising therefore given these restrictions that such a high prevalence was identified amongst the residential population. Whilst the findings do indicate higher rates of use in the residential sample it is likely that this under-represents the rates of alcohol and substance use by individuals with a diagnosis of schizophrenia in the community. More UK studies will be addressed in relation to specific substances of use.

A number of European studies have concluded that the prevalence of dual diagnosis is not as uniformly high as in the U.S. (Phillips and Johnson, 2001). A consensus exists within such studies that opiate use is more frequent than stimulant use (Soyka et al, 1993; Modestin et al, 1997). National variation of this type emphasises the need for the 'mechanisms of substance use development to be understood in context of local patterns of use and wider social and cultural factors' (Phillips and Johnson, 2001).

1.3 : Prevalence of Substances of Misuse

In addition to assessing the prevalence of dual diagnosis a number of studies have attempted to quantify the prevalence with which specific substances are abused by individuals with a diagnosis of psychosis and whether these rates differ significantly with the rates of abuse within the general population.

1.3.1: Alcohol

The ECA study (Regier et al, 1988) calculated a lifetime prevalence rate of 33.7% for

a co-morbid diagnosis of schizophrenia and any alcohol disorder and 27.5% for a co-morbid diagnosis of schizophrenia and any other substance use disorder. Lifetime prevelance rates of 13.5% (any alcohol use disorder) and 6.1% (any substance use disorder) were calculated for the general population (Regier et al, 1988). Based on a review of the findings from 32 studies Mueser et al (1990) concluded that alcohol is the most commonly abused substance, identifying lifetime prevalence rates of abuse from between 12.3% to 50% for alcohol dependence amongst samples of individuals with a diagnosis of psychosis (Alterman et al, 1981; Drake et al, 1990; Mueser et al, 1990). In their own study of 149 recently hospitalised patients with a diagnosis of psychosis, Mueser et al 1990) identified a lifetime prevalence rate of 47% for alcohol abuse. In comparing the prevalence rates of their experimental group to those of the general population, using data from the National Household Survey on Drug Abuse (NIDA, 1987), they concluded that rates of alcohol abuse within the experimental population although apparently high were actually lower than in the general population. The Mueser et al (1990) study recognises the limitations of using surveys without base rate comparisons. A less comprehensive review conducted by Schneirer and Siris (1987) confirmed the findings of Mueser et al (1990) in concluding that alcohol is abused equally or less frequently by individuals with a diagnosis of psychosis than by control groups (Schneier and Siris, 1987). One of the few UK based studies (Bernadt and Murray, 1986) used data drawn from a psychiatric admission (Maudsley Hospital, London) sample to evaluate the level of alcohol consumption in individuals with a number of psychiatric diagnoses. Their findings revealed that only 9% of the individuals with a diagnosis of schizophrenia had a history of heavy drinking as opposed to 29% of the sample drawn from individuals with other psychiatric diagnoses ($p<0.05$). `Heavy drinking' was determined by quantity of alcohol consumed rather than utilising standardised diagnostic criteria. Caution must be taken in interpreting data collected by studies using an unspecified `psychiatric'

comparative group as some individuals may be admitted to these services to solely undergo detoxification programmes.

1.3.2: Cannabis

It is generally recognised in the US based studies that cannabis is the second most common substance of use; Mueser et al (1990 and 2000) calculated a lifetime prevalence of approximately 25% within their groups of individuals with a diagnosis of psychosis. Other studies have estimated prevalence of cannabis use at between 12.5% and 35.8% (Cohen and Klein, 1970; Barbee et al, 1989). Again disagreement lies within the body of literature as to whether this rate of use is significantly different in individuals with diagnosis of psychosis from that of the general population, and few studies have sought to compare data from the two groups. A number of studies have identified significantly higher rates of cannabis use among individuals with a diagnosis of psychosis than other psychiatric diagnostic groups (Hekimian and Gershon, 1968; Tsuang et al, 1982; Breakey et al, 1974). Other studies have found there to be no significant difference in rates of use between samples drawn from groups of individuals with a diagnosis of psychosis and other psychiatric groups or chronic medical inpatients (Crowley et al, 1974; Prosser and Pickens, 1979).

1.3.3: Other Substances

Opinion is more consistent as regards the prevalence of usage of cocaine, amphetamine, hallucinogens, sedatives, and heroin (and other opiates). Higher rates of use of the first three substances are seen in groups of individuals with a diagnosis of psychosis when compared to controls in a number of studies (Schneier and Siris, 1987; Breakey, 1974; McLellan and Drufey, 1977; Siris et al, 1988; Barbee et al, 1989). Cocaine has been identified as the third most popular substance of use, within samples of individuals with a diagnosis of psychosis, by a number of studies with

estimates of lifetime prevalence at around 11% (Mueser, 2000). Significantly lower rates of use of sedatives and opiates are seen in the groups of individuals with a diagnosis of psychosis (Mueser, 1990 and 1992; Dixon, 1999; Schneier et al, 1987; McLellan et al , 1977; Barbee, 1989; Siris et al, 1988). Higher rates of use of caffeine and tobacco are also observed in sample populations of individuals with a diagnosis of psychosis in comparison to the rates of use in the general population (Prosser and Picker, 1970).

1.3.4: Critique of Prevalence Studies

The variability between the findings that have sought to ascertain prevalence rates can be attributed to a number of methodological factors. These factors must be considered when interpreting prevalence studies of both dual diagnosis and specific drug use (el-Guebaly, 1990).

Many studies have omitted to match their control group, be they from psychiatric or general populations, to their group of individuals with a diagnosis of psychosis on demographic variables. It is widely recognised that demographics, such as age and educational status amongst many others, are highly correlated with substance use in the general population (Regier et al, 1990; Tein and Anthony, 1990). Mueser et al (1992) concluded that a number of the demographic features of their sample correlated with the prevalence and preference of substance use and choice. These findings further emphasise the need to match groups if meaningful comparisons are to be drawn.

If control groups are not included in the study then it is of crucial importance to ensure that known population base rates are quoted for comparison purposes. As already stated the majority of the prevalence and other studies associated with dual

diagnosis have been undertaken in the US. Patterns of drug availability and differing systems and standards of health care are geographically dependent and differ from country to country (Drake et al, 1991; Menezes et al, 1996). There is a clear need for there to be locally based research to assess the nature of the problem on a local level.

The majority of studies have collected their data from groups of dually diagnosed individuals receiving treatment for their psychiatric disorder. It has been suggested that drawing data from clinical populations other than community based ones can result in the overestimation of dual diagnosis as individuals can seek medical attention for both disorders independently, which has been described as `Berkson's Fallacy' (1946). Prevalence rates can clearly be seen to differ depending on sample populations, for example Drake et al (1990) calculated a current rate of alcohol use as 25% for an outpatient sample of individuals with a diagnosis of psychosis compared to one of 45% for an inpatient sample. Dufort et al (1993) explored this phenomenon further and have suggested that treatment seeking is a function of the type and number of disorders. Individuals with substance use disorders are at a low probability of presenting for treatment; this probability increases with the presence of other disorders. It can be argued that in terms of developing service provision for dually diagnosed populations it is the prevalence amongst service users and not the general population that that must be explored through research.

The heterogeneity of the studies limits the degree to which the findings can be generalised and compared. Many of the studies reviewed did not use standardised diagnostic criteria for determining psychosis or substance use disorder (Schneirer and Siris, 1987; Richard et al, 1985; Rockwell and Otswald, 1988). This in turn raises questions about the reliability of psychosis as a diagnosis in the presence of concurrent substance use (Bryant et al, 1992; Corty et al, 1993). Great difficulty can

be encountered by clinicians in trying to differentially diagnose psychosis from a number of toxic drug effects. Chronic alcohol abuse and withdrawal can cause hallucinations and delusions (Royal College of Psychiatrists, 2000). Amphetamine use can result in a temporary psychotic state that is clinically indistinguishable from schizophrenia (Hall, Popkin, Beresford, and Hall, 1988). Cocaine, cannabis, and hallucinogens all have psychotropic properties that can mimic certain symptoms of schizophrenia (Mueser et al, 1992). Equally well severe problems can be encountered by the individual even when the diagnostic criteria [e.g. Diagnostic and Statistical Manual (DSM-IV)(American Psychiatric Association, 1994)] for substance abuse or dependence are not met (Dixon et al, 1993). The validity of the diagnostic label of schizophrenia has been called into question (British Psychological Society, 2000). As far back as 1988 Bentall argued strongly for the consideration of `abandoning the concept of schizophrenia'. Bentall has instead proposed that it is more clinically valid and useful to research an individual's symptoms rather than the umbrella syndrome of schizophrenia (Bentall, 1988). In adopting this theoretical framework it emphasises the need for dual diagnosis research to assist in understanding how an individual's substance use interacts with their symptom profile.

A number of further complications are associated with the methods by which data has been collected. Self-report questionnaires used to ascertain prevalence have been consistently shown to produce higher rates than data collected using interviews (Turner et al, 1992). McNagny and Parker (1992) also observed that there appears to be a greater willingness to report past use over current use. It is well documented that different interviewers and interviewing techniques significantly impact on the data that is collected (Davies, 1992). Ball (1967) demonstrated clear interviewer effect in his study of substance use. In an attempt to investigate this phenomena further, Davies and Baker (1987) conducted a study whereby they compared the information

gathered by two different interviewers, one so called 'straight' interviewer who presented himself as being affiliated to a research team at the local university, and the other being a substance user who was asked to share this information with the participants. The findings indicate that the 'straight' interviewer was given reports of heavier use, higher expenditure on substances, heavier withdrawal symptoms, greater difficulty in coming off substances, a longer history of substance use and a greater degree of addiction (Davies and Baker, 1987). The reports given to the 'drug-using' interviewer were less extreme with respects to the features outlined above (Davies and Baker, 1987). The researchers conclude that while neither version can be determined as being the 'truth' what the findings probably represent is the legitimate act of construction (Davies and Baker, 1987). This means it is important to consider the participants' perceptions of the interviewer and the type of information that is required of them.

1.4: Effects of Substance Use

As well as having addressed issues of prevalence of substance use the literature review has also sought to investigate further the relationship between substance use and psychosis with regard to a range of clinical and social outcomes.

1.4.1: Effects of use on Social Factors and Course of Illness

It is well documented that both the social and clinical outcomes for this group are worse and the service costs are greater than for those with severe mental illness only (Lehman, 1996). Dually diagnosed individuals are documented as being heavy users of emergency services (Bartels et al, 1993) and are reported to have higher rates of violent behaviour upon admission (Yesavage and Zarcone, 1983). Dual diagnosis is also associated with higher rates of offending, imprisonment, and homelessness (Tessier and Denis, 1989). Levels of substance use lower than those associated with

mental and behavioural difficulties in the general population may result in much poorer outcomes in those with severe mental illness (Drake, Osher and Wallach, 1993). Research has also highlighted that individuals with a dual diagnosis experience a more severe course of their illness, including earlier age at first episode (Mueser et al, 1990) a greater symptom severity and a higher frequency of hospitalisations (Cleghorn and Kaplan, 1991; Drake et al, 1990). Dually diagnosed individuals are also less compliant with treatment and more likely to be treatment resistant which in turn can have a detrimental effect upon the course of their illness (Zisook et al, 1992). These findings serve to reinforce further the need to develop both clinical understanding and effective treatment strategies for the dually diagnosed population, whose needs are great but yet pose such a formidable challenge to both clinicians and the mental health service as a whole (Mueser et al, 1992).

1.4.2: Effects of Use on Symptoms of Psychosis

A large body of research has further investigated the effects of substance use upon the individual and their symptoms of psychosis in order to develop an information base on which to provide the foundations of hypothesised relationships between the two disorders. Information regarding the acute effects of substance use has been gained utilising the following designs; self-report of subjective experiences whilst using substances, empirical studies correlating the use of substances with symptoms of psychosis, longitudinal studies observing the same sample in different using states (non and active), and finally laboratory studies administering specific substances (Brunette, et al, 1997).

1.4.2.1: Self-report Studies of Effects of Use on Symptoms

Findings regarding subjective self-reports of experiences of substance use are mixed (Brunette et al, 1997). They are also reported to be anecdotal and often vague (Dixon

et al, 1990). Alcohol has been reported to relieve positive symptoms by a small number of individuals (Noordsy et al, 1991; Hartsell and Willis, 1977). A similar proportion has reported an increase in their psychotic symptoms with its use (Brunette et al, 1997; Kesselman et al, 1982). The reporting of the subjective effects of cannabis has also rendered varied conclusions (Dixon et al, 1990). Negrete et al (1986) stated that 90% of their 76 strong sample reported experiencing `adverse psychic effects' as a result of cannabis use but did not specify what these effects were. Other studies have reported their sample as having favourable and pleasant subjective responses to cannabis use (Knudsen and Vilmar, 1984). Knudsen and Vilmar recounted their sample's experiences in some detail, individuals expressed that cannabis use initially gave feelings of inspiration, relaxation, and energy but was followed by an exacerbation of symptoms and feeling bad, aggressive, and experiencing `thought splitting'. A small minority of the sample used by Dixon et al (1991) stated that `substance use' in general helped to relieve hallucinations and suspiciousness. A slightly larger minority of the same sample reported that use of substances increased their positive symptoms. This finding may be related to differences in dose which will be explored in the following section. Cannabis and cocaine were found to be most likely to exacerbate psychotic symptoms (Dixon et al, 1991). Test et al (1989) reported that the majority of their sample found that substance use helped to relieve paranoia and hallucinations.

A number of studies have also attempted to assess 'reasons for substance use' amongst individuals with a diagnosis of psychosis. These few studies are in themselves limited in the level to which they have engaged the experiences of the user. Hekimian and Gershon (1968) reported that the wish for euphoric feelings was the reason most commonly given to explain use of heroin, amphetamines, and hallucinogens. Cannabis use was attributed to the influence of friends and the

environment. Three of the 10 patients interviewed in the Knudsen and Vilmar (1984) study reported to use cannabis for developing social contacts and the associated `bohemian lifestyle' Dixon et al (1989) utilised a series of statements expressing conceivable reasons for drug use and asked the respondent to rate the degree to which the statement reflected their on reasons for usage. Seventy five per cent of the respondents endorsed statements that indicated a desire to experience euphoria. Fifty percent agreed with statements probing for the use of drugs as a means to diminish negative symptoms, although the authors have acknowledged that these statements could also be interpreted as attempts to alleviate depression. Fifty per cent of the sample also agreed with statements implying a degree of conforming to peer pressure in their drug usage.

1.4.3.2: Empirical Studies of Effects of Use

The majority of clinical studies have focussed on the co-occurrence of psychotic symptoms and relapse with substance abuse (Dixon et al, 1990). Like much of the dual diagnosis literature these reports have failed to use standardised diagnostic tools and assessment procedures resulting in limited scope for comparison and interpretation (Dixon et al, 1990).

Unspecified drug use has been correlated with a number of symptomatic fluctuations, particularly increases in positive psychotic symptoms. These have included more severe hallucinations (Barbee et al, 1989; Cleghom, 1991; Pulver et al, 1989; Soni and Brownlee, 1991), delusions (Cleghorn et al, 1991; Negrete et al, 1986) and thought disorder (Cleghorn et al, 1991). However other studies have found no correlation between substance use and positive symptoms (Alterman et al, 1984; Cuffel et al, 1993; Drake et al, 1989; Mueser et al, 1990, Serper et al, 1995, Sevy et al, 1990;

Rosenthal et al, 1994).

Negative symptoms have been found to be lower in cocaine users (Buckley et al, 1994; Lysaker et al, 1994; Serper, 1995) and also in alcohol users, particularly with regards to psychomotor retardation (Soni and Brownlee, 1991).

Dysphoric mood is frequently associated with psychosis and a number of studies have observed mood changes correlated with substance use. An increase in depressive symptoms (Cuffel et al, 1993; Drake et al, 1989; Pulver et al, 1989; Serper et al, 1995; Sevy et al, 1990), anxiety (Drake et al, 1989; Serper et al, 1995) and suicidal ideation (Drake et al, 1989) have all been reported in correlation with substance misuse. Other studies have reported no differences or less symptoms of depressive mood respectively (Linszen et al, 1994; Buckley et al, 1990). Alterman et al (1981) noted that greater variability of mood was correlated to alcohol abuse.

Cannabis use has been correlated with an exacerbation of psychosis in a number of studies of this methodological nature (Treffert, 1978; Knudsen and Vilmar, 1984; Negrete et al, 1986). A dose specific relationship has been observed, whereby cannabis users with the heaviest usage are seen to have the more severe symptomatic profile (Negrete et al, 1986).

1.4.3.3: Longitudinal Studies of Effects of Use

A small number of studies have sought to explore the relationship between substance misuse and psychosis through the observation of the same sample over time and in different states of use, abusing and non-abusing (Brunette et al, 1997). Utilising this methodological design both Treffert (1978) and Knudsen and Vilmar (1984) reported an increased level of psychotic symptoms amongst individuals with a diagnosis of

psychosis that abused cannabis. Linszen et al (1994) conducted a 1-year prospective study. They initially noted no differences in the severity of symptoms in association with drug use. Over the duration of the study heavy users of cannabis, in comparison to low and occasional users, showed increases in psychotic symptoms. There was no variation in negative symptoms over time. A follow up of the ECA sample conducted by Cuffel et al (1993) observed that individuals whose substance use actively developed over the year experienced increased depression. Those individuals whose substance use decreased experienced a concurrent reduction in depressive mood.

1.4.3.4: Laboratory Studies of Effects of Use

Laboratory experiments designed to measure the acute effects of drug intoxication upon individuals with a diagnosis of psychosis have not been conducted on the most common drugs of abuse, alcohol, cannabis and cocaine (Brunette et al, 1997). Past studies have however recorded the effects of stimulants, hallucinogens, opiates, and benzodiazapines (Dixon et al, 1990). Administration of stimulants, even small doses, has been found to exacerbate existing positive symptoms (Angrist et al, 1980; Janowski and Davis, 1976). Other studies have failed to replicate these findings and have observed amphetamine to have no effect upon symptoms or in some cases to improve negative symptoms (Kornesky, 1977; Cesarec and Nyman, 1985). Hallucinogens have also been found to increase psychotic symptoms and the exacerbation of anxiety and irritability (Fink et al, 1966). A minority of subjects reported feeling a sense of euphoria and relaxation (Hoch, 1951 and 1952). Opiates have been found to reduce symptoms in some (Brizer et al, 1985; Comfort, 1977; Gold et al, 1977) or to produce no change in others (Davis et al, 1977). The action of benzodiazepines upon the symptoms of psychosis is less clear. They have been found to worsen psychotic symptoms and to produce intolerable side effects (Dixon et al, 1989) but have also been found to have adjunctive anti-psychotic effects in others

(Douyon et al, 1989).

1.4.4: Critique of the Studies Exploring the Effects of Substance Use Amongst Individuals with a Diagnosis of Psychosis

As with the studies on prevalence, interpretation of the presented data about the impact of use are limited to some extent by the designs of the studies. Much of the literature is based upon drawing comparisons between abusing and non-abusing groups. Comparisons of this kind assume that subjects within the groups are otherwise equivalent. Empirical evidence would suggest that they are not (Brunette et al, 1997). For example the interesting but frequently observed characteristic of substance abusing individuals is that of better pre-morbid and in some cases current social functioning than that of their non-abusing peers (Breakey et al, 1974; Buckley et al, 1990; Dixon, et al, 1990). Individuals with a dual diagnosis also have a higher rate of substance use in their family backgrounds and have presumably experienced a greater degree of disruption and disordered behaviour (Dixon et al, 1991; Gershon et al, 1988; Hay et al, 1986; Kendlerl, 1985; Noordsy et al, 1994; Pulver et al, 1989). Substance use disorders are often grouped together without consideration for the type of substance, level of use, or concurrently used substances. Laboratory studies clearly indicate that different drugs have varying short and long-term effects and Linszen (1994) showed that level of use over time is critical. The experimental parameters of laboratory studies serve to limit a number of factors that play a key role in the experience of drug use in a naturalistic setting, such as environmental factors, dosage, type, and purity of a drug (Dixon et al, 1990).

Correlational studies drawn from clinical observations are suggested to over-represent symptom exacerbation and under-estimate benefits associated with substance use. Drawing their samples from relapsing clinical populations serves to highlight and

draw the clinician's attention to the complications experienced by substance misusing individual (Dixon et al, 1990).

Limitations in the development of a more comprehensive understanding of dual diagnosis exist as a result of the narrow focus of the literature. The majority of the literature attempts to understand the effects of substance use on the individual based upon the analysis of the associated effects upon psychiatric symptoms alone. This bias in the literature is highlighted by the 'remarkable paucity' of studies describing the self-perceived reasons that individuals with a diagnosis of psychosis give for their substance use (Dixon et al, 1990).

Section 2: The Delivery of Services for People with a Dual Diagnosis

2.1: Service Structure

The problems experienced by individuals with a dual diagnosis have historically been compounded by the lack of adequate service provision to meet their needs. Traditionally services for substance misuse and mental health have operated and developed independently of one another (Department of Health, 2002). As a consequence of this type of service structure clients have tended to rest on the caseload of a single service and in such cases may not have received adequate help with the broader cluster of their problems, or they have been passed from one service to another to independently address their multi-faceted presentations. The Department of Health Dual Diagnosis Good Practice Guidelines (2002) states that as a result of this model of service provision that

> *'Some potential clients or patients have almost certainly been excluded from all the available services'*. They have called for *'a radical rethink of the way*

that services are organised...organised around the user rather than around social, professional or service constructions of "abnormal" behaviour' (Department of Health, 2002, pp.6).

2.2: Assertive Outreach

A specialist model of service provision, Assertive Outreach (AO), has been promoted in recent years to meet the complex needs of clients with severe and enduring mental health problems who have failed to be engaged by traditional services. These new services are increasingly finding that they are working with a large number of clients that have concurrent mental health and substance use problems. The model of Assertive Outreach (AO), as it is known in the UK, was first pioneered in the US as a means of providing a more appropriate service to this *hard to engage* client group. The model of AO service provision is based on a team approach, with shared responsibility for their clients (Clements et al, 2002). It gained impetus for its implementation in the UK with the publication of the National Service Frameworks for Mental Health (NSFMH), which recommended Assertive Outreach as a key component in attempting to provide a more effective service to those who have fallen through the net of traditional service provision. A clear service specification for Assertive Outreach services is described in the Policy Implementation Guide (Department of Health, 2002).

*'In many areas the first priority will continue to be addressing gaps in current services for people with severe and enduring mental illness – 24 hour staffed accommodation, **assertive outreach**, home treatment or secure beds...'* [NSFMH (Department of Health, 1999)]

The aim of the Assertive Outreach approach is to

> *'achieve an improved level of services for people with significant and complex long-term mental health problems who only variably engage, or have never been engaged, by mainstream services'* (Clement et al, 2002, pp.6).

Thus central to the aim of the model is the enhancement of engagement, to ensure that clients remain in contact with the service. The concept of engagement and its relevance to the study will be discussed in further detail in the following section of this document.

A Cochrane review (Lockwood, 1998) of US based studies investigating the efficacy of Assertive Community Treatment (ACT), the American version of this approach, concluded that:

> *'ACT is a clinically effective approach to managing the care of severely mentally ill people in the community. ACT, if correctly targeted on high users of in-patient care, can substantially reduce the costs of hospital care whilst improving outcome and patient satisfaction. Policy makers, clinicians, and consumers should support the setting up of ACT teams.'* (Lockwood, 1998, pp. 2)

Lockwood (1998, pp.10) concludes that there is a need *to 'establish that the ACT model can be generalised beyond the USA'*. Fidelity to the Assertive Outreach model is important in considering the outcome data from research that evaluates the efficacy of AO in working to engage those with severe and enduring mental illness. Differences in mental health practice and culture between the US and UK have been highlighted, indicating a more coercive style of client management in US services

(Smith et al, 1999). Further to differences in team philosophy and practice it has been hypothesised that a lack of training may influence outcome data in studies of comparative approaches (Gournay, 2000).

The training needs of teams are particularly pertinent when considering recommendations within the Mental Health Policy Implementation Guide (Department of Health, 2002) for the provision of services to meet the needs of those with a dual diagnosis. Three potential models of provision are recommended, their adoption being dependent upon local identified need. They include specialist dual diagnosis teams, networks of clinicians with expertise, and the development of Assertive Outreach teams to specialise in dual diagnosis. The lack of specificity with regards to which of these models of service provision should be adopted acknowledges the current lack of knowledge about what works for whom.

2.3 The Need for Engagement

The engagement of people with the service is of central importance to the services outlined above. Engagement is described as being *'concerned with the development and maintenance of a therapeutic alliance'* (Department of Health, 2002, pp. 19). It is a relationship that is enhanced by the 'value that the client attributes to the service' (Department of Health, 2002). The Dual Diagnosis Good Practice Guide (Department of Health, 2002, pp. 20) emphasises the importance of the style of interaction, stating the need to be *'non-confrontational, empathic and respectful of the client's subjective experiences of substance use'*. Understanding the client's perspective with regards to their substance use is thus seen as being of central importance if services are to develop a meaningful alliance with individuals with a dual diagnosis, providing the foundations for further therapeutic work to be undertaken. Kofoed (1997 and 1993) proposed a conceptual model of a staged approach to dual diagnosis treatment.

The stages of this approach are as follows:

(1) Engagement

(2) Persuasion

(3) Active treatment

(4) Relapse prevention (Kofoed, 1997)

This approach shares features with the Prochaska and DiClemente's Stages of Change model (1998). Primarily it is similar in its staged nature of understanding the process of change with regards to substance use and secondly with respect to the need to match the phase of intervention to the client's acceptance of the (dual) nature of their problems (Addington et al, 1999). The stages of change model will be discussed in greater detail later in the document. Whilst there are some similarities the Kofoed model differs with respect to the emphasis that is placed upon the stage of engagement as opposed to the later stages in a more traditional approach (Carey, 1996).

2.4 Evidence Base

Provisional investigations have attempted to determine the efficacy of therapeutic interventions for substance misuse in conjunction with some form of intensive case management, or psychiatric treatment as usual. The vast majority of these investigations have been undertaken in the US. Drake et al (1998) reviewed a number of treatment studies for dual diagnosis. Drake et al (1998) identified 10 key studies that had incorporated some form of motivational intervention in the form of 'substance misuse counselling' into their treatment packages. These studies provide some evidence of managing both to engage and retain service users. The findings

also indicate there to be some reduction of substance use over time (Drake et al, 1998). However the studies reviewed by Drake were found to be flawed in a number of ways, such as small group sizes, and difficulties in assessing the levels of substance abuse (Drake et al, 1998). Drake (1998) concludes that ' integrated treatment for dual disorders remains a working hypothesis with only modest empirical support'.

One notable study, Barrowclough et al. (2001), has attempted to ascertain the efficacy of an integrated package of psychological interventions in conjunction with standard psychiatric care. The intervention was delivered as a randomised controlled trial on an individual basis as opposed to a group programme.

In the absence of both adequate empirical data to support treatment interventions and a clear theoretical model of dual diagnosis the researchers describe that they based their intervention on a number of important assumptions (Barrowclough et al, 2000).

> *'expectation that the majority of individuals will be unmotivated to change their substance use...symptomatology might be implicated in the maintenance of substance use while in turn drug and alcohol use may exacerbate symptoms...family stress might have a particularly detrimental effect on outcomes of patients with a dual diagnosis'* (Barrowclough et al, 2000, pp. 218)

Based on this rationale the intervention programme designed used a range of therapeutic approaches that have been shown to be effective in singularly diagnosed populations, including motivational interviewing (Miller and Rollnick, 2002), cognitive behaviour therapy (Tarrier et al, 1998; Kuipers et al, 1997), and a family intervention (Mari and Streiner, 1996). The outcomes of the Barraclough study are

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promising, showing improvements in general functioning, reductions in both positive symptoms and symptom exacerbation, and an increase in the number of days abstinent from drugs or alcohol over a twelve-month period (Barrowclough et al, 2001). However the study was limited by its small sample size (experimental group n=18) which restricts the generalisabilty of the findings.

As these findings indicate attempts to further understand how successful interventions may be designed for implementation with dual diagnosis are still very much in the early stages of development. Attempts to design and implement psychological interventions are greatly restricted by a lack of empirical evidence to suggest a comprehensive theory of dual diagnosis. Researchers are having to adapt intervention approaches from those that have been shown to be effective with individuals with a single diagnosis.

Section 3: Theoretical Models of Relevance to Understanding Substance Use and Psychosis

Inherent to the interventions described above are a number of key theoretical models. These theoretical models are particularly pertinent to this study as they seek to explain the process by which both substance use and symptoms of psychosis are maintained and how change is brought about through the understanding of maintenance factors. These theories, whilst by no means an exhaustive representation of all the theories in the area, are felt to be strongly supported by the literature base and have practical utility as clinical tools or therapeutic techniques. However it is important to note that these theories only seek to explain the two disorders singularly and do not propose an

integrated understanding. The theoretical models of 'dual diagnosis' will be explained in some detail later.

3.1: Substance Misuse

3.1.2: Disease Model of Addiction

For a great many years the disease model of addiction dominated the substance use field, to a certain extent the concepts that underpin it are still very influential. The model is characterised by the assumption that when individuals become addicted to substances they lose control of their substance use (Jellinek, 1952). This assumption is based on three concepts:

(1) Repeated use of a substance leads to the development of ***tolerance*** to that substance, whereby an individual must take an increased dosage of the substance to experience the same effects.

(2) That an individual will experience ***withdrawal symptoms*** when the effects of the substance wear off. These symptoms can be alleviated through the use of the substance.

(3) Individuals experience ***cravings***, a strong psychological desire to have the substance.

Summary taken from McMurran (1994).

The disease model has attracted a large amount of criticism over the years due to the lack of evidence that has been found to support the hypotheses that are drawn from the model and alternative psychological, as well as biological, explanations have been also proposed (McMurran, 1994).

3.1.2: Social learning theory

Bandura's (1977) social learning theory (SLT) has been seen to play a prominent role in the substance misuse field. In fact cognitive behavioural therapy, which will be discussed in some detail later, is seen to have been heavily influenced by Bandura's work (Leonard and Blane, 1999). A large volume of research has been published attesting to the applicability of the concepts upon which SLT is based with relevance to the substance use field (Leonard and Blane, 1999). For the purposes of brevity this information will not be included in this document. A summary of the main components of SLT in relation to substance misuse are offered below (Marlatt and Gordon, 1985).

- Substance use is primarily a learned behaviour in which the social environment plays an important role.
- Patterns of use may become problematic for an individual if they frequently use substances to cope with stress and other unpleasant feelings. This is most likely to happen when an individual is lacking in social or affect management skills with which to handle the situation more appropriately.
- Cognitions in the form of outcome and efficacy expectancies play an important role in mediating patterns of use.
- Cognitive processes are also important in regulating behaviour as well as changing it.

3.1.3: Stages of Change

The 'stages of change' model provides a theoretical framework upon which to match a treatment programme to an individual's commitment to change (Connors et al,

2001). Developed by Prochaska and DiClemente the most recent versions of the model (Prochaska and DiClemente,1992; DiClemente and Prochaska, 1998) and the five stages that provide the theoretical framework are outlined in Table 1 below.

Table 1: Summary of the Stages of Change Model

STAGE OF CHANGE	FEATURES AND CHARACTERISTICS OF STAGE
Pre-contemplation	This stage is characterised by an individual's perception of their substance use as not being problematic. Individuals in this stage are described as having no desire to change their substance use
Contemplation	At this stage the individual is hypothesised as having some awareness of the problems associated with their use of substances. Consequently there will be some indication that change is being considered. This may take the form thinking about making change, seeking information about their problem, and evaluating the pros and cons of making change.
Preparation	The main characteristic of this stage is seen as being the individuals' readiness to change in their attitude and behaviour. They may also have begun to increase self-regulation and begin to make some change to their substance use.
Action	At this stage an individual is seen as engaging in active modification of their substance use. They may also be learning skills to prevent relapse
Maintenance	During this stage an individual continues to sustain the changes that they have made. This stage may continue for some time after the substance use has been ceased or until the person relapses.

(Modified from Connors et al, 2001)

Whilst this model does not serve to explain how individual factors influence the maintenance of substance use it does serve to provide a conceptual framework to understand the process that underpins both maintenance of use and movement into making change. Within this conceptual model individual differences with regards to the maintenance of use may be understood. The first two stages of this model are of

particular interest to this study as they provide some explanation of the process that underpins the continued use of substances. This study will endeavour to investigate further these stages and the perceptions that contribute to continued use.

3.1.4: Cognitive theory of substance Use

Central to the cognitive theory of substance use disorder is the proposition that individuals hold a number of dysfunctional beliefs about their substance use that serve to maintain their continued use. Cognitive theory supports the importance of understanding an individual's subjective experiences and beliefs about substance use (Graham, 1998). The theory regards an individual's motives and expectancies about the effects that their substance use will have with respect to bringing about change in their cognitive state or helping them to cope with a certain situation as being central to understanding the maintenance of use (Toneatto, 1995; Liese and Franz, 1996; Mueser et al, 1995). Beck's cognitive model of emotional disturbance (1976) has been developed significantly since and includes a model of substance use. Central to the cognitive model are dysfunctional beliefs. With regards to substance use they are thought to develop when an individual is exposed to drugs or alcohol at an important developmental life stage (Graham, 1998). These beliefs may in turn become a way of coping with the core beliefs that individuals hold about themselves, such as 'I am inferior' (Graham, 1998). As an individual continues to use substances they are hypothesised as developing a:

> *'network of idiosyncratic and substance-specific beliefs…activated in particular circumstances ('high risk situations') and increase the likelihood of continued use by activating cravings'* (Graham, 1998, pp.196).

Thus central to the process that maintains use is the individual's subjective experience and belief that their substance use will serve to in some way modify their cognitive

state or help them to cope with a situation, rather than the objective 'truth' of the effect that their substance use has upon them. Furthermore that dysfunctional assumptions play a central role in whether an individual responds to the cravings and urges that they experience and as such form a necessary target in an effective treatment intervention (Graham, 1998). This theory serves to further illustrate the importance of individuals' subjective experiences in both understanding the process by which substance use is maintained and forming the basis of an effective treatment programme. It also serves to highlight how important individual experiences are in bridging the divide between the pursuit of theoretical concepts and developing information with very real clinical utility.

3.2: Psychosis

This study could not hope to review all and, in doing so, do justice to the large number of theories that exist to understand psychosis. Furthermore there is still little certainty with regards to the 'causal chains that lead to schizophrenic symptoms' and theory supports only hypothetical relationships (Wykes et al, 1998, p. 21). This chapter aims to provide a broad outline of the potential factors that influence the experience of the symptoms of psychosis in order to understand how these processes may in turn mediate the maintenance of substance use. Therefore a highly suitable integrative model has been chosen to guide this understanding. Known as the vulnerability-stress model it is outlined in detail below.

3.2.1: Vulnerability-Stress Model of Psychosis

This model postulates that individuals may have a number of biological and psychological features that contribute to a predisposition (vulnerability) to psychosis. Subsequent to this an individual may experience stressful life events prior to the onset of psychotic symptoms.

The vulnerability-stress model of psychosis has been developed by integrating the empirical research findings with regards to factors that are seen to influence both the onset and subsequent course of psychosis. A number of vulnerability-stress models have been proposed. Figure 2 is the comprehensive Nuechterlein model (1987) that was developed at the UCLA Clinical Research Centre for the Study of Schizophrenia. The evidence that has contributed to the formation of this model will be discussed first and the model will be presented at the close of this section to act as a visual summary.

3.2.1.1: Vulnerability factors

Nuechterlein (1987) concludes that the findings from empirical research from individuals with a diagnosis of psychosis and their biological family members supports the choice of a number of vulnerability factors that are hypothesised to precede the development of psychosis. These included dopaminergic dysregulation, information processing limitations, hyperactivity in the autonomic nervous system responses and schizotypal personality traits (Neuchterlein, 1987). Some of these factors are attributed to a genetic transmission (McGuffin, 1991). Whilst others consider that early neurodevelopment may be influenced by the intrauterine environment (Barr, 1990). Some writers have proposed that schizophrenia is characterised by a behavioural sensitivity to psychosocial stressors (Fowler et al, 1995).

3.2.1.2: The role of stress and 'stressors'

Psychosocial stressors have been noted as playing an important role in the exacerbation of symptoms (Norman, 1993). An increased risk of relapse is seen as being related to stressful life events (Ventura, 1989). Relapse into acute episodes of

psychosis has also been related to experiencing negative family interactions and attitudes (Hooley, 1998). Further factors are also proposed as compounding the effect that stress has upon individuals' that experience psychotic symptoms. Most notably the deficits in coping and problem solving skills that are associated with schizophrenia and the consequent detrimental effect that this has upon an individual's ability to adequately reduce stress (Blanchard, 2000).

3.2.1.3: Clinical utility of the vulnerability –stress model

Whilst this model offers a fairly rudimentary understanding it has allowed for a 'professional consensus' (Morrison, 2002) to emerge with regards to an explanatory model of psychosis. However crude the model may be it has enabled the promotion of psychosocial interventions due to its acknowledgement of the pivotal role played by stress (Morrison, 2002). Furthermore it has clinical utility in that it provides for the development of a personalised formulation of the dominant biological models that an individual is likely to have been exposed to (Morrison, 2002) and can also provide a 'normalising rationale' (Kingdon and Turkington, 1991). It achieves this through the suggestion that anyone can experience psychotic symptoms if placed under sufficient stress (Morrison, 2002).

The Nuechterlein vulnerability-stress model (1987) is illustrated in Figure 2 (see page 34).

Figure 2: Nuechterlein's Vulnerability-Stress Model of Psychosis

3.3: Conclusions on theoretical models of substance use and psychosis

Whilst these theories provide a useful framework for understanding some of the features of dual diagnosis and the maintenance of substance use what they fail to address is the complex relationship between mental health problems (psychosis) and substance use. As already discussed an understanding of the interactive relationship between these is vital if effective treatment interventions are to be developed. A number of theoretical models have been proposed to understand the process of interaction. They are discussed in the following section.

Section 4: Models of Understanding Dual Diagnosis

A number of theoretical models have been proposed in order to conceptualise the interaction between substance use and psychosis, many of which have attempted to attribute a causal relationship. Below is a summary of the dominant models.

4.1: Etiological model

Substance use has long been hypothesised as an etiological factor in schizophrenia (Bowers, 1987). This model is derived from early experimental studies observing the psychotogenic properties of various drugs and the psychotic states brought about through heavy intoxication (Dixon et al, 1990). Findings from a number of studies have provided support for this model. McClellan et al (1977) concluded that amphetamine users were significantly more likely to develop psychoses than barbiturate users. In considering studies of this type it is necessary to again remind ourselves of the many difficulties associated in differentially diagnosing schizophrenia when an individual is using substances. In a review of the records of 47,570 Swedish conscripts Andreasson et al (1987) found that the relative risk of

schizophrenia among heavy users of cannabis was 6 times greater than in non-users. This study has attracted some criticism as regards the absence of information about the subjects' early functioning. The early age of onset of psychotic symptoms in drug users found by some studies has also added weight to the etiological hypothesis (Breakey et al, 1974; Tsuang et al, 1982; Alterman et al, 1984). Without prospectively controlled studies any conclusions about the etiological role of drug abuse in schizophrenia must remain inferential (Dixon et al, 1990).

4.2: Dopamine Dysfunction

The dopaminergic system has been suggested to be involved in the reinforcement and reward functions (Prosser and Pickens, 1979; Ritz et al, 1987). Furthermore a large body of literature exists indicating the role of dopaminergic dysfunction in schizophrenia (Synder, 1979). It has been hypothesised that hyper function of the dopaminergic pathways in the frontocortical region produces cognitive symptoms that include thought disorder, whilst hypofunction of the dopaminergic mesolimbic projections contributes to negative symptoms (Miotto et al, 2000; Ritz et al, 1987; Mueser et al, 1992; Weinberger, 1987; Friedhoff, 1983). The use of opioid antagonists like heroin could partially correct the dopamine imbalance in the two neural systems (Miotto et al, 2000). Some studies have concluded that individuals preferentially abuse certain substances and that these may have a dopaminergic action (Schneier and Siris, 1987). However as discussed earlier these studies have also attracted methodological criticism, often lacking the necessary information to infer causal relationships. These factors have led some to suggest that dopamine disturbances may increase the vulnerability that some individuals have to both schizophrenia and drug abuse (Prosser and Pickens, 1979). Further more the

dopaminergic action of a substance may exacerbate and maintain particular addiction for example chronic cocaine use is associated with a decrease in dopamine levels which in turn further reinforces the need to continue cocaine use (Wyatt et al, 1988).

4.3: Social Exclusion Model

Societal attitudes towards severe mental health problems and the resultant stigma attached to this 'status' leads to many individuals with mental health problems feeling excluded from their community (British Psychological Society, 2000). Substance users are often viewed in an equally stereotypical way and could also be described as being socially excluded. Substance users are seen to build their own networks of other users. However no such subculture exist within the majority of mental health service user. It has been hypothesised that substance use provides isolated individuals with an identity and social group (Treffert, 1978; Hall et al, 1979; Millman and Sbriglio, 1986). Some studies investigating reported reasons for substance use have cited that individuals state the influence of friends as influential in their decisions to use (Knudsen and Vilmar, 1984; Hekimian and Gershon, 1968). However, other studies investigating reasons for use have not found socialising to be a significantly reported factor. Dixon et al(1990) reported that a substantial portion of drug use occurs when the individual is alone, thus removing the element of socialisation from substance usage.

The social exclusion model may find more weight for its hypotheses in the research investigating the deficits associated with psychosis, more specifically deficits in social behaviour and interpersonal problem solving. Interpersonal impairment is included in the diagnostic criteria, for schizophrenia, of DSM IV (American Psychiatric

Association, 1994). Bellack et al (1984) concluded that in comparison to a non-psychiatric control group that individuals with a diagnosis of schizophrenia were impaired in their ability to resolve interpersonal problems through conversation, to identify problems and generate solutions, and to discriminate effective and ineffective social problem-solving behaviour. In the light of such findings it is plausible that individuals may perceive that substance use might enable them to function better in social situations and to build a social network.

4.4: Self-Medication model

The hypothesis that individuals with a diagnosis of psychosis medicate the symptoms of their illness using a variety of substances is one that has received a considerable amount of attention over recent years. It has been suggested by many studies that individuals may self-medicate depression (Freed, 1975; Siris et al, 1988) negative symptoms (Schneier and Siris, 1987) and neuroleptic induced extrapyrimidal side effects (Treffert, 1978; Knudsen and Vilmar, 1984). This model has also been proposed to explain drug use in the general population (Khantzian, 1985). Reasons given by individuals for their substance use suggest that they may perceive themselves as self-medicating symptoms, in particular reporting usage to ameliorate dysphoria and to feel more relaxed (Dixon et al, 1990). Further expansion of this model to include drug of preference overlaps with the dopamine dysfunction model.

4.5: Independence model

The independence model proposes that reasons for drug use by individuals with a diagnosis of psychosis are no different from the reasons and explanations for

substance use in the general population, such as the desire for euphoria and escape (Khantzian, 1985). Agreement with this model can be found in the demographic correlates with substance use seen between both populations e.g. age, gender, economic status, education status. As in the general population a higher incidence of dual diagnosis is seen in individuals with a family history of drug use. Self-medication and social exclusion models would appear equally relevant to both populations.

What the independence model does not account for are the different rates within the two populations when they can be assumed to come from a similar demographic background. It could be argued, however, that both the distress experienced as a result of the symptoms of psychosis and the pressures placed on individuals through derogatory societal attitudes to mental illness may place individuals with a diagnosis of psychosis at greater risk of experiencing the features that lead people in the general population to use substances.

4.6: Summary of Theoretical Models of Dual Diagnosis

These theories offer competing frameworks by which the interaction between substance use and psychosis may be understood. However, the literature upon which they have been based as already been critiqued in an earlier section of this document. It has been argued that these studies have approached this area with a simplistic view, diluting people's experiences into single 'causal' statements about why they think they take substances. What is lost in such an approach is a depth of information that might allow for a more sophisticated understanding of how these reasons and other features of people's experiences might be inter-related.

Section 5: Conclusions and Scope of the Study

5.1: Gaps in the existing research

As outlined in previous sections the studies and documents critiqued in this review highlight a number of questions that remain unanswered with regards to our understanding of the maintenance of substance use amongst individuals with a diagnosis of psychosis. Married with the increasing pressure being placed upon services to provide effective interventions for individuals with both substance use and mental health problems, this poses clinicians with a great challenge when attempting to develop appropriate interventions for this group. Furthermore, the literature demonstrates that these individuals have very challenging and complex presentations. The studies reviewed indicate that there has been a limited amount of investigation of psychological concepts and the application of established psychological theories of singular diagnosis with regards to the processes that maintain substance use amongst people with a diagnosis of psychosis. The research thus far has focussed heavily on identifying a causal relationship between the two disorders. Whilst this approach is valid with respect to its own aims and objectives it is not necessarily useful when trying to apply these concepts in a clinical setting to groups of individuals with severe and enduring mental health problems. In order for research in this field to have clinical utility, it requires the broad investigation of the interactive process of not only the two disorders but also the wider social and environmental pressures faced by these individuals through their day to day lived experience. Central to a number of the theories and therapeutic interventions reviewed is the significance of individuals 'subjective' experiences and the beliefs that they hold about such experiences. Within the existing literature about dual diagnosis there has been little attempt to gather

information from individuals about their experiences. Furthermore the data that has been collected by such studies has presented only simplistic concepts and as such the meaning of peoples' experiences has been lost to further analysis.

5.2: Research Questions

The following research questions were formulated based on the gaps in the existing literature outlined above:

1. **What are the experiences of individuals with a diagnosis of psychosis of using alcohol and illicit substances?**
2. **What impact does their use have upon them?**
3. **What do participants' experiences tell us about the maintenance of their alcohol and illicit substance use?**

CHAPTER TWO

METHOD

Section 1: Epistemology and Qualitative Methodology

Having identified the research questions that this study aims to address it is necessary to consider how these questions might best be answered. The choice of research method is significant to this decision as research methods are described as being *'the way to the goal'* (Kvale, 1996, p. 278). In identifying the goal or objective of the study it is necessary to adopt an epistemological position (Willig, 2001). Epistemology, the philosophical theory of knowledge, attempts to answer the question *'How, and what, can we know?'* (Willig, 2001. P. 2). This study is concerned with the experiences and meanings of the participants. It is also seeking to explore an area that has been under-researched and where the previous research could have been influenced by an 'institutional bias'. In such cases the use of a qualitative methodology is often considered to be highly appropriate (Pidgeon and Henwood, 1997).

This section outlines the theoretical position of, and subsequent rationale for choosing, the method employed by this study.

1.1: Phenomenology, a Way of Knowing.

Phenomenology is a branch of philosophical thought concerned with the ways in which humans gain knowledge from the world around them (Willig, 2001). It considers that there are different approaches to human understanding, some of which are more constructive than others, and provides guidance on how superior knowing can be achieved (Willig, 2001).

The approach aims to set aside what we think we already know about a phenomenon. However it acknowledges that the *'self and world are inseparable components of meaning'* (Moustakas, 1994, p.28) and that perception is *'infused with ideas and judgements'* (Willig, 2001, p. 51). The approach identifies methods which help us to focus on *'that which lies before one in phenomenological purity'* (Husserl, 1931, p.262). The aim of these methods is to analyse a phenomenon free from assumption and judgement. Central to this process is the consideration of one's own thoughts and experiences in relation to the information being investigated.

1.2: The Application of Phenomenology to Psychology

The phenomenological approach has gained the interest of psychologists due to the meaning that it assigns to the data. Kvale (1996, p. 53) highlights the appeal of the approach;

> 'Phenomenology is interested in elucidating that which appears and the manner in which it appears. It studies the subjects' perspectives of their world; attempts to describe in detail the content and structure of the subjects' consciousness, to grasp the qualitative diversity of their experiences and to explicate their essential meanings'

It is proposed that any lived experience can be subjected to the approach. The approach clearly has great utility in its application to the exploration of the proposed research questions.

1.3: Interpretative Phenomenological Analysis (IPA).

IPA is a version of the phenomenological method. It aims to explore the participant's view of the subject under investigation (Smith, 1999), to gain an insiders' perspective (Conrad, 1987). Smith (1995, p. 189) describes it as:

> 'an attempt to unravel the meanings contained in...accounts through a process of interpretative engagement with the texts and transcripts.'

It recognises that this cannot be done completely in that such a process implicates the researcher's own view of the world (Willig, 2001). The approach proposes that making sense of another person's world is an interpretative activity.

Where IPA differs from other qualitative approaches, such as discourse analysis (Potter and Wetherall, 1987), is in relation to the status of cognition (Smith, 1999). It aims to understand what the participant thinks about the subject under investigation, utilising an analytic process to say something about that thinking (Smith, 1999). The approach is particularly interested in the social cognition paradigm, that being the connection between verbal report, cognition and physical state (Smith, 1999 and 1996). In essence the approach proposes that it is possible to relate a participant's verbal reports to the underlying cognitions and is, as such, distinct from other forms of qualitative analysis.

1.4: Rationale for Choice of Methodology

The ability to analyse the data in a manner that allows for interpretations to be made about the participants' cognitive constructs has led to IPA and the methodological procedures associated with it being chosen for this study. It will allow for inferences

to be made about the beliefs held by participants about their substance use and mental health problems, which would not have been possible with other forms of qualitative analysis. Furthermore the social cognition paradigm is of relevance to this study as the physical sensations brought about through substance use form a significant part of peoples' experiences. It will be meaningful to analyse the relationship between these features of peoples' experiences.

Section 2: Design

The design chosen for this study is one based on the principles of IPA, utilising the administration of a single semi-structured interview with a group of individuals who have shared common experiences of psychosis and substance use. Interviews are identified by Smith (1995) as a suitable form of data collection for IPA and are rendered suitable for analysis through the process of transcription.

Section 3: Measures

This section outlines the measures that were used in the study.

3.1: Semi-structured interview.

A semi-structured interview was devised to capture the participant's experience of the mental health difficulties and their substance use (see Appendix 1). The interview was constructed based on guidance in the qualitative literature (Willig, 2001 and Smith, 1995). The qualitative interview is seen as an opportunity to allow the participant to talk openly about their experience. Whilst the style of interviewing aims to be non-directive it acknowledges the fundamental importance of the research questions in the formulation of the questions asked and the kind of data that the

researcher wishes to elicit. The importance of rapport is noted as playing a role in the interview process. This factor was considered as being particularly significant in relation to the sample being used in the study and will be discussed in more detail when describing sampling procedures.

The interview made use of the four types of questions outlined by Spradley (1979); descriptive, structural, contrast and evaluative. The interview consisted of 13 questions split into three sections; current use, past use/change and mental health difficulties. A number of supplementary prompt questions were also formulated. The interview procedure was kept reflexive and the interviewer responded to the accounts given by the participants.

3.2: Details sheet.

A details sheet (see Appendix 2) asking for information about age, diagnosis, substances of use, prescribed medication, symptoms experienced and chronology of service involvement was given to the care co-ordinator of each participant to complete. The purpose of the sheet was to gather descriptive data about the sample.

3.3: Perceived Stress Scale (PSS) (Cohen et al, 1983).

A measure of stress was included in the design as stress was seen to be an important mediating factor of many of the theories relating to substance misuse and psychosis. It was felt important to have an understanding of the levels of stress that participants' in this study were experiencing. The PSS (Appendix 9) was chosen as it purports to measure perceived stress, the 'degree to which one's life events are appraised as stressful' (Cohen et al, 1983). This was felt to be consistent with the broader aims of

the study these being the investigation of the participants' lived experiences, and their perceptions.

The measure requires the participant to subjectively appraise events occurring over a one-month time frame with regards to the frequency with which they have occurred (Cohen et al, 1983). The test consists of fourteen items and can be administered as a questionnaire or an interview. It was decided to administer the measure as an interview schedule for a number of reasons, including the comprehension and reading difficulties experienced by the participants, and so that the measure could act as a tool to cue the participant into interview process.

The fourteen-item PSS-14 was found to have an internal consistency of 0.75 (Cohen and Williamson, 1988) in their study of the general population.

Section 4: Procedure

4.1: Participants

The sample was drawn from the clinical caseloads of the Hull and East Riding Assertive Outreach teams. The Assertive Outreach model is described in the introduction and as stated these services are expected in some instances to serve the needs of individuals with a diagnosis of both mental health problems and substance misuse.

Participants were recruited on meeting the following criteria:

(i) That they have a primary diagnosis of psychosis.

(ii) That they engage in illicit substance or alcohol use.

(iii) That they have received at least three admissions to mental health unit over last five years.

(iv) That they have the cognitive capacity to participate in the interview procedure, as determined by their CPA co-ordinator.

Both male and female participants were recruited

Prior to the application to the ethics committee the researcher met with the Hull and East Yorkshire Assertive Outreach teams to discuss the project proposal. The discussions centred on issues of recruitment; such as potential participant numbers and suitability of the design in relation to the proposed sample and issues regarding the feasibility and practical procedural issues related to the project; such as ensuring the safety of the researcher. These initial enquiries led the Hull team to identify approximately 15 service users who were deemed suitable to participate in the project. Figures of this type were not available from the East Yorkshire Assertive Outreach team. The teams also made suggestions with regards to the engagement of potential volunteers and emphasised the difficulties inherent in such a process with the users of the specialist service that they provide.

Following the discussions with service providers a research protocol was written and an application to the Hull and East Riding Local Research Ethics Committee was made in August 2002. The committee recommended amendments were made to the original protocol and accompanying documentation (see Appendix 3). The necessary amendments were submitted and ethical approval was granted under Chair's action in October 2002 (see Appendix 4).

4.2: Recruitment procedures

The researcher presented the research protocol and recruitment strategy to the staff at the assertive outreach teams from where the samples were being drawn. Staff were asked to identify service users active on their caseloads who met the necessary inclusion criteria for participation in the project. In order for the identity of the service users to remain confidential the CPA co-ordinator was requested to describe the research project to the service users. An information sheet (see Appendix 5) was given to each service user approached. The CPA co-ordinator then discussed the possibility of the service user meeting with the researcher to find out more about the project. The CPA co-ordinator was then required to gain written consent, using Consent Form 1 (see Appendix 6), from the service user for their name to be passed on to the researcher in order for an appointment to be made.

Following the completion of Consent Form 1 the researcher was given the name and contact details of the service user. The researcher then made contact with the service user through telephone contact, letter or through liaison with the care co-ordinator and arranged an appointment to meet.

Upon meeting with the service user the researcher provided them with further information about the research project in both verbal and written formats. The service user was given the opportunity to ask questions about the project. At this meeting the researcher gained written consent (see Appendix 7) from the service user to take part in the research project. Written consent was also gained for the researcher to gather demographic details about the participant from their care co-ordinator in the form of a details sheet. The researcher also informed the participant about the opportunity to participate in the member validation of their transcript following the initial analysis.

4.3: Interview procedures

An interview was arranged with the participant. For reasons of risk management a number of the interviews were conducted at the Assertive Outreach base. Other interviews were conducted at community mental health units and in the participants' homes. In five instances the researcher was accompanied by a member of the AO staff team to a participant's home who remained present throughout the interview. The remaining eight interviews were undertaken without the presence of a third party. Staff members that did attend the interviews agreed to treat what they heard within the interviews as confidential within the constraints of the confidentiality policy employed by the study.

The interview was initiated by the administration of the Perceived Stress Scale (Cohen, 1983). This was administered in an interview format to allow for the comprehension difficulties experienced by some service users and to promote engagement and discussion.

Following the administration of the scale the semi-structured interview was initiated. Participants were encouraged to talk about their experiences. The interview was reflexive to the issues raised by the participants. The use of clinical interviewing skills such as reflection and summarising allowed for the interviewer to further develop and clarify themes as they emerged in the interview through the participants' narratives.

All the interviews were audio taped for later transcription. The interviews lasted between sixty to ninety minutes each. At the end of each interview the participant was reminded of the opportunity to meet with the researcher at a later date to discuss their transcript and the themes identified from the primary analysis.

Following the interview the care co-ordinator for each participant was asked to complete a details sheet asking for information regarding the participant's mental health difficulties and substance use.

Due to lower than anticipated participant numbers, based on the initial estimates offered by the assertive outreach teams, further recruitment was undertaken through the residential rehabilitation unit in Hull. Individuals were recruited on the basis of the strategy outlined earlier.

Section 5: Analysis

In order to prepare the data for analysis all interviews were transcribed verbatim. The transcripts were analysed using interpretative phenomenological analysis following the four stages outlined by Smith et al (1999). Smith describes interpretative

phenomenological analysis as an idiographic approach and as such the researcher attempted to initially approach each transcript as an entity in its own right, allowing for comparison of themes across transcripts to begin at a later stage of the analysis.

Initially the all the transcripts were read. Due to the large amount of data collected the five richest transcripts were identified. These transcripts were then read and re-read. During this stage the researcher made notes about the text in the left hand margin of the page. The aim of the notes at this stage was to capture initial feelings and thoughts in response to the text. It was also felt important at this stage to retain the language used by the participant.

During the second stage of analysis the five main transcripts and the initial notes made about them were read again. At this stage 'labels' were assigned to the emergent themes identified in stage one. When labelling the themes it was felt particularly important to attempt to capture the meaning of the identified sections of the transcript. At this stage psychological terminology was used to name certain themes. Following this process a table was drawn up for each participant. It recorded the themes and associated quotes from the transcript. The themes drawn from each participant were studied and clustered into groups of similar or seemingly related themes. This process was undertaken individually for each transcript. When this list had been collated the researcher returned to the original sections in the transcript to ensure that the quotes still retained the context in which they had been discussed.

Once a list of themes had been identified for each of the five main transcripts each step of the process described above was repeated for the remaining seven transcripts.

When lists of themes had been drawn up for all the transcripts they were compared with one another and analysed to identify if there was any relationship between them. Themes were clustered into groups or 'concepts' with which they shared the same meaning. The researcher repeatedly assessed each quote that was used in the theme to ensure that essence of what the participant was communicating did in fact concur with the theme to which it was being assigned.

The themes were further analysed to identify the hierarchical relationship between them. Where a relationship could be identified the themes were placed together. They were then assessed again to identify the meaning or essence of the relationship. Throughout this stage of analysis the researcher referred back to the original data in order to establish a meaningful and credible relationship between the raw data and the interpretative analysis. Clusters were named using direct quotes from the sections of the transcripts from which they had been drawn or using concepts that defined the 'essence' of the theme. The themes were structured into a hierarchy that consisted of three super-ordinate themes, they were comprised of a total of ten composite themes.

The final stage of the analysis involved the production of a summary table outlining the structure of the themes and supporting quotes from the text.

Section 6: Ensuring Quality Throughout the Research Process

It is essential that the highest standards with regards to research are upheld. Quantitative methodologies adhere to established traditions with regards to ensuring quality whereas the path is less clear for enthusiasts of qualitative approaches (Salmon, 2003). Whilst a number of 'techniques' for ensuring rigor in qualitative research have

been published (Elliot et al, 1999; Turpin, 1997) Salmon (2003) urges caution when employing these techniques as nothing more than a tick box checklist. What can be surmised from Salmon's argument is that the qualitative discipline upholds transparency and the role that the researcher and their thinking has played in the development of the study. Whilst qualitative research must employ standards to ensure that it is conducted as rigorously as possible these standards and associated techniques must be conducted in the spirit of qualitative epistemology. That they can be used to their greatest effect when facilitating the researcher to reflect on the process by which understanding is being attained.

A number of techniques were utilised by this study to enhance accountability and transparency within the analytic process. The researcher also aimed for these procedures to allow her to be as reflexive as possible throughout the study.

6.1: Member Validation

Participants were given the choice to meet with the researcher on a second occasion. During this meeting it was proposed that the researcher would feed back the themes drawn from the initial analysis of the data to the participant. The aim of the meeting was to provide the participants with the opportunity to comment on the relevance of the analysis to their understanding of their experience. Unfortunately none of the participants volunteered to take part in the 'member validation' exercise.

6.2: Multiple Analysers

Two individuals with experience of using the IPA technique were approached by the researcher to act as second analysts. The five key transcripts were subjected to a supplementary analysis. The themes identified during this process were incorporated into the analysis at the second stage outlined above.

6.3: Reflective Diary

The researcher made use of a diary in order to leave auditable evidence of decisions that were made throughout the research process and the analysis. Relevant sections of this document have been included in the appendices (see Appendix 8).

CHAPTER THREE

RESULTS

Section 1: Overview

This chapter presents the results of the analysis of the data collected from the participants. Thirteen participants were interviewed but only twelve tapes were able to be transcribed giving a final sample of twelve. The first section of this chapter will present the demographic information that was collated from the details sheets completed by the participants' key workers. This section will also present the scores from the Perceived Stress Questionnaire (Cohen and Williamson, 1988) that was completed by each participant at the beginning of the interview. The subsequent sections of this chapter will outline and describe the themes that were identified from the participant interviews.

Section 2: Descriptive Information

The CPA co-ordinators from the Assertive Outreach teams completed a details sheet for each participant that took part in the study. They were asked to provide details of participants' substance use and mental health problems as well as demographic details such as the participant's age. The information gathered from these sources is summarised below.

2.1: Gender and Age of the Participants

Of the twelve participants only two were female, the remaining ten being male.

The participants interviewed were aged between 24 and 57. A mean age of 34.5 and a standard deviation of 5 were calculated for the female participants. A mean age of 35 and a standard deviation of 9 were calculated for the male participants.

2.2: Mental health problems

Nine of the participants had a formal psychiatric diagnosis of schizophrenia, a number with paranoid characteristics. Of the remaining sample two were diagnosed with Bipolar disorder and the one remaining participant was diagnosed with Schizo-affective disorder. The symptoms that the participants were reported as experiencing by their key workers are summarised in Table 2 on the following page.

2.3: Substance use

The information presented in Table 2 is a composite summary of the information that both key workers and participants gave about substances of use. In some cases participants spoke about using substances that their key workers had not noted on the details sheets. Whilst the substances of use are summarised below it was felt interesting to highlight which substances were used most frequently by the sample. The majority of participants in this study could be referred to as 'poly-substance users' reporting regular use of a number of substances and less frequent use of others. Cannabis and amphetamine were the most common substances of use within the sample population with eight participants reporting the use of these substances. Six participants reported the use of Heroin and Alcohol whilst five reported using crack cocaine. A number of other substances were reported as being used as can be seen in Table 2. These and the other demographic findings will be commented on in more depth in the discussion chapter of this study.

Table 2 (see page 60) summarises the information that was gathered about each participants' substance use and mental health problems.

Table 2: Summary of Participant Substance Use and Mental Health Details.

PARTICIPANT NUMBER	PSYCHIATRIC DIAGNOSIS	SYMPTOMS EXPERIENCED	PRESCRIBED MEDICATION	SUBSTANCES USED
P01	Drug induced psychosis/ schizophrenia	Auditory hallucinations Thought disorder Flight of ideas Thought blocking	Refuses all medication	Heroin Cannabis Amphetamine
P02	Paranoid schizophrenia	Auditory hallucinations Delusional thoughts	Depixol	Cannabis Amphetamine
P03	Schizophrenia	Visual hallucinations Auditory hallucinations Delusions of persecution	Clozaril Hyoscine	Alcohol Cannabis Psilocybin mushrooms Amphetamine Cocaine LSD
P04	Bipolar disorder	Paranoia Mood swings Pressure of speech Anxiety/agitation	Lithium carbonate Piportal depot Benzhexol	Heroin Crack cocaine Amphetamine Cannabis
P05	Schizophrenia	Auditory hallucinations Persecutory ideas Paranoia	Clopixal	Cannabis Ecstasy Crack cocaine Heroin Amphetamine
P06	Bipolar disorder	Elated mood Grandiose delusions Self neglect Paranoia	Risperidone Lithuim carbonate	Cannabis Cocaine Crack cocaine Heroin Opium
P07	Schizophrenia	Auditory hallucinations Visual hallucinations	None prescribed	Amphetamine Cannabis Ecstasy Crack cocaine LSD
P08	Schizophrenia	Auditory hallucinations	Risperidone	Alcohol
P09	Paranoid schizophrenia	Auditory hallucinations Paranoid beliefs Bizarre speech content Negative symptoms	Olanzapine	Alcohol Cannabis Amphetamine Heroin

P10	Paranoid schizophrenia Personality disorder (unspecified)	Paranoid ideas Auditory hallucinations	Clozapine Zopiclone Sodium valporate	Amphetamine Cannabis Alcohol Heroin Crack cocaine Ecstasy Abuse of prescribed medications
P11	Schizophrenia	Paranoia Auditory hallucinations	Olanzapine	Alcohol
P12	Schizoaffective disorder	Auditory hallucinations Pressure of speech	Depakote Clozapine Acamprosate	Alcohol

2.4: Summary of the Scores Drawn From the Administration of the Perceived Stress Scale (PSS-14)

At the start of each interview each participant was asked to complete the 14-item Perceived Stress Scale (Cohen and Williamson, 1988). The scores for each participant are summarised in the Table 3 below. The starred (*) scores indicate those participants (50% of the sample) that reported experiencing a level of perceived stress which was higher than one standard deviation (7.49) from the mean score (19.62) of a large general population sample (Cohen and Williamson, 1988). Only one participant scored lower than one standard deviation from the mean. Two of the participants were unable to complete the scale as they were unable to follow the instructions given and repeatedly became confused during its administration. The researcher therefore decided to terminate the administration of the scale for these subjects.

Table 3: Individual PSS Scores for Participants

PARTICIPANT NUMBER	PSS SCORE
P1	Incomplete
P2	25
P3	20
P4	18
P5	30*
P6	17
P7	34*
P8	28*
P9	Incomplete
P10	32*
P11	28*
P12	9

Section 3: Themes Drawn from Analysis

This section serves to summarise the themes drawn from the analysis of the transcripts. The themes are presented within the hierarchical structure that was imposed on the

themes as part of the analytic process. Each super-ordinate theme is described and the composite themes from which it is composed also discussed. Each theme is illustrated with a selection of quotes from the transcripts that were used in the formation of the theme. These quotes appear in italics and are presented as the participant spoke them.

Table 4: Summary of the Super-ordinate and Composite Themes

SUPER-ORDINATE THEME: INCREASED CONTROL
Theme one: Relax (Theme includes 'relaxing to cope with problems')
Theme two: Enjoying drug effects
Theme three: Blocks things out
Theme four: Fitting in (Theme includes 'drug taking as a personal identity')
SUPER-ORDINATE THEME: FEELING OUT OF CONTROL
Theme one: Addiction(Theme includes 'the drug has taken control' and 'withdrawal')
Theme two: Danger (Theme includes 'feeling threatened')
Theme three: Practical problems with access to substances
SUPER-ORDINATE THEME: AMBIVALENCE
Theme one: Wanting things to be different (Theme includes 'wanting more' and 'thinking differently')
Theme two: Feeling overwhelmed
Theme three: Ambivalence

3.1: Super-Ordinate Theme: Increased Control

The super-ordinate theme of 'increased control' was apparent in all the participants' accounts of their experiences. More specifically participants' reported that a number of key features of their substance use gave them an increased sense of control over their life experiences.

Some participants described the experience as having an increased sense of control over the symptoms of their mental health problems. Whilst others described feeling their substance use helped them to feel an increased sense of control over other problematic aspects of their lives.

For some participants the experience of being in control was simply one of enjoyment. For others they described their substance use as being important to their ability to function, or cope with their day-to-day lives.

3.1.1: Composite Theme: Relax

The theme of using substances to gain a sensation of relaxation was a prominent feature of the participants' experiences. The theme of relaxation was composed of both the feeling of relaxation and the participants' reports of using relaxation to enable them to cope with problems. It was felt important to title the theme 'relax' as it reflected the language that many of the participants used to convey the feelings that they had.

Participants spoke of having these experiences when using a range of substances, including cannabis, heroin, alcohol.

Participants spoke about using substances as a way of getting the feeling of relaxation.

> *'Like when you are smoking it you know you just feel relaxed and you feel high'* (P06)

Reports of this feeling were also characterised by the enjoyment of being relaxed,

> *'The high. Just to get the relaxation that you get from smoking cocaine. When you smoke it your whole body just feels relaxed and it's a beautiful feeling'* (P06)

and being able to do activities that they find pleasurable.

> *'I like to lie in the sun and smoke a spliff, that is what I like to do. Chill out and relax, do you know what I mean?'* (P05)

> *'Just to get the feeling and that. Chill out and listen to my music'* (P09)

Participants went on to further describe their experiences of relaxation. The narratives reveal that participants use substances to help them to relax which they felt helped them cope with problems that they might be experiencing. The problems that participants identified as being eased when they became more relaxed were varied. Some spoke of their feelings of stress and anxiety as being negated by the relaxing effects of their substance use,

> *'you know that if you take some of that it will take it all away and you will feel normal again and you will be relaxed and chilled and you will get some sleep. Its just a release from it, do you know what I mean?'* (P05)

'Cause it gets rid of all my problems, it releases a lot of fear, it doesn't cause anger and it helps me produce a feeling of non-stress reality around myself wherever I go' (P02)

Other participants spoke of the relaxing effects of their substance use as being able to help them to cope with the symptoms of their mental health problems such as paranoia and thought disorder.

'It just helps me to relax, makes me feel less paranoid if I have to go out. If I have to talk to other people it allows me to do it a lot easier...You just feel calmer, like I said more relaxed, more at ease. Less threatened by things that are going on in your mind and environment' (P08)

'It just chills me out. It really does. It just keeps your head on a level and rationale thinking and all that. Thinking before you speak' (P10)

One participant described how she used heroin in the place of her prescribed medication as a way of calming herself down when she experienced delusions of grandeur.

'If it is heroin and you are in psychosis quite often I will have a smoke to calm myself down. You know like, cause it takes the psychosis away...Cause it is like taking a downer, do you know what I mean. And if you are really high on a psychosis and I am having delusions of grandeur and like you want to get around the clock and meet people and enjoy yourself and things like that, to calm yourself down its good to have a smoke of heroin. You know bring me back down to a level. I never used to take tablets, I used to like every time I'd

have a psychosis and I used to go out and buy a tenner bag to calm myself down, bring myself back down to a level' (P06)

The relaxing effects of cannabis and heroin were described by some participants as being used as a means of coping with the 'come down' that they experienced as a result of taking amphetamine.

'Then I got into heroin. It used to bring me down and calm me down off the speed...it made me relax and I could think straight, cause my mind was whizzing from all the speed...I used to take the heroin to stop all that. And I started chillin out and you know relaxing and that' (P04)

'To come down I smoke dope. I just relieve all the stress, all the anxiety and all the bad feelings that are changing my body' (P02)

These varied reports of relaxation illustrate part of the process by which participants' experiences of substance use result in the perception of an increase in the amount of control they have over their life.

3.1.2: Composite Theme: Enjoying Drug Effects

Many participants spoke about enjoying the effects of the substances that they used. It was felt that these experiences contributed to their increased sense of control.

'The feeling that you get...Oh real good. Better than sex' (P07)

'Just the feeling of euphoria I suppose and I had a really cheeky come up. You could see stuff like faces in the wallpaper and shit like that, it was a good laugh…It was sound. Just having a good time' (P05)

'You can't get a better feeling really. Its just a beautiful feeling' (P06)

'The edge of happiness, blissfulness, cheerfulness…rushes in on you, or like waterfalls and fountains coming out of you. Just expressing how you feel and that it gives you rushes and emotions' (P02)

Other participants spoke of the feeling that they got when taking the substances as being the only positive experience in their lives.

'But it is the only pleasure in life really, isn't it' (P09)

Some participants particularly enjoyed the way in which their imagination and creativity was enhanced by the 'drug effects'. These explanations also appear to convey that participants are able to enhance some of the symptoms that they experience by using substances in order to make them more enjoyable and controllable.

'its like I'm into my art and that. Your mind, well your reactions take over your mind. Its like say draw and smoke for me, its like when I was drawing and taking mushrooms like I drew a cockatiel with a joint in his foot and like on the other side of the paper there was a cat holding a cannabis leaf' (P03)

'Your imagination is a lot more and you seem to sense the lights and things like that a lot more. Like when you are on coke, when you are smoking coke and you are on psychosis you are just really high…like you can believe really great things, you know when you are smoking you get like delusions of grandeur' (P06)

3.1.3: Composite Theme: Blocks Things Out

Participants' reported a very distinct experience, that of 'blocking things out', which they attributed to their substance use. They described using substances as a way of increasing their control over the things that come into their heads such as worries and thoughts.

'I think it just suppresses something…it tends to knock them out…when you are drinking you are not focussing on anything. You are not thinking about something. You just sit back and enjoy the alcohol in your system. You are not thinking so much, you are not thinking so clearly. It is like an escape from reality' (P08)

'you're thinking it in your head but it sort of blocks your thoughts' (P03)

Many of the participants found that the effect of 'blocking' was helpful to them, describing themselves as being relieved to be having a break from some of the experiences that cause them distress, such as the worries and stress of their day to day lives and the symptoms of their mental health problems.

'just the stress in my life…I've got that going round my mind and it does my head in. Put a bit of a barrier in between my problems, smoking a bit of blow puts a barrier there…and the things that are worrying me don't come into my mind as often. They are still there, do you know what I mean, but it is not as insistent as it is like when things come in every five minutes. Saying you have got to go and see your girlfriend, she's going to be thinking that you don't care about her' (P05)

'I mean that is why it was such a relief in a way when I first took it because it was like, wow that is everything just gone. I am just here and I feel perfectly normal, I can chill, I can talk, you know what I mean. There is nothing on my mind that is doing my head in' (P05)

'Coloured cartoons for weeks on end. So anyway I'm of the mind that, whatever you want to call it that the heroin, the opiates or the amphetamines seeing a background of cartoons of total horror. And it actually makes things go to the back of your mind, more actually less frightening' (P01)

'Well it helps because it takes away all the feeling…Eggs are brilliant because it takes away, you couldn't care less about anything…It just took everything away, all the pain and everything' (P10)

3.1.4: Composite Theme: Fitting In

It is notable that the theme of 'fitting in' was one of two dominant composite themes, the other being addiction which will be discussed in a later section, that participants

spoke about. This may reflect the significance of this aspect of participants' experience to their continued substance use.

The theme of 'fitting in' was seen to comprise of two elements of participants' experiences. Firstly that of finding that substance use helped them to fit in with social groups. Secondly that their substance use gave them a sense of personal identity. Both of these aspects were seen to give participants a greater sense of control over problems that they reported with self-confidence, loneliness and getting on with others.

Participants spoke of experiencing problems with self-confidence, loneliness and being able to socialise with other people.

> *'it almost feels like totally alone in this world, this lonely world'* (P01)

> *'It is loneliness more than anything'* (P11)

> *'I like having people around me...I don't like being on my own...I don't like my own company'* (P04)

> *'You see I don't trust people that much'* (P09)

> *'Not that you should feel intimidated anyway but as part of my illness I think that you do. You tend to feel a bit smaller, a bit less confident'* (P08)

Participants reported that their substance use helped them to feel more confident. A number of individuals described that when they are using substances that they feel like a 'somebody rather than a nobody', conveying that they feel a greater sense of self-worth. Through these experiences participants spoke of finding that they were able to 'fit in' and build social relationships with other people. In some cases having built relationships with other people they didn't want to 'not fit in' anymore so continued to use. It is this feature of their experience that seemed so very important to the participants.

> *'it helped my confidence and stuff like that'* (P10)

> *'well it gave me loads of self-confidence. I started losing weight. I mean I wasn't this fat but I was a bit plump but not too much. Started losing weight, ehmm, I thought it gave me great ideas. Yeah it made me feel more confident. I could socialise a lot better...I just felt like a somebody instead of a nobody'* (P04)

> *'I was my circle of friends...we all encouraged each other. And you sort of fit in, don't you, and I didn't want to not fit in. So you just carry on doing it'* (P04)

> *'It was mainly heroin addicts, you know heroin injectors. But they all seemed exactly like me. Mixing around with a lot of them and eventually I started doing it more and more and more'* (P07)

As outlined earlier a second feature of peoples' experiences was seen to contribute to the theme of 'fitting in'. A number of participants described having developed a personal identity based upon them being a substance user. This identity was seen as making them different to what they saw as 'normal' non-drug using society, a lifestyle that they rejected.

> *'art is my first choice but say like Van Gogh he used to paint and get pissed and starve his self. I starve myself, and take alcohol and drugs as well'* (P03)

> *'I just don't particularly want the normality of the day-to-day things. Know what I mean, that piss you off like bills coming through your fucking door and getting letters off social'* (P05)

3.2: Super-Ordinate Theme: Feeling Out of Control

The analysis of the transcripts revealed a second super-ordinate theme, that of 'feeling out of control'.

In some cases participants reported feeling out of control of their substance use. They also reported experiencing situations, often directly related to their substance use, that made them feel less in control and able to make choices.

Participants' accounts of the experiences that formed the composite themes of 'feeling out of control' were characterised by a sense of negativity, frustration and in some

cases fear. Participants also spoke of these experiences with a tone of resignation, that events had become out of their control and there was little that they could do to effect change.

Whilst the theme of feeling out of control could be interpreted as lying on a continuum with 'increased control' it was felt that identifying these two aspects as separate themes was necessary in order to convey the essence of the data collected. Participants' reports of 'increased control' and 'feeling out of control' were very distinct and equally represented in the data. During the process of interpretation it was felt that these reports highlighted a clear division in the experience of the participants and as such it was felt provided a rationale for the creation of separate themes rather than the amalgamation of distinct experiences under one unifying yet imposed concept.

3.2.1: Composite Theme: Addiction

The composite theme of 'addiction' was one that participants spoke of at length. They used the term addiction to describe how they felt that their substance use had become out of their control. This experience was composed of two aspects, firstly that their substance use had taken over their lives, and secondly that they experienced difficulties with withdrawal effects.

Participants spoke of feeling out of control about their substance use, that it was the drug and not them that was controlling their life. They described reaching a point whereby their need for the drug was so strong that it took over many aspects of their

day-to-day lives. Whilst they reported not wanting to be 'addicted' they felt their drug use had escalated to a level whereby it was out of their control to make change.

> *'I am trying to cut down but I am an addict. I didn't think that I would become a drug addict, I didn't think that I would get onto needles...Addicts are people that continue to take drugs every day. Injecting, injecting drugs. And they don't do anything else except take drugs'* (P07)

> *'Just the lifestyle that is involved. I mean I am into being reliant on being on a drug that is just making you feel normal in the end and having no money for food or baccy or anything basically. Spending it all fucking on that shit. And any money that you are getting you are putting aside for that, thinking alright I have got 30 quid, that's two bags and I am wanting a bag today. Fuck food, fuck baccy'* (P05)

> *'I was smoking like £20 worth everyday and then like my body started aching and I was being sick in the morning, things like that. I didn't like it, do you know what I mean. I was relying on it and it wasn't enjoyable'* (P06)

Participants also spoke about the struggles that they had experienced with the withdrawal effects when they had not been able to use or had tried to stop. They described finding that the physical symptoms were so painful that they felt unable to make choices about continuing to use. Consequently they would use to take away the pain that they were feeling as they felt powerless to do anything else.

'I found it stressful going through with cold turkey instantly. And that is something I don't like. Cause it is like breaking someone's heart really and it's just coming apart inside you' (P02)

'It's not a craving, it's an actual physical addiction. You feel pain. You get pains shooting through your legs, you get stomach cramp, you get backache, your neck aches, you just feel horrible. You get a snotty nose, cough, you keep retching, spewing up, do you know what I mean. You have diarrhoea, stuff like that' (P05)

'Like I said it's a vicious circle. You do it, you have a binge and the next morning you feel crap and there is only one thing that cures it and that is another drink. You feel better for while' (P11)

3.2.2: Composite Theme: Danger

The theme of 'danger' was comprised of situations that were described as being dangerous and experiences of feeling threatened and fearful. It was felt that these different experiences contributed to understanding the way in which danger contributed to participants feeling out of control.

Participants described finding themselves in dangerous situations, which they associated with their substance use. These included the effect that their substance use was having on their physical health. It was apparent that participants were left feeling that situations had escalated out of their control and that as such they were in danger.

Participants spoke of how these experiences had made them realise that they wanted to make change in their lives and in some cases reduce their substance use.

> *'no I don't like drugs. I don't like the people that mix with them. You just get mixed up with all the riff raff, don't ya'* (P10)

> *'Yeah it's the lifestyle that I really don't like. Cause I know I'd end up dead. I'd end up beaten up, and things like that. And it goes further, you know, I'd end up with some punter trying to beat me up or something like that. And I'm not a prostitute, do you know what I mean, and I can't live that lifestyle. And I feel guilty when I have done something like that. Its just like all the time I have been spaced out on the crack I've wanted more and I've agreed to have sex with someone for money...Cause it puts you in a lot of danger because you are off your head, you are really high'* (P05)

> *'Well I kept feeling I was overdosing all the time. And then I took a couple of sleeping tablets and a glass of whisky and another two sleeping tablets. And I kept thinking I must have very low* metabolism, *do you know, not to take a couple of sleeping tablets. So you know I just don't want to overdose'* (P05)

> *'Formations in my stomach were not taking place properly. I would probably have be in the gutter now if I hadn't given up alcohol'* (P02)

Participants also spoke of feeling threatened and intimidated. These feelings were often associated with the symptoms of their mental health problems. In one participants' case he spoke of being intimidated and exploited by other substance

users. These experiences are all characterised by the way in which participants feel these situations are out of their control.

'It was frightening, it was scary, cause I was believing that it was all true. I thought that everybody was talking about me and it was as if things were really happening, do you know what I mean. Like I really did think that people was standing in the bush, looking at me. And I was convinced. I was frightened' (P04)

'I hear voices and stuff like that and I won't even turn the light on. I keep it off all night in case people are watching me' (P10)

'Person that gave me drugs, yeah. I find it hard to tell him but when he comes the next time I will just tell him, I will just say, I can't do with it' (P09)

'When my mate moved out some other druggies came around and they found me on the street and they came into my flat and they was into heroin. Well I couldn't stop them really because there was about four of them. Well not that I couldn't stop them but that I couldn't get them out of my flat' (P09)

3.2.3: Composite Theme: Practical Problems with Access to Substances

Money played a large role in the practical problems that some participants experienced in accessing substances. Participants reported that understandably this affected their patterns of use and that they would find themselves wanting to use but without the money to pay for it. They spoke of finding this a frustrating experience as

it reduced the amount of control that they felt had when making choices about what they wanted to do. Participants also spoke of feeling bad about how they got money and where it came from.

> *'Depends on the finances like. You can't do it if you haven't got the money. It is a great influence'* (P08)

> *'My dealer won't do me loans no more...He won't do me a loan, so I have to go everyday and then I pay him off on my payday but still get that work out everyday, but he won't let me do it. He's not making enough money, so he can't give me a loan anymore. Stuck for money'* (P07)

> *'I need the money, I feel bad about where I get it from'* (P07)

> *'You feel a bit frantic. You'd do anything to get more money. Prostitution anything...You feel, you get involved in prostitution if you are smoking enough crack. You need to get more money'* (P06)

One participant spoke of trying to find practical solutions to his financial problems by co-ordinating the purchase of drugs with a group of friends that he used with.

> *'Money is sometimes a problem. With working with friends we all have our paydays and we work around it'* (P02)

3.3: Super-Ordinate Theme: Ambivalence

A third theme of 'ambivalence' was identified as emerging from the analysed data. The composite themes were seen to feed into a process that was indicative of ambivalence. Furthermore it was felt that this theme allowed for the expression of the tension between participants' reports of attempting to increase their sense of control over their life situations through substance use whilst often finding that their use increasingly left them feeling out of control.

The process of ambivalence was seen to emerge from participants' recognition of there being other things in their life that were important to them and the desire to make choices about their lives, in some cases the wish to cease or change their substance use. Yet on the other hand people felt overwhelmed by their life experiences.

The reports of the participants indicated that individuals were at different stages of this process. One participant in particular was seen to have negotiated this process and was as such making choices about her life and thinking differently about her experiences of substance use.

3.3.1: Composite Theme: Wanting Things to be Different

The theme of 'wanting things to be different' was seen to be composed of two elements, 'wanting more' and 'thinking differently'. Both were seen to be important parts of the process by which participants thought about making change.

Participants spoke about wanting more in their lives and for their future. For some this was about the ability to buy material things that they wanted, rather than spending all their money on drugs.

> *'there are other things that I want to buy…That's it, that's what I want to buy…new coat, a Nike coat, I am going to get that money, about 25 pound. My X is going to help me with that. I need a new cap, some Nike trainers, mobile phone'* (P07)

> *'I am moving into my flat I've got to make some stability in my life. So I need money. Any bit of money that I have got'* (P06)

For others it was about developing their relationships with partners and one day starting a family.

> *'I am happy with her. I want to have kids with her'* (P05)

> *'Dangerous, dangerous for me, at the end of the day I could end up dead somewhere, found dead in the gutter somewhere…I don't want to live that type of life, I think I am better than that. And I have got a nice boyfriend at the moment and we are thinking about getting married'* (P06)

Some of the participants reported 'thinking differently' about their substance use. An important aspect of this theme was that participants talked about it being their choice and their decision to make change, not one that was imposed upon them. Some participants had been able to make change and reduce their use of some substances and saw that thinking differently about their use had been a key component in this

process. One participant spoke of her experience in a substance misuse programme and how this had helped her to think differently about the choices that she was making. Her narrative detailed the resolution of a process that the other participants were still trying to negotiate but highlights the importance of this aspect of their experiences with regards to making change in the future.

> *'Well I make my own decisions don't I. I have to decide whether to or not'* (P09)

> *'But I knew that it was something that I had to come out of. Do it myself, not when they was ready, when I was ready'* (P10)

> *'I have done a drugs and alcohol misuse programme in X which was really effective and it has helped me see, well it has changed my life around, you know. Made me see that there are more important things in life than just getting wasted. And that I can chose in life what I want from life and that the decisions that I make on my own, you know I can be whoever I want to be if I put my mind to it'* (P04)

3.3.2: Composite Theme: Feeling Overwhelmed

A further identifiable theme that was felt to contribute to ambivalence was that of 'feeling overwhelmed'. For some they attributed this feeling as being as a result of the symptoms of their mental health problems whilst others spoke of feeling overwhelmed by life in general and having to deal with day-to-day pressures. When participants talked about feeling overwhelmed there was a sense that they did not

know how to cope with these feelings and situations and would consequently feel hopeless. It was felt that these experiences contributed to them feeling that there was nothing that they were able to do to execute change in their lives so they would continue to use.

> *'I just thought I can't be doing with this. So I just sacked everything off'* (P05)

> *'Just getting up in the morning is a pressure for me. Cause there is nowt to do and cause I have put on all this weight I have got no self-confidence...So just getting up in the morning and going to the shop that is a pressure for me. Deciding what to do for the day. Tidying your room and making your bed'* (P04)

> *'If I have something to do it will stop me. But if you are on your own in that flat, terrible place. Terrible places, flats. On your own in a great big box in the sky, it is horrible. You have got to do something if you are sat there in that thing and there is nothing on telly. So you drink'* (P11)

> *'I can't, I just feel as everything in the whole world is coming into you, do you know what I mean. Like, it feels like you are the only one out there. Everything is sort of staring down on you. Feels like you are being followed around. It just, I've started to have (unclear) feeling overwhelmed. You don't feel right, you don't feel that you are there'* (P07)

'Well see if they could fucking swap brains with me for a couple of days. See how they feel like...anxiety attacks and things and I feel sick and all like that when I have had a smoke. And I feel shit...Well anxious and stressed and everything what stresses you and you cope with when you have a smoke and to cope with. They start coming on and all at once you are fucking ill. And then you are snowed under' (P10)

3.3.3: Composite Theme: Ambivalence

Some participants spoke directly about the ambivalence that they feel towards their substance use, verbalising the process that has been seen to emerge from the previous two composite themes that form the super-ordinate theme of 'ambivalence'. Although this theme was less supported by the data it was felt that these statements serve to illustrate the role that ambivalence can play in maintaining substance use.

' I have always had a taste for it but I shouldn't be drinking it. I need to come off it' (P09)

'I like it and I don't like it, do you know what I mean. It is horrible and then I like it' (P07)

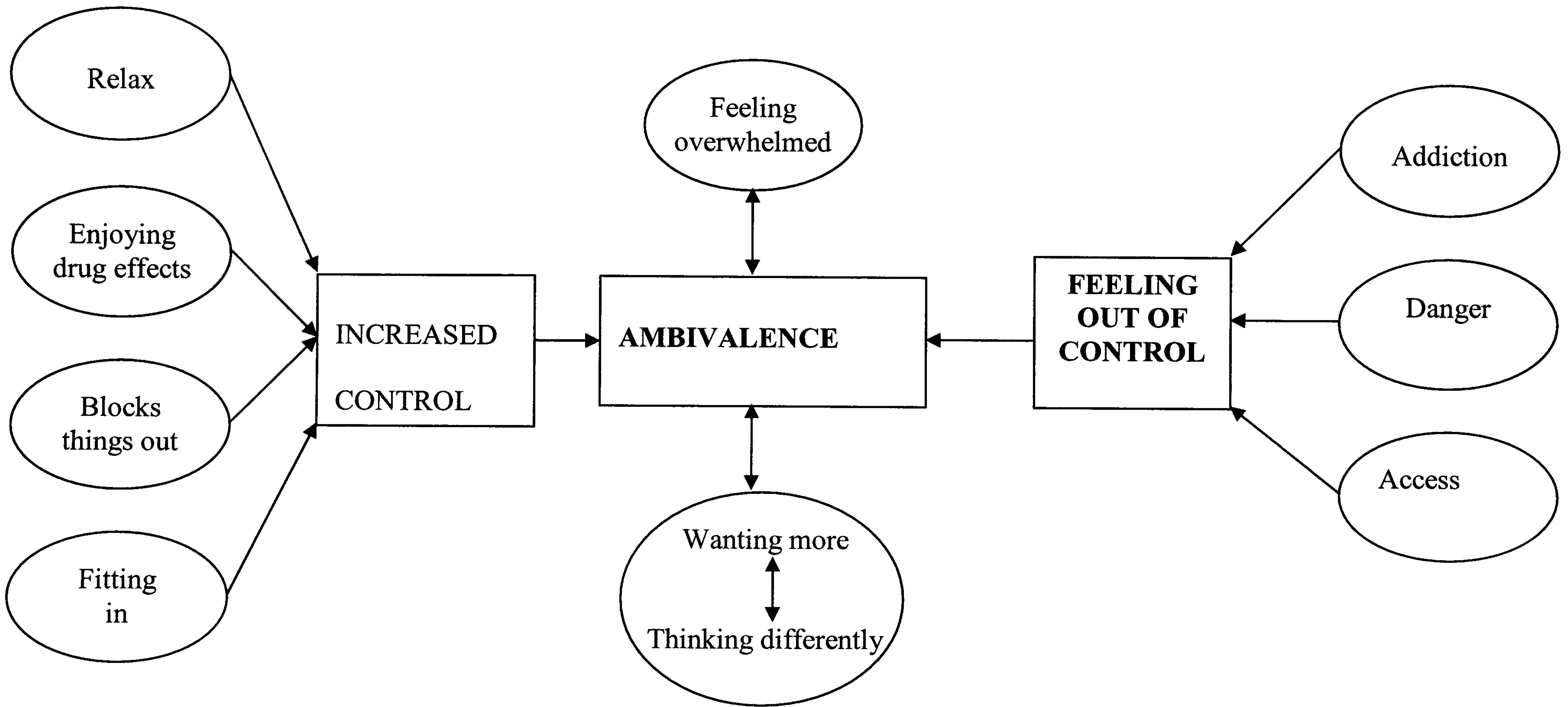
'I do, mind I still drink, I mean not to, well I have the last couple of years mind I did rather hit it. I ended up in hospital a couple of times. I don't think I drink to excess. I do use alcohol. I would like not to...Sometimes I do it and I don't then I don't know why I actually do it. I just do' (P11)

'You don't even think of anything else but that it just constantly in your life but that it is something that takes away all your problems as well as causing them' (P05)

Section 4: Summary Diagram

Figure 3 on the following page illustrates the relationship between the composite and super-ordinate themes. This relationship is expanded upon and described further in order to address the research questions in the next chapter.

Figure 3: Illustration of the Relationship Between Composite and Super-ordinate Themes



CHAPTER FOUR

DISCUSSION

Section 1: Overview

The aim of this study was to explore the experience of substance use amongst a sample of individuals with a diagnosis of psychosis. The research questions investigated by the study aimed to develop an understanding of participants' experiences of substance use and the process by which substance use is maintained in this population sample. The study also measured participants' perceptions of stress in order to assess how this might contribute to the process of maintenance.

Thirteen participants were interviewed using a semi-structured protocol. Twelve of these interviews were transcribed and analysed using a qualitative technique, Interpretative Phenomenological Analysis. The analysis of the interviews revealed ten composite themes, which were organised into three superordinate themes: 'Increased control', 'Feeling out of control' and 'Ambivalence'. The analysis allowed for the essence of the participants' experiences to be communicated whilst providing a framework by which the maintenance of their substance use might be understood.

The concepts underpinning the themes reveal the participants' dilemma between finding a way to cope with difficulties in their lives, through using substances, whilst understanding that this in turn both reinforces and causes them further difficulties. This dialectic can be understood by the superordinate theme of 'Ambivalence'. These concepts and the relationship between them appear to be consistent with aspects of the Stages of Change model, which will be discussed in detail later.

In summation this chapter will address the descriptive data drawn from the sample with reference to the established literature in this field. It will also make comment on scores drawn from the administration of the Perceived Stress Scale (PSS) (Cohen et al, 1983). The

themes drawn from the analysis will then be discussed with reference to the existing literature that seeks to understand substance use. This section will further attempt to understand how the experience of people with mental health problems, more specifically psychosis, can be understood to contribute to these models of maintenance. This chapter will then go on to critique the methodology employed by the study. Recommendations for future research and the clinical implications of this study will also be discussed.

Section 2: Descriptive Data

It is necessary to address the descriptive data collated by this study in order to tackle the issue of representativeness and generalisabilty. Qualitative designs consist of small sample sizes. Some critiques argue that, because of this feature, the sample cannot be considered to be representative of the experience of the general population. Therefore qualitative studies are limited in their ability to draw generaliseable conclusions from the data that they have collected (Willig, 2001). Haug (1987, p.44) however argues that if *'a given experience is possible, it is also subject to universalisation'*. In considering these arguments it was felt important to present the descriptive data collected from the sample in relation to available data from other studies in order to place the participants' experiences within a wider context.

2.1: Substances of Use

The information gathered regarding the substances of use detailed by the sample was thought to be of particular interest. Nine of the participants were identified as being poly-substance users. There is a dearth of information amongst the established literature regarding poly-substance use in populations of individuals with mental health problems. This is in contrast to the literature in the substance use field in which poly-substance use is a well recognised concept, viewed as being frequent if not the norm within 'drug culture' (Royal College of Psychiatrists, 2000). This may be in part be due to the all consuming aim of the research in

the field to identity causal relationships between the two 'disorders'. Resultant of such an approach is that data regarding the prevalence of substances of use has been fragmented into singular substances in an attempt to identify such a relationship. It is interesting to note that the other three participants that were not identified as being poly-substance users only used alcohol.

Cannabis and amphetamine were jointly identified in the sample as being the most common substances of use. This finding concurs, in part at least; with research indicating that cannabis is the most widely used illicit substance by individuals with mental health problems in the UK (Department of Health, 2002). Amphetamine has been identified as being more frequently used amongst individuals with a diagnosis of psychosis in comparison to the control samples (Schneier and Siris, 1987). Interestingly heroin and alcohol were the next most common substance of use by the participants in this study. Heroin is identified in the literature as being less frequently used by individuals with a diagnosis of psychosis than control groups (Mueser et al, 1990 and 1992). Alcohol has also tended to be seen as being less frequently used in populations of individuals with mental health problems than control groups (Mueser et al, 1990). This may reflect transatlantic differences in patterns of substance use (Drake et al, 1993; Menezes et al, 1996). The various different patterns observed highlight the need for locally based research to occur to understand local population needs.

Finally, and maybe somewhat worryingly is the finding that five (42%) of the participants reported using crack cocaine. Media portrayal of crack is as a substance that is highly addictive and is associated with violence and excessive sexual activity (Royal College of Psychiatrists, 2000). North America reported a large-scale problem with the rate of crack use in the 1980s (Royal College of Psychiatrists, 2000). Commentators predicted a similar

penetration of the substance in the UK market to follow. The Royal College of Psychiatrists (2000) alludes to the snorting of the powdered form of cocaine to be more common in the UK than the use of freebase, crack cocaine. What the findings from this study would indicate is that the freebase form of the substance rather than the powdered form is more commonly used amongst this sample.

However, cocaine (form unspecified) has been identified as the third most popular substance of use, within samples of individuals with a diagnosis of psychosis, by a number of studies with estimates of lifetime prevalence at around 11% (Mueser et al, 2000).

It is difficult to reach conclusions as regards representativeness of the sample based on substance use alone as the findings are so mixed.

2.2: Perceived Levels of Stress

Of the ten participants completing the PSS-14 five reported experiencing levels of perceived stress above that of the mean given by the authors of the measure. This finding would indicate that the sample displayed a wide variability in terms of their levels of perceived stress as measured by this scale. It is difficult to interpret the findings as participants found it difficult to complete the measure, and in two cases the administration had to be terminated due to the participants' difficulties. Participants also spoke of how stressed they were in the interview; however this level of distress is not reflected in the scores from the PSS. The scale has not been validated for this population and it may not have been an appropriate choice of measure.

Section 3: Broadening the Discussion of the Themes in Order to Address the Research Questions

The following discussion aims to further explore the themes that were drawn from the analysis in relation to the existing literature in the field. Simultaneously, through this discussion, the research questions will be addressed. The research questions were as follows:

(1) What are the experiences of individuals' with a diagnosis of psychosis of using alcohol and illicit substances?

(2) What impact does their use have upon them?

(3) What do participants' experiences tell us about the maintenance of their alcohol and illicit substance use?

3.1: Understanding Individuals' Experiences of Use and the Impact That This Has Upon Their Lives.

This section will describe the themes that were felt to relate to the first two research questions, experience and impact of use. It will discuss the findings in relation to the established literature.

3.1.1: Increased control

The theme of **'increased control'** covered a number of aspects of participants' experiences. These aspects will be discussed in relation to the existing literature in the field. The overall theme of **'increased control'** and its broader meaning in the context of existing research will also be discussed.

Underpinning the theme of **'increased control'** is that of using substances to cope with problems. In particular coping with feelings of anxiety and stress as is illustrated by the themes of **'relaxation', 'blocking' and 'enjoy'**. The theme of **'fitting in'** appeared to address more specifically the way in which participants used substances to help them to cope

with the difficulties that they experience in building relationships with others and social situations.

Participants spoke of the importance that their substance use had in helping them to feel relaxed. A number of participants spoke of how this feeling helped them to cope with stress and anxiety. This finding supports the literature that has explored the experience of anxiety amongst individuals with a diagnosis of psychosis. A number of researchers have talked about the role that emotional disturbance such as anxiety and depression play in peoples' subjective experience of psychosis. MacCarthy et al (1986) states that many people with psychosis report 'feelings of severe anxiety, despair, loneliness, and rejection are of equal, if not greater importance to the symptoms which define psychosis itself'. Studies indicate that up to 60% of individuals with a chronic psychotic disorder experience symptoms of panic and anxiety (Siris, 1991; Moorey and Soni, 1994). It would appear that the high levels of stress expressed by the sample could be seen to be representative of the high levels of anxiety that are seen within the wider population of individuals with a diagnosis of psychosis.

Previous research has placed great emphasis on understanding dual diagnosis through the effect that substance use has upon 'positive symptoms'. Furthermore this interest has been formative in the development of the self-medication model (Khantzian, 1997). However for the group involved in this study it appears that the regulation of anxiety states and stressful situations is of prime importance. Other studies support the themes of **'relax', block'** and **'enjoy'**, stating that the most common reasons for substance use amongst individuals with a diagnosis of psychosis is to 'get high' and to reduce negative affect, including social anxiety, depression, dysphoria, and boredom (Carey and Carey, 1995; Bellack and DiClemente, 1999).

The use of substances to regulate stress and anxiety can be further understood in relation to the vulnerability-stress model of psychosis (Nuechterlein, 1987). The model proposes that the experience of stress and stressors can exacerbate episodes of psychosis. The participants' attempts to minimise their experience of stress and anxiety through their substance use could be seen within the context of them regulating potential triggers of an episode of psychosis. Further investigation would need to be undertaken to ascertain the meaning of stress in relation to participants' experiences of psychosis in order to understand more clearly this possible form of self-regulation.

Participants spoke of their substance use as helping them to deal specifically with a cluster of problems around social interactions such as poor confidence, loneliness, and difficulty trusting others. This may reflect findings in the established literature that conclude that individuals with a diagnosis of psychosis have deficits in their social behaviour and interpersonal problem solving (Bellack, 1992). Some studies have suggested that up to 60% of individuals with a diagnosis of psychosis experience some level of social disability. The relationship between psychosis and social disability is seen to be an extremely complex one. Wing (1983) hypothesises that social disability is dependent on four factors, including: chronic impairments; acute psychosis; adverse social circumstances; attitudes to self and recovery. These features could be seen as being present in the sample interviewed for the purposes of this study and may be related, in part at least, to the dual nature of their presenting problems.

The theme of **'fitting in'** appeared to describe very clearly the use of substances to deal with difficulties with social relationships. This finding would appear to support the Social Inclusion Model, which hypothesises that substance use provides individuals with an identity and social group (Treffert, 1978; Hall et al, 1979; Millman and Sbriglio, 1986). Feeling that their substance use helped them to overcome problems that stop them from socialising with

other people and allowed them to build social groups was very important to the participants. A second feature of the theme of fitting in was that of personal identity, describing their substance use as being a part of them and their lifestyle. This aspect of the theme is also reflected in the social inclusion model, in that the social groups that are welcoming of these individuals themselves represent a 'socially excluded group'.

What these experiences clearly illustrate is that participants report experiencing a range of stressful situations in their day-to-day lives. They reported that substance use helped them to **feel in control** of these situations. The following section attempts to answer how we can understand substance use as a form of coping.

The participants' use of substances to alleviate uncomfortable emotional and physiological reactions to stress can be understood as a form of coping. More specifically emotion-focussed coping. This type of coping is characterised by an individual's attempt to alleviate emotions associated with stressful situations rather than finding a solution to problems that may have arisen (Lazarus and Folkman, 1984). This type of coping is frequently associated with uncontrollable problems or events (Lazarus and Folkman, 1984). It could be assumed that an individual may find their experiences of the symptoms of psychosis as being uncontrollable. Some authors have classified substance use as a behavioural strategy that is used to alleviate negative emotions (Moos, 1988).

The concept of self-efficacy is an important feature of Social Learning Theory (Bandura, 1977). It can be defined as an individual's assessment of their competence to perform a task in a specific situation. As such self-efficacy is an important mediating factor in the choices that a person will make about how to cope. Efficacy judgements will determine what people will chose to do, how much effort they will put into a task, and how long they will persist when faced with obstacles and difficulties (McMurran, 1994). When self-efficacy is low an

individual may believe that they are incapable of performing a task and as such may make little effort to undertake the task or avoid it altogether. Self-efficacy judgements are based on four sources of information; (1) Instruction, (2) Observation of the performance of others, (3) One's own past performance, (4) Emotional arousal (McMurran, 1994). The reports of the participants' and the difficulties that they have reported in coping with the problems in their lives could be interpreted as being reflective of low self-efficacy. With respect to treatment interventions self-efficacy must be enhanced if individuals are to make use of new skills (McMurran, 1994).

A further feature of the theory regarding substance use as a form of coping is that of outcome expectancies. Expectancies are hypothesised as being a mediating factor in stress reduction, that being that individuals who expect substances to alleviate negative mood states and bring about positive mood are thought to use more heavily. Cooper (1988) measured alcohol related outcome expectancies when studying drinking to cope, defined as being *'the tendency to use alcohol to escape, avoid or otherwise regulate unpleasant emotions'* (p. 218). This definition could also be applied to the experiences reported by the sample in this study as being formative features of their substance use. The Cooper (1988) study concluded that:

> 'individuals who hold strong positive expectancies and also use avoidant styles of coping with emotion were most likely to drink to cope. In turn, individuals who hold strong positive expectancies and who drink to cope not only drink more, but are also more likely to experience problems as a result of their drinking' (p. 228)

Expectancies regarding alcohol consumption have been further refined into six categories, that drinking will:

(1) Transform experiences in a positive way

(2) Enhance social and physical pleasure

(3) Increase sexual performance and satisfaction

(4) Increase power and aggression

(5) Increase social assertiveness

(6) Decrease tension (Brown et al, 1990).

Cognitive theory can be seen as playing a role in the formation of outcome expectancies. Dysfunctional beliefs are seen to form expectations, like the ones outlined above (Beck et al, 1993). These expectations are seen to contribute to the experience of urges, the desire to use a substance (Beck, 1993).

The relationship between the theme of **'increased control'** and the other super-ordinate themes will be discussed in a later section.

3.1.2: Feeling Out of Control

The themes of **'addiction', 'danger'** and **'practical problems with access'** were thought to reflect a sense that participants' **felt out of control**, both of their substance use and their lives.

A key factor that participants identified as contributing to their experience of **feeling out of control** was that of the physical experience of withdrawal. The experience of withdrawal as described by the participants in this study corresponds to an established literature that documents these effects. Alcohol withdrawal is known to bring about tremors, sweating, nausea and vomiting (Madden, 1984). Whilst the features of Opiate withdrawal include

anxiety, restlessness, yawning, running nose, watering eyes, aching muscles, stomach cramps, nausea, vomiting and diarrhoea (Madden, 1984). The majority of these withdrawal experiences were described in the reports of the participants. Furthermore the reports of such experiences tended to be from users of heroin or alcohol. Some participants who spoke about amphetamine use also spoke of experiencing 'come-down' effects. The established literature states that individuals should experience little in the way of withdrawal from this drug (McMurran, 1994). However some authors discuss the *'profoundly depressed mood that is typical of amphetamine withdrawal'* (The Royal College of Psychiatrists, 2000, p. 175). The 'comedown' that was described by the amphetamine users in the study is a commonly observed clinical phenomenon and is understood within the theme of 'addiction' regardless of whether it is technically understood as a 'withdrawal' phenomenon.

The concept of withdrawal is seen as being closely linked to tolerance, both of which are thought to have at least in part a biological basis (McMurran, 1994). Through repeated use of a substance the effectiveness of the substance in producing the desired effects is seen to be reduced and tolerance is developed. Therefore an individual must take larger doses of the substance to experience the same effects as were previously experienced on a lower dose. When tolerance has developed, withdrawal symptoms may also be present (McMurran, 1994). The biological basis of this process is seen to be as a result physiological adjustments leading to the more rapid metabolism of a substance by the body (McMurran, 1994). A process known as neuro-adaptation also occurs, whereby changes in the neurotransmitter systems take place to allow for the counteraction of the acute effects of a substance (McMurren, 1994). The changes that have occurred to the synthesis, storage and release of neurotransmitters, as well as changes to the level of sensitivity of neurotransmitter receptors is thought to produce withdrawal symptoms in the absence of the substance (Madden, 1984). Whilst these explanations offer the biological basis of the experiences of withdrawal, as described by the participants involved in this study, psychological factors are also thought to

contribute to the process. Orford (1985) states that the act of taking a substance to relieve the unpleasant physical experiences of withdrawal is a learned one reinforced through the processes of operant conditioning. Withdrawal can also be seen to be a classically conditioned response (Pomerleau et al, 1983; Childress et al, 1986).

Withdrawal symptoms are seen as being one of the three components of the 'disease model' of addiction, the other components being tolerance and craving (the compulsion to have a drug). What is of particular interest to this study is not the disease model itself but the controversy that has raged for many years as a result of the core concept of the model, that being loss of control. This issue is of course of key significance to this study as it relates to the superordinate of **'feeling out of control'**. The disease model would propose that an individual loses control of their substance use, engaging in heavy and repeated use whilst feeling powerless about their behaviour. Furthermore this model infers that 'addicts' are somehow different from the rest of the population. That by using a substance they have triggered a constitutional biological or psychological abnormality, that it is a progressive and irreversible disease (McMurran, 1994). The conclusion of adopting the 'disease model' as a framework for understanding addiction is that the only possible solution for an individual is to abstain from taking a substance altogether otherwise it will lead to the *'reinstatement of symptoms (of their disease)'* (Davies, 1992, p. 66). This notion was challenged by the work of D.L. Davies (1962) in his paper reporting the success of 'controlled drinking' in a group of alcoholics. It was his paper that sparked the long running debate as to whether individuals who had experienced problems with substance use were indeed able to exercise control over their use as opposed to attaining total abstention from the substance as the only path to 'recovery' (Stockwell, 1986).

A number of interesting features with particular relevance to this study can be extracted from this debate. Firstly the proponents of the 'loss of control' argument state that it is the

substance that causes the individual to lose control. What is evident from the thematic analysis of the participants' narratives is that their sense of feeling out of control is generalised across a number of aspects of their life, not just their substance use. Most notably their mental health problems, as is evidenced in the 'danger' theme, where participants spoke about feeling fearful and threatened in their lives which was seen to contribute to them **'feeling out of control'**. Furthermore the 'loss of control' is based on the presupposition that an individual is unable to exert control with regards to their substance use, hence the need to abstain from use. Relating this argument once again to the findings of this study we can observe that participants were able to exert control over their use in a number of ways not only in relation to reducing their substance use but also in relation to the theme of **'increased control'**, making choices to use to enable them to cope with aspects of their life that they found unbearable. Whilst 'objectively' these choices could be seen to bring about more problems for the participants in the long term it must not be forgotten that they were choices and decisions that individuals made and not involuntary acts, the uncontrolled succumbing to a biological drive as would be supported by proponents of the disease model. Issues that arise from this finding in relation to clinical interventions will be discussed in further detail later.

3.2: Understanding the Process of Maintenance Through the Experience of Ambivalence

The theme of **'ambivalence'** was felt to capture the apparent dilemma that was faced by participants, that on one hand they **'wanted things to be different'** yet on the other they were **'feeling overwhelmed'**. A composite theme of **'ambivalence'** was also identified as participants made statements that were simultaneously contrasting in their description of their feelings about their substance use. Furthermore the theme of **'ambivalence'** was felt to

signify the interactive relationship between the two other superordinate themes of **'increased control'** and **'feeling out of control'**. The interaction between the superordinate themes and the underlying composite themes has been summarised in the results section of this study, see Figure 3. The theme of ambivalence is felt to be key in addressing the third research question that was posed by this research study. That being, what do participants' experiences tell us about the maintenance of their substance use?

Ambivalence can be thought of as a *'natural phase in the process of change'* (Miller, 2002, p. 14). Problems may arise for an individual when they become stuck in an ambivalent state. In order for change to occur it is necessary to resolve ambivalence. Ambivalence is less likely to be resolved in the direction of positive change when self-esteem and self-efficacy are low. (Miller, 2002). The strength of ambivalence as a part of the participants' experiences is evident in its status as a superordinate theme. It is necessary to understand ambivalence further if we are to understand the process by which participants' substance use is maintained. Ambivalence can be conceptualised as a decisional balance, whereby the individual must weigh against each other the pros and cons of both maintaining the status quo (continuing using a substance) and making change (Miller, 2002). Miller (2002) highlights that it is easy to oversimplify the decisional balance and that it is vital to consider the value that an individual may place upon a particular element. For example participants in this study could be seen to place great value on **'relaxing'** or **'blocking'** as pros of their continued substance use. Miller (2002) also makes reference to social and cultural factors with regards to the perception of substance taking behaviour. He states that ambivalence must be understood within the context of family, friends and community. We may be able to interpret the theme of **'fitting in'** as being reflective of the importance that social groups and relationships hold in relation to the participants' ambivalence.

Ambivalence is seen as being related to the Stages of Change Model (Prochaska and DiClemente, 1982, 1984, 1992). DiClemente and Hughes (1990) assessed stages of change, using the University of Rhode Island Change Assessment Scale (URICA), amongst individuals attending an outpatient alcohol treatment programme. They identified a separate cluster of individuals that they named as ambivalent as these individuals scored higher (than the cluster of pre-contemplative clients) on the measure of pre-contemplation whilst consecutively scoring above average on measures of contemplation, action and maintenance (the stages of change associated with making change) indicating that they were moving closer to contemplating change (DiClemente and Hughes, 1990). This finding, using the URICA scales, has been replicated in a subgroup of polydrug users (Carney and Kivalan, 1995). What these findings highlight is the importance of ambivalence in maintaining an individuals' substance use, whilst indicating that the individual may be preparing to move into a stage of change, Contemplation. The stage of contemplation is characterised by the individual thinking seriously about reducing or ceasing their substance use (Miller, 2002). Significantly to the themes of **'increased control'** and **'feeling out of control'** is that individuals in the contemplation stage are seen to be seeking a sense of control over their situation through a process of cognitive reappraisal (Prochaska and DiClemente, 1982), highlighting the importance of the experience of control. Furthermore the composite theme **'wanting things to be different'** subsumed participants' reports of **'thinking differently'** about their substance use may indicate a form of cognitive reappraisal. This may suggest a group of participants in the study who were moving more closely to the contemplation stage of change.

The process of ambivalence and its role in maintaining behaviour can also be understood through dialectical theory. Dialectical perspectives offer an understanding of the nature of reality and human behaviour (Linehan, 1993). This theory has been used to good effect as a form of therapy, Dialectical behavioural Therapy (DBT) (Linehan, 1993), for individuals

with a diagnosis of borderline personality disorder. However the principles upon which this approach is based are thought to be relevant to the theme of 'ambivalence', which is proposed by this study as being integral to understanding the maintenance of substance use. 'Dialectics stresses the fundamental interrelatedness or wholeness of reality' (Linehan, 1993). This statement serves to illustrate the importance of understanding how behaviour must be seen as being part of a larger context whilst also trying to understand the relationship between individual patterns of behaviour. This aspect of dialectical thinking is seen to be important when understanding that it is not the individual features of the participants' experiences that serve to maintain their substance use but the manner in which their conflicting views about their substance use, ambivalence, interrelate and make it difficult to execute change. With respect to using this understanding when informing a therapeutic approach to the 'dually diagnosed' population, DBT could be seen as equally applicable to the experiences and therapeutic needs of individuals with both substance use and mental health problems. Linehan (1993) states that the dialectical perspective would support the notion that when behaviour is seen as occurring in a wider context, it is difficult for an individual to learn one set of skills without learning associated skills simultaneously. She illustrates this statement with an example that is felt to be of particular relevance to the experiences of the participants in this study. Linehan (1993) talks about the difficulty teaching an individual psychosocial skills when their environment and culture are not supportive of such learning. She talks about needing to simultaneously teach individuals 'self-regulation skills...also better skills for influencing her environment' (Linehan, 1993, p. 2). Participants' in this study spoke of the great influence that the cultural context played in their substance use in the theme 'fitting in'. The implications of such findings with regards to therapeutic intervention programmes will be discussed in detail later.

Ambivalence and dialectics can be seen to share common ground when we consider the dialectical proposition that reality is not static. This proposition is based on the assumption

that all propositions (thesis) contain within themselves their own oppositions (antithesis) (Linehan, 1993). That through the resolution of such polarities comes synthesis and behaviour change can occur. However, this is, the holding of thesis and antithesis, in essence a form of ambivalence and individuals can become very stuck in their behaviour when they hold polarised views. The polarisation of the participants' thinking about their substance use can be seen in the two superordinate themes 'increased control' and 'feeling out of control'. Change in the dialectical model is seen as being the fundamental nature of reality and change must therefore be learnt to be tolerated by individuals if they are to break with stuck behaviour (Linehan, 1993). This includes learning to tolerate what comes with change, an acceptance of being the person that you are in this moment of time and the acceptance of loss as an inevitable consequence of making change. In DBT this process is assisted through the acquisition of new skills (Linehan, 1993). This concept too has implications for the provision of therapeutic interventions to individuals with a diagnosis of psychosis and mental health problems.

3.4: Summary

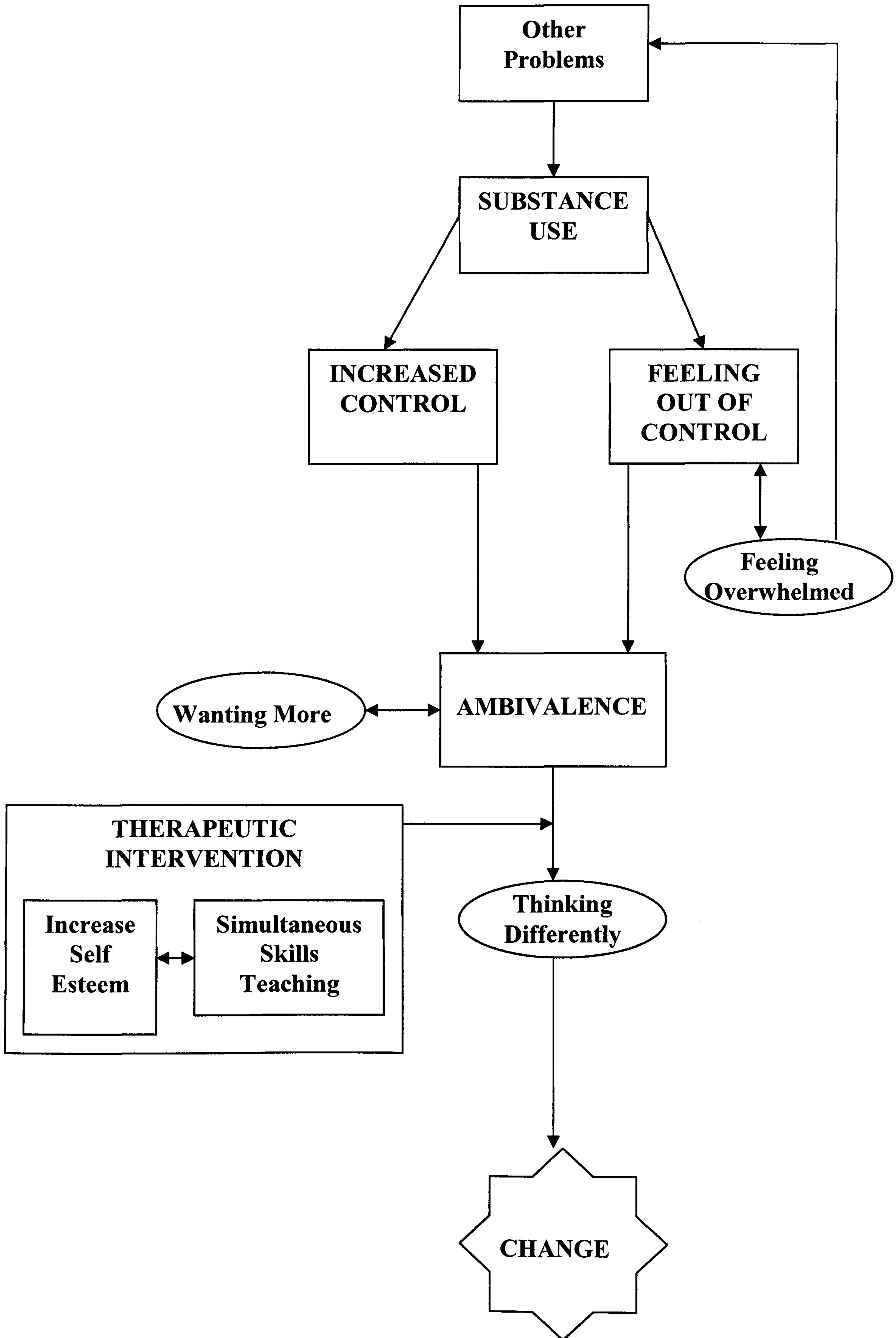
Participants spoke of feeling overwhelmed in by problems in their lives. They talked about their substance use as helping them to cope with some of the difficulties that they experience, particularly in helping them to relax and fit into a social group. Participants also talked about feeling out of control, of both their lives and their substance use.

This 'dialectic' was seen to contribute to the participants' ambivalence about their substance use. They wanted things to be different but they just felt overwhelmed and unable to do anything to make change.

The observed interactive relationship between the themes was seen to describe the process

by which the participants' substance use was maintained. The consideration of established literature in relation to the themes enabled this process to be elaborated and contributed to the development of the model shown in Figure 4. The model illustrates the process by which substance use is thought to be maintained in the participant group. It also shows how the literature contributed to the hypothesised process of change. The model indicates that self-efficacy and self-esteem must be enhanced if individuals are to be able to use new skills to execute change. The model advocates the provision of simultaneous skills teaching as a therapeutic intervention. The implications that this model has for clinical practice and the development of therapeutic interventions will be discussed in further detail in a later section.

Figure 4: Model Illustrating Interactive Process of Maintenance and Hypothesised Action of Proposed Intervention Package



Section 4: Critique

4.1: The Sample

Participants were recruited from three different services, one urban and one rural assertive outreach team, and a residential rehabilitation unit. This reflects a variation in the community in which the participants were living. This in turn may reflect a variation in their access to substances. Previous research strongly argued that locality has an influence on patterns of substance use both with respect to culture and access (Dixon et al, 1990). However an identifiable variation in substances of use was not observed between the users of different services. Poly-substance users were recruited from all the services, individuals who only used alcohol were recruited from the rural assertive outreach team and the residential service.

Participants were recruited from services that work solely with individuals with severe and enduring mental health problems. Whilst this was relevant to the aims of the study, that being the exploration of these issues within a chronically ill population it may not reflect the experiences of the wider population.

The severity of individual's substance use was not evaluated or assessed in any way. As such the extent to which individuals used substances varied. Whilst the quantitative literature has been criticised for its use of non-homogenous samples it was neither the aim nor the epistemological position of this study to control for the aforementioned variables. Whilst recognising that the sample used by this study may be somewhat restricted in the extent to which it could be considered representative it was felt that the variation between individuals was in fact an asset of the study. It contributed to the richness of the data and as the analysis indicated it allowed for common themes and shared experiences to be identified.

The sample size, twelve participants, was more than adequate for the purposes of the utilised design. The data was felt to be of a high enough quality not to require any further information to be collected.

Some difficulties were encountered in the recruitment and interviewing of participants. This may reflect issues around the importance of engagement when working with this client group. It was felt that this process may have been facilitated somewhat if the researcher had been able to spend more time with the participants prior to the data collection stage of the procedure. Whether this would have been practical or ethically sound remains to be seen.

A limiting factor of this study is the ethnic background of the sample. All the participants were white. Whilst this is reflective of the general population of Hull and the surrounding areas, it being a predominantly white community, it is not representative of the general population of the U.K. Therefore within this study there is no representation of the experiences of individuals from diverse ethnic backgrounds.

4.2: Methodology and Analysis

The methodology was specifically chosen in order to explore the experiences of individuals with respects to an under researched field. It was felt particularly important to provide individuals with the opportunity to discuss their own experiences, which had been identified as a particular gap in the literature. It was also felt in the current climate of user involvement in service development and the importance of engaging an otherwise 'lost' group that it was vital to produce a piece of research that was more inclusive of the views and experiences of service users.

Whilst some participants had greater difficulty than others in expressing their experiences it was felt that the analysis clearly shows how rich the data was and as such justifies the use of such a research technique with this population.

Interpretative phenomenological analysis was chosen for the purposes of this study as it provides a theoretical framework, which considers that the analysis may elucidate an individual's cognitive constructs about an experience. This feature is unique to this analytic framework. The cognitive constructs drawn from the analysis played an important role in the construction of the model (see Figure 4)

In keeping with other research techniques, both qualitative and quantitative, the study employed a number of features to ensure the validity and credibility of the analysis. Two 'Second analysers', individuals who had some experience of the research technique being employed, were asked to analyse the five primary transcripts that formed the basis of the data analysis as outlined in the method. This process highlighted some themes that required further investigation by the primary researcher but also concurred with the primary researcher's identification of the majority of themes.

A drawback of the study was the absence of member validation. This process was proposed in the design of the study. However due primarily to a lack of interest on the behalf of the participants but also due to time constraints it was not possible to ask the participants whether they felt the analysis drawn from the transcripts was an accurate reflection of their experiences.

The analysis of the data raised some issues and concerns for the researcher due to the novelty of the technique. Throughout this process a reflective diary was kept by the researcher, commenting on her engagement with both the texts and the technique. It was hoped that

through this process the researcher would make clear any preconceptions that she bought to the analysis. For extracts of the reflective research diary please see the (Appendix 8). The final presentation of the analysis in the form of the three super-ordinate and ten composite themes is an effort on the behalf of the researcher to present the essence of the participants' reported experiences in a coherent framework. It is not an exhaustive or absolute interpretation of the data.

Section 5: Clinical Implications

The main implication of the findings is the need to develop appropriate treatment interventions for individuals with a diagnosis of psychosis and substance use that address the dialectical nature of their experience.

Current treatment interventions often rely heavily on the use of Motivational Interviewing (MI) in order to move an individual through the ambivalence that they feel about their substance use to a stage of action (Miller and Rollnick, 2001). As discussed earlier MI is dependent in part on the use of decisional balance techniques and acknowledges the role that differences in assigned value can play in this process. MI can become increasingly difficult to undertake when people present with a wide range of problems, as can be seen in the sample that was recruited by this study.

The dialectical nature of the findings supports the suggestion for interventions to use simultaneous skills teaching, similar to the package used in Dialectical Behaviour Therapy (DBT) (Linehan, 1993). The skills components could be adapted to meet the needs of the dually diagnosed population. This type of approach is seen to have other benefits as well. The DBT programme is concerned in part with the development of self-regulatory skills in order for clients to learn to cope better with the intolerable levels of distress that they experience. Again this is seen to be relevant to the findings drawn from the sample and the

literature base that suggests that individuals with a diagnosis of psychosis and substance use experience high levels of stress and anxiety.

It also seems that simultaneous skills development may improve self-efficacy which the model presented in Figure 4, and the reviewed literature, highlights as being an important feature in enabling people to make change.

Another key clinical implication is that of how to address the issue of social exclusion. Participants reported finding it extremely difficult to fit in and build social groups. Individuals with severe and enduring mental health problems may find that they lose their social support networks as the years go by. Whilst much thinking has gone into the provision of individual treatment packages there is little that is provided for people to enable them to build new social networks. The US Assertive Community Treatment services prioritise the development of employment opportunities for their service users. If individuals are to build social networks it seems that they must be offered these kinds of opportunities to facilitate the process.

Section 6: Future research

The findings would suggest that further research could address whether the experiences talked about by this participant group are shared by individuals with less enduring mental health problems that also use substances, e.g. service users from an Early Intervention service working with individuals that are experiencing their first episode of psychosis. Research of this kind could develop an understanding of how the maintaining process can develop over time.

Further research could also be undertaken to explore individuals' experiences of treatment. This would be somewhat limited in the current climate of service provision as very few treatment programmes are in operation.

Research could also be undertaken to explore self-efficacy amongst individuals with a diagnosis of psychosis and substance use. This was identified as being a potentially influential factor in the model that was produced. It was not measured in any way by this study. Future measurement of the concept could further elucidate its function in maintaining patterns of substance use.

Section 7: Conclusion

As previous research has suggested, the participants in this study reported using substances to help them to deal with problems that they were experiencing in their lives. The sample spoke about the increased feeling of control that their substance use gave them. Helping them to relax and block out stress form their lives. The role that their substance use played in assisting them in their social interactions was a particularly strong and striking feature of their experiences.

There was a striking dialectic quality to the participants' experience. Whilst their substance use gave them a feeling of increased control they also felt out of control of their use and their lives. This dialectic was conceptualised as ambivalence. The participants' ambivalent feelings towards their substance use were seen to be maintaining their use. This process was thought to be compounded by poor self-efficacy.

An integrated model was proposed that drew together the findings from the data and existing literature. A number of suggestions for treatment interventions were drawn from the model.

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APPENDICES

Appendix 1: Interview schedule

Introduction

- Why I am doing the research
- Go through information sheet and participants questions
- Consent form 2
- Reiterate confidentiality clauses

Start with brief demographics and reiterate brevity

- Name
- Age / DOB
- Social support – do you live with anyone else, friends and family
- Duration of involvement with services
- What kind of diagnosis have you been given?

Administer perceived stress questionnaire

Section A: Current use

1) What has been happening for you over the last few weeks?

- What have you found difficult to cope with?
- What have you been using over the last few weeks?

2) I'm interested in what your experiences of taking X are like. Can you tell me about what it is like for you when you take X?

- Prompts:
- How do you feel when you take X?
- What do you do before/after you use?
- Who do you use with?
- Do you tend to use alone or with others or both?
- What do you want to get from this? This will help you to refine prompts.)
- Where do you tend to use? (in own home/in other peoples homes/on the street/pubs or clubs etc.)
- How often do you use X?
- Are there certain things that prompt you to use?

3) What do you expect to experience when you take X?

- Are there times when your experience is different to your expectations?
- In what way is it different?

4) When you talk to other people that you know when you use do find that you have similar experiences to them?

- If different in what way?

5) What reasons would you give for your drug use?

Section B: Established patterns of use and change

6) What have you used over the past year?

- Cross check with:
  - Is that what you have been using over the past 5 years?
  - Further enquiry/prompts around episodes of change?
    - What else was happening for you in your life at the time?
    - Why don't you use x anymore

7) What do you see the benefits of your drug use being?

8) What do you see the costs of your drug use being?

9) Who are the important people in your life? What do they say about your drug use?

- Prompt around friends/ family/ services

10) Have you ever thought about changing or tried to change your pattern of drug use?

- Did you reduce/stop/use differently?
- When was this?
- What happened?

11) What do you think the obstacles would be to you changing your patterns of drug use, if you wanted to?

Section C: See if psychosis emerges during description of maintenance. Ask all questions towards end of interview:

12) People with a diagnosis of psychosis sometimes find that their drug use can effect the symptoms that they have. Is this something that you have experienced? Can you tell me a bit about that?

13) Sometimes people can find that they experience side effects from taking their prescribed medication. Do you experience anything that you think is a side effect? Could you describe what those feelings are like? Does your drug use have any effect on those feelings?

14) Is there anything else that you would like to tell me about?

Wind down

What will happen now – Write up the interview
Go through and look for themes
Offer feedback session

THANK YOU VERY MUCH FOR TAKING PART

Appendix 2: Details sheet

Name of participant:

Date of birth:

Current diagnosis:

Symptoms experienced:

Prescribed medication:

Details of substances used (to include alcohol):

Summarised chronology of service involvement:

Completed by:

Relationship to participant:

Appendix 3: Ethics letter

HULL AND EAST RIDING LOCAL RESEARCH ETHICS COMMITTEE

c/o Faculty of Health
Coniston House
The University of Hull
East Riding Campus
WILLERBY
HU 10 6NS
Phone: 01482 466771
Fax: 01482 466769
e-mail: k.birtwhistle@hull.ac.uk

Ms A Baldwin Trainee

22 October 2002

Dear Ms Baldwin,

LREC/ 08/02/140 Protocol number: Experiences of alcohol and illicit substance use amongst a sample assertive outreach service users: An Exploratory study

The Chair of the Hull and East Riding REC has considered the amendments submitted in response to the Committee's earlier review of your application on 19`1' August 2002 as set out in our letter dated 28`1' August 2002. The documents considered were as follows:

- *Revised participant information sheet to address the concerns of the committee regarding the disclosure* of *particular information to the participants Key Worker. Version 1 June 2002*
- *The withdrawal of the offer of gift vouchers as advised by the committee*
- *Key worker Consent Form*
- *A copy of the original application form signed and dated 21/10/02*

The Chair, acting under delegated authority, is satisfied that these accord with the decision of the Committee and has agreed that there is no objection on ethical grounds to the proposed study. I am, therefore, happy to give you the favourable opinion of the committee on the understanding that you will follow the conditions set out below.

Conditions

- You do not undertake this research in an NHS organisation until the relevant NHS management approval has been gained as set out in the Framework *for Research Governance in Health and Social Care.*

- You do not deviate from, or make changes to, the protocol without prior written approval of the REC, except where this is necessary to eliminate immediate hazards to research participants or when the change involves only logistical or administrative aspects of the research. In such cases
  the REC should be informed within seven days of the implementation of the change.

Hull and East Riding Local Research Ethics Committee Members
Prof SR Killick (Chair) Mr M Davidson Dr CJ Brophy Dr R Calvert Mrs E Dakkak Dr D Horton
Mr GS Duthie Cllr K West Mrs H Thornton-Jones Dr E Baguley Dr I Markova Mrs S Floyd
Mrs F Shepherd Mrs H Williams Ms F Ashton Mrs J Wild

- You complete and return the standard progress report form to the REC one-year from the date on this letter and thereafter on an annual basis. This form should also be used to notify the REC when your research is completed and in this case should be sent to this REC within three months of completion.
- If you decided to terminate this research prematurely you send a report to this REC within 15 days indicating the reason for the early termination.
- You advise the REC of any unusual or unexpected results that raise questions about the safety of the research.

Yours sincerely

ProE S R Killick
Chair of the Hull and East Riding REC

LREC/ 08/02/140	Please quote this number on all correspondence

Hull and East Riding Local Research Ethics Committee Members
Prof. SR Killick (Chair) Mr M Davidson Dr CJ Brophy Dr R Calvert Mrs E Dakkak Dr D horton
Mr GS Duthie Cllr K West Mrs H Thornton-Jones Dr E Baguley Dr I Markova Mrs S Floyd
Mrs F Shepherd Mrs H Williams Ms F Ashton Mrs J Wild

Appendix 4: Ethics letter

HULL AND EAST RIDING LOCAL RESEARCH ETHICS COMMITTEE

c/o Faculty of Health
Coniston House
The University of Hull
East Riding Campus
WILLERBY
HUI 0 6NS
Phone: 01482 466771
Fax: 01482 466769
e-mail: k.birtwhistle@hull.ac.uk

Ms A Baldwin

28August 2002

Dear Ms Baldwin,

LREC/ 08/02/140
Experiences of alcohol and illicit substance use amonest a sample assertive outreach service users: An
Exploratory study

Thank you for coming to The Hull and East Riding REC in support of your application which was reviewed on 19`" August 2002.

The Committee is prepared to offer a favourable opinion to this application subject to submission of the following information and/or amendments, which are detailed below:

- *The committee felt that the all parties involved in the study should be aware that any severe, life affecting comments made by the participant will be passed on to the key worker. This issue of confidentiality should be made explicit in the patient information sheet.*
- *The committee felt that the use ofgift vouchers was an in appropriate was of compensating participants for*
- *their time, as this could be seen as a form of coersion. It was suggested that* if *any of the participants go have any bonefide expenses, such as travel costs, that these can be reimbursed.*
- *The committee felt that there should be some kind of consent gained from the key workers.*
- *The committee wishes to receive a signed copy of the application form, for our files.*

The Committee has delegated authoriiy to the Chair to agree these amendments once they have been received. Subject to the Chair's agreement a formal letter offering a favourable opinion will then be issued.

When submitting the response to the committee, please send revised documentation where appropriate underlining the changes you have made and giving revised version numbers and dates.

Yours sincerely

ProL S R Killick
Chair of the Hull and East Riding REC

LREC/ 08/02/140	Please quote this number on all correspondence

Hull and East Riding Local Research Ethics Committee Members
Prof. SR Killick (Chair) Mr M Davidson Mr GS Duthie Dr CJ Brophy Cllr K West Dr R Calvert Mrs H 'rhomton-.tonesDr E Baguley Mrs E Dakkak Dr I Markova Dr D Horton Mrs S

Appendix 5: Information sheet

Participant Information Sheet

Title of study: Experiences of alcohol and illicit substance use amongst a sample of assertive outreach service users: An exploratory study.

You are being asked to take place in a research study. Before you decide if you want to take part it is important that you understand why the research is being done and what you will be asked to do.

- Please take as much time as you like to read through this information and discuss it with other people if you want to.
- If you are having any problems understanding it or would rather that someone read it to you please ask.
- Please ask the researcher if there is anything that does not make sense or if you would like some more information.

Take your time to decide whether you want to take part or not.

Thank you very much for taking the time to read this.

Why is this study being done?

It is hoped that by talking to people about their experiences of drug use and psychosis that we can get a better understanding of problems that people in similar situations to yourself face. Not much research on this has been done that actually asks people who have had a diagnosis of psychosis about their experiences with alcohol and drugs

This information that is obtained from this study can be used to develop better ways of helping people who may wish to change their pattern of drug use. It is hoped that this will lead to improved services more attuned to the reality of service users experiences and needs.

The study will take place over a year. You will only be asked to talk to the researcher twice during this time. Appointments will be made at a time convenient to you.

Why have I been asked to take part?
The staff at the service that you use were given information about the study. They were asked to think of people that they worked with that had a diagnosis of psychosis and who also used drugs or alcohol. They were then asked to speak to you about the study and to ask you if the researcher could contact you to tell you more about the study.

Do I have to take part in the study?
It is up to you if you want to take part or not.

If you do want to take part you will be given this information sheet to keep and you will be asked to sign a consent form. This form is to say that you agree to take part and that you understand what you have been asked to do.

If you do decide to take part you can withdraw at any time and you do not have to give a reason.
If you decide not to take part or to withdraw it will not effect in any way the service that you receive.

What will I have to do if I take part?
If you decide you do want to take part you will be asked to come to an interview with the researcher. This will last about 90 minutes. During the interview the researcher will ask you questions about your experiences. The interview will be audiotaped so that the researcher can listen to it again in order to analyse what has been said.A second researcher will also listen to the tape to assist in the analysis but will not be given your name or any other information about you. As well as being interviewed You will also be asked to fill out a short questionnaire.

The researcher will also ask you if they can talk to your key-worker about you. This is so we can get a history of the services that you have used. We are also interested in talking to your key-worker about what they understand about your drug use and compare it to the things that you say.
The researcher will show you the questions that are going to be asked.
The interview will take place at the Assertive Outreach Team base, or clinic settings for those participants recruited from the East Yorkshire service.

What are the benefits of taking part in the study?
It is hoped that the information from the study will contribute to the development of better services and assistance for people with a diagnosis of psychosis who use drugs and alcohol.

Will my taking part in the study be kept confidential?
You will be asked if the researcher can talk to your key-worker.

All the information that you or your key worker give the researcher will be kept strictly confidential. Anonymity will also be assured. This means that any feature that could identify you (e.g. name, date of birth) will be removed from the data at the first opportunity.

What will happen to the findings of the research study?
When the research is finished it will be written up to as a doctoral thesis. It will also be written up to be published as an article for a psychology journal.

If you would like a copy of the published article please let the researcher know and they will be glad to send you a copy.

When the research is finished the researcher will be happy to talk to you or any Service User group which you may attend about the findings of the study. If you are interested in being told about the findings please let the researcher know and they will contact you to arrange a time to do so.

Contact details for further information
If you have any more questions or would like some more information please ask your key-worker or contact:

Alice Baldwin
C/O Clinical Psychology Department
University of Hull,
Cottingham Road,
Hull,
HU6 7RX.
You can also leave a message at the Assertive Outreach Team offices.
Thank you for your time.

Appendix 6: Consent form 1

Participant Consent form 1

Title of project: Experiences of alcohol and illicit substance use amongst a sample of assertive outreach service users: An exploratory study

Name of researcher: Alice Baldwin

(please circle your answer to all the statements below)

1. My key worker has read through the information sheet with me. YES / NO

2. I am interested in talking to the researcher about taking part in the study. YES / NO

3. I agree to let my key worker give the researcher my name and contact details. YES / NO

Name of participant	Date	Signature
Name of person taking consent	Date	Signature
Researcher	Date	Signature

Appendix 7: Consent form 2

Participant Consent form 2

Title of project: Experiences of alcohol and illicit substance misuse amongst a sample of assertive outreach service users: An exploratory study

Name of researcher: Alice Baldwin

(please circle your answer to the statements written below)

1. I have read and understood the information sheet. YES / NO
2. I have asked any questions that I might have. YES / NO
3. I understand that my participation is voluntary and that I can withdraw at any time. YES / NO
4. I have seen the questions that my key-worker will be asked. YES / NO
5. I give permission for the researcher to ask my key worker these questions. YES / NO
6. I have agreed for the interview to be audio-taped and transcribed. YES / NO
7. I would like to take part in the study. YES / NO
8. I would like to read the transcript of my interview. YES / NO

Name of participant Date Signature

Name of person taking consent Date Signature

Researcher Date Signature

Appendix 8: Reflexive Statement and Diary Summary

Reflexive Statement

Through my own personal experiences, those of my friends, and my experience as a street based outreach drugs worker I have seen *'The good the bad, and the downright ugly'* effects of substance use. I have always been interested in why some people seem to able to 'recreationally use' drugs and alcohol with no apparent signs of ill effect, apart from the occasional hangover or 'comedown', whilst others find that their lives are ruined. Whilst I understand the devastating effect that substance use can have upon individuals lives I am perplexed by professionals that 'pathologise' substance use in all its guises. I consider that this in part reflects the fact that majority of substance use is in itself an illicit activity and hence attracts a raft of value judgements about an individual and their lifestyle because of their substance use. I believe that this prevents people from talking honestly about their substance use and reinforces its subversive nature which in turn can have very damaging and dangerous consequences. Furthermore I consider that current legislation pertaining to substance use is ineffective and in its present state serves to place the very people that it is supposed to protect to the margins of society forcing individuals directly into the situations that the policy attempts to avoid and alleviate. What I believe is important in a professional capacity is balance and the ability to listen without judgement. To respect an individuals right to make choices about their lives and to assist them in making the changes that they and not the service wish to make.

When undertaking this research my aim was to allow a balanced account, free of value judgements, to be presented about people's own experiences of substance use.

Summary from Research Diary

During the analysis of the transcripts I became concerned that I was placing my pre-conceived judgments onto the data and themes. The following is a brief bullet pointed list taken from my research diary of the things that concerned me and the actions that I took.

- As I began to analyse the data I was struck by how it seemed to be very similar. I was also struck by the similarity in the data to that of established models of understanding substance use and the process of change, most notably the stages of change model.
- I revisited my data on numerous occasions, both in its analysed and raw form. I re-read statements and the context in which they appeared.
- I considered my data within the context of the themes drawn from the second analysers. I also discussed the themes that they had identified with them to gain further clarification of the meaning that they had assigned to the data.
- I considered how the data differed from the pre-conceived beliefs that I might hold about the area. I was struck by the theme of addiction. I felt that this was not a theme that I had anticipated finding and was aware of how powerful it was in the data. I was also struck by the significance of the fitting in theme and the extent to which this was important for individuals. I considered that

amongst some of my original thinking about the area was that I might find that individuals reported that their substance use was important with regards to the positive symptoms of the psychosis. This feature was virtually absent from the transcripts. I was also struck by how many of the participants were wanting to change their patterns of use as I initially expected people to be less seriously effected by it.

- I reconciled my concerns through the repeated engagement in the text and the remarkable similarity that was emerging from peoples transcripts.

PERCEIVED STRESS SCALE

NFER NELSON

Name: ....

Date: .... Record Number: ....

Instructions

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate.

For each question choose from the following alternatives:

0 = never
1 = almost never
2 = sometimes
3 = fairly often
4 = very often

1. In the last month, how often have you been upset because of something that happened unexpectedly? ☐
2. In the last month, how often have you felt that you were unable to control the important things in your life? ☐
3. In the last month, how often have you felt nervous and stressed? ☐
4. In the last month, how often have you dealt with irritating life hassles? ☐
5. In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life? ☐
6. In the last month, how often have you felt confident about your ability to handle your personal problems? ☐
7. In the last month, how often have you felt that things were going your way? ☐
8. In the last month, how often have you found that you could not cope with all the things you had to do? ☐
9. In the last month, how often have you been able to control irritations in your life? ☐
10. In the last month, how often have you felt that you were on top of things? ☐
11. In the last month, how often have you been angered because of things that happened that were outside of your control? ☐
12. In the last month, how often have you found yourself thinking about things that you have to accomplish? ☐
13. In the last month, how often have you been able to control the way you spend your time? ☐
14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? ☐

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