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THE RELATIONSHIPS BETWEEN PERSONALITY DISORDER, SUBSTANCE DEPENDENCE, SELF-ESTEEM AND COPING BEHAVIOUR WITHIN THE HOMELESS POPULATION

BY

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THESIS FOR THE DOCTORATE IN CLINICAL PSYCHOLOGY

OCTOBER 2006

WORD COUNT: 18520

ACKNOWLEDGEMENTS

I would like to thank both my research supervisor, Nick Maguire, for his support and encouragement throughout the duration of this project as well as my research tutor, Matt Garner, for all his help (and patience!) with my statistics. I would also like to express my sincere gratitude to St Mungos and the Cedars Road Hostel's residents and staff, without whom this research would not have been possible, particularly my thanks to Simon Rogoff and Emma Duggan for all their help. Lastly, thank you to my 'proof-readers' - your time and suggestions were very much appreciated.

THESIS ABSTRACT

This thesis examines the relationships between personality disorder, substance dependence, self-esteem and coping behaviour within the homeless population. Research studies have repeatedly found high rates of personality and substance use disorders within homeless samples, with the dually diagnosed being at an increased risk for further trauma, service exclusion and more prolonged periods of homelessness. Furthermore, the roles and interactions of low self-esteem and maladaptive coping behaviours have been highlighted within the homeless, addiction and personality pathology literature. However, the empirical investigation of these relationships is limited and many findings are inconsistent and inconclusive. Therefore, the current study examined these relationships within a homeless sample and investigated the particularly vulnerable personality-disordered subgroup. The aim was to improve the understanding of the multiple processes and factors involved in homeless psychopathology and thus help in identifying more appropriate service needs. The final sample consisted of 39 participants who had been recruited from a London-based homeless hostel and who were asked to complete a questionnaire pack consisting of the Million Clinical Multiaxial Inventory-III, Rosenberg Self-Esteem Scale and Coping Responses Inventory. The study results showed high prevalence rates for personality, mood and substance use disorders, where the personality-disordered group had significantly lower self-esteem, higher mood disturbance and higher drug dependence, although there were no significant differences in coping behaviour compared to the non personality-disordered group. This study was not without its methodological limitations, although the findings do highlight an especially vulnerable group of homeless individuals who are in need of more specialised and

integrated mental health services than what is generally currently available. Indeed, further research investigating the factors involved in homeless psychopathology is needed in order to match the service and clinical needs of a particularly vulnerable and complex population group.

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LITERATURE REVIEW

WHAT IS KNOWN ABOUT THE RELATIONSHIPS BETWEEN PERSONALITY DISORDER, SUBSTANCE DEPENDENCE, SELF-ESTEEM AND COPING WITHIN THE HOMELESS: A REVIEW OF THE LITERATURE

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OCTOBER 2006

PREPARED AS IF FOR SUBMISSION TO THE CLINICAL PSYCHOLOGY REVIEW
(SEE APPENDIX A FOR NOTES TO AUTHORS)

ABSTRACT

This paper reviews the existing literature on the relationships between personality disorder, substance dependence, self-esteem and coping within a homeless population. Homelessness is considered to be an inherently distressing experience, where a significant proportion of the homeless suffer from multiple and co-morbid problems including high rates of personality and substance use disorders. Regrettably, the literature suggests that these vulnerable dually-diagnosed individuals are at an increased risk of further trauma and prolonged periods of homelessness and are also among the least likely to utilise available support services. Indeed, the development and refinement of more specialised and integrated mental health services that enhance engagement is essential within this population group. Various authors have also highlighted the roles of low self-esteem and adverse coping behaviour within both homelessness and personality pathology. In fact, a distorted view of the self and inflexible, maladaptive coping strategies are among the core features of most personality disorders, where substance use is often seen as a coping strategy to escape or regulate negative affect. However, empirical investigation of the relationships between self-esteem, coping, personality disorder and substance dependence is limited and some of the findings are inconsistent and inconclusive. In conclusion, it seems that particular personality characteristics, self-esteem levels and coping behaviours can act as mediating factors in the initial and prolonged use of substances. Further more controlled research investigating these relationships in more detail will improve the understanding of the multiple processes and factors involved in homeless psychopathology and may also help identify appropriate service needs.

1. INTRODUCTION

The routes to becoming and remaining homeless are complex, diverse and are likely to vary within particular subgroups of the homeless, with this process often involving a combination of psychological, social, physical and economic factors (Martens, 2002). Furthermore, while some individuals experience only a single, isolated episode of homelessness, others endure repeated cycles or prolonged periods of homelessness (Breakey, 1997). Within the majority of the literature and for the purposes of this review 'homelessness' is defined as a lack of a permanent or regular place to live and/or sleeping on the street or in a hostel, for a period of at least one month. Furthermore, chronic homelessness is characterised either by a repeated pattern of tenancy breakdowns and thus frequently moving in and out of homelessness or by a prolonged and sustained period of homelessness (Fichter & Quadflieg, 1999; 2003).

In England, particularly within the major cities, homelessness continues to be a substantial economic and social problem, although the number of individuals becoming homeless has been steadily decreasing since 2003 due to various developments and improvements within homeless services (Office of the Deputy Prime Minister, ODPM, 2005a). Studies have shown that the homeless population generally consists of males over the age of twenty-five who frequently present with significantly high levels of psychiatric disturbance, poor physical health, lower social support, financial difficulties, stigmatisation, shorter life expectancy and high rates of assault and victimisation (Griffiths, 2002; ODPM, 2003). This general composition is changing to include more women and younger people (Stein & Gelberg, 1995) and given this high diversity of need, it is clear that the homeless are a particularly heterogeneous group who require a wide range of support services.

It is now widely recognised that the homeless population suffer from multiple and co-morbid problems in almost all areas of functioning, particularly high rates of mental health disorders and substance dependence (Fischer & Breakey, 1991). While the prevalence rates of various psychiatric disorders in the homeless differs between studies, more recent controlled research found overall lifetime prevalence rates of 82-93%, which frequently included severe mood disorders, abusive histories, drug dependence and psychosis (Fichter & Quadflieg, 1999; Salize, et al., 2001). In particular, studies have shown that personality disorders are also highly prevalent within the homeless, although these individuals are among the least likely to be utilising services despite their more complex needs (Pollio, North, Thompson, & Paquin, 1997). This has led most authors to agree that the homeless population is a highly vulnerable group who are at particular risk of developing ongoing and chronic psychiatric and substance use disorders, which in turn, have been shown to increase the risk of repeated tenancy breakdown, on-going victimisation, antisocial behaviour and incarceration (Bradford, Gaynes, Kim, Kaufman, & Weinberger, 2005; Craig & Hodson, 2000; Fichter & Quadflieg, 2003).

While homeless psychopathology research is relatively limited, the relationships between personality disorder, substance dependence and various mediating psychosocial factors have been highlighted as areas of much needed investigation within the homeless population (Diblasio & Belcher, 1993; Fichter & Quadflieg, 1999; Stein & Gelberg, 1995). Furthermore, certain behaviours and characteristics that are commonly associated with personality disorder such as increased impulsivity, substance abuse, poor coping skills, antisocial behaviour, mood disturbance and distorted self perception are likely to be among those risk

factors that contribute to repeated tenancy breakdown. Indeed, understanding psychological risk factors and their roles and interrelationships is essential for the development of appropriate services that can address these concerns. Therefore, this paper will review the existing literature on the relationships between personality disorder, substance dependence and the role of self-esteem and coping behaviour within the homeless in an effort to synthesise and evaluate the current state of knowledge in the area. Figure 1 represents a schematic diagram that tentatively illustrates how these four variables might be linked together.

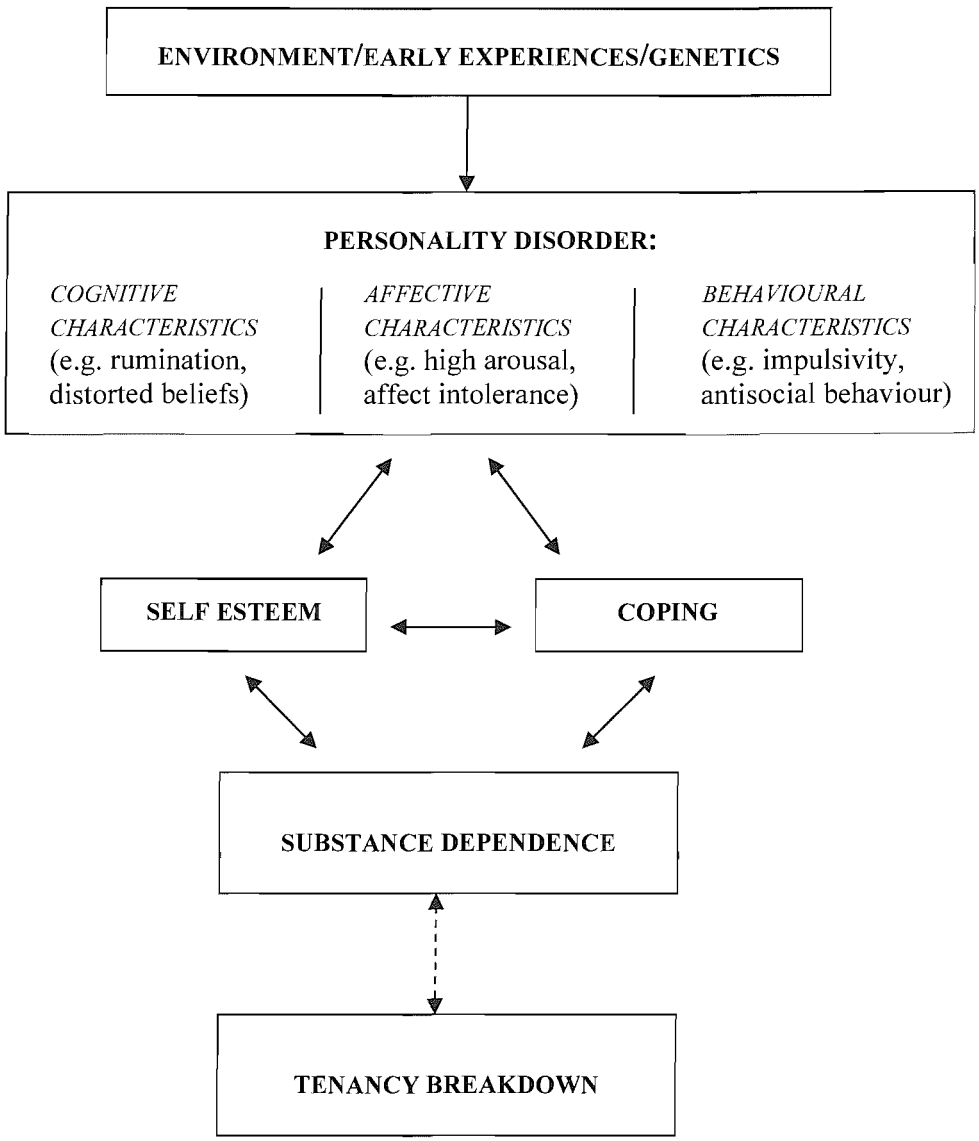

Figure 1: A schematic diagram illustrating the hypothesised links between personality disorder, self-esteem, coping behaviour and substance dependence.

This mediating model suggests that adverse early life environments, experiences and genetic factors contribute to the development of personality disorder, which is characterised by particular cognitive, affective and behavioural disturbances (Beck, Freeman, & Davis, 2004; Linehan, 1993). Within this model, both self-esteem (cognitive characteristic) and coping (behavioural characteristic) are seen as potential mediating factors in the chronic use of substances, where substance dependence has been found to be one of the leading risk factors for tenancy breakdown (Fichter & Quadflieg, 2003).

This model forms the basis of the review, which will go on to discuss these interactions in more detail and where each of the four distinct concepts will be defined and their associated conceptual models presented. To ensure clarity, the review will consecutively discuss how each of the concepts have been associated with homelessness as well as with each other, whilst presenting the relevant empirical research. Mental health service provision within the homeless population will then be discussed and the conclusions and future recommendations will be presented.

2. PERSONALITY DISORDER

2.1 THE CONCEPT OF PERSONALITY DISORDER

An individual's personality is comprised of various traits that form complex, enduring patterns of perceiving, thinking and relating to others that are displayed across a wide variety of social and interpersonal settings. When these traits become inflexible, maladaptive and cause significant distress and/or functional impairment, a disorder of personality is considered to exist (American Psychiatric Association, APA, 1994). A personality disorder is defined by the fourth edition of the

Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, APA, 1994, p.629) as 'an enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time and leads to distress or impairment'. The concept of personality disorder has been continuously evolving throughout each successive edition of the DSM, with the definitions and criteria being expanded and refined as well as new disorders being identified while others have been removed (Derksen, 1995).

Within the DSM-IV (APA, 1994), Axis-II has been reserved for 10 primary personality disorders which have been grouped into three clusters. Firstly Cluster A, which is characterised by unusual and eccentric traits and encompasses the paranoid, schizoid and schizotypal personality disorders. Secondly Cluster B, which is characterised by behaviour that is erratic, emotional or dramatic and includes the antisocial, borderline, histrionic and narcissistic personality disorders. Lastly Cluster C, where this group of disorders is characterised by traits of fear and anxiety and includes the avoidant, dependent and obsessive-compulsive personality disorders. Furthermore, the passive-aggressive personality disorder and the more recent depressive personality disorder appear in Appendix B of the DSM-IV, as they require further investigation and refinement (Millon & Davis, 2000). Table 1 presents a brief description of each of the 12 personality disorders within the DSM-IV.

Table 1: Brief descriptions of the DSM-IV personality disorders

Paranoid Personality Disorder:	characterised by a persistent pattern of distrust and suspiciousness, in that others' intensions/actions are unrealistically interpreted as threatening and demeaning (no psychotic symptoms present)
Schizoid Personality Disorder:	characterised by a pattern of indifference and detachment from social relationships across all contexts and a restricted range of emotional expression
Schizotypal Personality Disorder:	characterised by a pattern of acute discomfort in close relationships as well as odd/eccentric behaviour with a tendency to experience psychotic symptoms
Antisocial Personality Disorder:	characterised by a pervasive pattern of disregard and violation of the rights of others and a history of severely irresponsible and threatening behaviour
Borderline Personality Disorder:	characterised by a pattern of instability and impulsiveness that encompasses most aspects of the individuals functioning including interpersonal relationships, self-image, affect and behaviour
Histrionic Personality Disorder:	characterised by a pattern of exaggerated emotionality and intense, attention-seeking behaviour
Narcissistic Personality Disorder:	characterised by a pattern of distorted, inflated view of self as special and superior with a need for admiration and a lack of regard for others
Avoidant Personality Disorder:	characterised by a pervasive pattern of behavioural, emotional and cognitive avoidance and presenting with feelings of inferiority, sensitivity to criticism and social inhibition
Dependent Personality Disorder:	characterised by a pattern of submissive and clinging behaviour related to intense fears of separation/abandonment and the excessive need to be taken care of
Obsessive-Compulsive Personality Disorder:	characterised by a pattern of rigid preoccupation with orderliness, perfectionism and control and presents with excessive obsessional and compulsive behaviour

Passive-Aggressive Personality Disorder:	characterised by a pattern of negativism, ambivalence, resistance and unwillingness to meet the expectations of others
Depressive Personality Disorder:	characterised by a pattern of intense pessimism and negatively with feelings of guilt, worthlessness and abandonment

Most epidemiological studies using the DSM criteria have estimated that the overall lifetime prevalence rate of personality disorder within the general population is 10-15%, with the prevalence increasing in clinical outpatient and inpatient populations (Depue, 1996; Weissman, 1993). Studies have also shown considerable overlap amongst the personality disorders as well as high co-morbidity with numerous Axis-I disorders (Ekselius, Tillfors, Furmark, & Fredrickson, 2001; Pretzer & Beck, 1996).

2.2 THEORIES OF PERSONALITY DISORDER

Within the literature, there are many theoretical conceptualisations on the development of personality disorder, with the most traditional and dominant perspectives being psychodynamic, biological, biosocial learning and cognitive (Millon & Davis, 2000). These theories have guided empirical research and personality assessment as well as provided a context and basis for the treatment of personality pathology. However, it is beyond the scope of this paper to comprehensively review each of these theories with their associated treatment and empirical literature. Therefore, a brief overview of the main theoretical features will be presented and the interested reader is directed to Lenzenweger and Clarkin (1996) and Millon and Davis (2000) for more detailed reviews.

THE PSYCHODYNAMIC APPROACH:

According to Freud (1905, 1923), personality develops through a series of five psychosexual stages, where each stage gives way to the next and presents the individual with a set of maturational challenges. Furthermore, personality is seen as being composed of three structural components: the id, ego and superego. It is hypothesised that the 'irrational' id consists of basic survival instincts and the two dominant drives of personality; sex and aggression; whereas the superego incorporates societal and moral values. To ensure greater adaptability, the ego develops to rationally mediate between the demands of the id and the constraints of the environment and superego, although this process is highly vulnerable to feelings of anxiety. Consequently, defence mechanisms such as denial, repression or rationalisation are used to reduce perceived anxiety and protect the ego from becoming overwhelmed (Millon & Davis, 2000). With regard to personality pathology, damage to the ego is considered to be the most serious. Such damage can result from particular stage-fixations, disturbances in early development or relationships, and disturbances in people's perceptions of themselves and others. The type of damage and structural quality of the ego thus determines the exact nature and form that the personality disturbance takes (Derksen, 1995). For example, the psychodynamic understanding of antisocial personality emphasises a strong crisis in the development of the superego, leaving the id and its pleasure principles to dominate (Millon & Davis, 2000). However, there is limited empirical evidence to support this approach, although the concept of defence mechanisms continues to inform contemporary personality disorder theories (Millon, 1990).

THE BIOLOGICAL APPROACH:

The role of genetic factors in the aetiology of personality pathology remains unclear (Lenzenweger & Clarkin, 1996). Thapar and McGuffin (1993) argue that the evidence supporting a genetic influence on personality is strongest for the antisocial and schizotypal personality disorders. In fact, of all the personality disorders, the antisocial personality disorder has the most extensive and persuasive biological literature base. Cleckley (1964) proposed what he called 'semantic aphasia', which is the inability of antisocial personalities to understand and process emotional experiences, leading to their failure to empathise or develop a conscience. Some researchers have argued that antisocial personalities have specific language-processing deficiencies (Louth, Williamson, Alpert, Pouget, & Hare, 1998), while others have found frontal lobe abnormalities and lowered levels of physiological arousal that are thought to account for the antisocial's constant excitement- and novelty-seeking behaviour (Deckel, Hesselbrock, & Bauer, 1996). Furthermore, serotonin and dopamine levels have repeatedly been found to be related to emotional instability (Depue, 1996). One of the most prominent biological accounts of personality pathology is Cloninger's (1986) neurobiological theory, which is based on the relationships between three trait dispositions and their associated neurotransmission systems. Essentially, novelty seeking is associated with low basal activity in the dopaminergic system, which is thought to dispose the individual towards excitement in response to novel stimuli and the active avoidance of monotony. In addition, harm avoidance is associated with high activity in the serotonergic system and reflects the disposition to respond strongly to aversive stimuli and avoid punishment, novelty and frustration. Lastly, reward dependence is associated with low basal noradrenergic system activity and reflects a tendency to

respond strongly to signals of reward and approval (Millon & Davis, 2000). However, the overly broad personality disorder profiles generated by this model correspond only loosely to those in the DSM-IV (Derksen, 1995).

THE BIOSOCIAL LEARNING APPROACH:

Millon's (1986) biosocial learning theory emphasised three universal polarities: pleasure-pain, self-other and active-passive. According to this model, personality is comprised of a complex set of structures and functions that are essentially designed to maximise comfort and minimise discomfort (pleasure-pain polarity). Beyond this, these structures and functions reflect where the individual looks (self-other) and how the individual behaves (active-passive) to achieve this aim. Personality pathology emerges from a complex interaction between these polarities and can result from deficits that occur in the nature (pleasure versus pain), source (self versus others) or behaviours (active versus passive) that individuals employ (Lenzenweger & Clarkin, 1996). Millon also emphasised the importance of experiential learning and coping in response to stressful events. He argued that the coping repertoire of personality-disordered individuals is limited and inflexible and as such, they tend to utilise the same strategies repeatedly regardless of the situation or outcome. Consequently, the level of stress continues to rise and the dominant pathological themes tend to keep repeating as vicious cycles (Millon & Davis, 2000).

THE COGNITIVE APPROACH:

The cognitive approach essentially proposes that an individual's perception and interpretation of situations govern their emotional and behavioural responses. These interpretations are shaped by inflexible dysfunctional beliefs or schemas,

which are global mental representations that guide information processing and attach meaning to events (Beck, Freeman, & Davis, 2004). Schemata also include entrenched patterns of distorted thinking and errors in reasoning and so have the potential to generate high levels of negative affect. In fact, the cognitive theory of personality disorder emphasises the importance of schemas and suggests that when particular schemas are hypervalent, their threshold for activation is low and as such, they dominate information processing and bias the interpretation of events in such a way that maladaptive beliefs are strengthened and possible alternatives are discounted (Beck, et al., 2001; Beck & Freeman, 1990). The development of these schemas and interpersonal behaviours are strongly influenced by early life experiences. Pretzer and Beck (1996) suggested that the family environment, significant life events and social learning processes play a major role in the development of maladaptive schemas and thus in the development of personality disorder. Furthermore, Beck, et al. (2004) hypothesised that each personality disorder can be characterised by a specific set of beliefs and behavioural responses. For example, the dependent personality shows excessive attachment behaviour that is connected to the beliefs 'I am helpless, needy and weak' and 'others are nurturing, supportive and competent'. Numerous research studies have provided support for the proposition that certain dysfunctional beliefs are associated with each personality disorder, which led to the inclusion of specific cognitive components within the treatment of personality disorder (Arntz, Dietzel, & Dreessen, 1999; Arntz, Dreessen, Schouten, & Weertman, 2004; Beck, et al., 2001).

SUMMARY:

Each of these theories have highlighted different characteristics in personality development and pathology, although the empirical support for some of these

models is relatively limited. The psychodynamic approach emphasised the importance of ego-disturbance in personality pathology, whereas the biosocial learning theory focused on the pleasure-pain polarity as well as the importance of experiential learning and inflexible coping strategies. The biological theories of personality disorder have highlighted the role of neurobiological structures and processes, particularly the serotonergic, dopaminergic and noradrenergic systems. Lastly, the cognitive approach emphasised the role of maladaptive schemas in distorting the interpretation of events and instigating dysfunctional responses. Furthermore, each of these theories have acknowledged the importance of early environmental and social factors in the development of personality. Indeed, empirical research has repeatedly demonstrated significant associations between personality disorder and early maladaptive experiences, particularly the role of neglect, abuse, parent trauma, styles of child rearing and early separation (Derksen, 1995).

More contemporary theories and treatment approaches such as Linehan's (1993) Dialectical Behaviour Therapy and Young's (1999) Schema-Focused Therapy have attempted to integrate these models, although they are in need of continued refinement and empirical research. A number of approaches to the treatment of personality-disordered patients have been manualised and subjected to treatment outcome evaluation, although research comparing these different treatment approaches is limited (Beck, Freeman, & Davis, 2004). The empirical evidence to date does not indicate a preferred treatment of choice and the effective components of different treatment approaches remain uncertain (Bateman & Fonagy, 2004). This uncertainty is mainly due to methodological issues in defining and measuring personality disorder as well as uncontrolled studies using highly

selected sample groups (Tyrer, 2005). Nevertheless, it seems that different theory-driven treatment approaches can be effective, at least to some extent, for specific groups of personality disordered patients (van Bilsen, 2005).

2.3 PERSONALITY DISORDER IN THE HOMELESS POPULATION

Research has shown that mental health problems are highly prevalent within the homeless population, with personality disorders representing a significant percentage. However, prevalence rates of personality disorder among the homeless vary widely, with estimates ranging from 6% to 50% (Fischer & Breakey, 1991; Pollio, North, Thompson, Paquin, & Spitznagel, 1997; Scott, 1993), which is due mostly to differences between the studies in concept definition and classification, the use of diverse assessment measures and the utilisation of varied sample groups (i.e. differences in age, gender, ethnicity, hostel- versus street-dwelling homeless). Worryingly, mental health problems have often been cited as one of the leading causes of initial homelessness, only ranking below reasons related to economic resources or relationship breakdown (Fischer & Breakey, 1991). Furthermore, Stein and Gelberg (1995) have argued that the homeless severely mentally ill are at a significantly higher risk of prolonged or chronic homelessness. However, most studies have found that these highly vulnerable individuals are among the least likely to be utilising services (Pollio, et al., 1997). In fact, a study by Salize, et al. (2001) found that 91.7% of personality disorder-related problems went untreated or unrecognised within homeless services.

3. SUBSTANCE DEPENDENCE

3.1 THE CONCEPT OF SUBSTANCE DEPENDENCE

The American Psychiatric Association (APA, 1994) describes substance dependence as a maladaptive pattern of heavy alcohol and/or illicit drug use, which results in significant impairment or distress and is associated with tolerance and withdrawal symptoms. Substance dependence also has a significant negative impact on almost all areas of functioning including family, social, occupational and physical health. The development of an addiction requires a transition from casual to compulsive patterns of substance use, which involves a compulsive pattern of drug-seeking, drug-taking, drug-recovery and various other high-risk behaviours (Robinson & Berridge, 2003).

3.2 THEORIES OF SUBSTANCE DEPENDENCE

Numerous theoretical approaches have been developed to explain addictive behaviour, most notably the self-medication model, conditioning theory and the biological and cognitive perspectives, although the scientific merits of each of these theories vary. Given the scope of this paper, only a brief overview of these theories will be presented, although the interested reader is directed to Robinson and Berridge (2003) and Sher, Grekin, and Williams (2005) for more detailed information.

SELF-MEDICATION MODEL:

The most predominant and widely used explanation for substance use disorders is the self-medication model (Khantzian, 1985). This model suggests that substance use is initiated in order to feel good and alleviate negative emotions. This positive

effect reinforces regular use and as a result, tolerance and withdrawal effects quickly develop. Therefore, continued substance use is further motivated by the need to alleviate these additional drug-related effects. Findings from several studies have lent support to this model (Warner, et al., 1994).

CONDITIONING THEORY:

Wikler (1948) first proposed that conditioning factors play an important role in drug addiction, in that drug-related behaviours and objects become secondary reinforcers as a result of their repeated pairing with the primary drug-related cue. Furthermore, stimuli regularly associated with withdrawal symptoms acquire conditioned aversive properties. Ample experimental and anecdotal evidence has been found to support this theory (Gossop, 1994).

BIOLOGICAL PERSPECTIVE:

There have been numerous biochemical and physiological explanations for substance dependence since the discovery of opiate receptor sites and the identification of naturally occurring brain chemicals, particularly the endorphins and enkephalins (Gossop, 1994). More recently, research has highlighted the role of the dopamine reward system in the compulsive use of drugs. In fact, Kelley and Berridge (2002) are among those who have suggested that compulsive patterns of substance use produce drug-induced changes in reward-related brain systems, which are involved in pleasure, incentive motivation and learning processes. According to these authors, these brain reward circuits include dopamine projections from the ventral tegmental area and substantia nigra to the nucleus accumbens (Nacc) and striatum, as well as glutamate inputs from the prefrontal cortex, amygdala and hippocampus, and other key parts of this network which they refer to as the 'Nacc-

related circuitry'. Essentially, addictive drugs engage, sensitise and control the neural circuitry within this system (by altering dopamine projections), thereby altering the process of reward-motivated control over behaviour (i.e. the compulsive motivation and 'want' to take drugs).

COGNITIVE PERSPECTIVE:

The cognitive perspective assumes that peoples' beliefs and assumptions influence the way in which they interpret and respond to specific situations. Cognitive theorists hypothesise that specific beliefs about the meaning of substance use constitutes an increased vulnerability to substance dependence, for example, 'cocaine makes me more sociable' and 'I cope better after a few drinks' (Beck, Wright, Newman, & Liese, 1993). Continued substance use is then maintained by a number of factors including beliefs about the effects of withdrawing from the drug (e.g. 'will be intolerable'); beliefs that centre around the use of drugs or alcohol (e.g. 'I am a total mess without it'); the social pressures and rewards of using; and the drug-related emotional reactions and self-defeating behaviours that create vicious cycles of substance use (Beck, et al., 1993). In particular, Marlatt and Gordon's (1985) influential cognitive-behavioural model of relapse prevention highlighted four cognitive processes that are thought to play a major role in addictive behaviour. Firstly self-efficacy, which refers to the perceived ability to cope with challenging or high-risk situations such as negative emotional states and exposure to drug cues. Secondly outcome expectancies, which refers to the anticipated effects from substance use. Thirdly, attributions of causality, which is the belief that drug use is attributed to internal or external factors and lastly, the decision-making process which incorporates these beliefs. According to this model,

individuals who perceive themselves as having little control and low self-efficacy are more likely to rely on substance use as a way of coping with high-risk or stressful situations.

SUMMARY:

Each of these theories have focused on and provided a partial explanation for the different aspects involved in substance use disorders and as such, have guided the development of various treatment approaches including the social-behavioural, cognitive-behavioural, conditioning and medical interventions (the interested reader is directed to Gossop (1994) for more detailed accounts). However, it seems logical to assume that a comprehensive understanding of the development of substance dependence requires a more interactionist view. The reasons for the initial and continued use of drugs and/or alcohol are numerous and can include pleasure seeking; relief from negative affect or boredom; unemployment or poverty; social rewards and networking; and substance use beliefs and expectations. It is likely that biological, social and psychological factors are all involved in the development and course of substance dependence, although the level of their involvement may vary for different individuals.

3.3 SUBSTANCE DEPENDENCE AND PERSONALITY DISORDER

The term 'dual diagnosis' has been used to refer to the co-existence of substance use and psychiatric disorders. The prevalence of dual diagnosis in clinical populations is high and this co-morbidity has been found to significantly increase an individual's vulnerability for further risks and complications including increased anxiety, depression, family conflict, treatment drop-out, traumatisation and criminal behaviour (Kessler, et al., 1997; Laudet, Magura, Vogel, & Knight, 2004).

Reported prevalence rates for dual diagnosis within clinical samples have ranged from 2-68%, again due to differences in the methodology used (e.g. varying assessment measures) and the population utilised (e.g. different demographic characteristics of the sample), although more recent research using specific diagnostic criteria and standardised assessment instruments has narrowed this range to 47-68% (Blanchard, 2000; Fischer, 1989; Fischer & Breakey, 1991).

More specifically, there have been numerous studies that have found a high prevalence of personality disorder among individuals with substance use disorders, with this dually diagnosed group being particularly vulnerable as well as difficult and costly to treat (Gonzalez & Rosenheck, 2002; Nace & Davis, 1993). These prevalence estimates have ranged from 37% to 60%, with most of the variation having been attributed to differences in study methods, rating instruments and treatment population (Barber, et al., 1996; Bowden-Jones, et al., 2004; Brady, Dustan, Grice, Danksy, & Kilpatrick, 1995; Gonzalez & Rosenheck, 2002). Within the research literature, methodological differences in the assessment of personality disorder and substance dependence have made it difficult to compare studies or to separate substance abuse symptoms from personality pathology. Furthermore, the majority of studies have been based on selective US samples and often only included either drug or alcohol populations. Research has repeatedly shown that antisocial personality disorder is most frequently associated with substance dependence, followed by borderline personality disorder (Barber, et al., 1996; Morgenstern, Langenbucher, Labouvie, & Miller, 1997; Nace, 1990). However, the nature of the relationship between substance use disorders and these personality disorders is complex and remains unclear. It has been hypothesised that certain personality traits that are characteristic of these disorders such as sensation-seeking,

impulsivity and affect-intolerance predispose and increase the vulnerability for repeated substance use (Brady, et al., 1995; Gossop, 1994). Indeed, recent research has found significant associations between a variety of these personality traits (particularly impulsivity) and substance use disorders (Bornovalova, Lejuez, Daughters, Rosenthal, & Lynch, 2005; Sher, Grekin, & Williams, 2005). Furthermore, Nace (1990) has argued that the inherent difficulties in coping behaviour and emotion regulation within these disorders not only predispose individuals to abuse substances to self-medicate, but may also be a consequence of substance dependence. These findings have led most authors to conclude that personality-disordered individuals are at an increased risk of substance dependence. Regrettably, the presence of personality disorder also appears to be associated with more adverse substance dependent treatment outcomes (Nace, Davis, & Gaspari, 1991). Further research is required on the potential mediating and moderating variables that are likely to influence this dual-diagnosis relationship, which may also help identify appropriate areas for treatment.

3.4 DUAL DIAGNOSIS IN THE HOMELESS POPULATION

The association between substance dependence and homelessness is long-standing and widespread, with dually diagnosed homeless individuals being seen as the most disadvantaged and underserved segment of the homeless population (Stein & Gelberg, 1995). Despite the difficulties measuring mental illness and substance dependence in homeless epidemiological research, the majority of studies have found significantly higher prevalence rates for co-morbid substance dependence and mental illness in homeless groups compared to the general population (Fischer & Breakey, 1991; North, Eyrich, Pollio, & Spitznagel, 2004). The prevalence data

suggests that within the homeless population, approximately 30% suffer from severe mental disorders; 32-67% suffer from substance disorders, with alcohol being the most prevalent followed by cocaine and cannabis use; and about 10-22% are dually diagnosed (Manderscheid & Rosenstein, 1992; North, Pollio, Perron, Eyrich, & Spitznagel, 2005; Pollio, North, Thompson, Paquin, & Spitznagel, 1997; Vasquez, Munoz, & Sanz, 1997). Fichter and Quadflieg (1999) noted that the issues of mental illness and substance dependence in the homeless have been largely neglected in European countries, with most of the prevalence data being based on North American urban sample groups, thus making it difficult to compare findings across studies given the differences in sampling, assessment and classification. Regardless, it is clear that a significant percentage of the homeless population experience a multitude of difficulties making this dually or multiple diagnosed group of particular concern. Furthermore, studies have shown that the presence of mental illness and substance dependence is associated with an increased vulnerability for various forms of abuse and victimisation as well as for prolonged homelessness and a difficulty sustainng tenancies (Craig & Hodson, 2000; Hurlburt, Hough, & Wood, 1996; Stein & Gelberg, 1995). In fact, Fichter and Quadflieg (2003) found that alcohol dependency in homeless men was significantly associated with higher levels of homelessness at a three-year follow up and concluded that substance dependence constitutes a major risk factor for both becoming and remaining homeless. Most authors agree that the relationship between substance dependence and homelessness is bi-directional, in that substance use increases the risk of homelessness and the inherent stressors of homelessness exacerbates the use of substances (Fischer & Breakey, 1991; McCarty, Argeriou, Huebner, & Lubran, 1991).

4. SELF-ESTEEM

4.1 THE CONCEPT OF SELF-ESTEEM

Self-esteem has often been discussed as both an explanation for and a consequence of psychological disorder and has been categorised as a need, an attitude, a moderating variable and a reflection of competence and achievement (Robson, 1988). Multiple definitions and explanations of self-esteem exist within the literature. Self-esteem is generally considered to be the evaluative component of the self-concept, reflecting a global sense of self-worth that is relatively stable across time (MacArthur & MacArthur, 2004). The most universal and influential definition of global self-esteem came from Rosenberg (1965), who described self-esteem as a favourable or unfavourable attitude towards the self. Attitudes were defined in terms of emotional and/or evaluative reactions, in that they constituted approval/liking or disapproval/disliking. Rosenberg, like many authors, believed that self-esteem was shaped by early experiences and through the evaluations of others. A prominent cognitive model of self-esteem was proposed by Fennell (1997), who suggested that self-esteem was a cognitive representation of the self (schema) which was derived from specific experiences and guided information processing and behaviour. Low self-esteem was therefore seen as a learned, negative, global self-judgement which shaped a person's cognitive, emotional and behavioural responses and was further maintained and strengthened by ongoing cognitive processing biases and maladaptive behaviour patterns.

4.2 SELF-ESTEEM AND MENTAL HEALTH

Positive regard for the self has long been considered to be an essential component of mental health. Low self-esteem has often been associated with increased levels

of depression, anxiety, unemployment, interpersonal conflict and substance dependence (Emler, 2001), although the exact nature of these relationships is unclear. In some cases, low self-esteem may be only one aspect of the presenting problem; it may be a consequence of the presenting problem; and in other cases it may be a vulnerability or risk factor (Fennell, 1998; Robson, 1988). Alternatively, high self-esteem has often been viewed as a 'psychological buffer' or moderating factor that acts as a protective coping resource in stressful or adverse situations (Kling, Hyde, Showers, & Buswell, 1999).

Both Beck and Freeman (1990) as well as Fennell (1997) argued that a negative self-concept underlies most emotional disorders and proposed that these self-beliefs, in conjunction with beliefs about others and the world were critical to understanding personality disorder. For example, in avoidant personality disorder the view of the self as socially inept and incompetent in conjunction with a view of others as critical and demeaning, results in anxiety and the understandable strategy of social withdrawal and avoidance. Likewise, a view of the self as weak and helpless in conjunction with a view of others as nurturing and supportive, leads to the care-seeking and clinging behaviours that are characteristic of the dependent personality disorder. However, objective measurement of the association between self-esteem and personality disorder is limited to a couple of empirical studies that utilised only US student sample groups, thus limiting the generalisability of their findings (Sinha & Watson, 1997; Watson, 1998). Sinha and Watson's (1997) study revealed the importance of low self-esteem in personality disorder, particularly in the dependent, avoidant and obsessive-compulsive disorders. Similarly, Watson (1998) investigated the relationships between personality disorder and self-esteem, locus of control and various other psychosocial factors. He found that self-esteem

and locus of control were good predictors for seven of the 11 personality disorders studied. In particular, self-esteem was a strong predictor of the avoidant, borderline, dependent and obsessive-compulsive personality disorders. Watson concluded that lowered levels of self-esteem was linked to most personality disorders and recommended further investigation of interpersonal and psychosocial variables in personality disorder research, particularly in more vulnerable and clinical populations.

4.3 SELF ESTEEM AND SUBSTANCE DEPENDENCE

Self-esteem has long been hypothesised to play an important role in the initial and continued use of substances. However, the empirical literature is full of conflicting findings, due in part to the small sample sizes in some of the studies; differences in measurement and methodology; differences in the measured strength of association and the frequent utilisation of US student samples. Corbin, McNair, and Carter (1996) found a significant positive association between self-esteem and self-reported problem drinking in college students. Similarly, Carvajal, Clair, Nash, and Evans (1998) as well as Gordon and Caltabiano (1996) also found significant relationships between low self-esteem and increased substance use. Other studies however, have failed to find any association between self-esteem and substance abuse (Laflin, Moore-Hirschl, Weis, & Hayes, 1994; Seeman & Seeman, 1992). It might be that lower self-esteem poses a higher risk of substance abuse in more vulnerable populations and/or operates as a mediating factor when faced with difficult or stressful situations.

4.4 SELF-ESTEEM IN THE HOMELESS POPULATION

The inherent isolation and alienation of homelessness as well as the frequent failures and stressors associated with struggling to attain basic needs and safety often leads to high incidences of low self-esteem within the homeless population (Diblasio & Belcher, 1993). These factors place homeless individuals at an increased risk of developing mental health disorders or exacerbating existing psychiatric conditions (Votta & Manion, 2003), although minimal attention has been paid to the problem of low self-esteem among the homeless. A good quality study by Diblasio and Belcher (1993) assessed the level of self-esteem in a US homeless sample and found a significant association between low self-esteem and depression, with 54% of the sample having low self-esteem and 75% scoring highly on measures of depression. This association is not that surprising given that a negative view of self, of others and the world are part of the cognitive triad of depression (Beck, 1976). Worryingly, Diblasio and Belcher (1993) argued that the feeling of worthlessness that accompanies low self-esteem often prevents homeless individuals from securing employment and housing. They proposed that the identification and treatment of low self-esteem could help prevent chronic homelessness and recommended further investigation into the interactional patterns between self-esteem and mental health.

While the few studies mentioned earlier indicate an association between self-esteem and personality disorder, as yet, no systematic research has directly investigated this relationship within a homeless sample.

As highlighted previously, the empirical evidence showing the association between substance use and self-esteem is inconsistent. Unsurprisingly then, the three US studies that have examined this relationship within the homeless

population have also shown conflicting results. In their study, Nielsen and Scarpitti (1997) found that a large proportion of homeless substance abusers had low self-esteem, low self-worth and were lacking in self-confidence. In contrast, Diblasio and Belcher (1993) found no significant association between self-esteem and substance use. Using a somewhat different approach, Malcolm (2004) evaluated the impact of treatment for substance dependence and low self-esteem in a group of homeless men. The overall results indicated that the levels of self-esteem were not increased in the treatment condition despite decreases in alcohol and drug use. However, the study did not take account of the actual time spent in treatment or the level of dropout nor did the author provide adequate information on the treatment components, making it unclear as to how self-esteem was actually addressed within the intervention. Nevertheless, Malcolm concluded that the role of self-esteem in substance dependence was complex and varied within different sample groups and as such, further research using homeless populations was needed to clarify this relationship. It seems likely that low self-esteem may only be one of the many risk or mediating factors in the use of substances within homeless groups.

5. COPING

5.1 THE CONCEPT OF COPING

Lazarus and Folkman (1984) provided the most influential and prominent classification of coping and defined coping behaviours as the cognitive and behavioural efforts used to manage internal or external demands that are seen as challenging or exceeding one's personal resources. Therefore, coping behaviours refer to the way in which an individual attempts to reduce or eliminate both the source of stress and the associated emotional effects. The authors also emphasised

the role of cognitive appraisals in shaping the quality of emotional response and the choice of coping behaviour. Cognitive appraisal involves assessing both the degree of threat and controllability in a situation as well as the available personal and social coping resources. This transactional model suggests that the degree of stress vulnerability or resiliency can be understood by examining overall coping styles, which have been categorised as either adaptive, problem-focused responses directed toward managing problems or emotion-focused, avoidant responses used to diminish the emotional distress triggered by the stressor (Folkman, & Moskowitz, 2004).

Within the research literature, the distinction between approach and avoidance coping has been the most frequently used system to classify different coping behaviours (Carver & Scheier, 1994). The assumption of this theoretical approach is that cognitive and behavioural responses are directed either towards or away from the source of stress and/or negative affect. Approach coping strategies include planned problem solving, cognitive restructuring and seeking social support, where these responses involve psychological contact with the stressor and associated negative emotions. Alternatively, avoidant strategies include wishful thinking, denial, avoidance of negative emotions and social withdrawal (Compas, Connor, & Osowiecki, 1997). The empirical evidence from both cross-sectional and longitudinal studies has shown that appraisals of both the situation and the perceived coping resources significantly moderate the impact of stressors. In addition, the majority of these studies have found that avoidance coping is associated with higher levels of psychological distress and psychopathology (Beutler, Moos, & Lane, 2003; Compas, et al., 1997). Most authors have therefore concluded that while both coping styles can be appropriate in certain stressful

situations in the short-term, recurring avoidance coping behaviour is generally more maladaptive and interferes with appropriate action and emotional processing.

5.2 COPING AND PERSONALITY DISORDER

Millon and Davis (2000) argued that personality played a major role in how people perceived stress; how they utilised personal and social coping strategies; and how they adapted psychologically to stressful situations. Similarly, Folkman and Moskowitz (2004) suggested that certain personality characteristics influence the appraisal of stressful events and available coping resources, thus shaping the general pattern of coping behaviour. Difficulty coping with stressful situations as well as having inflexible and maladaptive coping strategies are considered to be among the core features of personality disorder (Millon & Davis, 2000). Despite the limited amount of research, studies have found strong correlations between personality disorder and less adaptive, avoidant coping strategies (Vollrath, Alnaes, & Torgersen, 1994; Watson & Sinha, 1999). Furthermore, research has shown significant relationships between personality disordered pathology and higher levels of depression, anxiety, avoidance coping and substance use (Kruedelbach, McCormick, Schulz, & Grueneich, 1993; Quirk & McCormick, 1998). However, Sinha and Watson (1997) found some contrasting results in their study which investigated the relationships between personality disorder and a number of psychosocial variables including stress, self-esteem, self-efficacy and coping style. The results showed that perceived stress and self-esteem explained a relatively large percentage of the variance in almost all personality disorders, although unexpectedly, coping behaviour contributed very little to the total variance. The scarce amount of research and the fact that the majority of these studies employed

only student samples make it impossible to resolve or generalise these findings without further research.

5.3 COPING AND SUBSTANCE DEPENDENCE

Cooper, Russell, Skinner, Frone, and Mudar (1992) have suggested that the distinction between approach and avoidance coping is particularly relevant in understanding substance dependence. From a theoretical perspective, alcohol and/or drugs are used as a coping strategy to escape or regulate negative affect. Most researchers have agreed that substance dependent individuals lack adaptive coping skills and so rely on 'self-medication' to cope with stressful situations, which subsequently contributes to the development and maintenance of substance dependence (Courbasson, Endler, & Kocovski, 2002). Empirical studies have shown that emotion-focused and avoidant coping responses are more prevalent among those who abuse drugs and/or alcohol (Moos, Brennan, Fondacario, & Moos, 1990; Nyamathi, Stein, & Swanson, 2000). Furthermore, the co-occurrence of psychiatric problems with the use of avoidant coping behaviours has been shown to increase the likelihood of substance abuse relapse and treatment dropout (Beutler, Moos, & Lane, 2003; Franken, Hendriks, Haffmans, & van der Meer, 2003).

5.4 COPING AND SELF-ESTEEM

From a theoretical view, self-esteem can be seen as a personal coping resource that may moderate the effects of stressful situations (Robson, 1988). The few empirical studies investigating the relationship between self-esteem and coping have all found that in situations of psychological stress, individuals with lower self-esteem utilise avoidance coping strategies more frequently than those with higher self-esteem

(Compas, Orosan, & Grant, 1993; Gurnakova, 2000; McCall & Struthers, 1994; Smith, Wethington, & Zhan, 1996). The majority of these studies however, did not control for the presence of psychiatric disorders and used only student sample groups.

5.5 COPING IN THE HOMELESS POPULATION

Homelessness itself is considered by most to be an inherently stressful experience, with most homeless individuals having to endure a wide range of both acute and chronic stressful situations. This places homeless individuals in the vulnerable position of being at further risk of increased psychiatric problems, traumatisation and repeated tenancy breakdown (Milburn & D'Ercole, 1991). The ability to cope with increased and prolonged levels of stress is exceedingly important in this population group. However, there have been only two US studies that have directly investigated the role of coping behaviour within homeless individuals and their associated impact on general psychological adjustment. Nyamathi, Keenan, and Bayley (1998) found that depression, anxiety, maladaptive coping and less social support were highly prevalent among their large and diverse (i.e. hostel and street-dwelling) substance dependent homeless sample. More recently, Votta and Manion (2003) explored the associations between coping style, negative life events, self-worth and perceived social support in both homeless and non-homeless adolescent males. The results showed that the homeless youths reported a higher prevalence of substance use and criminal involvement; a greater use of avoidance coping behaviours; more negative life events; and increased levels of depressive symptomatology. Furthermore, avoidance coping and low self-worth accounted for a significant proportion of variability in depressive symptoms, substance use and

criminal involvement. The authors concluded that coping style and negative self-worth contributed to the chronicity of mental health problems, exacerbated existing risk factors and acted as barriers to service utilisation. Therefore, the role of coping behaviour in the psychological well-being of homeless individuals clearly warrants further research.

6. SERVICE PROVISION WITHIN THE HOMELESS POPULATION

There are a wide variety of agencies that provide support within homeless populations including housing departments, tenancy support workers, hostels, day centres, social services, health services, drug action teams, educational services, criminal justice services and employment schemes (Office of the Deputy Prime Minister, ODPM, 2003). While most of these are separate and distinct services, a recent government guideline recommended improved service integration and coordination in an attempt to enhance their responsiveness to service user needs (ODPM, 2005b).

Recently, the government has introduced various initiatives in an attempt to reduce and prevent homelessness. The 'Supporting People' funding scheme (ODPM, 2003) provided housing–related support services that were designed to help vulnerable people achieve and maintain independent living. The primary objective of this scheme was to prevent people from becoming homeless by addressing the underlying causes of tenancy breakdown in particularly vulnerable groups such as victims of domestic violence and people with drug and alcohol problems. Similarly, the strategy document 'Sustainable Communities: Settled Homes; Changing Lives' (ODPM, 2005a) outlined future government initiatives for continuing to reduce and prevent homelessness, which included mediation schemes, floating support, rent deposit schemes and increased investment in social housing.

However, while both these initiatives recognised the significance of mental illness as a risk factor in tenancy breakdown, no specific mental health policies or services were established.

The Department of Health's (1996) 'Homeless Mentally Ill Initiative' provided a £2 million grant to develop and improve psychiatric outreach teams for homeless people, primarily within central London. However, mental health service provision within the homeless population varies across the country and access to these types of services is usually only available via mainstream community teams (Griffiths, 2002). Ironically, these generic services tend to impose eligibility criteria that often exclude many homeless individuals (such as substance dependence) and can also be inappropriate for this client group leading to high drop out rates. As a result, homeless shelters and hostels tend to provide most of the mental health care to service users, although research has shown that these staff are not always adequately trained to do so (Bradford, Gaynes, Kim, Kaufman, & Weinberger, 2005). Therefore, more specialised and flexible mental health provision within homeless services is clearly required that can improve access, interagency consultation and take into consideration the multiple needs of this population.

The ODPM (2003) has recommended that services identify particular groups within the homeless who are likely to be in need of high levels of support. Homeless individuals who suffer from mental health problems and substance dependence have long been considered to be an especially difficult population group to treat given their co-morbidity, severity and complexity. In particular, personality disordered patients are perceived to be more difficult to engage and less compliant with treatment (Gonzalez & Rosenheck, 2002). Recently, the National

Institute of Mental Health in England (NIMHE, 2003) issued policy implementation guidelines for the development of specialist services for people with personality disorders, highlighting populations with high concentrations of psychopathology, where the homeless would certainly fit this profile. The document recommends the development of specialised, multi-disciplinary, early-intervention services that target those with significant distress and/or multiple presenting problems.

Outcome studies that have evaluated the treatment of co-morbid presenting problems in the homeless are few, consequently little is known about the efficacy of particular interventions for different subgroups within the homeless (Manderscheid & Rosenstein, 1992). Nevertheless, the majority of well-designed treatment studies have demonstrated clinical improvement in both substance dependent and psychiatric disorders, even if these were only modest improvements in some cases (ODPM, 2004; Pollio, Spitznagel, North, Thompson, & Foster, 2000). Furthermore, the literature seems to suggest that psychological interventions aimed at improving self-esteem and coping skills whilst considering individual personality characteristics would be highly beneficial for this population group. Overall, more integrated treatment approaches that have recognised the complexity of dual- and multiple-diagnosis have been associated with significantly better outcomes (Drake, et al., 2001; Gonzalez & Rosenheck, 2002; Moggi, Brodbeck, Koltzsch, Hirsbrunner, & Bachmann, 2002). However, despite the recognised benefits of such services, research examining the level of service access and utilization in the homeless has shown a repeated pattern of under-utilization (North, Pollio, Perron, Eyrich, & Spitznagel, 2005; Salize, et al., 2001). Specialised and integrated services that enhance engagement and incorporate substance dependence; social welfare; personal and coping resources; and mental health issues need to be further

developed and refined. Additional empirical research is also needed to investigate the effectiveness of these combined treatment programs as well as factors that are related to mental health service utilisation within the homeless population.

The ODPM (2005a, p.17) recently stated that 'homelessness is not just a housing problem. People may have mental health problems, or substance dependence, or unemployment or a history of offending and chaotic lifestyles. In many cases these issues mean that people are vulnerable and at risk of remaining homeless...Services must be flexible enough to ensure that they can respond to short-term as well as life-long needs, and to multiple needs.'

7. CONCLUSIONS AND FUTURE DIRECTIONS

The pathways into homelessness are complex, diverse and involve a number of psychosocial factors. It is apparent that a large percentage of the homeless population experience significantly high levels of mental health and substance use disorders, with personality disorders and dual-diagnosis representing a significant proportion. Regrettably, the particular characteristics of this highly vulnerable co-morbid group often result in an increased risk of repeated tenancy breakdown, prolonged periods of homelessness and further trauma, although they are among the least likely to be utilising services. Therefore, increased knowledge and investigation within the personality-disordered homeless subgroup is required in order to help identify their particular support needs and risk factors. It might also be useful to examine the role of and the degree to which specific personality traits (such as impulsivity, affect intolerance and sensation-seeking) influence the initial and continued use of substances.

The literature suggests that self-esteem is an important factor to consider in both the homeless population as well as in the understanding of personality pathology. However, the objective measurement of this relationship is limited to a few empirical studies that have utilised only US student samples and as yet, no systematic research has directly investigated this relationship using a homeless sample. The association between self-esteem and substance abuse is also unclear, with the empirical evidence showing inconsistent and conflicting findings, which has mainly been attributed to biased and small sample sizes as well as differences in measurement and methodology across studies. Further studies examining the associations between personality disorder, substance dependence and self-esteem within the homeless population is essential in order to clarify these relationships, ideally using longitudinal designs that would then enable a more detailed investigation into the exact nature of these relationships.

Homelessness is clearly an inherently stressful experience. Research has shown that the inability to cope effectively with stress contributes to the chronicity of mental health problems, increases risk and vulnerability, precludes service utilisation and contributes to repeated tenancy breakdown. However, the empirical findings are inconsistent and there have been only two US studies that have directly investigated the coping behaviour of homeless individuals. The literature has also suggested that inflexible and maladaptive coping strategies are among the core features of personality disorder, which can often lead to the use of substances as a coping strategy to escape or regulate negative affect. Therefore, the role of coping behaviour in the psychological well-being of homeless individuals requires much needed further investigation.

There have been a number of theoretical approaches to understanding and treating personality disorder and addiction, although most are in need of continued refinement and empirical research. Most well-designed treatment studies have demonstrated at least some improvement in both mental health and substance use disorders, although more research is needed regarding the most effective treatment components and the management of homeless individuals with dual diagnosis and more complex personality problems. Despite the recent advances in both homeless and mental health service policies, the recognition, provision and utilisation of specialised mental health services is considerably low within the homeless population. Consequently, further research is required that investigates what psychological and service factors are involved within this pattern of under-utilisation as well as in the development and refinement of more specialised and integrated treatment approaches.

Regrettably, a large percentage of the current empirical literature within the homeless includes a number of methodological limitations. Early studies have used relatively unsophisticated research designs, unstandardised measures or measures that were not suitable for this population group. Furthermore, comparing homeless populations over time and across studies and cultures has been impeded by the substantial differences in definitions of homelessness and mental illness, assessment, sampling and methodology used. Most studies have also utilised cross-section designs, high exclusion criteria and US student sample groups, making it difficult to formulate conclusions or generalise some of the findings. Future research will therefore need to incorporate controlled studies that have considered these limitations and incorporate large and diverse sample groups (e.g. both hostel and street dwelling homeless, brief versus chronic homeless populations).

In conclusion, the homeless are clearly an exceptionally vulnerable group who often experience high levels of stress, mental health problems, low self-esteem, trauma and substance dependence. The literature seems to suggest that particular personality traits, self-esteem and coping behaviours can act as mediating factors in the initial and prolonged use of substances. Therefore, the knowledge and identification of particular characteristics and risk factors within the homeless is essential in order to define their needs more precisely and develop more appropriate, integrated services that can address these complex needs. Further research is needed to address the gaps within the existing evidence base and expand the understanding of the multiple processes and factors involved in the psychopathology within the homeless population.

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EMPIRICAL PAPER

PERSONALITY DISORDER WITHIN THE HOMELESS: THE RELATIONSHIPS BETWEEN SELF-ESTEEM, COPING BEHAVIOUR AND SUBSTANCE DEPENDENCE

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OCTOBER 2006

PREPARED AS IF FOR SUBMISSION TO THE BRITISH JOURNAL OF PSYCHOLOGY

(SEE APPENDIX B FOR NOTES TO AUTHORS)

ABSTRACT

The homeless are an exceptionally vulnerable group who frequently suffer from mental health and substance use disorders. This study investigated the relationships between personality disorder, substance dependence, self-esteem and coping behaviour within a homeless population in an attempt to examine the particularly vulnerable personality-disordered subgroup. The final sample consisted of 39 participants who had been recruited from a London-based homeless hostel. Personality disorder, substance dependence and mood disturbance were assessed using the Millon Clinical Multiaxial Inventory-III. Self-esteem was measured using the Rosenberg Self-Esteem Scale and coping style was assessed using the Coping Responses Inventory. Overall, the results showed high prevalence rates for personality, mood and substance use disorders, where multiple and co-morbid diagnoses were common. The personality-disordered group had significantly lower self-esteem, higher mood disturbance and higher drug dependence, although there was no significant difference in coping behaviour compared to the non personality-disordered group. These findings highlight an especially vulnerable group of homeless individuals who are also among the least likely to be utilising support services. The study however, is not without its methodological limitations and future more controlled research will need to continue to investigate the factors involved in homeless psychopathology in order to match service and clinical need within this vulnerable and complex population group.

Keywords: Homeless; Personality Disorder; Self-esteem; Coping; Substance Dependence

1. INTRODUCTION

It is widely recognised that a large proportion of the homeless population experience significantly high levels of mental health and substance use disorders, with personality disorders and dual diagnosis representing a significant percentage (Fischer & Breakey, 1991; Scott, 1993). Worryingly, severe mental health problems have often been found to be one of the leading risk factors for both initial and prolonged homelessness, where certain personality-disordered characteristics such as increased impulsivity, mood disturbance, substance dependence, poor coping skills, distorted self-perception and antisocial behaviour are likely to contribute to repeated tenancy breakdowns (Stein & Gelberg, 1995). Therefore, this paper will focus on the relationships between personality disorder, substance dependence, self-esteem and coping behaviour as these variables have been highlighted as areas of much needed investigation within the homeless population (Diblasio & Belcher, 1993; Fichter & Quadflieg, 2003; Fischer & Breakey, 1991; Votta & Manion, 2003).

Personality disorder has been defined by the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, APA, 1994, p.629) as 'an enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time and leads to distress or impairment'. Table 1 provides brief descriptions of the 12 DSM-IV personality disorders.

Table 1: Brief descriptions of the DSM-IV personality disorders

Paranoid Personality Disorder:	characterised by a persistent pattern of distrust and suspiciousness, in that others' intensions/actions are unrealistically interpreted as threatening and demeaning (no psychotic symptoms present)
Schizoid Personality Disorder:	characterised by a pattern of indifference and detachment from social relationships across all contexts and a restricted range of emotional expression
Schizotypal Personality Disorder:	characterised by a pattern of acute discomfort in close relationships as well as odd/eccentric behaviour with a tendency to experience psychotic symptoms
Antisocial Personality Disorder:	characterised by a pervasive pattern of disregard and violation of the rights of others and a history of severely irresponsible and threatening behaviour
Borderline Personality Disorder:	characterised by a pattern of instability and impulsiveness that encompasses most aspects of the individuals functioning including interpersonal relationships, self-image, affect and behaviour
Histrionic Personality Disorder:	characterised by a pattern of exaggerated emotionality and intense, attention-seeking behaviour
Narcissistic Personality Disorder:	characterised by a pattern of distorted, inflated view of self as special and superior with a need for admiration and a lack of regard for others
Avoidant Personality Disorder:	characterised by a pervasive pattern of behavioural, emotional and cognitive avoidance and presenting with feelings of inferiority, sensitivity to criticism and social inhibition
Dependent Personality Disorder:	characterised by a pattern of submissive and clinging behaviour related to intense fears of separation/abandonment and the excessive need to be taken care of
Obsessive-Compulsive Personality Disorder:	characterised by a pattern of rigid preoccupation with orderliness, perfectionism and control and presents with excessive obsessional and compulsive behaviour

Passive-Aggressive Personality Disorder:	characterised by a pattern of negativism, ambivalence, resistance and unwillingness to meet the expectations of others
Depressive Personality Disorder:	characterised by a pattern of intense pessimism and negatively with feelings of guilt, worthlessness and abandonment

Due to the methodological differences between studies, the prevalence rates of personality disorder within the homeless population vary widely, with estimates ranging from 6% to 50% (Fischer & Breakey, 1991; Pollio, North, Thompson, Paquin, & Spitznagel, 1997; Scott, 1993). Most studies have also demonstrated a substantial overlap among the personality disorders and high co-morbidity with numerous Axis-I mood disorders (Ekselius, Tillfors, Furmark, & Fredrickson, 2001; Pretzer & Beck, 1996; Salize, et al., 2001; Scott, 1993). The literature however, indicates that the complex needs of personality disordered individuals often go unrecognised and they are also among the least likely to be utilising services (Pollio, North, Thompson, Paquin, & Spitznagel, 1997; Salize, et al., 2001). In fact, the overall provision of specialised mental health care within homeless services is limited and as such, most rely on mainstream psychiatric services which are often inaccessible, inappropriate and do not take into consideration the complex needs of this population group (Griffiths, 2002). Recently, the Office of the Deputy Prime Minister (ODPM, 2003) recommended that homeless support services identify and target particular groups that present with high support needs, where personality disordered and substance dependent individuals would undoubtedly be included within this classification.

The association between substance abuse and homelessness is well recognised, with studies showing significantly higher prevalence rates of substance use disorders in the homeless compared to the general population (Fischer &

Breakey, 1991; North, Eyrich, Pollio, & Spitznagel, 2004). Specifically, a recent survey showed that drug addiction, particularly heroin and crack cocaine, had now become more prevalent than alcohol abuse within this population group (ODPM, 2004). The American Psychiatric Association (APA, 1994) has described substance dependence as a maladaptive pattern of heavy alcohol and/or illicit drug use that results in significant impairment and distress, involves a compulsive pattern of drug-related behaviour, and is associated with tolerance and withdrawal symptoms. Most authors agree that the relationship between substance abuse and homelessness is bi-directional, in that substance use increases the risk of initial and prolonged homelessness as well as the inherent stressors associated with homelessness often exacerbates the use of substances (Craig & Hodson, 2000; McCarty, Argeriou, Huebner, & Lubran, 1991).

Specifically, high rates of personality disorder have been found among individuals with substance use disorders, with this dually diagnosed group being particularly vulnerable as well as difficult and costly to treat (Gonzalez & Rosenheck, 2002; Nace & Davis, 1993). Indeed, the dually diagnosed homeless are often seen as the most disadvantaged and underserved segment within the homeless population (Stein & Gelberg, 1995). Dual diagnosis prevalence estimates in the homeless have ranged from 10% to 67%, with most of the variation having been attributed to differences in methodology, the use of inappropriate assessment instruments and the frequent utilisation of highly selective US urban sample groups (Barber, et al., 1996; Bowden-Jones, et al., 2004; Fichter & Quadflieg, 1999;Gonzalez & Rosenheck, 2002). Research has shown that the borderline and antisocial personality disorders are most commonly associated with substance abuse, although the nature of these relationships are complex and remain unclear. It

has been hypothesised that their inherent difficulties in coping and regulating emotion, together with other characteristic personality traits such as sensation-seeking and impulsivity, predispose and increase these individuals' vulnerability to abuse substances (Brady, Dustan, Grice, Danksy, & Kilpatrick, 1995; Gossop, 1994; Nace, 1990).

Numerous authors have suggested that self-esteem is an important factor to consider in understanding personality pathology (Beck & Freeman, 1990; Fennell, 1997; Watson, 1998). Self-esteem is generally considered to be the evaluative component of the self-concept that represents a global sense of self-worth (Rosenberg, 1965). Both Sinha and Watson (1997) and Watson (1998) found significant correlations between low self-esteem and most personality disorders, particularly the dependent, avoidant, borderline and obsessive-compulsive, and recommended further investigation of interpersonal and psychosocial variables in personality disorder research. However, the objective measurement of the relationship between self-esteem and personality disorder is limited to these two empirical studies that utilised only US student populations and as yet, no systematic research has directly investigated this relationship using a homeless sample. In fact, Diblasio and Belcher (1993) have argued that the very nature of homelessness generates high levels of low self-esteem and feelings of worthlessness, which contribute to the difficulty in securing employment and housing.

Self-esteem has also been hypothesised to play an important role in the initial and prolonged use of substances. However, the empirical literature is full of conflicting findings and very few studies have examined this relationship in the homeless population. In their study, Nielsen and Scarpitti (1997) found that a large proportion of homeless substance abusers had low self-esteem, low self-worth and

were lacking in self-confidence. Similarly, Carvajal, Clair, Nash, and Evans (1998) as well as Gordon and Caltabiano (1996) found a significant association between low self-esteem and increased substance use. Other studies however, have failed to find any relationship between self-esteem and substance abuse (Diblasio & Belcher, 1993; Malcolm, 2004; Seeman & Seeman, 1992). It may be that lower self-esteem increases the risk of substance abuse in more vulnerable samples and/or acts as a mediating factor when confronted with difficult or stressful situations. Further research into the associations between personality disorder, substance abuse and self-esteem within the homeless population is clearly needed in order to clarify these relationships.

Homelessness is considered to be an inherently stressful experience, thus the ability to cope with increased and prolonged levels of stress is extremely important within this population group. Lazarus and Folkman (1984) defined coping behaviours as the cognitive and behavioural efforts used to manage challenging or stressful situations. Therefore, coping behaviour refers to the way in which an individual attempts to reduce or eliminate the source of stress and/or its associated emotional effects. This model suggests that the degree of stress vulnerability or resiliency can be understood by investigating individual coping responses, which have been categorised as either adaptive, problem-oriented responses or emotion-focused, avoidant responses (Folkman & Moskowitz, 2004). The evidence from the majority of studies has shown that avoidance coping behaviour is generally associated with increased levels of psychological distress and psychopathology (Beutler, Moos, & Lane, 2003; Compas, Connor, & Osowiecki, 1997). This distinction between approach and avoidance coping has been the most frequently

used system to classify coping behaviour within the research literature (Carver & Scheier, 1994).

Millon and Davis (2000) have argued that personality plays a major role in how stress is perceived, how people adapt psychologically to stressful situations and how personal and social coping resources are utilised. Difficulty coping with stressful situations as well as having inflexible and maladaptive coping strategies are among the core features of most personality disorders. However, while some studies have found strong correlations between personality disorder and less adaptive, avoidant coping behaviours (Vollrath, Alnaes, & Torgersen, 1994; Watson & Sinha, 1999), others have found no significant relationships (Sinha & Watson, 1997). However, the limited amount of research, together with the fact that most of these studies employed only student samples, make it impossible to resolve or generalise these findings without further research.

From a theoretical perspective, substance use can be seen as a commonly used coping strategy to escape or regulate negative affect. Some researchers have argued that substance dependent individuals rely on 'self-medication' to cope with stressful situations as they lack more adaptive coping skills (Courbasson, Endler, & Kocovski, 2002). Numerous empirical studies have shown that emotion-focused, avoidant coping responses are highly prevalent among those who abuse drugs and/or alcohol (Moos, Brennan, Fondacario, & Moos, 1990; Nyamathi, Stein, & Swanson, 2000). Some researchers have also suggested a link between maladaptive coping styles, low self-esteem and the chronic use of substances, in that self-esteem has been seen as a coping resource that moderates both the effects of stressful situations and the use of substances (Compas, Orosan, & Grant, 1993; Gurnakova, 2000; Nyamathi, Stein, & Swanson, 2000; Robson, 1988). However, there have

been only two US studies that have directly investigated the coping responses of homeless individuals (Nyamathi, Keenan, & Bayley, 1998; Votta & Manion, 2003). Both studies found significant associations between avoidance coping and increased levels of depression, anxiety, substance abuse and criminal involvement. The authors concluded that maladaptive coping and feelings of negative self-worth contributed to the chronicity of mental health problems, exacerbated existing risk factors and acted as barriers to service utilisation. Therefore, the role of coping behaviour in the psychological well-being of homeless individuals clearly warrants further investigation.

PRESENT STUDY:

While homeless psychopathology research is relatively limited, the relationships and interactions between personality disorder, substance dependence and various mediating psychosocial factors are areas of much needed investigation within the homeless population. Indeed, the knowledge and identification of particular characteristics of subgroups within the homeless is necessary in order to define the need more precisely and develop more appropriate, integrated services that can address these complex needs (Breakey & Fischer, 1990). The primary aim of this study was to empirically investigate the personality-disordered homeless subgroup and the associated relationships between substance dependence, self-esteem and coping style. It was hoped that this research would contribute to a more comprehensive understanding of the difficulties associated with personality disorder within the homeless and also help contribute to the development of more appropriate mental health and psychological support services for this particularly vulnerable and complex population group.

Research Questions and Hypotheses:

RQ1: Is the existence of a personality disorder associated with differences in self-esteem, substance dependence and coping behaviour within this homeless sample?

Hypothesis 1: There will be significant differences between the personality-disordered (PD) and the non personality-disordered (non-PD) groups where:

a) PD group will have lower levels of self-esteem

b) PD group will have higher rates of substance dependence

c) PD group will utilise less approach/more avoidant coping behaviours compared to the non-PD group

RQ2: Within this homeless population, what are the relationships between substance dependence, coping style and self-esteem?

Hypothesis 2: Lower levels of self-esteem as well as the use of avoidant coping behaviours will be associated with increased substance dependence

2. METHOD

2.1 DESIGN:

The study utilised a non-repeated, between subject design, with the independent variable of personality disorder and the dependent variables of self-esteem, coping behaviour and substance dependence. To address RQ1, prevalence rates will be reported and t-tests will be performed to compare the PD and non-PD groups. Bivariate correlations will be used to address RQ2. Within the study, the participants were required to complete a set of questionnaires, where this survey design was used to maximise participation and given the nature of the setting and

sample, has also been shown to be a viable and practical alternative to structured interview approaches (Eisen, 1995; Trull & Goodwin, 1993). Once the self-report questionnaires were completed, each participant was then categorized as either PD or non-PD based on their scores (using cut-off criteria) on one of these questionnaires. Objective/confirmatory data on the participants' diagnosis and substance dependence histories could not be obtained due to confidentiality agreements.

2.2 PARTICIPANTS:

A total of 120 participants residing in a homeless hostel in London were initially approached to participate in the study. This hostel accepts both self-referrals and multi-agency referrals, with the only acceptance criterion being 'homelessness'. For the purposes of this study, 'homelessness' was defined as a lack of a permanent place to live and hostel dwelling for a minimum of one month (Fichter & Quadflieg, 1999).

Of the 120 residents approached, 49 participants agreed to take part in the study. However, of these 49 questionnaire packs completed, 10 had to be excluded from the analyses, as the scores were deemed invalid on the MCMI-III scoring profile. These invalidity conditions were deemed to be met when more than 12 missing responses were present, when two or more validity scale items were endorsed and/or when extreme scores were obtained on the disclosure index. According to the authors, these conditions indicate that the participant may not have paid sufficient attention, may not have understood the item content and/or may have over- or under-reported symptoms to such a degree that it becomes impossible to interpret the results appropriately (Millon, Millon, & Davis, 1994).

Therefore, the final sample used within the analyses consisted of 39 participants, with 4 females and 35 males. While there is generally a smaller representation of women within the homeless community (Stein & Gelberg, 1995), this sample contained considerably fewer women than men and as such, no gender differences could be investigated. The age of the sample ranged from 23 to 55, with a mean age of 37 and the ethnicity of the participants included British (59%), European (14%), African (23%) and Asian (4%). Anecdotal reports from the hostel staff suggested that the residents within this particular hostel generally had quite severe mental health problems and that most were classified as chronically (i.e. over 3 months) homeless.

2.3 MEASURES:

No demographic data was collected for the participants, which was an attempt to reduce the number of questions and time required from the participants in order to try and maximise participation. However, this information (such as social support levels, duration and reasons for homelessness) would have been very useful and would have contributed to the understanding of this sample group and thus this unfortunate oversight is seen as a major study limitation.

Millon Clinical Multiaxial Inventory-III (MCMI-III; Millon, Millon, & Davis, 1994):

This 175-item self-report questionnaire is one of the most widely utilised and researched clinical assessment inventories in the field of personality pathology (Craig, 1999). The MCMI-III uses a 'true/false' rating scale and provides a measure of 24 disorder scales: 14 personality disorders (Axis-II) and 10 clinical syndromes (Axis-I), including drug and alcohol dependence, where these two scales have independently been shown to have adequate diagnostic sensitivity (Craig,

1997) and do not contribute to the total personality disorder score. This measure also contains three 'modifier' indices (disclosure, desirability and debasement) that are used to identify invalid responses such as random responding, over-disclosure or under-disclosure.

The raw scores are converted to base rate (BR) scores, which incorporate normative data and adjust for potential affective states or invalidity conditions, thereby enhancing diagnostic efficiency (Millon, Millon, & Davis, 1994). These BR scores range from 0 to 115 for each of the 24 disorder scales measured and according to the authors, a total cut-off score of 85 and above for each of these scales indicates that the assessed attribute is definitely within the disordered range; a score of 75 to 85 shows that some or most of the features are present; and a score below 75 indicates no presence of pathology for that particular characteristic. However, some authors have argued that the MCMI has a slight tendency to overestimate the presence of disorder (Zimmerman, 1994) and so in accordance with the recommendation made by Craig (1999), the higher cut-off score of 85 was used in this study. Therefore, the participants were categorised as 'personality disordered' when they scored above 85 on at least one of the PD sub-scales.

The MCMI-III contains a small enough number of items to encourage its use in a variety of complex settings, whilst being large enough to permit the assessment of a wide range of clinically relevant behaviour. Furthermore, the vocabulary is set at a sixth- to eighth-grade level and it can generally be completed in approximately half an hour (Millon, Millon, & Davis, 1994). These features enhance participation and minimise fatigue, which makes the MCMI-III a recommended diagnostic screening tool in personality disorder research (Derksen, 1995; Rossi, Hauben, van den Brande, & Sloore, 2003).

The MCMI-III is grounded within clinical theory, reflects the DSM-IV criteria and contains normative data from a wide variety of samples (Millon, Millon, & Davis, 1994). Furthermore, this measure has previously been used to assess personality disorder within substance abusers (Craig, 1999); to investigate the relationships between personality, self-esteem and coping among university students (Sinha & Watson, 1997); and to assess psychopathology within homeless populations (Sumerall, Rate, Lopez, Hunter, & Weaver, 2000). The MCMI-III has good internal consistency (above .80 for 20 of the 26 scales) and test-retest reliability (ranging from .82 to .96), although most studies have demonstrated only mild to moderate correlations of the MCMI-III scales with other similar measures (ranging from .20 to .77) (Craig, 1999; Millon, Millon, & Davis, 1994). Furthermore, comparisons between the self-report MCMI and structured clinical interview measures have demonstrated poor convergent validity (Craig, 1999; Marlowe, Husband, Bonieskie, Kirby, & Platt, 1997). The general consensus appears to be that for screening/research purposes, self-report questionnaires are a viable and practical alternative to structured interviews (Eisen, 1995; Trull & Goodwin, 1993). Given the time constraints, the geographical area and the nature of the setting and sample, the MCMI-III was selected as the most reliable and feasible measure to assess psychopathology with this homeless sample.
(see Appendix C for example items)

Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965):

This self-report measure consists of 10 statements relating to overall feelings of self-worth and self-acceptance, where half of the items are expressions of positive self-esteem and half are of negative self-esteem. The items are rated on a 4-point

scale that ranges from strongly agree (1) to strongly disagree (4). The total score is the sum of the item scores, ranging from 10 to 40, where lower scores indicate higher self-esteem.

The RSES is the most widely utilised measure in self-esteem research and provides an indication of an individual's level of global self-esteem. This scale has demonstrated good reliability and validity across a large number of different sample groups, although the community-based norms are very high (Emler, 2001; MacArthur & MacArthur, 2004). It has also been shown to correlate well with other self-esteem measures (Shelvin, Bunting, & Lewis, 1995) and it has previously been used within substance dependent, personality disordered and homeless populations (Malcolm, 2004; Sinha & Watson, 1997).

(see Appendix D for example items)

Coping Responses Inventory – Adult Form (CRI; Moos, 1990):

This self-report inventory is based upon the theoretical formulation of Lazarus and Folkman (1984) and measures various coping behaviours that are utilised in response to stressful situations. The inventory considers the orientation and method of coping and classifies coping behaviour into approach and avoidant responses. Essentially, approach coping is considered to be problem-focused and reflects the cognitive and behavioural efforts that are used to resolve the stressor. Conversely, avoidance coping tends to be more emotion-focused and reflects the cognitive and behavioural strategies that are used to avoid the stressor or manage its effects. Generally, the higher the score on the approach subscales, the better the coping repertoire and the higher the score on the avoidance subscales, the less adaptive the coping (Moos, 1990).

With this measure, the participants were asked to think about an important problem or stressful situation that they had experienced during the past 12 months and then rate (using a four-point scale ranging from 'no/never' to 'yes/fairly often) their reliance on or use of each of the 48 coping items/behaviours when having dealt with this situation. Moos (1990) categorised these responses into the following eight subscales, where the first four measure approach coping behaviour and the second set of four subscales measure avoidance coping:

1. Logical Analysis (LA) = cognitive attempts to understand and mentally prepare for a stressor and its consequences
2. Positive Reappraisal (PR) = cognitive attempts to interpret and restructure the problem in a positive way whilst still accepting the reality of the situation
3. Seeking Guidance and Support (SG) = behavioural attempts to seek information, guidance or support
4. Problem Solving (PS) = behavioural attempts to take action to deal directly with the problem

5. Cognitive Avoidance (CA) = cognitive attempts to avoid thinking realistically about a problem
6. Acceptance or Resignation (AR) = cognitive attempts reacting to the problem by fully accepting it
7. Seeking Alternative Rewards (SR) = behavioural attempts to move away from the problem entirely and instead get involved in substitute activities
8. Emotional Discharge (ED) = behavioural attempts to reduce stress by expressing negative feelings

The raw scores are then converted to standard scores, which have been based on large clinical samples that included substance users, with the following interpretation criteria:

34 or less = considerably below average

35-40 = well below average

41-45 = somewhat below average

46-54 = average

55-59 = somewhat above average

60-65 = well above average

66 or above = considerably above average

The eight subscales show moderate to high internal consistencies (ranging from .58 to .74), are moderately positively intercorrelated (average r = .29) and are relatively stable over time (average r = .45). In terms of validity, the CRI generally correlates highly (.56 - .83) with various other coping questionnaires and it has also previously been used within psychiatric and substance dependent populations (Milne, 1992; Moos, Brennan, Fondacario, & Moos, 1990).
(see Appendix E for example items)

2.4 PROCEDURE:

The hostel agreed to participate in the research and the managerial and support staff were briefed on the study and measures involved. The only exclusion criterion for the study was the ability to understand basic spoken or written English as interpreters or alternative language test forms were not available. Nonetheless, assistance was provided to those participants who required support with completing the questionnaires (N=16) by either reading the questions aloud, clarifying queries

or providing word definitions. All the participants however, were required to answer the test items without any assistance in order to ensure both confidentiality and the validity of the questionnaires (Millon, Millon, & Davis, 1994; Moos, 1990).

Initially, the Information Sheet (see Appendix F) was given out and explained to all the hostel residents, with the staff and researcher being available for further questions. A number of posters (see Appendix G for an example), which included information about the study and what would be involved, were placed around the hostel communal areas to act as reminders. Interested participants were asked to go to the hostel reception office, where their name was noted on the Participant Sheet (see Appendix H) and the details of where and when the study was taking place were confirmed.

Given the complex nature of the setting and sample, the procedure needed to be flexible to enhance participation. Therefore, six two-hour sessions were held over three days after the morning and evening meals in the communal dining hall of the hostel. Upon arrival, each participant was allocated to one of the ten tables that had been set up around the room and an emphasis was placed on separateness and confidentiality. The hostel mental health worker then reiterated the study aims and procedure; considered the participant's reading level and degree of support required/wanted (see Appendix I for staff guidance notes); and completed the Consent Form (see Appendix J). Next, the participants were asked to complete the questionnaire pack, which consisted of the three questionnaires that were coded to ensure the confidentiality and anonymity of each participant. On average, the questionnaires took approximately 40 minutes to complete, although this process took longer for those who required more support. Once finished, the participants were asked to seal their questionnaires in the envelope provided and hand the pack

to the study co-ordinator. At this point, the Handout Sheet (see Appendix K) and a £5 'thank you' Sainsburys voucher was given to the participants, who were asked to sign the Voucher Confirmation Sheet (see Appendix L).

The study was approved by the School of Psychology Ethics Committee and was sponsored by the University of Southampton (see Appendix M and N).

3. RESULTS

DATA ANALYSIS:

Given the relatively limited data set, it was not feasible to conduct any detailed analyses on the potential differences in gender or differences within each of the specific personality disorders. Multifactorial analysis was also not possible given the relatively small data set combined with the large number of variables within the study, which was unfortunate as this would have provided more detailed information on the nature of the interactions between the variables.

Firstly, the distribution of data was examined using Kolmogorov-Smirnov tests and when assumptions of normal distribution were not met, non-parametric tests were used. The following variables did not satisfy parametric assumptions: the cognitive avoidance, alternative rewards, and emotional discharge coping strategies; alcohol dependence; anxiety; PTSD; depression; and the paranoid, borderline, schizotypal, self-defeating, passive-aggressive, sadistic, antisocial, dependent, depressive and avoidant personality disorders. Secondly, the prevalence data for the study variables as well as the mood disorders of anxiety, depression and post-traumatic stress disorder (PTSD) were then established. Thirdly, comparisons between the personality disordered (PD) and non-personality disordered (non-PD) groups on the dependent variables (i.e. self-esteem, substance dependence, coping

behaviour, anxiety, depression and PTSD) were completed using independent samples t-tests and Mann-Whitney U tests, where an alpha level of $p < .05$ was used to establish significance within the group comparison analyses, unless otherwise stated. Lastly, bivariate correlations were conducted using Pearson's product-moment and Spearman's rho correlation coefficients in order to investigate the relationships between the dependent variables. Given the number of correlations that were completed, Bonferroni tests were performed to try and reduce the familywise error rate and thus, an alpha level of $p < .006$ was used within all correlation analyses. Throughout the analyses, one-tailed significance tests were used and only the main findings have been presented.

SAMPLE CHARACTERISTICS:

Using the recommended cut-off score of 85, 23 (59%) participants met the diagnostic criteria for at least one personality disorder diagnosis and 16 (41%) did not. Interestingly, if the cut-off score of 75 was used, the prevalence rate of personality disorder increased considerably to 82%. Multiple personality disorder diagnoses were frequent, with the most commonly diagnosed disorders being the depressive, schizoid, passive-aggressive and self-defeating personality disorders. Unexpectedly, a one-sample t-test showed that the overall sample had significantly higher levels of self-esteem in comparison to the normative data set ($M = 34.73$, $SD = 4.86$), $t(38) = 13.650$, $p < .001$ (note that the higher the score, the lower the self-esteem). Within this sample, 15% and 28% met the diagnostic criteria for alcohol and drug dependence respectively. The majority of the participants generally utilised more avoidance coping strategies and scored below average on the use of approach coping behaviours, where cognitive avoidance and emotional discharge

were among the most frequently used strategies. Within the sample, 46% met the diagnostic cut-off criteria for anxiety, 23% for PTSD and 21% for major depression. Table 2 provides the means and standard deviations for the relevant study variables.

Table 2: Descriptive statistics for the study variables

VARIABLE	PERCENTAGE	OVERALL			PD GROUP		NON-PD GROUP	
		M	SD	RANGE	*M*	*SD*	M	SD
MCMI:								
SCHIZOID PD	30% [1]	70.82	14.95	24-96 (72)	76.83	10.27	62.19	16.63
AVOIDANT PD	17% [1]	63.08	23.40	0-99 (99)	72.35	15.09	49.75	27.06
DEPRESSIVE PD	48% [1]	71.72	26.40	0-111 (111)	83.52	15.76	54.75	29.68
DEPENDENT PD	17% [1]	64.18	22.74	0-95 (95)	71.65	13.64	53.44	28.79
HISTRIONIC PD	0% [1]	37.28	19.05	-7-74 (81)	29.04	18.44	49.13	12.91
NARCISSISTIC PD	4% [1]	53.51	19.94	-3-96 (99)	48.04	21.10	61.38	15.58
ANTISOCIAL PD	22% [1]	65.74	19.69	22-93 (71)	75.22	11.72	52.13	21.10
AGGRESSIVE (SADISTIC) PD	4% [1]	58.77	20.30	0-88 (88)	67.43	10.81	46.31	24.32
OBSESSIVE-COMPULSIVE PD	0% [1]	38.15	20.16	-7-71 (78)	29.35	19.16	50.81	14.19
PASSIVE-AGGRESSIVE PD	30% [1]	65.77	23.93	8-97 (89)	79.83	9.18	45.56	24.27
SELF-DEFEATING PD	30% [1]	65.08	26.11	-1-100 (101)	78.13	13.20	46.31	28.88
SCHIZOTYPAL PD	17% [1]	61.51	23.41	0-101 (101)	74.22	10.66	43.25	24.87
BORDERLINE PD	26% [1]	61.41	24.85	10-99 (89)	76.30	14.36	40.00	20.81

PARANOID PD	17% [1]	63.90	24.73	0-104 (104)	75.52	12.72	47.19	28.40
ALCOHOL DEPENDENCE	15% [2]	68.82	18.73	8-103 (95)	75.78	10.91	58.81	23.08
DRUG DEPENDENCE	28% [2]	72.13	21.21	8-101 (93)	79.83*	14.26	61.06	24.89
ANXIETY	46% [2]	70.69	34.07	0-109 (109)	82.48*	26.06	53.75	37.75
POST TRAUMATIC STRESS DISORDER	23% [2]	60.64	31.69	0-104 (104)	75.30*	21.81	39.56	32.30
MAJOR DEPRESSION	21% [2]	61.67	26.36	0-104 (104)	74.48*	17.90	43.25	26.02
RSES:								
SELF-ESTEEM	3% [3]	22.92	5.40	10-35 (25)	24.83*	4.46	20.19	5.59
CRI:								
LOGICAL ANALYSIS COPING	64% [4]	40.31	10.84	22-57 (35)	42.83	10.97	36.69	9.88
POSITIVE REAPPRAISAL COPING	59% [4]	45.49	10.00	27-65 (38)	46.83	9.69	43.56	10.46
SEEKING GUIDANCE/SUPPORT COPING	46% [4]	47.82	12.90	27-72 (45)	47.09	11.05	48.88	15.52
PROBLEM SOLVING COPING	56% [4]	44.79	11.66	24-67 (43)	44.26	10.94	45.56	12.93
COGNITIVE AVOIDANCE COPING	49% [5]	52.97	11.89	34-72 (38)	56.04	11.76	48.56	10.96
ACCEPTANCE/RESIGNATION COPING	38% [5]	50.33	11.19	33-68 (35)	54.70	10.71	44.06	8.81
SEEK ALTERNATE REWARDS COPING	28% [5]	50.59	11.85	37-78 (41)	49.17	10.43	52.63	13.73

EMOTIONAL DISCHARGE COPING	46% [5]	56.36	12.90	39-91 (52)	57.87	14.09	54.19	11.03
TOTAL APPROACH COPING	62% [4]	178.41	38.74	100-246 (146)	181.00	35.55	174.69	43.87
TOTAL AVOIDANCE COPING	48% [5]	210.26	37.45	143-296 (153)	217.78	38.23	199.44	34.62

Note. PD = personality disorder; non-PD = no personality disorder; *M* = Mean; *SD* = Standard Deviation; RSES = Rosenberg Self-Esteem Scale; CRI = Coping Responses Inventory; MCMI = Millon Clinical Multiaxial Inventory-III; age mean = 37; female/male ratio = 1:8.75; * = significant difference between the PD and non-PD groups for that variable at the $p < .05$ level; [1] = percentage scoring above the cut-off score (85) within the PD sample; [2] = percentage scoring above the cut-off score within the overall sample; [3] = percentage of sample scoring above the norm mean; [4] = percentage of sample scoring below average on the use of approach coping behaviours; [5] = percentage of sample scoring above average on the use of avoidant coping behaviours; comparisons between the PD and non-PD groups were completed for the self-esteem, substance dependence, coping behaviour, anxiety, depression and PTSD variables, although no group comparisons were performed for each of the different personality disorder subtypes given the limited data set.

RQ1: DOES THE EXISTENCE OF A PERSONALITY DISORDER RESULT IN DIFFERENCES IN THE LEVEL OF SELF-ESTEEM, SUBSTANCE DEPENDENCE AND COPING BEHAVIOUR WITHIN THIS HOMELESS SAMPLE?

In order to test the hypothesis that the PD group would have lower self-esteem, higher substance dependence and use less adaptive coping strategies in comparison to the non-PD group, a series of independent samples t-tests and Mann-Whitney U tests were performed.

Overall, the PD group had significantly lower self-esteem compared to the non-PD group, $t(38) = 2.88$, $p < .05$. The PD group was significantly more dependent on drugs, $t(38) = 2.72$, $p < .05$, however there was no significant difference between the two groups on alcohol dependence, $U = 113.5$, N1 = 23, N2 = 16, $p > .05$. The PD group was no more likely to use less adaptive, avoidant coping strategies, $t(38) = 1.53$, $p > .05$, nor were they less likely to use approach coping behaviours, $t(38) = .50$, $p > .05$, compared to the non-PD group. More detailed analysis revealed that there were no significant differences between the two groups on any of the 8 individual coping styles ($ts(38) > .034 < 1.79$, $ps > .006$; $Us > 117 < 157.5$, N1 = 23, N2 = 16, $ps > .006$), where Bonferroni tests were performed in order to control for the familywise error rate by adjusting the required level for significance ($\alpha = .006$).

The PD group also had significantly higher levels of anxiety compared to the non-PD group, $U = 100$, N1 = 23, N2 = 16, $p < .05$. The PD group had significantly increased levels of depression, $U = 62$, N1 = 23, N2 = 16, $p < .001$, and experienced significantly higher levels of PTSD symptomatology, $U = 81$, N1 = 23, N2 = 16, $p < .05$, compared to the non-PD group.

RQ2: WITHIN THIS HOMELESS POPULATION, WHAT ARE THE RELATIONSHIPS BETWEEN SUBSTANCE DEPENDENCE, COPING STYLE AND SELF-ESTEEM?

To test the hypothesis that both lower levels of self-esteem as well as the use of avoidant coping behaviours would be associated with increased substance dependence, a number of bivariate correlations were performed.

Increased drug dependence was significantly associated with lower self-esteem ($r(38) = .42, p < .006$), although alcohol dependence was not ($r(38) = .13, p > .006$). In terms of the individual coping styles, the use of cognitive avoidance coping was significantly correlated with increased levels of drug dependence, $r(38) = .42, p < .006$, and a significant correlation was found between low self-esteem and the use of cognitive avoidance coping ($r(38) = .39, p < .006$). Overall, the results indicated that there were no clear statistically significant associations between coping behaviour and both substance dependence and self-esteem. Furthermore, there were significant positive correlations between the three Axis-I disorders:

- Anxiety and PTSD: $r(38) = .90, p < .001$
- Anxiety and Depression: $r(38) = .68, p < .001$
- PTSD and Depression: $r(38) = .71, p < .001$

Significant correlations were found between low self-esteem and increased levels of anxiety ($r(38) = .46, p < .006$); PTSD ($r(38) = .46, p < .006$); and depression ($r(38) = .51, p < .006$). Increased drug dependence was also significantly associated with increased levels of PTSD ($r(38) = .46, p < .006$) and depression ($r(38) = .71, p < .006$) and PTSD was significantly positively correlated with total avoidance coping, $r(38) = .44$, $p < .006$. No further significant associations were found between these

three Axis-I disorders and coping behaviour. Table 3 presents the correlation matrix for the main study variables.

Table 3: Correlation matrix for the main study variables

VARIABLE	SELF-ESTEEM	TA COPING	TAV COPING	DRUG DEP	ALCOHOL DEP	ANXIETY	PTSD	DEPRESSION
SELF-ESTEEM								
Pearson Corr	1	-.078	.228	.415	.132	.461	.460	.512
Sig (1-tailed)	.	.318	.081	.004*	.212	.005*	.005*	.001*
TA COPING								
Pearson Corr	-.078	1	.633	.126	.120	.021	.080	-.148
Sig (1-tailed)	.318	.	.000*	.223	.234	.897	.630	.369
TAV COPING								
Pearson Corr	.228	.633	1	.121	.054	.285	.441	.151
Sig (1-tailed)	.081	.000*	.	.231	.372	.075	.004*	.359
DRUG DEP								
Pearson Corr	.415	.126	.121	1	.323	.258	.464	.494
Sig (1-tailed)	.004*	.223	.231	.	.023	.113	.005*	.001*

ALCOHOL DEP								
Spearmans rho	.132	-.120	-.054	.323	1	.262	.294	.169
Sig (1-tailed)	.212	.234	.372	.023	.	.107	.070	.305
ANXIETY								
Spearmans rho	.461	.021	.285	.258	.262	1	.896	.684
Sig (1-tailed)	.005*	.897	.075	.113	.107	.	.000*	.000*
PTSD								
Spearmans rho	.460	.080	.441	.464	.294	.896	1	.711
Sig (1-tailed)	.005*	.360	.004*	.005*	.070	.000*	.	.000*
DEPRESSION								
Spearmans rho	.512	-.148	.151	.494	.169	.684	.711	1
Sig (1-tailed)	.001*	.369	.359	.001*	.305	.000*	.000*	.

Note. TA = total approach; TAV = total avoidance; DEP = Dependence; PTSD = post traumatic stress disorder; Corr = correlation:

Sig = significance; * = significant at the $p < .006$ level (after bonferroni correction)

4. DISCUSSION

This study investigated the relationships between personality disorder, substance dependence, self-esteem and coping behaviour within the homeless population. Within this sample, there were significantly high prevalence rates for both personality and mood disorders, where multiple and co-morbid diagnoses were frequent. In fact, the overall prevalence of personality disorder within this sample (59%) was slightly higher than that observed in other comparable studies (Fischer & Breakey, 1991; Pollio, North, Thompson, Paquin, & Spitznagel, 1997; Scott, 1993), further highlighting the need for specialised mental health support services within the homeless sector. However, making direct comparisons between studies is problematic as there are several factors that can affect the composition and mental health status of a sample including differences in recruitment, assessment method and health care systems (Salize, et al., 2001). Regrettably, the high incidence of multiple diagnosis within a relatively small sample made it impossible to distinguish between each personality disorder within the analyses. Nevertheless, the findings suggest that personality disorder is associated with lower levels of self-esteem and higher levels of substance dependence, although very few significant correlations were found within coping behaviour. The distinctions between different personality disorder types and their relationships with various mediating and psychological risk factors is clearly an important area for future research as no firm conclusions can be drawn from this study given the limited number of each specific personality disorder present within the sample. Future studies will need to look at these differences in more detail and interpret the findings within the context of their specific diagnostic traits.

Overall, participants who met the diagnostic criteria for at least one personality disorder experienced significantly higher levels of anxiety, PTSD, depression and drug dependence compared to those with no personality disorder. This finding highlights the considerable levels of distress and psychological support needs within a particularly vulnerable subgroup of the homeless. The personality-disordered group also had significantly lower self-esteem, although they did not display any difference in their use of both avoidant and approach coping behaviours. The lack of role of coping behaviour in the personality-disordered presentation was inconsistent with most previous research studies (Vollrath, Alnaes, & Torgersen, 1994; Watson & Sinha, 1999) and particularly unexpected within this homeless sample, given that the homeless have often been associated with increased levels of stress and personality pathology (which is characterised by maladaptive coping) and have also been classified as 'poor copers' (Votta & Manion, 2003). In addition, since stress and coping are linked both theoretically and empirically, it is difficult to interpret this finding. It may be that the distinction between approach and avoidance coping behaviour is overly one-dimensional to be able to account for the various coping methods used in this complex population group. Instead, it may be worthwhile to assess 'coping flexibility', which is the ability to modify and adapt coping responses according to situational demands, rather than specific coping styles given that inflexible coping has been hypothesised to be a major feature of personality disorder (Millon & Davis, 2000). In addition, this study did not control for the differences in the type or severity of the stressor nor the individual's appraisal of the stressor, which have both been shown to influence the nature of the coping response (Folkman & Moskowitz, 2004). Before any definite conclusions

can be made, further research in this area is required which utilises more extensive assessment measures and considers both the type and appraisal of the stressor.

The prevalence of anxiety, depression and PTSD was also considerably high within this homeless sample. Perhaps unsurprisingly given their diagnostic criteria, there was significant co-morbidity among these three mood disorders and significant correlations with low self-esteem, although generally self-esteem explained only a small proportion of the variance. In addition, increased levels of PTSD was significantly correlated with the use of avoidance coping strategies, which would be expected given that intense cognitive and behavioural avoidant behaviours are among the essential diagnostic criteria of PTSD. Interestingly, drug dependence was significantly associated with increased levels of PTSD and depression, where it is likely that the compulsive use of drugs was one way of trying to avoid or stabilise mood, although these relationships are not necessarily one-directional. Furthermore, PTSD and depression accounted for only 11% and 14% of the variability in drug dependence respectively, making it clear that additional factors are involved in the relationship between substance use and mental health within the homeless which need to be investigated further.

The overall prevalence of both alcohol and drug dependence within the sample was relatively low compared to previous research. This was an unexpected finding which is difficult to interpret and may be due to symptom under-reporting given that the hostel staff had initially reported high levels of substance dependence within the hostel. The study findings were commensurate with the recently detected pattern of increased drug use rather than alcohol use within homeless groups (Bowden-Jones, et al., 2004; Manderscheid & Rosenstein, 1992; ODPM, 2004; Vasquez, Munoz, & Sanz, 1997). Interestingly, the results indicated a trend

between increased drug use and both lower self-esteem and the use of cognitive avoidance coping behaviour, where these findings are comparable with some previous empirical studies (Nyamathi, Keenan, & Bayley, 1998; Votta & Manion, 2003). Therefore, it may indeed be that substances are used to avoid or escape stressful situations, where self-esteem acts as a vulnerability or mediating factor in this use of substances as a coping strategy.

Regrettably, the findings from this study do not really provide a much clearer understanding of the coping behaviours within the homeless population. Given the multiple analyses that were performed using the various coping variables, Bonferroni tests were used to control for inflated familywise Type II error rates. However, this method results in a loss of statistical power, which may have increased the possibility of rejecting a real effect. Nonetheless, the majority of the participants generally utilised more avoidance coping strategies and also scored below average on the use of adaptive, approach coping behaviours compared to a normative sample. Ironically, this tentatively suggests that this homeless sample will be less able to cope with increased and prolonged levels of stress and as such, are at an increased risk of higher levels of psychological distress and psychopathology. Therefore, this is clearly an area that needs to be addressed within homeless support services as well as within the empirical literature.

METHODOLOGICAL CONSIDERATIONS:

There are several methodological limitations that restrict the interpretation of these findings. Given the cross-sectional design of the study and the relatively small sample size, causal or predictive relationships among the variables could not be determined, which limits the understanding of their interactional relationships.

Caution is therefore needed not to over-interpret these findings and further research that is capable of determining causal and/or mediating effects is required.

The limited number of women in the sample and the relatively small sample size made it impossible to distinguish or determine potential gender effects or detailed differences between each of the personality disorders. Recent research has shown significant associations between specific personality traits (e.g. impulsivity) and substance use disorders (Bornovalova, Lejuez, Daughters, Rosenthal, & Lynch, 2005). Some studies have also demonstrated gender effects in the relationship between substance dependence and mental illness (Stein & Gelberg, 1995) as well as within self-esteem levels and coping behaviour (Gurnakova, 2000), although this literature is full of contradictory findings. Further research is therefore needed to investigate and clarify the roles of gender as well as specific personality traits in the psychopathology of the homeless.

The sample consisted of individuals who had actively volunteered to take part in the study and included only the hostel-dwelling homeless population group. This selective sample raises questions about the generalisability of the present findings, as it is not entirely representative of all homeless subgroups and thus future research will need to include larger samples, multiple sites and incorporate both the hostel- and street-dwelling homeless. Having said that, efforts were made to enhance the representativeness of the sample by limiting the exclusion criteria and thereby including participants who presented with various and multiple disorders of varying degrees of severity. In fact, the main study findings are generally consistent with the literature, which suggests that the results were not extensively biased by the nature and restrictions of the sample.

Another study weakness was the reliance on retrospective self-report data given the questionable reliability of this form of data collection. Participants may interpret questions differently, they may under-report or over-report pathology and their affective state may alter their responses. This may be a particular concern for certain personality-disordered individuals given their specific characteristic traits (Millon & Davis, 1996). However, the MCMI-III validity scales attempt to take these potential complications into account and adjust the scores accordingly and it was also hoped that assurances of confidentiality and anonymity would reduce the frequency of distorted responses. In fact, Calsyn, Allen, Morse, Smith, and Tempelhoff (1993) demonstrated that the self-report data of homeless individuals on standardised symptom scales was usually fairly reliable and valid. Furthermore, apart from their low cost and ease of administration, numerous authors have argued that self-report measures have reliable screening properties, can be compared with normative data and are free from the systematic biases of interviews (Ekselius, Tillfors, Furmark, & Fredrickson, 2001; Trull & Goodwin, 1993; Zimmerman, 1994). Nonetheless, it may be worth using a structured interview approach in future studies in order to obtain a more detailed psychiatric assessment, although both methods require the participant to be able and willing to report accurately on their inner experiences and patterns of behaviour. Issues of confidentiality and data protection will need to be considered in future studies if confirmatory information is sought from alternative sources.

While the Rosenberg Self-Esteem Scale is the most widely utilised measure in self-esteem research, the normative data is skewed towards high self-esteem and the manual provides no distinct norms for particular clinical population groups (MacArthur & MacArthur, 2004). Therefore within this study, even the lower

scorers tended to score below the norm mean and thus exhibit relatively high levels of self-esteem, which made it difficult to compare the range of scores within this sample. This may explain, at least to some degree, the unexpected finding of relatively 'average' levels of self-esteem within the overall sample. Another difficulty is that this measure has alternative scoring methods, which makes comparisons between studies very difficult. Interestingly however, when comparing this homeless sample's self-esteem scores with studies using the same scoring procedure that had utilised various psychiatric populations (Torrey, Mueser, McHugo, & Drake, 2000), the mean scores were commensurate, which worryingly suggests that this undiagnosed homeless group presented with similar levels of self-esteem to severely disordered psychiatric populations. That said, when comparing these scores to the normative data, both groups unexpectedly demonstrated relatively 'average' self-esteem. This finding may be attributable to cohort or social group factors within the hostel, in that experiences and self-perceptions were normalised in this type of setting(Osborne, 2002); inflated self-perceptions of particular personality disorders within the group skewing the data (e.g. narcissistic); a anomaly result particular to this sample; or it raises questions about the suitability and validity of using this measure within this population group, particularly when comparing to normative samples.

In addition, the use of the Millon Clinical Multiaxial Inventory-III's strict cut-off scores may have limited the analysis and interpretation of the findings and as such, it may be more beneficial to use continuous or dimensional data in future studies.

The present study did not measure or control for a number of important factors. Firstly, the study did not incorporate a non-homeless control group and a

number of demographic variables were not assessed including marital status, educational attainment, employment information and social support levels. In addition, certain aspects relating to homelessness were not measured such as duration of homelessness and reasons for homelessness. Such factors may have produced some interesting findings in the comparative analyses and may have even altered the results. Some researchers have found higher rates of mental health and substance use disorders among those who have limited social support as well as those who have been homeless for more prolonged periods of time (Stein & Gelberg, 1995; Unger, Kipke, Simon, Montgomery, & Johnson, 1997). Consequently, future studies will need to incorporate this information and include a comparison (non-homeless) group to control for these homeless-related factors. Secondly, the participants' substance abuse histories were not assessed. This would have provided valuable comparison data on the type of substance used, dosage levels, onset of use and patterns of use as each substance has its own unique properties and effects. Thirdly, the study did not control for the presence of severe mood disorder or drug intoxication, which may have affected the participants' responses. That said, existing mood disturbances should not substantially affect the assessment of personality pathology given the enduring nature of personality disorder symptomatology (Lenzenweger & Clarkin, 1996) and the MCMI-III has incorporated a mood-adjustment condition within its scoring procedure in an attempt to regulate this (Millon & Davis, 1996). Lastly, no comparison data was available between those participants who had received support with completing the questionnaires and those who had not. However, given the importance that was placed on answering the questionnaire items without any prompting or assistance, it is unlikely that significant effects would have been found.

CONCLUSION:

The limitations of the research notwithstanding, this study makes an important contribution to the literature with regard to the relationships between personality disorder, substance dependence, self-esteem and coping behaviour in the homeless. The findings from the present study support the concept of complex and differing service needs within the homeless population and highlight the considerable psychological support needs of the personality-disordered subgroup. Therefore, specialised psychological therapy services are clearly required that can take into account the specific mental health needs of this population group and as such, help contribute to the reduction of repeated tenancy breakdown rates. The results showed that the prevalence of personality and mood disorders was considerably high whilst substance dependence was comparatively low. Personality-disordered individuals had significantly lower self-esteem, higher mood disturbance and higher drug dependence, with the compulsive use of drugs being associated with increased disturbances in mood. This study did not provide a much clearer understanding of the coping behaviours within homeless subgroups, with the personality-disordered group showing no difference in their use of approach or avoidance coping strategies. Overall, these findings clearly indicate that the homeless are an exceptionally vulnerable group who frequently experience multiple difficulties and high levels of emotional distress, which often go unrecognised or untreated within services, increasing the risk of prolonged periods of homelessness. Further controlled research is required to investigate the roles of potential risk and mediating factors in the psychopathology of the homeless. Such studies would improve the understanding of the difficulties and particular characteristics of the

homeless population and contribute to the development of more appropriate and integrated mental health services.

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CLINICAL PSYCHOLOGY REVIEW - GUIDE FOR AUTHORS

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manuscript directly to PubMed Central on request from the author, 12 months after formal publication. Upon notification from Elsevier of acceptance, we will ask you to confirm via e-mail (by e-mailing us at NIHauthorrequest@elsevier.com) that your work has received NIH funding and that you intend to respond to the NIH policy request, along with your NIH award number to facilitate processing. Upon such confirmation, Elsevier will submit to PubMed Central on your behalf a version of your manuscript that will include peer-review comments, for posting 12 months after formal publication. This will ensure that you will have responded fully to the NIH request policy. There will be no need for you to post your manuscript directly with PubMed Central, and any such posting is prohibited.

APPENDIX B - THE BRITISH JOURNAL OF PSYCHOLOGY – NOTES TO AUTHORS

BRITISH JOURNAL OF PSYCHOLOGY - NOTES FOR AUTHORS

The Editorial Board of the British Journal of Psychology is prepared to consider for publication:

(a) reports of empirical studies likely to further our understanding of psychology;
(b) critical reviews of the literature;
(c) theoretical contributions.

Papers will be evaluated by the Editorial Board and referees in terms of scientific merit, readability, and interest to a general readership.

1. Circulation

The circulation of the Journal is worldwide. Papers are invited and encouraged from authors throughout the world.

2. Length

Papers should normally be no more than 8,000 words, although the Editor retains discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length.

3. Reviewing

The journal operates a policy of anonymous peer review. Papers will normally be scrutinised and commented on by at least two independent expert referees (in addition to the Editor) although the Editor may process a paper at his or her discretion. The referees will not be aware of the identity of the author. All information about authorship including personal acknowledgements and institutional affiliations should be confined to the title page (and the text should be free of such clues as identifiable self-citations e.g. 'In our earlier work...').

4. Online submission process

1) All manuscripts must be submitted online at http://bjp.edmgr.com .

First-time users: click the REGISTER button from the menu and enter in your details as instructed. On successful registration, an email will be sent informing you of your user name and password. Please keep this email for future reference and proceed to LOGIN. (You do not need to re-register if your status changes e.g. author, reviewer or editor).
Registered users: click the LOGIN button from the menu and enter your user name and password for immediate access. Click 'Author Login'.

2) Follow the step-by-step instructions to submit your manuscript.

3) The submission must include the following as separate files:

- Title page consisting of manuscript title, authors' full names and affiliations, name and address for corresponding author - Editorial Manager Title Page for Manuscript Submission
- Abstract
- Full manuscript omitting authors' names and affiliations. Figures and tables can be attached separately if necessary.

4) If you require further help in submitting your manuscript, please consult the Tutorial for Authors - Editorial Manager - Tutorial for Authors
Authors can log on at any time to check the status of the manuscript.

5. Manuscript requirements

- Contributions must be typed in double spacing with wide margins and on only one side of each sheet. All sheets must be numbered.
- Tables should be typed in double spacing, each on a separate page with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript with their approximate locations indicated in the text.
- Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Captions should be listed on a separate sheet. The resolution of digital images must be at least 300 dpi.
- All articles should be preceded by an Abstract of between 100 and 200 words, giving a concise statement of the intention and results or conclusions of the article.
- For reference citations, please use APA style. Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full.
- SI units must be used for all measurements, rounded off to practical values if appropriate, with the Imperial equivalent in parentheses.
- In normal circumstances, effect size should be incorporated.
- Authors are requested to avoid the use of sexist language.
- Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations etc for which they do not own copyright.

For Guidelines on editorial style, please consult the APA Publication Manual published by the American Psychological Association, Washington DC, USA (http://www.apastyle.org)

6. Publication ethics

Code of Conduct - Code of Conduct, Ethical Principles and Guidelines
Principles of Publishing - Principles of Publishing

7. Supplementary data

Supplementary data too extensive for publication may be deposited with the British Library Document Supply Centre. Such material includes numerical data, computer programs, fuller details of case studies and experimental techniques. The material should be submitted to the Editor together with the article, for simultaneous refereeing.

8. Post acceptance

PDF page proofs are sent to authors via email for correction of print but not for rewriting or the introduction of new material. Authors will be provided with a PDF file of their article prior to publication.

9. Copyright

To protect authors and journals against unauthorised reproduction of articles, The British Psychological Society requires copyright to be assigned to itself as publisher, on the express condition that authors may use their own material at any time without permission. On acceptance of a paper submitted to a journal, authors will be requested to sign an appropriate assignment of copyright form.

10. Checklist of requirements:

- Abstract (100-200 words)
- Title page (include title, authors' names, affiliations, full contact details)
- Full article text (double-spaced with numbered pages and anonymised)
- References (APA style). Authors are responsible for bibliographic accuracy and must check every reference in the manuscript and proofread again in the page proofs.
- Tables, figures, captions placed at the end of the article or attached as a separate file.

APPENDIX C - EXAMPLE ITEMS FROM THE MCMI-III

81. I'm ashamed of some of the abuses I suffered when I was young.

82. I always make sure that my work is well planned and organized.

83. My moods seem to change a great deal from one day to the next.

84. I'm too unsure of myself to risk trying something new.

85. I don't blame anyone who takes advantage of someone who allows it.

86. For some time now I've been feeling sad and blue and can't seem to snap out of it.

87. I often get angry with people who do things slowly.

88. I never sit on the sidelines when I'm at a party.

89. I watch my family closely so I'll know who can and who can't be trusted.

90. I sometimes get confused and feel upset when people are kind to me.

101. I guess I don't take many of my family responsibilities as seriously as I should.

102. Ever since I was a child, I have been losing touch with the real world.

103. Sneaky people often try to get the credit for things I have done or thought of.

104. I can't experience much pleasure because I don't feel I deserve it.

105. I have little desire for close friendships.

106. I've had many periods in my life when I was so cheerful and used up so much energy that I fell into a low mood.

107. I have completely lost my appetite and have trouble sleeping most nights.

108. I worry a great deal about being left alone and having to take care of myself.

109. The memory of a very upsetting experience in my past keeps coming back to haunt my thoughts.

110. I was on the front cover of several

APPENDIX D - EXAMPLE ITEMS FROM THE RSES

1. On the whole, I am satisfied with myself.	SA	A	D	SD
2. At times I think I am no good at all.	SA	A	D	SD
3. I feel that I have a number of good qualities.	SA	A	D	SD
4. I am able to do things as well as most other people.	SA	A	D	SD
5. I feel I do not have much to be proud of.	SA	A	D	SD

APPENDIX E - EXAMPLE ITEMS FROM THE CRI

11. Talk with a friend about the problem?	☐	☐	☐	☐
12. Know what had to be done and try hard to make things work?	☐	☐	☐	☐
13. Try not to think about the problem?	☐	☐	☐	☐
14. Realize that you had no control over the problem?	☐	☐	☐	☐
15. Get involved in new activities?	☐	☐	☐	☐
16. Take a chance and do something risky?	☐	☐	☐	☐
17. Go over in your mind what you would say or do?	☐	☐	☐	☐
18. Try to see the good side of the situation?	☐	☐	☐	☐
19. Talk with a professional person (e.g. doctor, lawyer, clergy)?	☐	☐	☐	☐
20. Decide what you wanted and try hard to get it?	☐	☐	☐	☐

APPENDIX F - INFORMATION SHEET

UNIVERSITY HEADED PAPER

PERSONALITY AND COPING IN THE HOMELESS

INFORMATION SHEET

You are being asked to take part in a research study. Before you decide, it is important for you to understand why this study is being done and what it will involve. Please take some time to read this information carefully and talk to one of the Mental Health Workers (Emma or Maria) or contact me if you want to. Please ask one of us if there is something that is not clear or if you would like more information. Thank you for reading this.

What is the purpose of this study?
This study will look into some of the personality characteristics and difficulties that homeless people face, where it is hoped that this may help in creating more suitable and better services for homeless people.

Do I have to take part?
It is up to you to choose whether or not you want to take part. If you do decide to take part, you will be given this Information Sheet to keep. Also, by filling out the questionnaires, this will be taken as you giving informed consent to be included as a participant in this study. But even if you have chosen to take part, you will still be able to stop and withdraw at any time and without giving a reason, and this will not affect the care you receive.

What will I have to do if I take part?
You will be asked to fill in 3 questionnaires. Altogether, they should take around 30 minutes to fill out. Once you have completed the questionnaires, you will be asked to put them in the envelope given to you, and then seal and hand in the envelope to either Emma or Maria. If you feel you need help with filling out the questionnaires, please inform the hostel staff and this can be arranged.

Confidentiality - will my taking part in this study be kept confidential?
All the information collected from the questionnaires will be made anonymous (so no names or personal information will be used) and the information will be kept strictly confidential and in a safe place. This study is separate from St Mungo's and so no project staff will be able to see any completed questionnaires. The overall results of this study will be written up in a report and you can also get a summary of these results if you want.

What are the possible disadvantages of taking part?
If you become upset or distressed while filling out the questionnaires, you will be free to stop participating and support will be available from both the mental health workers or myself if you want.

.....PLEASE TURN OVER.....

What are the possible benefits of taking part?
The information from this study will help us understand some of the difficulties homeless people face and so hopefully let us know what further services might be needed to help people in similar situations to yourself.

Also, as a way of saying 'THANK YOU' for completing and handing in the 3 questionnaires, you will be offered a £5 Sainsbury's voucher (which can be collected from Emma or Maria at Cedars Road).

Who am I and how to contact me?
My name is Kerry Mathews and I am a trainee on the Doctoral Programme in Clinical Psychology at the University of Southampton. This study is being done as part of my training and has been reviewed by the School of Psychology Research Ethics Committee, University of Southampton.

If you have any questions or would like further information, please contact me at:

School of Psychology, Doctoral Programme in Clinical Psychology
University of Southampton
Highfield
Southampton
SO17 1BJ
Tel: 023 80595321

THANK YOU

APPENDIX G - EXAMPLE OF STUDY POSTER

STUDY - PERSONALITY AND COPING IN THE HOMELESS

WHERE?

DINING HALL
NEXT WEEK WEDNESDAY, THURSDAY AND FRIDAY
AFTER BREAKFAST (10-12)
AFTER DINNER (7-9)

WHAT WOULD I NEED TO DO?

FILL OUT 3 QUESTIONNAIRES THAT WILL TAKE ABOUT
30 MINUTES OF YOUR TIME

HOW DO I GET INVOLVED?

JUST ASK AT RECEPTION FOR YOUR NAME TO BE PUT DOWN & YOU CAN CHOOSE WHICH DAY YOU WANT TO TURN UP

IF YOU HAVE ANY QUESTIONS – PLEASE SEE EMMA
(MENTAL HEALTH WORKER)

APPENDIX H - PARTICIPANT SHEET

UNIVERSITY HEADED PAPER

PARTICIPANT SHEET:

PERSONALITY AND COPING IN THE HOMELESS – SOUTHAMPTON STUDY

- Please ensure that each participant has been given an Information Sheet
- If you know or suspect a resident may have difficulty reading/understanding tabloid newspaper level English, please put a tick next to their name

THANK YOU

NAME	INFORMATION SHEET GIVEN	PROVISIONAL SESSION NUMBER

APPENDIX I - STAFF GUIDANCE NOTES REGARDING READING/SUPPORT REQUIREMENTS

UNIVERSITY HEADED PAPER

PERSONALITY AND COPING IN THE HOMELESS

GUIDANCE FOR STAFF ON HOW TO SCREEN FOR READING + SUPPORT LEVELS:

If unsure about the reading level of a participant, ask the following questions:

1) Do/can you read one of the daily newspapers (e.g. the sun, mirror)?

   (if yes – some support may be necessary)

2) Do/can you fill out your own benefit forms without any support/help?

   (if yes – should be able to manage questionnaires)

Please also ask the participant if he/she would like support with reading the questionnaires, regardless of reading ability

(NB: NO HELP OR PROMPTS TO GIVEN WITH ANSWERING THE QUESTIONS ON THE DAY)

APPENDIX J - CONSENT FORM

UNIVERSITY HEADED PAPER

PERSONALITY AND COPING IN THE HOMELESS

CONSENT FORM

RESEARCHERS: KERRY MATHEWS AND NICK MAGUIRE
SCHOOL OF PSYCHOLOGY
DOCTORAL PROGRAMME IN CLINICAL PSYCHOLOGY
UNIVERSITY OF SOUTHAMPTON
HIGHFIELD
SOUTHAMPTON
SO17 1BJ
TEL: 023 80595321

(Please tick)

1. I confirm that I have read and understood the Information Sheet that was given to me (for the above study) and have had the chance to ask questions ☐

2. I understand that I have a choice to take part in this study and that I can stop at any time (without giving any reason) without my care being affected ☐

3. I have agreed to take part in this study ☐

_____	_____	_____
Name of Participant	Date	Signature
_____	_____	_____
Name of Staff	Date	Signature

Participant Identification Number for this study: _____

APPENDIX K - HANDOUT SHEET

UNIVERSITY HEADED PAPER

PERSONALITY AND COPING IN THE HOMELESS

HANDOUT SHEET

Thank you for taking part in this study.

From time to time, everyone feels angry, scared, sad or worried – especially when things are not going very well in their lives. Sometimes, these kinds of feelings can last for quite a long time and it can affect the way people feel about themselves, the way they think about things and the way they cope and do things in their everyday life.

This might not apply to you – but if it does, you might find it helpful to get some advice and support around this.

WHERE TO GET HELP:

If you think you might need or want some help and support or if you just want someone to talk to – please get in touch with any of these people, who will be able to help you:

- Your support worker at the hostel
- Dr Ashton (hostel's link GP) on 0208 6731386
- The Samaritans on: 08457 909090

RESEARCHERS: *NICK MAGUIRE AND KERRY MATHEWS*
SCHOOL OF PSYCHOLOGY,
DOCTORAL PROGRAMME IN CLINICAL PSYCHOLOGY
UNIVERSITY OF SOUTHAMPTON
HIGHFIELD
SOUTHAMPTON
SO17 1BJ
TEL: 023 80595321

APPENDIX L -VOUCHER CONFIRMATION SHEET

UNIVERSITY HEADED PAPER

PERSONALITY AND COPING IN THE HOMELESS

VOUCHERS CONFIRMATION SHEET ***...PAGE 1 OF 3...***

'I confirm that I have received my £5 food voucher given to me as a Thank You for participating in this study'

NAME OF PARTICIPANT:	SIGNATURE OF PARTICIPANT:	DATE:	SIGNATURE OF STAFF:

APPENDIX M - SCHOOL OF PSYCHOLOGY ETHICS COMMITTEE APPROVAL LETTER

University of Southampton

School of Psychology

University of Southampton
Highfield Southampton
SO17 1BJ United Kingdom

Tel +44 (0)23 8059 5000
Fax +44 (0)23 8059 4597

15 August 2005

Kerry-Lynn Mathews
Department of Clinical Psychology
University of Southampton
Southampton
SO17 1BJ

Dear Kerry-Lynn,

Re: **Personality disorders within a homeless population: The relationships between self-esteem, coping style and substance abuse**

I am writing to confirm that the above titled ethics application was approved by the School of Psychology Ethics Committee on 12 August 2005.

Should you require any further information, please do not hesitate in contacting me on 023 8059 3995.

Please quote approval reference number CLIN/03/86.

Yours sincerely,

Kathryn Smith
Secretary to the Ethics Committee

APPENDIX N - UNIVERSITY OF SOUTHAMPTON SPONSOR APPROVAL LETTER

University of Southampton

11 AUG 2005

Research Support Office

Dr Peter Hooper, Director

University of Southampton
Highfield Southampton
SO17 1BJ United Kingdom

Tel +44 (0)23 8059 8672
Fax +44 (0)23 8059 8671
Email info@rso.soton.ac.uk

Tel: +44 (0)23 80598848/9

Ref: 3420

8 August 2005

Ms Kerry-Lynn Mathews
School of Psychology
University of Southampton
Southampton
SO17 1BJ

Dear Ms Mathews

Project Title: Personality disorders within a homeless population: The relationship between self-esteem, coping style and substance abuse

I am writing to confirm that the University of Southampton is prepared to act as sponsor for this study under the terms of the Department of Health Research Governance Framework for Health and Social Care (2001).

The University of Southampton fulfils the role of research sponsor in ensuring management, monitoring and reporting arrangements for research.

I understand that you will be acting as the Principal Investigator responsible for the daily management for this study, and that you will be providing regular reports on the progress of the study to the School on this basis.

I would like to take this opportunity to remind you of your responsibilities under the terms of the Research Governance Framework for researchers, principal investigators and research sponsors. These are included with this letter for your reference. In this regard if your project involves NHS patients or resources please send us a copy of your NHS REC and Trust approval letters when available.

Please do not hesitate to contact me should you require any additional information or support. May I also take this opportunity to wish you every success with your research.

Yours sincerely

M Dorward.

Dr Martina Dorward
Research Governance Manager

Enc

cc. File
Ruth McFadyen
Nick Maguire