# UNIVERSITY OF SOUTHAMPTON

# School of Psychology

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# LITERATURE REVIEW

# WHAT ARE THE PERSONALITY DISORDER FACTORS THAT CONTRIBUTE TO HOMELESSNESS?

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# Abstract

Mental illness is prevalent in the homeless population, and research suggests that personality disorders may account for a significant proportion of psychopathology. The review proceeds to an appraisal of the particular features characteristic of personality disorder that may contribute to homelessness, based on Maguire, Keats & Sambrook's (2006) model. These factors may not only increase susceptibility to homelessness, they may also act as barriers to exits from homelessness, to the extent that individuals are at serious risk for long-term, chronic homelessness. The current approach to diagnosing personality disorders may be disadvantageous to homeless individuals and also yield limited information about psychopathology. The debate between categorical and dimensional models of understanding personality disorders is presented, along with a critical evaluation of each approach. Although the present categorical approach does have certain advantages, there appear to be a number of deficiencies pertaining to the reliability of diagnoses. There is promising evidence advocating a dimensional approach and this should be given serious consideration. Given the low uptake of services and high dropout from treatment among the homeless population, alternative approaches including therapeutic communities and treatment in accommodation are reviewed. Greater funding to provide psychological therapies within accommodation and to provide suitable training for staff members (for instance, in CBT) is necessary to increase uptake and completion of treatment in a vulnerable population with severe and complex needs. There may also be potential value in prevention programs designed to enhance personality resilience and adaptive capacities.

Keywords: Homeless; Personality Disorder; Diagnosis, Treatment

What Are the Personality Disorder Factors That Contribute To Homelessness?

#### Structure of the Literature Review

The aims of the literature review are to discuss mental health issues, particularly personality disorders in the homeless population. To present the current knowledge concerning personality disorders in the homeless population and to evaluate the paradigms of conceptualising and diagnosing personality disorders in relation to homeless individuals. In addition to establishing the current state of knowledge and debate within the field, this review will discuss the particular features of personality disorder that may contribute to homelessness, with a critical appraisal of the evidence base.

# Literature search strategy

The literature search aimed to identify current knowledge and research on personality disorders, particularly in relation to homelessness. The main literature search focused on CINAHL (Cumulative Index to Nursing and Allied Health Literature), EMBASE, Medline, PsycINFO (Psychological Information) and Science Direct, since they were considered to be the most relevant databases. In addition, a number of other databases were utilised in order to provide depth and breadth to the literature review. These included ASSIA (Applied Social Sciences Index and Abstracts), the Cochrane Library and Web of Science.

The search strategy involved dividing the main literature search in to two parts. The first part pertained to the assessment and diagnosis of personality disorders, the second part related to characteristics of personality disorders, with particular reference

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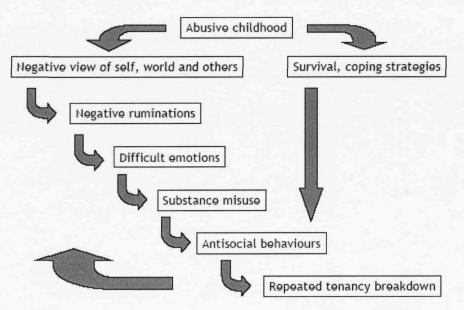
to homelessness. The literature search was conducted via the Hartley Library at the University of Southampton (http://www.library.soton.ac.uk). From the library website, the OVID database was utilised as it provides access to a number of sources that are relevant to this particular study. The literature search was limited to studies published in the English language in the last 30 years. Key words used were personality disorder, assessment, diagnosis, treatment, homeless / homelessness, tenancy breakdown. Reference sections from pertinent studies were scrutinised for additional material.

#### Introduction to the Literature Review

Homelessness remains a significant social and economic problem, particularly within the larger cities of England (Warnes et al. 2003). The homeless population predominantly comprises of males aged above 25 years, who frequently present with severe psychiatric distress, poor physical health, a lack of social support, stigmatisation, financial problems, high rates of assaults and victimisation and shorter life expectancy (Griffiths, 2002; ODPM, 2005). However, there are increasing amounts of females and younger people becoming homeless, suggesting that the population is increasing in heterogeneity, and that is has diverse, complex needs (Stein & Gelberg, 1995). Despite these complex and severe needs, homeless individuals are among the least likely to access services and among the most likely to dropout from treatment (Pollio, North, Thompson & Paquin, 1997). Therefore, there is a requirement to improve the knowledge and understanding of psychopathology within a vulnerable population who are susceptible to chronic difficulties such as personality disorders and substance use (Bradford, Gaynes, Kaufman & Weinberger, 2005; Craig & Hodson, 2000; Fichter & Quadflieg, 2003).

Personality disorders impede functioning in virtually all areas (Ward, 2004). Research has identified a high prevalence of personality disorders among homeless individuals (for example, Fischer & Breakey, 1991). The routes to becoming homeless are complex and diverse, and they are likely to differ within specific subgroups of the homeless population (Martens, 2002). Some individuals may only experience a single, episode of homelessness, whereas others may suffer recurring or lengthy periods of homelessness (Breakey, 1997). Homelessness is defined as the problem faced by people who lack a place to live that is supportive, affordable, decent and secure (Office of the Deputy Prime Minister, ODPM, 2005). Homelessness refers to individuals who lack a permanent or regular place to live, therefore including those who stay temporarily with family/friends/acquaintances, those who use homeless shelters, emergency refuges, squats, homeless hostels and 'rough sleepers' (individuals who essentially reside on the streets) (ODPM, 2005). There is widespread acceptance that homelessness is much more than not having a roof over one's head. A home is not merely a physical space, it provides roots, identity, security, a sense of belonging and a place of emotional well-being (Warnes, Crane, Whitehead, & Fu, 2003).

Theoretical aetiological frameworks for personality disorders will be presented in this review to identify the development of and vulnerability to personality psychopathology, within individuals. Specific personality disorder factors that may contribute to homelessness will be discussed in conjunction with the associated empirical research. The personality disorder factors that will be reviewed, are informed by a model postulating a possible pathway to homelessness (Maguire, Keats & Sambrook, 2006) (see figure 1).



# Possible pathway to homelessness

Figure 1. A model postulating a pathway to homelessness (Maguire et al., 2006)

This model proposes that early abusive experiences lead to negative core beliefs and difficult thought processes. Negative ruminative thoughts and intense emotions are assuaged through substance use (drugs or alcohol), as this is an easy method of altering affect and because emotion regulation skills have not been learnt during childhood. Substance misuse in combination with aggressive behaviours learnt in childhood and adolescence, increases proclivity to antisocial behaviours and repeated tenancy breakdown, thereby magnifying vulnerability to homelessness. Where adaptive interpersonal skills have not been learnt, more destructive ones which have previously been successful to some degree (such as aggression) are used.

The model will form the basis for the review. The components of this model will be discussed in detail, with reference to how each of the factors have been associated with personality disorders and how they may combine to escalate risk for homelessness. It is imperative that the assessment and diagnosis of personality disorders is scientific, reliable and valid, in order to inform appropriate, effective treatment and management. This is particularly important for homeless individuals who may have severe and complex difficulties. However, there remains discord within the field concerning the conceptualisation, classification and diagnosis of personality disorders (Clark, 2007; Huprich & Bornstein, 2007; Shedler & Westen, 2004; Trull & Durrett, 2005; Widiger, 2003). This review will delineate and critically evaluate the current categorical approach to diagnosing personality disorders, with a particular focus on the implications for homeless individuals. The argument for an alternative method, specifically a dimensional one, will be discussed along with potential improvements made by such a method, in the understanding of personality disorders within the homeless population.

# Mental Illness in the Homeless Population

An important factor that contributes to individuals becoming homeless is mental health difficulties (Gonzalez & Rosenheck, 2002). Findings suggest that mental health difficulties are prevalent among homeless people, with Axis I disorder estimates of 50% - 75% (Drake, Osher, & Wallach, 1991; Koegel, Burnam & Farr, 1988). Depressive disorders and trauma related disorders are particularly prevalent among the homeless population (Drake, Osher, & Wallach, 1991).

However, mental health problems often remain undiagnosed and untreated in the homeless population (Maguire et al., 2006; Pollio, North, Thompson & Paquin, 1997). Obtaining precise prevalence rates of mental illness in the homeless population has proved arduous due to methodological difficulties in gaining accurate counts of homeless people, access issues and variation in defining different groups of the homeless population (Farrell & Reissing, 2004; Steinhaus, Harley & Rogers, 2004). The lack of consistency in empirical studies is also attributed to differences in sample selection, methods of assessment and case definition (Susser, Conover & Struering, 1990).

A limitation of the homelessness literature has been the grouping together of different homeless groups into a collective. Roth & Bean (1986) described four categories or levels or homelessness: (a) street people or those sleeping rough, (b) residents of hostels and shelters for the homeless (c) residents of hotels or bed and breakfast accommodation, commonly families placed in temporary accommodation and (d) other temporary living arrangements such as staying with family or friends. However, many studies have combined two or more of these homeless groups in their sample, thereby treating the homeless population as homogeneous, when there is a suggestion of possible differences between the different levels of homelessness (Roth & Bean, 1986).

# Personality Disorders in the Homeless Population

There remains a paucity of scientifically rigorous research concerning personality disorders in homeless individuals, although significant psychopathology is often described in this population (Fischer & Breakey, 1991). Mental health difficulties are prevalent among homeless people, with Axis I disorder estimates of 50-75% (Drake, Osher, & Wallach, 1991; Koegel , Burnam & Farr, 1988).

Personality disorders represent a significant proportion of the mental health difficulties experienced by homeless individuals. Prevalence rates vary from 6-50% (Fischer & Breakey, 1991; Pollio, North, Thompson, Paquin & Spiznagel, 1997; Scott, 1993). The variation in prevalence estimates can be generally explained by differences in the conceptualisation and classification of personality disorders, diverse assessment instruments and diverse sample groups (for example some studies have had all male or all female samples, and samples have differed greatly in terms of age). No studies have compared the prevalence of personality disorders between the different sub-groups of the homeless population.

Antisocial personality disorder has received the most attention, with estimated rates of 10-40% (Caton et al., 1994; Caton et al., 2000; North, Smith & Spitznagel, 1993; North et al., 1997). Few studies have systematically diagnosed Axis II disorders, but unstructured clinical assessments suggest rates between 20-70% (Bassuk, Rubin & Lauriat, 1986; Breakey et al., 1989; Haugland, Siegel, Hopper & Alexander. 1997) with schizoid, borderline, dependent and antisocial features often identified (Armstrong, 2002; Tolomiczenko, Sota & Goering, 2000).

# The Burden of Personality Disorders

Personality disorders place a significant burden on the individual, those around them and to society as a whole. Personality disorders represent a major public health burden due to their high prevalence, long duration, under diagnosis and inadequate treatment (Zimmerman, 1994). Research postulates that personality disorders are under appreciated causes of social cost, morbidity and mortality (Reugg & Frances, 1995). Personality disorders are associated with crime, substance abuse, disability, increased need for medical care, suicide attempts, self-injurious behaviour, assaults, delayed recovery from Axis I disorders and medical illness, institutionalization, underachievement, underemployment, family disruption, child abuse and neglect, homelessness, illegitimacy, poverty, sexually transmitted diseases, misdiagnosis and mistreatment of medical and psychiatric disorders, medical and judicial recidivism and disruption of psychiatric treatment settings (Reugg & Frances, 1995). Furthermore, the amount of social cost and disruption caused by personality disorders is disproportionate to the level of attention generated in the public consciousness, in mental health professions training, in research and in mental health service funding.

There is a paucity of data on the economic costs of personality disorders on the national health service (NHS). It was estimated that expenditure on personality disorders in the NHS, was around 61 million pounds in 1986, over four times the amount spent on alcohol and substance misuse (Moran, Jenkins, Tylee, Blizard & Mann, 2000). Rendu, Moran, Patel, Knapp & Mann (2002) followed up 303 general practice attenders one year after they had been assessed for personality disorder. The mean total cost (including health and non-health costs) for personality disorder clients was over 3,000 pounds, nearly twice as much as that for non-personality disordered clients.

# The prevalence of personality disorders in the community

Estimates from empirical research suggest a higher prevalence of personality disorders in the homeless population when compared to the non-homeless population (Scott, 1993). Community studies investigating the prevalence of personality disorder report prevalence rates ranging from 3.9% to 22.3% (Black, Noyes, Pfohl, Goldstein, & Blum, 1993; De Girolamo & Dotto, 2000; Torgersen, Kringlen & Cramer, 2001; Weissman, 1993). Coid, Yang, Tyrer, Roberts and Ullrich (2006) conducted the first two-phase study involving a representative community sample in the UK. In a sample of 626 participants, the weighted prevalence of personality disorder was 4.4% (95% CI 2.9-6.7). Rates were highest among men, separated and unemployed participants in urban locations. Antisocial personality disorder was five times greater in men (1.0%) than in women (0.2%). All personality disorder categories were more common in men, apart from the schizotypal category. The prevalence identified in this UK study is lower than nearly all the previous surveys employing structured clinical interviews in other countries. Differences between prevalence rates in different studies may be explained by variations in sampling methods, diagnostic instruments and the number of personality disorder categories included, as opposed to true differences between populations (Zimmerman, 1994). For example some studies used opportunistic sampling or involved relatives of individuals involved in inpatient studies, and did not have a rigorous approach such as Coid et al's (2006), of prospectively surveying in order to assess the prevalence of personality disorder in a representative sample.

Personality disorders are more common in younger age groups (particularly the 25-44 year age bracket) and equally distributed between the genders (Millon & Davis, 2000; Moran, 1999). The male female distribution for specific types of personality disorders varies, for instance borderline personality disorder is more prevalent in females and antisocial personality disorder is more common in males. Antisocial personality disorder has received the most attention in community based studies, with a lifetime prevalence of 2 to 3%, it occurs most frequently in males, younger people of low socio-economic status, single individuals, those with low levels of education and those residing in urban locations (Moran, 1999, North, Smith & Spitznagel, 1993). There remains a dearth of community data on other personality disorders (Coid, Yang, Tyrer, Roberts & Ullrich, 2006; De Girolamo & Dotto, 2000).

At a community level, individuals with personality disorder are more likely to suffer from alcohol and drug problems, adverse life events such as relationship difficulties, long-term unemployment and housing problems which may lead to homelessness (Moran, 1999).

# The prevalence of personality disorders in primary and secondary care

Epidemiological research estimates the prevalence of personality disorders in primary care to range between 10% and 30% (Dilling, Weverer & Fichter, 1989; Casey & Tyrer, 1990). Cluster C personality disorders appear to be the most common among primary care attenders (Moran, Jenkins, Tylee. et al. 2000). Several studies have investigated the prevalence of personality disorders in secondary care, reporting a wide range of prevalence estimates (De Girolamo & Dotto, 2000). This is largely attributed to variance in sampling, diagnostic criteria and assessment methods. Empirical studies generally report high prevalence estimates above 50% for personality disorders in secondary care (Turkat, 1990). Outpatient research reports prevalence estimates ranging from 59% to 81% (Alnaes & Torgersen, 1988). Personality disorders are particularly prevalent in inpatients with drug, alcohol and eating disorders. In these populations, the prevalence for personality disorder is well above 70% (De Jong et al, 1993). Borderline personality disorder tends to be the most common and most frequently researched type in psychiatric settings (Paris, 2005). Females represent 80% of those receiving treatments for borderline personality disorder (Torgersen, Kringlen & Cramer, 2001).

# Theories of Personality Disorder

Several theories have been proposed to explain the development of personality disorder. The major theories include Biological, Biosocial Learning, Psychodynamic and Cognitive approaches, which have stimulated research and influenced the assessment and treatment of personality disorders (Millon & Davis, 2000). The aforementioned theories are presented briefly below followed by a discussion of how they may relate to homeless individuals, refer to Lenzenweger & Clarkin (1996) and Millon & Davis (2000) for a more comprehensive discussion.

### The Psychodynamic perspective.

Freud's (1917) ideas about personality have been highly influential. He referred to five psychosexual stages of personality development experienced sequentially, although individuals may become fixated at particular stages and/or fail to resolve conflicts, which may culminate in disorders of personality. Freud postulated that personality is composed of three components, the id (comprising of basic, primeval instincts) the ego and the superego (the moral conscience, influenced by societal and parentally learned values). The ego acts as a balance between the opposing forces of the id and the superego, however this process is susceptible to anxiety and therefore, a number of defence mechanisms such as denial or repression may operate in an attempt to assuage the anxiety and to protect the ego.

Damage to the ego has the most harmful effect, often culminating in personality disorder. The damage may be caused by particular stage fixations, for instance if an individual is nurtured too much as an infant, s/he will not develop beyond the oral stage of development, because they do not need to. They may become fixated in the oral stage, which leads to a high level of dependency. The individual subsequently experiences difficulties in adult life because s/he is accustomed to receiving excessive amounts of attention, and inevitably, when they do not, it results in personality pathology. Other forms of ego damage may include disturbances in early development or attachment relationships and dysfunctional beliefs about oneself and others. The type of damage and the structural quality of the ego influences the nature of the personality disturbance (Derksen, 1995). For example, psychodynamic theory postulates that antisocial personality disorder is caused by problems in the development of the superego, leading to excessive dominance of the id (Millon & Davis, 2000).

The concept of defence mechanisms has received much attention within the field and it continues to inform theoretical conceptualisations of personality pathology (Millon, 1990). The major criticism of the psychodynamic approach to understanding personality disorder is the same as it is for other psychodynamic theories. It is difficult to prove its assumptions and there is limited empirical evidence. Freud's stages of development occur at an unconscious level. It is not possible to identify if an individual is stuck at the oral stage because the psychodynamic theory hinges on subjective interpretations. Similarly, it is complex to ascertain as in the above example, what is too much or too little nurturing and it is onerous to measure.

# The Biological perspective

A number of genetic and biochemical explanations for personality disorder have been proposed. It has been postulated that the strongest empirical support is for antisocial and schizotypal personality disorders (Thapar & McGuffin, 1993). Cleckley (1964) described 'semantic aphasia' in antisocial personality types, specifically, the inability to comprehend and process emotional experiences, which results in difficulties empathising with others or developing a conscience. Specific language processing deficits have been propounded (Louth, Williamson, Alpert, Pouget & Hare, 1998), frontal lobe abnormalities and lowered physiological arousal have also been suggested to explain the heightened excitement and novelty-seeking behaviour indicative of antisocial personality disorder (Deckel, Hesselbrock & Bauer, 1996). In addition, serotonin and dopamine levels have been continually linked to emotional instability (Depue, 1996).

Cloninger's (1996) neurobiological theory has received much attention. It emphasises the relationships between three traits, namely novelty seeking, harm avoidance and reward dependence, and their associated neurotransmitter systems. Novelty seeking is linked with reduced basal activity in the dopaminergic system, with the implication that this leads individuals to seek excitement in response to novel stimuli and to avoid boredom. Harm avoidance has been associated with increased activity in the serotonergic system, and contributes to individuals responding strongly to unpleasantly-perceived stimuli, and to avoiding punishment and frustration. Reward dependence has been linked with decreased basal noradrenergic system activity and is involved in the tendency of individuals to respond strongly to reward and approval (Millon & Davis, 2000). Cloninger's model has been criticised for its very broad personality profiles and it does not correspond very well with current classification systems (Derksen, 1995). Overall, the role of genetic factors in personality pathology remains unclear (Lenzenweger & Clarkin, 1996).

#### The Biosocial Learning perspective

Millon (1986) postulated a biosocial learning theory referring to three universal polarities: pleasure-pain, self-other and active-passive. Millon (1986) asserts that personality consists of a complex set of structures and functions designed to maximise comfort and minimise discomfort (pleasure-pain). The structures and functions influence where the individual looks (self-other) and how the individual behaves

(active-passive) in order to achieve the aims of the pleasure-pain polarity. Personality disorders result from a complex interaction between these polarities, and they can be caused by deficiencies in the nature (pleasure versus pain), source (self versus others) or behaviours (active versus passive) that individuals utilise.

Millon (1986) highlighted the important role of experiential learning and coping in response to stressful events. He propounded that the coping skills of individuals with personality disorder are limited and rigid, hence they tend to employ the same coping strategies regardless of the particular situation or previous outcomes. The level of distress experienced by the individual increases and the difficulties are maintained by dominant pathological themes repeating as a vicious cycle (Millon & Davis, 2000).

# The Cognitive perspective

The cognitive approach postulates that emotional and behavioural difficulties are caused by irrational interpretation and thought processes, which are shaped by inflexible, dysfunctional schemas (Beck, Freeman & Davis, 2004). Schemas are global, pervasive patterns of distorted thinking and reasoning that negatively influence information processing and the meaning given to events. Schemas are developed in early childhood, they are affected by family environment, early experiences, life events and social learning processes (Pretzer & Beck, 1996). Maladaptive dysfunctional schemas are developed in childhood and continue to influence an individual's personality, leading to disorders of personality (Beck et al., 2001; Beck & Freeman, 1990; Young, Klosko & Weishaar, 2003). Beck et al (2004) assert that each personality disorder type has a corresponding set of beliefs and behaviours. For instance, the dependent personality displays excessive attachment behaviours, linked to

beliefs that s/he is helpless and weak, and that others are nurturing, supportive and competent.

Young (1999) argues that early maladaptive schemas have three basic origins: Early childhood experiences, the innate temperament of the child and cultural influences. A basic premise of Young's approach is that individuals with more complex problems have one or more early maladaptive schemas. Early maladaptive schemas include entrenched patterns of distorted thinking, disruptive emotions and dysfunctional behaviours (Young et al., 2003). Young has identified 18 early maladaptive schemas, organised into five themes known as domains: disconnection & rejection, impaired autonomy and performance, impaired limits, other-directedness and overvigilance and inhibition (Young, 1999; Young et al. 2003). Each of the five domains contain categories of schemas that represent an important component of a child's core needs. When these needs are not met negative schemas develop. The maladaptive schemas become fixed when they are reinforced and/or modelled by parents. The maladaptive schemas are perpetuated throughout one's lifetime culminating in personality pathology.

A number of studies have identified that certain dysfunctional beliefs are associated with each personality disorder type, and this empirical evidence has led to the implementation of cognitive components into contemporary treatment of personality disorder, including Cognitive Behavioural Therapy (Arntz, Dietzel & Dreesen, 1999; Arntz, Dreessen, Schouten & Weertman, 2004; Beck et al. 2001) and Schema Focused Therapy (Young et al, 2003).

#### Summary

The theories presented above postulate different characteristics in personality development and pathology. The psychodynamic perspective refers to ego-disturbance as a central feature of personality disorders. The biological hypotheses highlight the role of neurobiological processes, whereas the biosocial approach emphasises the pleasure-pain dimension, experiential learning and rigid coping styles in the development of personality disorders. The cognitive approach describes the importance of maladaptive schemas and irrational processes of interpretation and thinking. All of these perspectives acknowledge the role of early environmental and social factors in shaping personality. This is corroborated by findings of significant associations between personality disorder and early negative experiences, particularly neglect, abuse, parent trauma, certain child rearing styles and early separation from parents (Derksen, 1995).

The aformentioned theories and empirical findings suggest some overlap between susceptibility to personality disorders and homeless. For example, traumatic childhood experiences may increase vulnerability to personality disturbance and they have also been related to homelessness. The following section focuses on the particular personality disorder factors that may contribute to homelessness.

#### Personality Disorder Factors That May Contribute to Homelessness

There are a number of personality disorder features that may contribute to an individual becoming homeless.

# Adverse childhood experiences

As discussed previously, DSM-IV and ICD-10 definitions state that personality disorder manifestations can be traced back to childhood or adolescence. Personality disorders have been linked with negative, traumatic experiences in childhood (Millon & Davis, 2000). These experiences include growing up in economically deprived environments where individuals are exposed to dangerous and violent experiences (North, Smith & Spitznagel, 1994). Experiences of being reared in broken, chaotic, dysfunctional families, with physical, emotional and/or sexual abuse can be critical to individuals developing negative core beliefs and maladaptive schemas (Beck et al. 2001; Bassuk et al, 1986; Bassuk & Rosenberg, 1988).

Dysfunctional family background and poor family / social support during childhood and adolescence can harm the development of one's identity, perceived self-esteem and self-worth (Koegel, Melamid & Brunam, 1995). This can lead to patterns of violence and abuse established in childhood often continuing into adult life (Bassuk & Rosenberg, 1988). Individuals raised in abusive environments may develop schemas that relate to other people being untrustworthy or abusive. However, due to their personality disorder, individuals may continually find themselves in abusive situations. Freud (1917) referred to it as 'repetition compulsion' and Young (2003) argues that personality disordered individuals have a tendency to repeat in their lives distressing or painful situations without realising that they are doing so, or understanding that their current situation is a recurrence of previous traumatic events.

Young (2003) asserts that individuals manage to create conditions in adult life that are remarkably similar to those that were so destructive in childhood. For instance, females raised in abusive environments may have relationships with partners who are abusive to them (Tyler, Hoyt & Whitbeck, 2000; Young 2003). People with maladaptive schemas tend to be drawn to partners who trigger their schemas and partner selection is a mechanism through which schemas are maintained. Many females who become homeless escaped from abusive relationships with males upon whom they had been dependent (Bassuk, Rubin & Lauriat, 1986; Bassuk & Rosenberg, 1988; Hagen, 1987; Wood, Valdez, Hayashi & Shen, 1990). Findings also indicate that both males and females who experience childhood trauma (physical or sexual abuse) are at risk for homelessness and revictimisation on the streets (Davies-Netzley, Hurlburt & Hough, 1996; Morrell-Bellai, Goering, & Boydell, 2000). Tyler, Hoyt & Whitbeck, 2000; Whitbeck, Hoyt & Ackley, 1997).

It has been postulated that coercive families provide 'basic training' for antisocial behaviours due to the failure of parents to instil appropriate discipline in the home environment or to control aggressive interactions between family members (Patterson, Dishion & Bank, 1984). Children learn coercive and abusive interaction styles and these are generalised to other situations. However, this often leads to difficulties and rejection from peer groups. As personality disorders are characterised by inflexibility in attitudes, thoughts and behaviours, the dysfunctional interaction styles perpetuate, leading to subsequent deviant and antisocial behaviours in adulthood (Whitbeck, Hoyt & Yoder, 1999). Whitbeck et al (1999) argue that the basic training provided by the family is overtaken by 'advanced training' in antisocial behaviours on the streets. This suggests that street homeless individuals may be at greater risk for being victims and perpetrators of antisocial behaviour, than for instance, homeless individuals residing in hostels.

Therefore, adverse experiences in early childhood are risk factors for developing maladaptive schemas that may lead to disorders of personality. The continual triggering of maladaptive schemas, repetition of dysfunctional behaviours and abusive relationships may aggrandise vulnerability to homelessness.

# Interpersonal relationship difficulties

As alluded to above, individuals with personality disorders typically have difficulties in developing and maintaining relationships. They may have problems in initiating relationships or they may have unstable relationships (Millon & Davis, 2000). Individuals with Cluster A personality disorders are more likely to be suspicious of others (paranoid types) or to be detached from social relationships as they have interpersonal deficits (schizoid and schizotypal types) (Ward, 2004). Such individuals may become isolated and in the absence of any relationships or social support, become even more detached from society, making them susceptible to homelessness.

Those with Cluster B personality disorders may have very intense, unsettled relationships as is typical with borderline personality disorder (Paris, 2005). There may be an excessive fear of abandonment which leads to desperate efforts to avoid being left alone or a torrid nature of close relationships marked by incessant arguments, recurrent break-ups and the use of maladaptive strategies that can elicit anger, frustration and fear in others, such as highly emotional, unpredictable and manipulative behaviours (Lieb, Zanarini, Schmahl, Linehan & Bohus, 2004). Individuals with antisocial personality disorder can be callous, aggressive, deceitful, lacking in humanistic concern and remorse, which allows them to engage in behaviours that hurt or upset others (Deckel, Hesselbrock & Bauer, 1996; Moran, 1999). Individuals with histrionic personality disorder are excessively emotional and constantly wish to be the centre of attention, while narcissistic individuals have an exaggerated need for

admiration, lack empathy and exploit others (Ward, 2004). Individuals with Cluster C personality disorders may be socially avoidant (avoidant types) or have an extreme need to be supported and nurtured (dependent types) (De Girolamo & Dotto, 2000).

The unstable, unpredictable and maladaptive nature of the relationships held by people with personality disorders are likely to lead to arguments and ruptures in relationships (such as separation from partners/spouse, being asked to leave the parental/family home, eviction from shared accommodation, dismissal from employment), which increases risks for tenancy breakdown and homelessness (Slade, Scott, Truman & Leese, 1999).

# Impulsivity and impulse control difficulties

The impulsivity associated with personality disorder may also be a contributory factor to homelessness. Impulsivity is recognised as a prominent psychological construct in the understanding and diagnosis of personality disorders and many other forms of mental illness (Whiteside & Lynam, 2001). Impulsivity appears in the diagnostic criteria for antisocial personality disorder (impulsivity or failure to plan ahead, DSM-IV-TR, American Psychiatric Association, 2000) and borderline personality disorder (impulsivity in at least two areas that are potentially self-damaging, DSM-IV-TR, American Psychiatric Association, 2000). Whiteside & Lynam (2001) examined impulsivity in relation to the Five Factor Model. They pinpointed four distinct psychological processes that lead to impulsive behaviours: urgency, lack of premeditation, lack of perseverance and sensation seeking. Urgency is described as the tendency to experience strong impulses, often during negative affect. Individuals are likely to carry out impulsive behaviours in an attempt to ameliorate negative emotions despite the harmful consequences of such actions. Lack of premeditation is the propensity to act on the spur of the moment without any consideration of the consequences. Lack of perseverance is the inability to remain focused on tasks that may be mundane or difficult and individuals with this characteristic find it arduous to achieve what they want to. Sensation seeking refers to a proclivity to take risks and to engage in exciting activities that may be dangerous.

Individuals with personality disorder commonly fail to resist impulsive acts or behaviours that may be harmful to themselves or to others (Jentsch & Taylor, 1999). Lack of premeditation may contribute to individuals making irrational decisions, such as leaving relationships, employment or accommodation. Lack of perseverance and self-discipline may impact on the ability to carry out routine, daily tasks that are necessary to function in society, and may lead to problems in maintaining relationships, employment and tenancies. Sensation seeking may involve behaviours such as overspending, risky sexual behaviours, reckless driving and substance abuse (Kruedelbach, McCormick, Schulz & Gruenich, 1993).

Erratic, emotional and unpredictable behaviour is most typical of the Cluster B personality disorders (antisocial, borderline, histrionic and narcissistic types) (DSM-IV-TR, American Psychiatric Association, 2000). Violent behaviour towards self and/or others is particularly prevalent in antisocial and borderline personality disorders (Davidson, Putnam & Larson, 2000; Schore, 2003). Many of these individuals are comorbid for both personality disorder types as part of the impulse disorder spectrum (Zanarini, 1993).

Impulse control disorders are a specific group of impulsive behaviours that have been accepted as psychiatric disorders under the DSM-IV-TR (American Psychiatric Association, 2000). The impulsive behaviours or acts are not premeditated or not considered in advance and the individual has little or no control over them. The impulsive behaviours or actions refer to aggressive, violent behaviours (Explosive disorder), sexual behaviour, pathological gambling, fire starting (pyromania), stealing (kleptomania) and self-abusive behaviours. Impulsive behaviour seems to have an underlying predisposition which may or may not be related to existing mental health conditions, however research suggests substantial co-morbidity of impulse control disorders with personality disorders along with mood disorders, anxiety disorders, eating disorders, substance abuse and with other specific impulse control disorders (McElroy, Hudson, Pope, Keck & Aizley, 1992). Impulse Control Disorders are often present in a number of specific personality disorders, mainly borderline, antisocial, narcissistic, and histrionic types. Impulsivity may be exhibited in the form of risk-tasking behaviours, sexual promiscuity, gestures and threats of self-harm and other attention-seeking behaviours. They are less prevalent in avoidant, dependant, obsessive-compulsive personality and other disorder types (McElroy et al., 1992). In particular cases, it may be clinically difficult to disentangle from one another.

Impulsivity appears to be a particularly important characteristic of personality disorder (O'Boyle & Barratt, 1993). The above features of impulsivity may make individuals susceptible to certain behaviours that contribute to homelessness, furthermore, high levels of impulsivity may increase risk for long-term, chronic homelessness.

#### Comorbidity of personality disorders and substance use

Substance dependence is defined 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 (American Psychiatric Association, 1994).

Substance dependence is detrimental to all areas of functioning including family, social, physical health and occupational functioning. Addiction involves compulsive patterns of substance use, including drug-seeking, drug consumption, drug-recovery and other high risk behaviours (Robinson & Berridge, 2003).

The term 'dual diagnosis' has been used to refer to the co-occurrence of psychiatric disorders and substance use. The prevalence of dual diagnosis is high in clinical populations, up to 68% (Blanchard, 2000, Fisher & Breakey, 1991) and this comorbidity has been associated with elevated risks for anxiety, depression, interpersonal and family conflict, traumatisation, criminal behaviour and treatment dropout (Kessler et al., 1997; Laudet, Magura, Vogel & Knight, 2004).

Several studies report a high prevalence of comorbid personality disorders and substance use, with estimates from 37% to 60% (Barber et al. 1996; Bowden-Jones et al. 2004; Brady, Dustan, Grice, Dansky & Kilpatrick, 1995; Gonzalez & Rosenheck, 2002). Reviews of studies in this area estimate prevalence of any personality disorder coexisting with substance use as ranging from 34% up to 100% (Seivewright & Daly, 1997; Verheul, 2001). For antisocial personality disorder alone, estimates are between 7% to 55%. The findings of rigorous studies were used by Verheul (2001) to calculate median estimates, with a median prevalence of 56.5% for any personality disorder comorbid with substance use. The most common personality disorder type was antisocial personality disorder (median estimate 22.9%) followed by borderline personality disorder (17.7%). The scientific rigour of research in this area has been variable with methodological differences in the assessment of personality disorder and substance use, complicating comparison between studies and separation of substance use symptoms from personality pathology. Furthermore, studies have included selective samples and only included either drug or alcohol populations. Nevertheless,

the research is consistent in identifying high prevalence of comorbid personality disorders and substance use. In addition, antisocial personality disorder and borderline personality disorder are particularly prominent.

The relationship between substance use and the aforementioned personality disorders appears to be complex. It has been propounded that specific personality traits such as sensation-seeking, impulsivity and affect intolerance, which are characteristic of personality disorders such as antisocial and borderline types, predispose and increase susceptibility to repeated substance use (Brady, Dustan, Grice, Danksy, & Kilpatrick, 1995; Gossop, 1994). Recent studies have corroborated the link between these personality traits, particularly impulsivity, and substance use disorders (Bornovalova, Lejuez, Daughters, Rosenthal, & Lynch, 2005; Sher, Grekin, & Williams, 2005).

Individuals with personality disorders are likely to use substances as a form of self-medication, in order to improve their affect and to assuage negative emotions (Khantzian, 1985). These effects appear to be attractive which reinforces regular use. However, tolerance and withdrawal symptoms can develop rapidly, thereby perpetuating the need to obtain substances (Warner, Taylor, Wright, Sloat, Springett, Arnold & Wienberg, 1994). Biochemical and cognitive explanations have also been postulated for substance use. The former refer to the role of opiate receptor sites and brain chemicals such as endorphins (Gossop, 1994) in maintaining substance use. Compulsive substance use has also been linked to drug-induced changes in reward-related brain systems that are involved in pleasure, incentive motivation and learning processes (Kelley & Berridge, 2002). Cognitive explanations propound that individuals' beliefs and assumptions influence their interpretations of and responses to situations. Individuals' beliefs about the positive effects of substances such as:

'Alcohol makes me sociable' and catastrophic beliefs about the consequences of ceasing consumption, allied with the social pressures and rewards of continuing use lead to self-defeating behaviours that create vicious cycles, which maintain substance use (Beck, Wright, Newman & Liese, 1993).

Homeless individuals have higher rates of substance use than non-homeless individuals, with findings showing a two-fold likelihood of substance use disorders at lifetime and six-months (Koegel, Burnam, & Farr, 1988; Winkleby, Rockhill, Jatulis & Fortmann, 1992). Findings of higher levels of substance use among homeless individuals compared to non-homeless individuals are accordant across subgroups such as homeless mothers (Bassuk et al., 1997; Weitzman, Knickman & Shinn, 1992), homeless attenders of healthcare clinics (Ferenchick, 1992; Heffron, Skipper & Lambert, 1995), and homeless psychiatric clients (Caton et al., 1994).

Studies have demonstrated an association between mental illness and substance use increasing the risk for prolonged homelessness and difficulties in maintaining tenancies (Craig & Hodson, 2000; Hurlbert, Hough & Wood, 1996; Stein & Goldberg, 1995). Fichter & Quadflieg (2003) found that alcohol dependence in homeless men was significantly associated to higher levels of homelessness after a three-year followup of participants. The authors conclude that substance use is a major risk factor for both becoming and remaining homeless. Similarly, Zlotnick, Tam & Robertson (2003) report that substance use can be a barrier to exits from homelessness. It can also drain social resources and lead to involvement in other illegal acts, to the extent that individuals become entrenched and chronically homeless (Benda, 1987; Grigsby, Bauman, Gregorich & Roberts-Gray, 1990). The literature suggests a bi-directional relationship between substance use and homelessness, as substance use can elevate the risk for homelessness, and the stressors associated with homelessness can exacerbate dependence on substances (Fischer & Breakey, 1991; McCarty, Argeriou, Huebner & Lubran, 1991). This group is extremely difficult to treat (Gonzalez & Rosenheck, 2002; Nace & Davis, 1993).

Interestingly, Johnson & Fendrich (2007) found that participants described drug abuse by their parents as often as their own drug use to explain their homelessness. This ties in with dysfunctional family experiences contributing to later difficulties for individuals, discussed previously. It also suggests that substance use may influence the homeless experiences of several generations.

In summary, research has consistently shown a high prevalence of comorbid personality disorders and substance use, particularly for antisocial and borderline types. These comorbid difficulties make individuals highly susceptible to homelessness and may also prevent exits from homelessness, thereby increasing vulnerability to long-term, chronic homelessness.

# Deficient coping skills

Coping has been defined as the cognitive and behavioural efforts employed to manage internal or external demands that are perceived as challenging or above one's personal resources (Lazarus & Folkman, 1984). Thus coping refers to the way that an individual reduces the source of stress and the emotional effects associated. Lazarus & Folkman's transactional model (1984) highlights the importance of cognitive appraisals in coping, which involve assessing the level of threat and controllability in a situation and evaluating the personal and social coping resources available. The level of stress experienced by individuals is influenced by their coping styles, that can be either adaptive and problem focused or emotion-focused, avoidant responses employed to reduce the emotional disturbance caused by the stressor (Folkman & Moskowitz, 2004).

Research within the field has referred to the approach and avoidance dichotomy in coping (Carver & Scheier, 1994). Approach coping involves cognitive and behavioural responses directed towards the source of stress and/or emotional distress. In this type of coping, an individual typically engages in constructive behaviours such as problem solving, modifying their cognitions or seeking social support. In contrast, avoidance coping involves cognitive and behavioural responses that divert away from the stressor and the emotional disturbance, with denial, avoidance of negative emotions and social withdrawal among the responses utilised (Compas, Connor & Osowiecki, 1997).

Empirical studies have demonstrated that the cognitive appraisal postulated by Lazarus & Folkman (1984) moderates the impact of stressors and avoidance coping correlates with higher levels of psychological distress and psychopathology (Beutler, Moos & Lane, 2003; Compas et al. 1997). Although, avoidance coping may have short-term benefits, repeated coping of this nature is maladaptive and counterproductive.

A fundamental characteristic of personality disorders is difficulty coping with stressful situations. This is compounded by inflexible and maladaptive coping strategies (Millon & Davis, 2000). Research has identified strong correlations between personality disorder and avoidant coping strategies (Vollrath, Alnaes & Torgersen, 1994; Watson & Sinha, 1999). Personality disorders have also been linked with higher levels of depression, anxiety, substance use and avoidance coping (Quirk & McCormick, 1998). Sinha & Watson (1997) report that perceived stress and selfesteem account for a large proportion of the variance in almost all personality disorders.

Individuals with personality disorders may be more prone to experience stressful situations due to emotional dysregulation (Newhill, Mulvey & Pilkonis, 2004). Emotional dysregulation is thought to result from biological factors, with a low threshold or high sensitivity to emotional stimuli (Linehan, 1993). There is a tendency to experience emotions extremely intensely and there is a slow return to baseline (Linehan, 1993). Individuals develop poor coping skills to deal with their intense emotions usually catalysed by interpersonal experiences. These poor emotion regulation behaviours may include deliberate self-harm, suicidal behaviour, or aggression and violence towards others (Linehan, 1993; Newhill & Mulvey, 2002), which can focus attention and reduce psychic pain (Russ et al. 1994).

An avoidant coping strategy that individuals with personality disorder may be prone to is the use of substances to escape from or reduce negative affect (Cooper, Russell, Skinner, Frone & Mudar, 1992). Such self-medication may be employed regularly to cope with stressful situations, however it is ultimately counter-productive as problems are not adequately dealt with and substance dependence develops (Courbasson, Endler & Kocovski, 2002), which increases vulnerability to further difficulties such as homelessness, as discussed previously.

# Synthesis of Personality Disorder Factors That May Contribute to Homelessness

Maguire et al's (2006) model, presented in the introduction to this review adequately synthesises the factors that may contribute to homelessness. Howard (2006) also postulates an intriguing model, similar to Maguire et al's, which ties together many of the personality disorder features discussed previously. Howard (2006) propounds that

early experiences (such as trauma and abuse) predispose individuals to progressive and increasing alcohol dependence, which leads to deficits in the neuropsychological processes involved in goal-directed behaviour and emotional regulation. This places individuals with personality disorder at risk for excessive impulsivity, and greater abuse of alcohol. A vicious cycle puts individuals at high risk for chronic and serious antisocial behaviour.

Both Maguire et al (2006) and Howard (2006) emphasise the importance of childhood experiences influencing difficult thought processes. Both models also acknowledge problems in coping with intense, negative emotions. Howard refers to alcohol misuse as a means of coping with emotions and distress, whereas Maguire et al propose alcohol and/or drug misuse. Both models describe a vicious cycle that maintains substance use and frequently results in antisocial behaviour. Maguire et al's model extends further by proposing the consequences of these difficulties, specifically, repeated tenancy breakdown and homelessness. Therefore, Maguire et al's (2006) model provides a more coherent framework for understanding possible pathways to homelessness.

Having discussed pathways to homelessness and the prevalence of personality disorders among homeless individuals, the next section focuses on the assessment and diagnosis of personality disorders, particularly in relation to the homeless population.

# Personality Disorder Assessment & Diagnosis

The word personality originates from the Greek term *persona*. Personality is considered to be a complex pattern of psychological characteristics that are deeply

embedded and not easily altered which are expressed automatically in almost every aspect of functioning (Coolidge & Segal, 1998). Personality is intrinsic and pervasive with traits derived from a composite matrix of biological and environmental factors, fundamentally relating to how an individual perceives, feels, thinks, copes and behaves (Berrios & Lopez-Ibor, 2006).

There remains a lack of consensus among clinicians and commentators about how to define personality disorders and even whether the term personality disorder has any use at all (Berrios & Lopez-Ibor, 2006). Despite extensive research in the field, there is disparity pertaining to how these disorders should be conceptualised (Clark, 2007; Ganellen, 2007). Although personality disorder can be diagnosed with the use of various interview schedules, there is debate concerning how to reliably assess personality disorders (Widiger & Lowe 2007). Furthermore, there is divergence between clinical and research methods for diagnosing personality disorders and the level of agreement between schedules has been generally poor. The accuracy with which clinical or research diagnoses actually identify and capture the experiences of people thought to have personality disorder is also equivocal (Clark, 2007).

An individual's personality consists of numerous traits that form complex, enduring patterns of interacting with, perceiving and relating to others that are prominent across a range of social and interpersonal settings. When these traits become inflexible, maladaptive and induce significant distress and/or functional impairment, a personality disorder is thought to exist (American Psychiatric Association, 1994). Formal definitions of personality disorder have been devised by the World Health Organisation and the American Psychiatric Association. According to The International Classification of Mental and Behavioural Disorders (ICD-10) (World Health Organisation, 1992), a personality disorder is a severe disturbance in the characterological condition and behavioural tendencies of the individual, usually involving several areas of the personality, and nearly always associated with considerable personal and social disruption. The fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (American Psychiatric Association, 1994) defines a personality disorder 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 onset in adolescence or early adulthood, is stable over time and leads to distress or impairment.

The concept of personality disorder has been perpetually evolving, with revisions and additions to the criteria and the different personality disorder types (Derksen, 1995).

# **Diagnosis of Personality Disorder**

The key features of personality disorders appear to be early onset, stability and chronicity (although there may be waxing and waning of individual symptoms), pervasiveness (across a variety of settings including relationships, educational and occupational), intrapsychic and interpersonal focus and impairment (Hirschfeld, 1993).

The diagnostic process involves collating all relevant information about a client in order to arrive at a diagnosis that appropriately characterises that person (Tseng, 2001). Personality disorders are onerous to diagnose accurately. Indeed, agreement between diagnosticians has been poor for personality disorders (Segal, 1997; Segal & Falk, 1998). Substantial changes in the way that personality disorders are conceptualised and in diagnostic criteria, have further complicated diagnosis.

# The current official classification systems: DSM-IV and ICD-10.

There are two internationally established classification systems of mental disorders, specifically, the Diagnostic and Statistical Manual of Mental Disorders – 4<sup>th</sup> Edition-Text Revised (DSM-IV-TR) (American Psychiatric Association, 2000) and the International Classification of Mental and Behavioural Disorders (ICD-10) (World Health Organisation, 1992). The objectives of classification systems are to enhance communication among clinicians, to develop knowledge and understanding of disorders and to provide more effective treatment (Gruenberg, Goldstein & Pincus, 2005).

The diagnostic criteria for personality disorder according to DSM-IV and ICD-10 are presented below in Figure 2 and Figure 3. There are similarities between the two systems in their respective diagnostic criteria. Both DSM-IV and ICD-10 refer to onset of personality disorders during adolescence and both describe the enduring, pervasive nature of psychopathology. The two systems also delineate the significant distress in different domains of functioning.

**A**. An enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual's culture. This pattern is manifested in two (or more) of the following areas:

1. Cognition (i.e., ways of perceiving and interpreting self, other people, and events)

2. Affectively (i.e., the range, intensity, lability, and appropriateness of emotional response)

3. Interpersonal functioning

4. Impulse control

**B**. The enduring pattern is inflexible and pervasive across a broad range of personal and social situations.

**C**. The enduring pattern leads to clinically significant distress or impairment in social, occupation, or other important areas of functioning.

**D**. The pattern is stable and of long duration, and its onset can be traced back at least to adolescence or early adulthood.

**E**. The enduring pattern is not better accounted for as a manifestation or consequence of another mental disorder.

**F**. The enduring pattern is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medial condition (e.g., head trauma).

Figure 2. DSM-IV diagnostic criteria for a personality disorder

#### General criteria

A specific personality disorder is a severe disturbance in the characterological constitution and behavioural tendencies of the individual, usually involving several areas of the personality, and nearly always associated with considerable personal and social disruption. Personality disorder tends to appear in late childhood or adolescence and continues to be manifest into adulthood. It is therefore unlikely that the diagnosis of personality disorder will be appropriate before the age of 16 or 17 years. General diagnostic guidelines applying to all personality disorders are presented below.

#### **Diagnostic guidelines**

Conditions not directly attributable to gross brain damage or disease, or to another psychiatric disorder, meeting the following criteria:

(a) markedly disharmonious attitudes and behaviour, involving usually several areas of functioning, e.g. affectivity, arousal, impulse control, ways of perceiving and thinking, and style of relating to others;

(b) the abnormal behaviour pattern is enduring, of long standing and not limited to episodes of mental illness;

(c) the abnormal behaviour pattern is pervasive and clearly maladaptive to a broad range of personal and social situations;

(d) the above manifestations always appear during childhood or adolescence and continue into adulthood;

(e) the disorder leads to considerable personal distress but this may only become apparent late in its course;

(f) the disorder is usually, but not invariably, associated with significant problems in occupational and social performance.

Figure 3. ICD-10 diagnostic criteria for a personality disorder

For different cultures it may be necessary to develop specific sets of criteria with regard to social norms, rules and obligations. For diagnosing most of the subtypes, clear evidence is usually required of the presence of at least three of the traits or behaviours given in the clinical description.

Both the DSM-IV-TR and the ICD-10 give important consideration to personality disorders. The DSM-IV-TR categorises personality disorders under a separate axis, namely Axis II, with five such axes in total. The DSM-IV-TR groups personality disorders into three clusters based largely on empirical descriptive similarities. Brief descriptions of the personality disorder types are presented in Table 3. Cluster A comprises of paranoid, schizoid and schizotypal personality disorders (often referred to as odd or eccentric individuals), Cluster B includes antisocial, borderline, histrionic and narcissistic personality disorders (the emotional, dramatic or erratic individuals), and Cluster C comprises of avoidant, dependent and obsessive-compulsive personality disorders (anxious, fearful individuals). The DSM-IV-TR has a category of 'personality disorder not otherwise specified', which refers to disorders of personality disorders. An Appendix B details two more personality disorders that require further research, the depressive and the passive-aggressive (negativistic) personality disorders. Two other personality disorders described in Appendix A of the DSM-III-R (American Psychiatric Association, 1987) were eliminated in the DSM-IV, the sadistic and the self-defeating (masochistic) personalities. The cluster grouping of the DSM has been questioned as it has not been satisfactorily validated (Widiger & Lowe, 2007; Widiger, 2003).

The ICD-10 classification has a single section that covers all personality abnormalities. The section separates specific individual personality disorders, mixed and other personality disorders, and enduring personality changes. The specific personality disorders are paranoid, schizoid, dissocial, emotionally unstable (impulsive and borderline types), histrionic, anxious (avoidant), anankastic and dependent categories. Two additional categories include 'other specific personality disorders' and 'personality disorder, unspecified'.

The ICD-10 classification is similar to that of DSM-IV, however there are certain differences. For instance, the borderline personality disorder of the DSM-IV is incorporated as one of the two emotionally unstable disorders in ICD-10, the obsessive-compulsive personality disorder in DSM-IV corresponds to 'anankastic' in ICD-10, and avoidant personality disorder is only partially similar to the ICD-10 anxious personality disorder. Two additional personality disorders included in the three main clusters of the DSM-IV are excluded from ICD-10. Narcissistic personality disorder is not given specific criteria in ICD-10 and it is only referred to in 'other specific personality disorders' and schizotypal personality disorder corresponds more so with the schizophrenia spectrum of disorders in ICD-10. The ICD-10 has other general categories referring to personality disorders such as 'mixed disorders' and 'other disorders of adult personality and behaviour', which the DSM-IV does not.

Personality Disorder Type	Characteristics
Cluster A	
Paranoid	A persistent pattern of distrust and unwarranted suspiciousness of others such that their motives are unrealistically interpreted as threatening, malevolent or exploitative.
Schizoid	A pervasive pattern of detachment from social relationships and restricted expression of emotions in interpersonal settings, with little if any interest in relationships and pleasure derived from few, if any, activities
Schizotypal	A pervasive pattern of social and interpersonal deficits marked by acute discomfort with, and reduced capacity for, close relationships as well as by cognitive or perceptual distortions and eccentricities of behaviour.
Cluster B	
Antisocial	A pervasive pattern of disregard for and violation of the rights of others, and a history of severely irresponsible, unlawful, threatening and deceitful behaviours with a lack of remorse.
Borderline	A pervasive pattern of instability and impulsiveness, including unstable and intense interpersonal relationships, unstable self-image, unstable affect due to marked reactivity of mood, inappropriate and extreme anger and marked impulsivity in a variety of contexts. Also, recurrent suicidal behaviour, gestures or threats and deliberate self-harm
Histrionic	A pervasive pattern of excessive emotionality, self dramatisation and an intense need to be the centre of attention, typically achieved through physical appearance, exaggerated expression of emotion or inappropriate or provocative behaviour.
Narcissistic	A persistent pattern of grandiosity (in fantasy or behaviour) and self-importance, need for excessive admiration and unreasonable sense of entitlement. The narcissistic individual is exploitative of others and lacking in empathy, envious of others and believes others are envious of him/her.
Cluster C	
Avoidant	A pervasive pattern of emotional, cognitive and behavioural avoidance, with social inhibition, feelings of inadequacy, and hypersensitivity to negative evaluation.
Dependent	A pervasive and excessive need for nurturance, support and to be taken care of that leads to submissive and clinging behaviour and fears of separation and abandonment.
Obsessive- Compulsive	A pervasive pattern of preoccupation with orderliness, perfectionism, and mental and interpersonal control with excessive obsessional and compulsive behaviour at the expense of flexibility, openness, and efficiency.
Additional	
Depressive	A persistent pattern of intense pessimism and negativity with feelings of guilt, worthlessness and abandonment.
Passive- Aggressive	A pervasive pattern of negativistic attitudes and passive resistance to demands and expectations of others in social and occupational contexts, complaining about personal misfortune and being misunderstood and unappreciated, expressing envy and resentment towards those viewed as more fortunate and alternating between attitudes of defiance and contrition towards others.

Table 1. Descriptions of the DSM-IV Personality Disorders

## Taxonomies of personality disorders.

The question of how personality disorders should be grouped, differentiated, assessed and diagnosed has traditionally been answered according to one's belief as to whether the individual should be embedded in the diagnostic system or vice-versa. This has lead to considerable deliberation between categories and dimensions, and more recently prototypes. The debate pertaining to categorical or dimensional methods of assessment and diagnosis of personality disorders has existed for a number of years, however, there has been renewed interest within the field (Clark, 2007; Huprich & Bornstein, 2007; Trull & Durrett, 2005).

# Evaluation of Categorical Methods

There has been extensive debate over whether the categorical method of assessing and diagnosing personality disorders is clinically useful and effective in identifying the true nature of these types of psychopathology (Livesley, 2003; Widiger & Samuel, 2005).

The present day conceptualisation of personality disorders can be traced back to the DSM-III (American Psychiatric Association, 1980). The current diagnostic manuals of both the DSM-IV-TR and the ICD-10 continue with a categorical approach. Personality disorders are diagnosed as either present or absent, based on the categorical premise that personality disorders are "qualitatively distinct clinical syndromes" (American Psychiatric Association, 2000, p.689). The DSM-IV-TR defines personality disorders within a categorical, hierarchical classification system. The 10 main personality disorder types are defined by seven to nine items, of which a subset must be met for a diagnosis, with five symptoms usually required to be present. An advantage of the categorical approach is its ease of use by clinicians, often required to make quick diagnoses with large numbers of patients whom they see only briefly. The categorical method has practical benefits for clinicians as it guides treatment decisions (Trull & Durrett, 2005). Those diagnosed with personality disorder need treatment, and those not receiving such a diagnosis do not. By having a single categorical diagnosis, clinical focus and appropriate treatment options are simplified (Gunderson, 1992). Categorical systems can also be beneficial for communication and conceptualisation as a certain amount of information is provided using a single diagnosis, for instance information concerning features, associated conditions and treatment choices.

The current categorical approach to the diagnosis of personality disorders can be unfavourable to the homeless population. Diagnosis needs to be made by a psychiatrist, but with limited outreach services in the UK, access to mental health services for homeless individuals is usually only achieved through community mental health teams (Griffiths, 2002). However homeless individuals are among the least likely to use services (Pollio et al. 1997). The situation is compounded by criteria, such as current substance dependence, that makes homeless individuals ineligible for treatment. Personality disorders and other psychological disorders may remain undetected and untreated. Thus, under the current system, the homeless population may be particularly disadvantaged.

DSM-IV has been attacked for an almost total emphasis on what can be observed and described, with little attention to underlying and more invisible structures, dynamics, and meanings. One consequence is that this approach cannot adequately conceptualise individuals who present marked contradictions between external and internal spheres of functioning (Lerner & Lerner, 2007). Categorical systems are nominal, only allowing binary judgements (Schacht, 1993). Given the complexity of psychopathology in homeless individuals, the categorical system's emphasis on observable characteristics and a yes/no diagnosis of personality disorders may lead to limited phenomenological knowledge and understanding. A major issue with categorical systems is that they produce great heterogeneity. Two homeless individuals who fulfil the criteria for the same personality disorder may share as few as one or two items or as many as the total set of items. For example, there are 126 different ways to meet the diagnostic criteria for borderline personality disorder (Trull & Durrett, 2005). Therefore, categorical systems may not capture the full essence and complexity of psychopathology in homeless individuals.

A fundamental argument against the retention of a categorical system is unreliability (Silverstein, 2007). There is much overlap between the different personality disorder types suggesting that they may not be disparate (Clark, 1999, Livesley, 1998). It has often proved difficult to differentiate between the different personality disorders and many individuals diagnosed with one personality disorder type have several others that do not always appear to be markedly different (Ekselius, Tillfors, Furmark & Fredrickson, 2001).

Critics of categorical systems argue that such systems would be appropriate if there was a clear distinction between the presence and absence of a personality disorder (Grove & Andreasen, 1989). However, there is no empirical support for any clear differentiation between the presence or absence of a personality disorder (Widiger, 2003). The organisation of the clusters was initiated to make the personality disorder types easier to remember by grouping those with similar features, however it does not have a theoretical foundation or an evidence base (Trull & Durrett, 2005). The basis of the distinctions made by the DSM has been questioned, and it has been contended that the threshold for personality disorder diagnoses have been based on expert consensus of the personality disorder advisory committee (Perry, 1990). Widiger, Trull, Clarkin, Sanderson & Costa (2002) conclude that current diagnostic systems are arbitrary and unreliable with little utility for treatment planning. Similarly Tyrer et al (2007) assert that current assessment of personality disorders is inaccurate, unreliable, often incorrect, and in need of improvement.

The categorical method has limitations but it also has strengths in terms of its utility for clinicians. The categorical approach is also amenable to empirical research as it allows estimates of the prevalence of psychological disorders according to DSM-IV and/or ICD-10 criteria and it allows comparisons between different groups in terms of the prevalence of psychological disorders. There has been a burgeoning interest in alternative approaches. Recent research within the field provides support for dimensional methods, and the DSM-IV-TR does acknowledge these as an alternative to traditional categorical approaches. A committee involving the American Psychiatric Association and the National Institute of Mental Health examined dimensional models from several perspectives and concluded that there is a clear need for dimensional models to be developed (Widiger & Simonsen, 2005).

## Evaluation of Dimensional Methods

Many commentators have argued that a categorical system where disorders are judged to be present or absent, may not be efficient or effective for diagnosing personality disorders (Grove & Tellegen, 1991; Westen & Arkowitz-Westen, 1998; Widiger, Clark & Howard, 1999), and that a dimensional approach may be superior (Westen, Heim, Morrison, Patterson & Campbell, 2002), for instance conceptualising personality pathology on a continuum from mild through moderate to severe. There are a number of dimensional approaches to understanding and classifying personality disorders (Livesley, Jang & Vernon, 1998). One method is to quantify each personality disorder construct, with a score expressing the extent to which the symptoms are met for each disorder (Widiger, 1993). Another method is to rate the degree to which an individual matches a prototypic case of a specific personality disorder (Shedler & Westen, 1998; 2004).

Millon (1996, 2005; Millon & Grossman, 2006) has devised an evolutionary model of personality and psychopathology, that proposes a prototypic personality taxonomy. Millon's (1996, 2005) model is based on the premise that normal personality has evolved over many years to help people survive and adapt, whereas abnormal personality develops from adverse events and experiences. Millon (1996) advocates the use of diagnostic targets within the DSM that represent complex personality prototypes. He argues that the building blocks of the prototypes are continuously distributed domain traits. The same personality prototypes can be utilised to delineate normality and abnormality, as normal and abnormal traits lie along a continuum with no distinct dichotomy. Individuals have traits that are characteristic of different prototypes to varying degrees. Through the measurement of these, an overall personality profile can be obtained for each individual that reveals which traits are more dominant or prevalent. The third edition of the Millon Clinical Multiaxial Inventory (MCMI-III; Millon, 1997, 2006) operationalises this model. The MCMI-III is a 175- item self-report questionnaire that assesses 14 personality disorders and ten clinical syndromes. To assist in diagnosing individuals, the personality disorder items are based on DSM-IV diagnostic criteria. Since the first version of the MCMI was published in 1977, it has become established as one of the most widely used assessment measures for personality disorders and clinical syndromes, with over 500

empirical studies based on the questionnaire (Craig, 2005). All three versions of the MCMI have been shown to be useful in making DSM diagnoses of personality disorders (Choca, 2004; Millon, 1997, 2006) and the MCMI-III has demonstrated good reliability (Craig, 1999; Millon, 2006) and validity (Choca, 2004; Retzlaff & Dunn, 2003, Rossi, Van den Brande, An, Sloore & Hauben, 2003).

An alternative to the prototypic method is to redefine current personality constructs through personality trait models that were devised independent of classification systems such as DSM-IV. The personality trait model that has stimulated the most interest within the field is the Five Factor Model (FFM). The FFM of personality is a widely established model to conceptualise major personality traits (Mullins-Sweatt & Widiger, 2006). The five broad factors are neuroticism versus emotional stability, extraversion versus introversion, openness versus closedness to experience, agreeableness versus antagonism and conscientiousness versus negligence. Over the last decade, several studies have examined the relationship between the FFM and personality disorders (Widiger & Costa, 2002). Studies have demonstrated that normal and abnormal personality are overlapping (O'Connor, 2002). The DSM personality disorders can be conceptually related to the FFM by clinical researchers (Widiger et al. 2002) and clinicians (Samuel & Widiger, 2004; 2006; Sprock, 2002, 2003) and empirically related (O'Connor, 2005; Saulsman & Page, 2004).

Dimensional methods combine several personality traits into a single profile, which can be assessed and interpreted by clinicians. As the dimensional approach is so detailed, little information is lost. A trait profile allows clinicians to assess unusual or atypical cases whereas in categorical approaches, odd, infrequent, or mixed conditions are often excluded as they do not fit into the set categories (Widiger & Lowe, 2007). Clinical personalities are often of very diverse and idiosyncratic character, and dimensional methods acknowledge individuality, as opposed to fitting clients into categories that may not accurately represent them (Trull & Durrett, 2005). Dimensional (ordinal or higher scale) systems allow more individualised, differentiated and precise description (Schacht, 1993, Shedler & Westen, 2007). Thus they may be more suitable for understanding the complexity of personality psychopathology in the homeless population. Dimensional methods are likely to yield more comprehensive and richer information about homeless individuals, including for instance, the strength of different traits and coping strategies employed by individuals. This is conducive to greater precision in treatment planning and management of personality disorders and associated difficulties, in the homeless population.

Although there is growing interest in the adoption of dimensional models as an alternative approach to the categorical system, the former has been questioned due to limitations for clinical utility, as they may not have the ease of use for clinicians that categorical methods have (Kernberg, 1996). Dimensional models propose that personality disorders traits exist on a continuum, and it can be difficult to specify a point at which these traits warrant diagnosis and treatment (Widiger & Clark, 2000). The theoretical depth of dimensional methods has been questioned and it remains unclear as to which particular dimensional system is the most effective (McAdams, 1996). The latter point intimates that further research on dimensional methods is necessary, although there appear to be a number of potential advantages to adopting such methods for personality disorders, particularly in relation to the homeless population.

## Summary of Personality Disorder Diagnosis

It has been highlighted that there is a need for a classification system for personality disorders, which has greater clarity and utility (Clark, 2007; Huprich & Bornstein, 2007). Specifically, to improve the usefulness of the classification of the personality disorders so that it is helpful in decision-making at all levels. There are issues of contention with the current classification systems suggesting likely changes in the classification of personality disorders in the forthcoming DSM-V and ICD-11, that are planned to be published in 2011 (Clark, 2007; Huprich & Bornstein, 2007; Widiger & Lowe, 2007). The burgeoning evidence advocating dimensional approaches to understanding personality disorders suggests that serious consideration is being given to a shift from the current categorical system to a dimensional one (Clark, 2007; Shedler & Westen, 2007; Silverstein, 2007; Strack & Millon, 2007). A dimensional approach is likely to enhance the knowledge and understanding of personality psychopathology in homeless individuals. As the homeless population are particularly complex and heterogeneous, a dimensional approach may be superior to the categorical system, in terms of the richness, precision and individualised nature of information gained concerning psychopathology. The FFM of personality carries considerable support in terms of proponents and empirical evidence, therefore if a dimensional system is adopted for Axis II in DSM-V, there is a strong likelihood that it will be based around the FFM (Clark, 2007; Saulsman & Page, 2004, Widiger & Costa, 2002; Widiger et al. 2002)

There has been interesting and productive debate within the field, with empirical data advocating dimensional methods. However, further research is necessary to ascertain the number and types of dimensions for explaining personality disorders. Personality disorder diagnosis must not only focus on the assessment of traits as such an approach will be incomplete, personality functioning must also be examined, and this is an area that may require further attention.

# Treatment of Personality Disorders

Psychological therapy has been identified as the treatment of choice for personality disorders, based on two meta-analyses (Leichsenring & Leibing, 2003; Perry, Bannon & Ianni, 1999), a Cochrane review (Binks et al. 2006), clinical guidelines in USA (American Psychiatric Association, 2001) and the UK (National Institute for Mental Health in England, 2003), and a number of reviews (Gabbard, 2000; Ogrodniczuk & Piper, 2001; Perry & Bond, 2000).

Contemporary theoretical models and treatment modalities include Linehan's Dialectical Behaviour Therapy (DBT, Linehan, 1993) and Young's Schema-Focused Therapy (Young, 1999; Young et al. 2003). DBT has been successful in treating borderline personality disorder (Linehan, 1993) and it is recommended by the National Institute of Clinical Excellence (NICE) for borderline personality disorder. There remains a lack of rigorous empirical evidence to indicate a treatment of choice for personality disorders, and the effective components of different treatments remain unclear (Bateman & Fonagy, 2004). The lack of clarity is due to methodological issues in defining and measuring personality disorders and uncontrolled studies employing highly selective samples (Tyrer, 2005). Nevertheless, Bateman & Fonagy (2000) concluded in a systematic review that there is evidence to suggest CBT and psychodynamic psychotherapy are effective for treating personality disorders. However findings did not indicate superiority of one therapy over others. The authors highlighted problems pertaining to case identification, comorbidity, randomisation, specificity of treatment and outcome measurement. More recent reviews corroborate

the effectiveness of CBT and psychodynamic psychotherapy for personality disorders (Bartak, Soeteman, Verheul & Busschbach, 2007; Verheul & Herbrink, 2007).

For homeless individuals, psychotherapy can be arduous due to interpersonal difficulties and sensitivity associated with childhood neglect and abuse. Homeless individuals often lead chaotic lives and they typically have a high dropout rate from treatment (Pollio et al. 1997; Salize et al, 2001). Therefore, provision of therapy in mainstream outpatient services is unlikely to be effective. Two alternative approaches are therapeutic communities and treatment within special accommodation for homeless individuals.

Therapeutic communities in the UK date back to the 1960's, they are small, cohesive communities where clients are involved in decision-making. Therapeutic communities are structured to encourage personal responsibility, and the peer group is regarded as important to the development of a strong therapeutic alliance (Campling, 2001). Some therapeutic communities only have group therapy while others include individual therapy. The daily experience of living and working together is considered to be as important as formal therapy. The term 'attachment failure' has been used to describe people with personality disorders, where early experience of abusive, adverse attachments lead individuals to lack basic trust causing difficulties in expressing distress and seeking appropriate help (Campling, 2001). Therapeutic communities may be particularly useful in terms of building trust and engaging clients. A systematic review of therapeutic community effectiveness for people with personality disorders and offenders with mental illness identified a positive effect (Lees et al. 1999). De Leon, Sacks, Staines & Kendrick (2000) report better outcomes (including symptom improvement and employment) among homeless individuals with mental illness and drug misuse following treatment in a therapeutic community compared to treatment as

usual. Similarly, another study found that a therapeutic community was successful in improving the psychological health and functioning of dually diagnosed homeless men (Mierlak et al., 1998). There has been renewed interest in therapeutic community treatment, including effectiveness research and the funding of two new therapeutic communities in Birmingham and Manchester, based on the Henderson model (Davies & Campling, 2003). Research suggests positive outcomes for homeless individuals and individuals with personality disorders, however the cost-effectiveness of therapeutic communities and the appropriate referral of individuals who could benefit from this form of treatment, remain important challenges.

Maguire et al (2006) argue that treatment should be delivered within the accommodation (such as hostels and supported housing) rather than in outpatient services, to maximise take up and engagement. Both CBT and DBT projects have been successful in reducing symptoms among homeless individuals in Hampshire and in enabling severely mentally ill individuals to find and keep accommodation (Maguire, et al., 2006). The traumatic and chaotic life histories typical in the homeless population, suggest that prevention programs to develop resilience in personality and to enhance adaptive capacities may be particularly useful.

The government has introduced initiatives such as 'Supporting People' (ODPM, 2003) and strategy documents such as 'Sustainable Communities: Settled Homes, Changing Lives' (ODPM, 2005), to reduce and prevent homelessness by providing housing support and funding for mediation schemes and rent deposit schemes. Although these strategies recognised the contribution of mental illness to tenancy breakdown, the Supporting People programme excludes financial support for therapeutic services, such as psychotherapeutic treatment. Although funding has been allocated to outreach services in the past, such as the Department of Health's (1996)

'Homeless Mentally III Initiative', this has predominantly been in Central London. There is much variability in services, and homeless individuals are often unable to access local mental health care due to limited access and referral to primary care and also due to a shortage of therapists. Those individuals who do access secondary and tertiary care are often considered to be ineligible for psychological therapies due to substance use. Consequently, homeless shelters and hostels tend to provide most of the mental health care, however, staff are not always appropriately trained (Bradford et al. 2005).

This review has identified that homeless individuals are clearly a vulnerable group often presenting with complex comorbid and multiple mental health difficulties. Yet it seems paradoxical that they face a number of barriers to accessing appropriate mental health care. There continues to be an absence of specific and adequate mental health policies for the homeless population. Additional funding for psychotherapeutic input is necessary and primary care may be a particularly useful area for investment (Maguire et al., 2006). Training for staff in homeless services, such as in the CBT approach as opposed to the delivery of therapy, would be conducive to consistent and improved care. Greater integration and collaboration between agencies including hostels, day centres, social services, health services and criminal justice services would further improve responsiveness to the needs of the homeless population.

#### Conclusions

Mental illness is consistently found to be prevalent in the homeless population. There is a dearth of empirical research on personality disorders in the homeless population and further investigation is recommended. Studies suggest that personality disorders represent a significant proportion of the mental health difficulties experienced by homeless individuals, with prevalence rates ranging from 6% to 50% (Fischer & Breakey, 1991; Pollio et al., 1997; Scott, 1993). The present categorical approach to diagnosing personality disorders has a number of limitations and it may impede detection in homeless individuals. Even where diagnosis is made by a psychiatrist, the assessment information may be phenomenologically and qualitatively limited. Changes in the classification of personality disorders are likely in the forthcoming DSM-V and ICD-11, planned to be published in 2011 (Clark, 2007; Huprich & Bornstein, 2007; Widiger & Lowe, 2007). There is encouraging empirical support for dimensional methods and these may provide a richer, subtler and more precise understanding of the complex personality psychopathology in homeless individuals. The Five Factor Model may possibly form the basis of any dimensional approach, given the empirical evidence. Further research is necessary to establish the number and types of dimensions for explaining personality disorders. In addition, personality disorder diagnosis must not only focus on the assessment of traits as such an approach will be incomplete, but also examine personality functioning.

Maguire et al's (2006) model provides a cogent framework for a possible pathway to homelessness. Negative experiences during childhood make individuals vulnerable to personality psychopathology and further victimisation, abuse and adversity in adulthood. The persistent and pervasive difficulties in social, emotional, cognitive and motivational functioning along with problems with identity and impulse control combined with affective and behavioural dysregulation and maladaptive coping skills, common in personality disorders, can increase the risk for tenancy breakdown. Unless the underlying causes of homelessness such as substance misuse, antisocial behaviour and mental illness like personality disorders are not targeted, individuals will continue to be at risk for repeated tenancy breakdown and long-term, chronic homelessness. Greater funding to provide psychological therapies within accommodation and to provide suitable training for staff members (for instance, in CBT) is necessary to increase uptake and completion of treatment in a vulnerable population with severe and complex needs. There may also be potential value in prevention programs designed to enhance personality resilience and adaptive capacities.

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EMPIRICAL PAPER

# PERSONALITY DISORDERS IN THE HOMELESS POPULATION: AN EXPLORATORY COMPARISON OF HOSTEL AND STREET DWELLERS.

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#### ABSTRACT

There is a paucity of research on personality disorders in the homeless population and there is inconsistency about prevalence rates. Studies have suggested that street homeless individuals may have more severe psychological problems than homeless individuals who use hostels. This study conducted an exploratory comparison between hostel dwellers and street homeless individuals, to identify the prevalence of personality disorders in the two groups and to investigate whether the street homeless group have more severe difficulties, including alcohol and drug dependence, greater levels of impulsivity, higher number of tenancy breakdowns and higher levels of antisocial behaviour. A final sample of 30 hostel and 20 street homeless individuals were recruited from homeless services in Hampshire. The Millon Clinical Multiaxial Inventory (MCMI-III) did not identify any significant difference between the hostel (53%) and street (60%) homeless sample in the prevalence of personality disorder. However, the street group were significantly more likely to meet diagnostic criteria for more than one personality disorder, suggesting more varied and possibly more complex personality psychopathology. There was no significant difference between the two groups in alcohol and drug dependence and antisocial behaviour. The street group had significantly higher levels of impulsivity, a longer mean duration of homelessness than the hostel group and a lower number of tenancies. These results suggest that the street homeless group may be an entrenched group who do not or cannot gain tenancies. Further research into long-term street homeless individuals would be useful as they may require different interventions to other homeless sub-groups, to address their needs.

Keywords: Homeless; Personality Disorder; Alcohol dependence, Drug dependence, Impulsivity, Tenancy Breakdown

# **1. INTRODUCTION**

Homelessness has been defined as the problem faced by people who lack a place to live that is supportive, affordable, decent and secure (Office of the Deputy Prime Minister, ODPM, 2005). There is widespread acceptance that homelessness is much more than not having a roof over one's head. A home is not merely a physical space, it provides roots, identity, security, a sense of belonging and a place of emotional well-being (Warnes, Crane, Whitehead, & Fu, 2003). Homelessness continues to be a social and economic problem, that has a significant impact on society, the individuals concerned and on public health (Caton et al., 2005; Maguire, Keats & Sambrook, 2006).

Homelessness refers to individuals who lack a permanent or regular place to live, therefore including those who stay temporarily with family, friends or acquaintances, those who use homeless shelters, emergency refuges, squats, homeless hostels and 'rough sleepers' (individuals who essentially reside on the streets) (ODPM, 2005). The routes to becoming homeless are complex and diverse, and they are likely to differ within specific subgroups of the homeless population (Martens, 2002). Some individuals may only experience a single, episode of homelessness, whereas others may suffer recurring or lengthy periods of homelessness (Breakey, 1997).

The homeless population in England predominantly comprises of males aged above 25 years, who frequently present with severe psychiatric distress, poor physical health, a lack of social support, stigmatisation, financial problems, high rates of assaults and victimisation and shorter life expectancy (Griffiths, 2002; ODPM, 2005). However, there are increasing amounts of females and younger

people becoming homeless, suggesting that the population is increasing in heterogeneity, and that is has diverse, complex needs (Stein & Gelberg, 1995).

Roth & Bean (1986) described four categories or levels or homelessness: (a) street people or those sleeping rough, (b) residents of hostels and shelters for the homeless (c) residents of hotels or bed and breakfast accommodation, commonly families placed in temporary accommodation and (d) other temporary living arrangements such as staying with family or friends. This paper will focus on individuals from Roth & Bean's first two levels of homelessness.

An important factor that contributes to individuals becoming homeless is mental health difficulties (Gonzalez & Rosenheck, 2002). Personality disorders account for a sizeable percentage of mental health difficulties in homeless individuals (Scott, 1993). However, there remains considerable debate regarding the prevalence of personality disorders in this population. Prevalence estimates have generally ranged from 6% to 42% (Fischer & Breakey, 1991; Pollio, North, Thompson, Paquin & Spitznagel, 1997; Salize et al. 2001; Scott, 1993), although, a recent unpublished doctoral thesis by Matthews (2006) reported 59% prevalence among UK homeless hostel dwellers. A higher personality disorder prevalence of 78% has been identified in homeless outpatient mental health clinic attenders in USA (North, Thompson, Pollio, Ricci & Smith, 1997). The variation in prevalence estimates can be generally explained by differences in the conceptualisation and classification of personality disorders, diverse assessment instruments and diverse sample groups (for example some studies have had all male or all female samples, and samples have differed greatly in terms of age).

Antisocial personality disorder has received the most attention in homelessness research, with estimated rates of 10%-40% (Caton et al, 1994; Caton

et al., 2000; North, Smith & Spitznagel, 1993; North et al., 1997). Few studies have systematically diagnosed Axis II disorders, but unstructured clinical assessments suggest rates between 20-70% (Bassuk, Rubin & Lauriat, 1986; Breakey et al. 1989; Haugland, Siegel, Hopper & Alexander, 1997) with schizoid, borderline, dependent and antisocial features often identified (Armstrong, 2002; Tolomiczenko, Sota & Goering, 2000).

Individuals with personality disorders are particularly at risk for comorbidity, adding to the severity and complexity of psychopathology (Barber et al. 1996; Bowden-Jones et al. 2004; Brady, Dustan, Grice, Dansky & Kilpatrick, 1995; Gonzalez & Rosenheck, 2002). Reviews of studies in this area estimate prevalence of any personality disorder coexisting with substance use as ranging from 34% up to 100% (Seivewright & Daly, 1997; Verheul, 2001). For antisocial personality disorder alone, estimates are between 7% to 55%. The findings of rigorous studies were used by Verheul (2001) to calculate median estimates, with a median prevalence of 56.5% for any personality disorder comorbid with substance use. The most common personality disorder type was antisocial personality disorder (median estimate 22.9%) followed by borderline personality disorder (17.7%).

There is a strong association between substance use and homelessness. Significantly higher rates of co-morbid substance abuse and mental illness have been identified in homeless people compared to the general population (Fisher & Breakey, 199; Johnson & Fendrich, 2007; North, Eyrich, Pollio & Spitznagel, 2004). Higher rates have been reported in USA, for instance a study conducted at a homeless drop-in centre identified alcohol dependence in 85% and drug dependence in 73% of predominantly male homeless individuals (Ball, Cobb-Richardson, Connolly, Bujosa & O'Neall, 2007).

The scientific rigour of research in this area has been variable with methodological differences in the assessment of personality disorder and substance use, complicating comparison between studies and separation of substance use symptoms from personality pathology. Furthermore, studies have included selective samples and only included either drug or alcohol populations. Nevertheless, the research is consistent in identifying a high prevalence of comorbid personality disorders and substance use.

Homeless individuals with personality disorder and substance use represent a particularly vulnerable group that is immensely difficult and expensive to treat (Nace & Davis, 2003). Difficulties in behaviour and emotion regulation predispose individuals to abuse substances. They are also a consequence of substance abuse (Nace, 1990). Individuals with personality disorders are likely to use substances as a form of self-medication, in order to improve their affect and to assuage negative emotions (Khantzian, 1985; Klee & Reid, 1998). These effects appear to be attractive which reinforces regular use. However, tolerance and withdrawal symptoms can develop rapidly, thereby perpetuating the need to obtain substances (Warner et al., 1994).

The relationship between substance use and personality disorders appears to be complex. It has been propounded that specific personality traits such as impulsivity and affect intolerance, which are characteristic of personality disorders like antisocial and borderline types, predispose and increase susceptibility to repeated substance use (Brady, Dustan, Grice, Danksy, & Kilpatrick, 1995; Gossop, 1994). Recent studies have corroborated the link between these personality traits, particularly impulsivity, and substance use disorders (Bornovalova, Lejuez, Daughters, Rosenthal, & Lynch, 2005; Sher, Grekin, & Williams, 2005). Impulsivity may thus be an important trait that requires further investigation.

The impulsivity associated with personality disorder may be a contributory factor to homelessness. Impulsivity is recognised as a prominent psychological construct in the understanding and diagnosis of personality disorders and many other forms of mental illness (Whiteside & Lynam, 2001). Individuals with personality disorder commonly fail to resist impulsive acts or behaviours that may be harmful to themselves or to others (Jentsch & Taylor, 1999). Whiteside & Lynam (2001) postulate four distinct psychological processes that lead to impulsive behaviours: urgency, lack of premeditation, lack of perseverance and sensation seeking. Urgency and lack of premeditation may contribute to individuals making irrational decisions. Lack of perseverance and self-discipline may impact on the ability to carry out routine, daily tasks that are necessary to function in society, and may lead to problems in maintaining relationships, employment and tenancies. Sensation seeking may involve behaviours such as overspending, risky sexual behaviours and substance abuse (Kruedelbach, McCormick, Schulz & Gruenich, 1993). Impulsivity may thus be an important trait contributing to homelessness. Erratic, emotional and unpredictable behaviour is most typical of the Cluster B personality disorders (antisocial, borderline, histrionic and narcissistic types) (DSM-IV-TR, American Psychiatric Association, 2000).

Personality disorders have been linked with negative, traumatic experiences in childhood, such as physical and sexual abuse (Millon & Davis, 2000). Homelessness has also been associated with adverse early experiences (Bassuk & Rosenberg, 1988). Maguire et al (2006) propose a model which suggests that these early abusive experiences can cause difficult thought processes such as negative

rumination, leading to the experience of intense emotions. Substance use is employed to cope with these emotions, as emotion regulation skills have not been learned or developed by individuals during childhood. The substance use in combination with aggressive behaviours learned in childhood and adolescence, increases the likelihood of antisocial behaviours and repeated tenancy breakdown.

It has been postulated that coercive families provide 'basic training' for antisocial behaviours due to the failure of parents to instil appropriate discipline in the home environment or to control aggressive interactions between family members (Patterson, Dishion & Bank, 1984). Children learn coercive and abusive interaction styles and these are generalised to other situations. However, this often leads to difficulties and rejection from peer groups. As personality disorders are characterised by inflexibility in attitudes, thoughts and behaviours, the dysfunctional interaction styles perpetuate, leading to subsequent deviant and antisocial behaviours in adulthood (Whitbeck, Hoyt & Yoder, 1999). Whitbeck et al (1999) argue that the basic training provided by the family is overtaken by 'advanced training' in antisocial behaviours on the streets. This suggests that street homeless individuals may be at greater risk for being victims and perpetrators of antisocial behaviour, than for instance, homeless individuals residing in hostels.

Johnson et al (2005) postulate that individuals with personality disorders are more prone to engage in antisocial behaviour such as physical violence. It has been posited that antisocial behaviour is embedded in the immediate social environment (context) and situational interpersonal relations (Hawkins, Catalano & Miller, 1992). This premise suggests that homeless individuals, particularly those living on the streets, have greater exposure to contextual risk factors, such as aggression, violence, crime, alcohol and drugs (Fischer & Breakey, 1991). Police contact and being jailed is a frequent occurrence among homeless people, due to criminal behaviour, assaults, vagrancy, intoxication or public exposure (Breakey et al. 1989). Street homeless individuals may be more prone to initiating antisocial behaviour due to chronic history of alcohol and/or substance abuse and impulsivity such that it almost becomes the norm, or a way of dealing with the frustrations and stresses of homelessness (Bassuk & Rosenberg, 1988; Breakey et al. 1989). Thus, in terms of Maguire et al's (2006) model, street homeless individuals may be at greater risk for substance misuse, antisocial behaviours and repeated tenancy breakdown.

Howard (2006) propounds a similar model to Maguire et al (2006) and places particular emphasis on impulsivity. Howard (2006) asserts that early experiences (such as trauma and abuse) predispose individuals to progressive and increasing alcohol dependence, which leads to deficits in the neuropsychological processes involved in goal-directed behaviour and emotional regulation. This places personality-disordered individuals at risk for excessive impulsivity, and greater abuse of alcohol. This vicious cycle puts individuals at high risk for chronic and serious antisocial behaviour.

Both models argue that where adaptive skills have not been learnt, more destructive behaviours such as aggression are used, which have been successful to some degree in the past. This is likely to have an adverse effect on relationships. The unstable, unpredictable and maladaptive nature of the relationships held by people with personality disorders are likely to lead to arguments and ruptures in relationships (such as separation from partners/spouse, being asked to leave the parental/family home, eviction from shared accommodation, dismissal from employment), which increases risks for tenancy breakdown and homelessness (Slade, Scott, Truman & Leese, 1999).

It is clear that mental illness is a serious problem in the homeless population. Personality disorders may be prevalent and may contribute to individuals becoming homeless and remaining homeless (Scott, 1993). However, the literature has been limited by a tendency to regard the homeless population as homogeneous. There is a dearth of research comparing the extent of mental illness in street and hostel homeless individuals. The few studies in this area, have reported conflicting findings. Mulkein, Bradley, Spence, Allein & Oldham (1985) found no differences in prior psychiatric hospitalisation between street and hostel samples. Roth, Bean, Stefl & Howe (1985) reported no significant differences between street and hostel homeless individuals on overall psychological distress. However, Rosnow, Shaw & Concord (1986) identified a higher prevalence of psychiatric symptoms among a street homeless sample compared to a hostel sample. Similarly, Hannappel, Calsyn and Morse (1989) propound that from their own clinical experience, street homeless individuals are more likely to experience severe mental health difficulties than those individuals using shelters or hostels.

More recently, Farrell, Aubry & Reissing (2002) conducted a study of street homeless individuals to identify their characteristics and service needs. The authors identified that street homeless people (particularly those who had been long-term street homeless) had a higher level of need than individuals living in hostels. The street homeless group reported a longer duration of homelessness than hostel samples, supporting previous studies. The street homeless sample also had higher rates of substance abuse and smaller social networks. These results supported findings of more severe illness and greater levels of substance abuse in street homeless individuals compared to hostel and shelter using individuals (Farrell et al., 2004). Farrell et al (2002) postulate that street homeless individuals may require different interventions to hostel homeless individuals to address their needs.

Despite having complex and severe needs, homeless individuals with personality disorders often remain untreated and their difficulties undiagnosed (Scott, 1993). They are among the least likely to access services and among the most likely to dropout from treatment (Pollio et al., 1997; Salize et al. 2001). Therefore, there is a requirement to improve the knowledge and understanding of psychopathology within a vulnerable population who are susceptible to chronic difficulties such as personality disorders and substance use which elevate the risk for repeated tenancy breakdown and antisocial behaviour (Bradford, Gaynes, Kaufman & Weinberger, 2005; Craig & Hodson, 2000; Fichter & Quadflieg, 2003).

Ravenhill (2000) refers to a 4-week rule. This is the length of time for newly homeless individuals to become acclimatised to life on the street. After that they become entrenched and it becomes more difficult for them to move back into mainstream society. Thus, there is an evident need to develop our knowledge and understanding of the psychopathology of the street homeless population.

There is a paucity of research on personality disorders in the homeless population and there is inconsistency about prevalence rates. Researchers within the field have asserted that more studies are required to ascertain the prevalence of personality disorders in the homeless population, and to enhance understanding of associated psychopathology (North, Eyrich, Pollio & Spitznagel, 2004). Previous studies have focused on either hostel or street dwellers, or combined them as one group & subsequently attempted to extrapolate findings to the homeless population as a whole. But is it really a homogeneous population or are there differences between those individuals who manage to maintain some form of tenancy in hostels and those individuals who reside on the streets? This study will attempt to conduct an exploratory comparison between hostel dwellers and street homeless individuals, to identify the prevalence of personality disorders in the two groups and to investigate whether the street homeless group have more severe difficulties.

This study posits that there will be a greater prevalence of personality disorders in street homeless individuals compared to homeless hostel dwellers. It is also suggested that there will be a greater level of antisocial behaviour, impulsivity and substance misuse in the street homeless group, which may be associated with these individuals experiencing more tenancy breakdowns and being unable to maintain tenancies.

#### **PRESENT STUDY:**

#### **Research Question**

There will be a difference between the street homeless and the hostel homeless groups in terms of mental illness and associated difficulties.

#### Hypotheses

Hypothesis 1: (a) There will be a significantly higher prevalence of personality disorder in the street group in comparison to the hostel group.

(b) The street group will have a significantly higher number of personality disorder types than the hostel group.

Hypothesis 2: The street group will have more severe problems than the hostel group, including:

(a) Significantly higher prevalence of alcohol dependence

(b) Significantly higher prevalence of substance misuse

(c) Significantly higher levels of impulsivity

(d) Significantly higher levels of antisocial behaviour

(e) Significantly higher number of tenancies.

#### 2. METHOD

#### 2.1 DESIGN:

A non-repeated between subject design was employed, with the independent variable of homeless group (hostel or street) and the dependent variable of personality disorder. The study involved a questionnaire-based comparison of two homeless groups: hostel dwellers and street homeless individuals<sup>\*</sup>. To address Hypothesis 1, prevalence rates will be reported and the chi-square test will be used to compare the hostel and street groups. Hypothesis 2 will be tested by independent t-tests and chi-square tests. The outcome of the univariate analyses will determine the use of multivariate analyses. The questionnaire method was utilised in order to maximise participation. Due to the characteristics of the settings and the sample, the questionnaire approach has been demonstrated to be a feasible, practical alternative to structured interview methods (Trull & Goodwin, 1993, Mathews, 2006).

The author collaborated with another researcher, Louisa McClean, to recruit participants. The set of measures completed by participants included three measures for the current study plus two measures for Louisa McClean. Data was collected jointly, all other research activity was conducted by the author himself.

Objective/confirmatory data on the participants' diagnosis and past psychiatric history could not be obtained due to confidentiality agreements.

#### **2.2 PARTICIPANTS**

Prior to recruitment, a sample size calculation identified the target number of participants. To detect a medium difference between two independent groups, using a two-sided chi-squared test with one degree of freedom, where  $\alpha = .05$ , a sample size of 107 in each group was required to have 80% power (nQuery Advisor Version 6.0).

A total of 61 individuals residing either in one of the hostels participating in the study or residing on the streets and in contact with homelessness services in Southampton, were approached by service staff to participate in the study. For the purposes of this study, the hostel homeless individuals were those who lacked a permanent place to live and who were registered as a resident at a homeless hostel. The street homeless participants were defined as individuals lacking a permanent or temporary place to reside in, who were in contact with the Street Homeless Prevention Service.

Of the 61 individuals approached, 59 agreed to participate in the study. However, the MCMI-III questionnaires for 9 of the 59 people (four in the hostel group and five in the street group) had to be excluded from the MCMI-III analyses. The responses by these nine participants were deemed to be invalid according to the MCMI-III scoring criteria. MCMI-III responses are invalid when more than 12 items are omitted, when two or more validity scale items are endorsed or extreme scores are achieved on the Disclosure Index (Scale X). Four participants endorsed two or more validity scale items and five participants received extreme scores on the disclosure index. Millon, Millon & Davis (1994) assert that any of the above conditions indicate the participant may not have paid sufficient attention, may not have adequately understood the item content and/or may have over or underreported symptoms to such a degree that it is not possible to ensure the validity of the scale scores, thus rendering it impossible to interpret the results appropriately.

The sample used for the MCMI-III analyses comprised of 50 participants, 30 hostel and 20 street homeless individuals. There were 43 males (25 in the hostel group and 18 in the street group) and 7 females (5 in the hostel group and 2 in the street group). The age of the hostel group ranged from 18 to 57 years, with a mean age of 32.76 (*SD* 12.17, *95% C.I.* 27.74-37.78). The age of the street group ranged from 19 to 58, with a mean age of 35.83 (*SD* 11.97, *95% C.I.* 29.88-41.78).

## 2.3 MEASURES

Millon Clinical Multiaxial Inventory-III (MCMI-III; Millon, Millon & Davis, 1994) The MCMI-III is a 175-item self-report questionnaire, based on DSM-IV criteria (American Psychiatric Association, 1994). The MCMI-III items are written as statements, which are answered in a true/false format. The measure comprises of 24 disorder scales: 14 personality disorders (Axis II on the DSM-IV) and 10 clinical syndromes (Axis I on the DSM-IV), including alcohol and drug dependence. Adequate diagnostic sensitivity has been demonstrated for the alcohol and drug dependence scales, independently (Craig, 1997). The aforementioned scales do not contribute to the overall personality disorder scores.

Items are divided into two groups on the personality disorder scales. One referring to core, unique features of the personality and one referring to more peripheral features likely to be present in one or more similar personality disorder

types. For scoring, core items are weighted 2, whereas the peripheral items are weighted 1 (Strack & Millon, 2007). Thus, participants who have more of the attitudes, thoughts, feelings and behaviours that are fundamental to the definition of a particular personality type, receive the highest raw scores.

The MCMI-III consists of three 'modifier' indices: Disclosure (Scale X), Desirability (Scale Y) and Debasement (Scale Z), which are used to indicate invalid responses such as random answering, under-disclosure and extreme over-disclosure. The raw scores are converted to base rate (BR) scores, with different BR transformations employed for males and females. The BR conversion incorporates normative data and further adjustments are made to account for potential affective states and/or invalidity conditions to arrive at a final BR score. The BR adjustments thus improve diagnostic efficiency (Millon et al., 1994). The BR scores range from 0 to 115 for each of the 24 disorder scales and a threshold of 85 and above for each scale indicates that the participant is within the clinical range for that particular attribute. A score of 75 to 84 indicates that some or most of the features are present, while a score of 74 or below indicates no pathology. The MCMI has been criticised for over-estimating the presence of disorder (for example, Zimmerman, 1994) and the higher cut-off has been advocated by researchers (Craig, 1999). Consequently the higher threshold of 85 and above was employed for this study, where a score of 85 or above on at least one of the personality disorder scales was deemed to be indicative of a personality disorder.

The MCMI-III is an established instrument in the field having been extensively utilised in personality pathology research (Craig, 1999). It was developed from a theoretical basis, it reflects DSM-IV criteria and it has normative data from a variety of samples (Millon et al., 1994; Strack & Millon, 2007). In

addition, it has been successfully employed in research to assess psychopathology within homeless populations (Sumerall, Rate, Lopez, Hunter & Weaver, 2000). It was a suitable measure for this study for a number of reasons. The instructions and items are written in clear, comprehensible language with the vocabulary set at sixth to eighth grade level. The true-false format for responses is simple and objective, minimising confusion among participants. It can generally be completed in 30 minutes (Millon et al/, 1994), which enhances participation and minimises fatigue, whilst being comprehensive enough to assess a wide range of clinically relevant behaviour. These features have contributed to the MCMI-III being recommended as a useful diagnostic screening tool in personality disorder research (Derksen, 1995; Rossi, Hauben, Van Den Brande & Sloore, 2003), with homeless populations (Sumerall et al., 2000).

The MCMI-III has demonstrated good internal consistency (above .80 for 20 of the 26 scales) and test-retest reliability (ranging from .82 to .96). It has mild to moderate correlations (.20 to .77) with other similar measures (Craig, 1999; Millon et .al., 1994) and moderate convergent validity with structured clinical interview measures (Craig, 1999). For research proposes, the MCMI-III is regarded to be a useful alternative to structured interviews, such as the Structured Clinical Interview for DSM-IV (SCID) (Craig, 2005), which would be difficult to employ in this study, given the time constraints and the nature of the settings involved. Thus the MCMI-III was selected as the most reliable and feasible measure to identify personality disorder and associated psychopathology in this homeless sample.

Barratt Impulsiveness Scale version 11 (BIS-11; Patton, Stanford & Barratt, 1995) The Barratt Impulsiveness Scale is an established and widely used self-administered impulsivity test. It was initially developed in 1959, when Barrett postulated a unidimensional model of impulsiveness (Barratt & Patton, 1983). Impulsiveness was presented as a part of a larger group of personality features and predispositions such as extraversion, sensation seeking and a lack of inhibitory behavioural controls. Following additional research, Barrett classified impulsivity in three major components: motor (acting without thinking), cognitive (quick decisions) and nonplanning (present orientation).

The BIS-11 consists of 30 self-descriptive items, with responses on a four point Likert-type scale ranging from "Rarely/Never" to "Almost Always/Always". The raw impulsiveness measure is the sum of the scores of these responses (the larger the sum, the more impulsive the participant). The scale can be decomposed into three subscales measuring specific aspects of impulsivity: Attentional impulsiveness (AI), Motor Impulsiveness (MI) and Non-planning impulsiveness (NP). AI assesses actions caused by lack of attention and it can be exacerbated in anxious situations. MI identifies hyperactivity due to need of movement, which is exacerbated by stress. NP evaluates attitudes and conclusions precipitated by lack of reflection.

The BIS-11 has been used with a variety of populations including psychiatric outpatients (Crean, de Wit & Richards, 2000), substance addicts (Kirby, Petry & Bickel, 1999), adults (Mitchell, 1999) and undergraduates (Stanford, Greve, Boudreaux, Mathias & Brumbelow, 1996). It has demonstrated good reliability and validity (Carrillo de la Pena, Otero & Romero, 1993; Fossati, Barratt, Acquarini & DiCeglie, 2002). Patton, Stanford & Barratt (1995) report internal consistency

coefficients for the BIS-11 that range from 0.79 to 0.83 with different participant groups while McLeish & Oxoby (2006) report a Cronbach's Alpha coefficient of 0.85, evidence that responses on the scale are consistent across the 30 items.

The BIS-11 was selected for this study due to previous evidence that this measure is a superior predictor of impulsivity across a variety of respondent populations (Carrillo de la Pena et al., 1993; Mitchell, 1999; Stanford et al., 1996).

#### Antisocial Behaviour & Tenancy Scale

A literature search identified a lack of suitable antisocial behaviour scales, as they have predominantly been designed for children and adolescents. A short measure adapted from an antisocial behaviour scale used by Hayward & Sharp (2003) was devised by the author to acquire data on antisocial behaviours in the previous 12 months and tenancies in the previous two years (see Appendix C). The measure had three main sections: antisocial behaviour by the participant, antisocial behaviour committed against the participant and tenancy details.

Item 1 required participants to indicate whether they had committed any of the following acts: vandalism, theft, verbal abuse or a physical attack on another person, in the previous 12 months by ticking either no or yes. If they answered yes to any of the aforementioned acts, they were asked to specify the number of times they had committed each act in the previous 12 months. Item 2 required participants to indicate whether they had had any contact with the police over the previous 12 months, to specify the number, and to indicate the reasons for the police contact. Item 3 pertained to antisocial behaviour committed against the participants. They were asked to indicate (yes or no) whether they had experienced any vandalism to their property, any theft, verbal abuse or physical attack by another person. If participants answered yes to any acts, they were asked to give the number of occurrences in the previous 12 months, to specify who committed the act (if known) and whether they contacted anyone regarding the matter, such as the police.

Item 4 required participants to confirm where they were currently staying (either in a hostel or sleeping rough) and how long they had been there. Item 5 asked participants for details of tenancies over the previous two years, including the types of accommodation they had lived in, the duration of stay and the reason for moving.

## Screening Form for Reading Ability

A form used successfully by Matthews (2006) was adapted for the present study, with the author's permission (see Appendices D & E). The form screens for the reading ability of participants by asking whether they are able to read a newspaper and able to complete benefit forms on their own. They are also asked to select the format to complete the measures.

## **2.4 PROCEDURE**

Two hostels and a Street Homeless Prevention Service were initially approached and agreement was gained for their respective involvement and co-operation in the study. These meetings were attended by the author and a colleague conducting a separate study. The measures described previously were collated with an additional measure used by the author's colleague into a questionnaire pack. Participants completed all the measures in the pack and the relevant measures were used by the author for data analysis purposes. Posters introducing the study (see Appendix F) and its aims were displayed at the respective services and study information sheets (see Appendix G) were also made available. Participants were asked to convey their interest to the service staff and details were given regarding the particular dates that the author was visiting to collect data. All participants were initially approached by staff members of the services.

The fieldwork was completed over seven sessions at the three respective services, using opportunistic sampling. Each participant was greeted by the author or his colleague in the room allocated by the service for the study. Separate tables were arranged around the room to maintain participants' confidentiality. Participants were shown to one of the tables and briefed about the study purposes, aims and procedures. They were assured that participation was entirely voluntary and could be withdrawn at any point in the study. Confidentiality of disclosed information was emphasised. Participants were given the Screening Form and asked whether they required any assistance with completing the measures. Participants who wished to self-complete were provided with the measures. Participants who preferred to complete the measures in an interview format, signed a consent form before the interview proceeded (see Appendix H). The three questionnaires used for this study took approximately 40 minutes to self-complete with a longer time period required for the interview method. Upon completion, the questionnaires were placed in the envelope provided. All questionnaires were coded to ensure anonymity and confidentiality. A Handout Sheet (see Appendix I) providing details for support and a £5 Asda voucher were given to the participants to thank them. Participants were asked to sign a voucher confirmation sheet (see Appendix J) to confirm their receipt of the voucher.

The only exclusion criterion for the study was difficulty in understanding verbal or written English as interpreters or translated materials were not available. Assistance was provided to participants as required. Questionnaire items were repeated verbally to participants if they experienced any difficulties in understanding the content, however participants responded to the items with out assistance in order to ensure validity of the measures (Millon et al., 1994).

The study was approved by the School of Psychology Ethics Committee (see Appendix K) and was sponsored by the University of Southampton (see Appendix L). Based on the research guidelines, NHS ethics approval (COREREC) was not sought as this study did not involve NHS patients. Approval was obtained from all the managers at the respective homeless services involved in the study.

#### **3. RESULTS**

#### Data Analysis:

Analyses were conducted using the statistical package SPSS, version 15. The distribution of the data was examined using the Kolmogorov-Smirnov test, and where assumptions of normal distribution were met, parametric tests were employed. The prevalence of personality disorder in the hostel and street homeless groups was calculated. A chi-squared test using the categorical variables of type of homelessness (hostel or street homeless) and diagnosis (having a personality disorder or not according to the MCMI-III was utilised to test Hypothesis 1. An independent T-test analysing the mean number of personality disorder types that each group met the criteria for, was used to examine Hypothesis 1(b). Chi-squared tests and independent t-tests were used to compare the two respective groups in the

prevalence of alcohol and drug misuse, levels of impulsivity, levels of antisocial behaviour and number of tenancies.

**Hypothesis 1 (a):** There will be a significantly higher prevalence of personality disorder in the street homeless group in comparison to hostel dwellers.

#### Table 2.

Prevalence of Personality Disorder in the Hostel and Street Homeless Groups

	Criteria met for a Personality Disorder?		
Group	Yes (% within group)	No (% within group)	Total
Hostel	16 (53.3%)	14 (46.7%)	30
Street	12 (60.0%)	8 (40.0%)	20
Total	28	22	50
	• .		

Table 1 indicates that in the hostel dwellers group, 16 out of 30 (53.3%) met the criteria for at least one personality disorder according to the MCMI-III (a score of 85 or above on at least one personality disorder type). In the street homeless group 12 out of 20 (60%) met the criteria for a personality disorder. Thus, there was a higher prevalence of personality disorder in the street homeless group compared to the hostel group. The chi-squared test was used to determine whether the above percentages were significantly different or not. There was no significant difference between the hostel and the street group in the prevalence of personality disorder, X<sup>2</sup> (1, N=50) = .773, p>0.05. If the lower MCMI-III threshold of 75 was used (indicating that some or most of the features of personality disorder are present), the

prevalence would be 100% in the hostel group and 95% in the street group, with no significant difference, p>0.05.

**Hypothesis 1 (b):** The street homeless group will have a significantly higher number of personality disorder types than the hostel dwellers.

Due to the non-normal distribution of the data, a non-parametric test, the Mann Whitney test was employed to investigate whether the street group met the criteria for a significantly higher number of personality disorder types than the hostel group. The mean number of personality disorder types that the hostel group met the criteria for, was 0.83 (*SD* 1.020, *SE* 0.186). The street group had a mean of 2.05 (*SD* 1.932, *SE* 0.432) personality disorder types. A Mann Whitney test revealed that the street group met the diagnostic criteria for a significantly higher number of personality disorder types. A Mann Whitney test revealed that the street group met the diagnostic criteria for a significantly higher number of personality disorder types than the hostel group.

The most prevalent personality disorder types in the hostel group were Depressive (n=5, 16.7%), Antisocial (n=4, 13.3%) and Borderline (n=4, 13.3%). The most prevalent personality disorder types in the street group were Dependent (n=7, 35%), Depressive (n=6, 30%), Paranoid (n=4, 25%), Passive Aggressive (n=4, 25%) and Avoidant (n=4, 25%).

**Hypothesis 3**: The street group will have more severe problems than the hostel group, including:

(a) Significantly higher prevalence of alcohol dependence

Table 3.

	Criteria met for alcohol dependence?		
Group	Yes (% within group)	No (% within group)	Total
Hostel	11 (36.7%)	19 (63.3%)	30
Street	6 (30.0%)	14 (70.0%)	20
Total	17	. 33	50

Prevalence of Alcohol Dependence in the Hostel and Street Homeless Groups

Table 3 indicates that in the hostel group, 11 out of 30 (36.7%) met the criteria for alcohol dependence according to the MCMI-III. In the street homeless group 6 out of 20 (30%) met the criteria for alcohol dependence. A chi-squared test was used to determine whether the above percentages were significantly different or not. There was no significant difference between the hostel and the street group in the prevalence of alcohol dependence,  $X^2(1, N=50) = .763, p>0.05$ .

# (b) Significantly higher prevalence of substance misuse

Table 4.

Prevalence of Substance Misuse in the Hostel and Street Homeless Groups

	Criteria met for substance misuse?		
Group	Yes (% within group)	No (% within group)	Total
Hostel	8 (26.7%)	22 (73.3%)	30
Street	7 (35.0%)	13 (65.0%)	20
Total.	15	35	50

Table 4 indicates that in the hostel group, 8 out of 30 (26.7%) participants met the criteria for substance misuse according to the MCMI-III. In the street homeless

group 7 out of 20 (35.0%) met the criteria for substance misuse. A chi-squared test was used to determine whether the above percentages were significantly different or not. There was no significant difference between the hostel and the street group in the prevalence of substance misuse,  $X^2(1, N=50) = .547, p>0.05$ .

Two participants in the hostel group met had both alcohol and substance misuse. Similarly, two participants in the street group had both alcohol and substance misuse.

### (c) Significantly higher levels of impulsivity

The hostel group had a mean total score of 69.20 (*SD* 8.660, *SE* 1.581) on the BIS-11 and the street group had a mean total BIS score of 79.80 (*SD* 9.622, *SE* 2.152). An independent t-test identified that the street group had significantly higher levels of impulsivity than the hostel group, t(48) = -4.056, p=0.00.

### (d) Significantly higher number of tenancies.

The mean number of tenancies reported by the hostel group in the previous two years, was 2.43 (*SD* 1.040, *SE* 0.190). The street group reported a mean of 1.45 (*SD* 1.234, *SE* 0.276) tenancies. The hostel group reported a significantly higher number of tenancies than the street group, t(48) = 3.039, p=0.00.

The street group had been living on the streets for a mean duration of 9 months (*SD* 11.777, *SE* 2.702), while the mean duration of current tenancy in the hostel group was 3 months (*SD* 2.58, *SE* 0.471).

(e) Significantly higher levels of antisocial behaviour

The mean number of antisocial behaviour incidents committed by the hostel group in the previous 12 months, was 6.43 (*SD* 11.939, *SE* 2.180). The street group reported a mean of 8.20 (*SD* 15.463, *SE* 3.458) antisocial behaviour incidents. There was no significant difference between the two groups in the overall level of antisocial behaviour, t(48) = -0.455, p > 0.05.

The mean number of antisocial behaviour incidents suffered by the hostel group in the previous 12 months, was 1.90 (*SD* 3.585, *SE* 0.655). The street group reported a mean of 5.55 (*SD* 12.002, *SE* 2.684) antisocial behaviour incidents suffered. There was no significant difference between the two groups in the overall level of antisocial behaviour suffered, t(48) = -1.321, p > 0.05.

There was no significant difference between the two groups in police contact (p>0.05). There were no significant differences between the two groups in the clinical syndromes on the MCMI-III.

### **4. DISCUSSION**

This study compared two sub-groups of the homeless population, namely hostel dwellers and street homeless individuals, to ascertain whether there is a higher prevalence of personality disorders in the latter. There was no significant difference between the hostel (53%) and the street group (60%) in the prevalence of personality disorder. This finding is contrary to previous research (Rosnow et al., 1986; Farrell et al., 2000; Farrell et al., 2002) suggesting greater levels of mental illness in street homeless individuals compared to individuals using homeless hostels or shelters. The present study supports Hannappel et al (1989) and Roth et al's (1985) research, which reported no significant differences between street and hostel homeless

individuals on overall psychological distress. Research investigating mental illness in homeless populations has varied in terms of scientific rigour. A major problem has been the substantial differences between studies in the measures used to assess mental illness. Studies have not always used standardised measures that have been previously validated with the sample population. For instance, Hannappel et al (1989) used abbreviated and self-devised measures to detect mental illness in their homeless sample. Differences in assessment measures may explain contradictory findings concerning mental illness in street and hostel homeless individuals.

The prevalence estimates of personality disorder in the present study are higher than in previous studies (for example, Fischer & Breakey, 1991; Salize et al. 2001; Scott, 1993), but they are more comparable to a recent unpublished doctoral thesis that also used the MCMI-III and reported 59% prevalence among UK hostel dwellers (Mathews, 2006).

Although the street group did not have a higher prevalence of personality disorder than the hostel group, they met the diagnostic criteria for a significantly higher number of personality disorder types than the hostel group. That is to say, the street group were more likely to be diagnosed with multiple personality disorders according to the MCMI-III. This is an interesting finding suggesting perhaps more varied and possibly more complex personality psychopathology in street homeless individuals.

The most common personality disorder types in the street group were the dependent and the depressive categories. Individuals with dependent personality disorder typically have an excessive need for nurturance and support, they have difficulty initiating or doing things on their own due to a lack of confidence in their abilities. They can also be submissive and have exaggerated fears relating to

separation and abandonment. These characteristics have been associated with attachment difficulties during childhood and the adoption of negative, maladaptive schemas pertaining to one's capabilities and to the role of others in relationships (Young, 1999; Young et al., 2003). Overprotective parenting in isolation or in combination with authoritarian parenting can lead to dependent personality disorder (Head et al., 1991). Overprotective parenting styles can cause individuals to believe that they cannot cope without the protection and care of others, while authoritarian parenting teaches individuals to seek guidance from others rather than to use personal resources or capabilities. Both parenting styles can lead to negative schemas that one is weak and ineffectual which increases dependent attitudes and behaviours (Bornstein, 1993). There is an implication that individuals with dependent personality disorder who become street homeless may find it particularly onerous to exit from homelessness due to problems in initiating and carrying out tasks, such as accessing appropriate services. Research shows that street homeless individuals lack social support (Happnapel et al., 1989; Nyamathi, Keenan & Bayley, 1998) and they have lower levels of support than individuals who use hostels or shelters (Roth & Bean, 1986), therefore, the excessive need for nurturance is unlikely to be fulfilled on the streets which could lead to confirmation of negative schemas about oneself and others and further distress. Street homeless individuals with dependent personality disorder may thus be at potential risk for chronic, longterm homelessness.

An intriguing finding was that depressive personality disorder was prevalent in both groups. It was the second most common category among the street group and the most common among the hostel group. The depressive category is characterised by a persistent pattern of intense pessimism and negativity with feelings of guilt,

worthlessness and abandonment. Depressive personality disorder, as a category, requires further research according to DSM-IV (American Psychiatric Association, 2000). The MCMI-III measures depression separately from depressive personality disorder, therefore, according to Millon et al (1994) the latter is not merely detecting depression. If the depressive personality disorder category was removed, the prevalence of personality disorders in the street group would be unchanged at 60%, and prevalence in the hostel group would be reduced from 53% to 43%. Since this category requires further research according to the DSM-IV, the results must be interpreted with caution. Nevertheless, it seems intuitively correct that depressive personality disorder is common among homeless individuals. Research findings indicate a high rate abuse and neglect during childhood in homeless individuals (Bassuk & Rosenberg, 1988). Although this study did not examine childhood experiences, the findings are robust within the literature and it is postulated that such adverse experiences contribute to negative, depressogenic beliefs and schemas about the self, others and the world (Beck, Butler, Brown, Dahlsgaard, Newman, & Beck, 2001; Beck, Freeman & Davis, 2004) leading to low self-esteem and hopelessness. Depressive thoughts and symptomatology have been reported in the homeless population (Votta & Mannion, 2003), but the present study is unique in identifying depressive personality disorder.

Antisocial and borderline personality disorders were the second most prevalent categories in the hostel group. Previous research on personality disorder in homeless samples has concentrated on antisocial personality disorder, with estimated rates of between 10% to 40% (Caton et al. 1994; 2000; North et al., 1993; North et al., 1997). The present study found relatively low rates for antisocial personality disorder, with 13% prevalence among the hostel group and 10% among the street group. This study had a lower number of females compared to males, which is consistent with the literature. Previous research has generally identified a larger representation of males than females within the homeless community (Stein & Gelberg, 1995).

There was no significant difference between the two groups in terms of alcohol dependence and drug dependence. This is contrary to previous research suggesting greater levels of substance use in street homeless groups compared to hostel groups (Farrell et al., 2002). The prevalence rates for alcohol and drug dependence in the two groups were lower than in previous studies (Fisher & Breakey, 1991; Johnson & Fendrich, 2007; North et al., 2004). This may be partly due to under-reporting by participants. Greater levels of drug dependence than alcohol dependence were identified in the street group. This is consistent with recent research reporting increased drug use compared to alcohol use among street homeless populations (O'Toole et al., 2004; Rowe, 2005). Drug use in the homeless population has been explained as a way of coping with the conditions of homelessness, the lifestyle particularly on the streets, can be damaging to psychological health, and qualitative research has shown that drugs are used by homeless individuals as self-medication to reduce physical and emotional pain (Neale, 2001). Street homeless individuals can become isolated and drug-using peer groups may appear attractive in terms of providing companionship and legitimisation for their lifestyle (Horn, 1999). This increases the risk of chronic drug dependence and it may also lead to a limiting of social contacts to other drug users, which can cause further problems such as risks from needle-sharing (since drug use is often a group activity among homeless individuals) and antisocial behaviour (Rogers, 1992; Rowe, 2005).

The hostel group reported a significantly higher number of tenancies over the previous two years than the street group, which was contrary to the predicted direction of difference. The street homeless group had been living on the streets for a mean duration of 9 months, while the mean duration of current tenancy in the hostel group was 3 months. This finding corroborates research that duration of homelessness is longer among street homeless individuals in comparison to individuals who use hostels or shelters (Farrell et al. 2000; Farell et al., 2002). Only 15% of the street group had been residing in a homeless hostel prior to living on the streets. In the hostel group, 27% had moved from another hostel. Over a third of the hostel group (36%) had been residing in rented or owned accommodation (private or council) prior to their current hostel tenancy, compared to only 10% of the street homeless group. A possible explanation for the higher number of tenancies among the hostel group is that the street group are homeless for a longer period of time, that they are an entrenched group, who do not seek tenancies or cannot obtain tenancies. Interestingly, 30% of the street group reported that they were street homeless due to personal choice, suggesting that individuals on the streets, may be more likely to give tenancies up.

Farrell et al (2002) conducted a study of street homeless individuals to identify their characteristics and service needs. The authors identified that street homeless people had a higher level of need than individuals living in hostels and shelters. They also distinguished between two groups of street homeless individuals: recently homeless (duration of up to one month) and longer-term/chronic homeless individuals. There was a significantly larger group of long-term/chronic street homeless individuals (78% of the sample) compared to short-term street homeless individuals (22%). Overall, 41% of the street homeless sample had been homeless for more than one year. In the study reported in this paper, 15% could be classified as short-term street homeless and 85% as long-term street homeless, with 25% reporting homelessness for two years and above.

Employing the one-month point to distinguish between short and long-term street homelessness is consistent with research findings referring to the 'four-week rule'. The four-week rule is the process by which individuals become acclimatised to life on the street. After this period, they become entrenched and it becomes increasingly more arduous for them to move back into mainstream society (Ravenhill, 2000). Unfortunately, due to low numbers, analyses could not be conducted to compare the short and long-term street homeless sub-groups. Nevertheless, this is a potentially important issue, which merits further investigation. This study supports Farrell et al's (2002) dichotomy of street homeless groups. The aforementioned authors report increased, chronic levels of difficulties in long-term street homeless individuals. The implication is that this subgroup may require different, more intensive interventions to address their needs than short-term street homeless individuals or hostel dwellers.

The street group had significantly higher levels of impulsivity than the hostel group. Impulsivity is recognised as a prominent psychological construct in the understanding and diagnosis of personality disorders and many other forms of mental illness (Whiteside & Lynam, 2001). Four distinct psychological processes that lead to impulsive behaviours are urgency, lack of premeditation, lack of perseverance and sensation seeking. Urgency and lack of premeditation can contribute to individuals making irrational decisions, such as leaving relationships, employment or accommodation. Lack of perseverance and self-discipline can impact on the ability to carry out routine, daily tasks that are necessary to function in

society, and may lead to problems in maintaining relationships, employment and tenancies. Sensation seeking may involve behaviours such as overspending, risky sexual behaviours and substance abuse (Kruedelbach et al., 1993). The significantly higher levels of impulsivity in the street group may thus possibly lead to certain behaviours that increase risk for homelessness. As stated previously, 30% of the street homeless group reported that they were street homeless due to their own choice. This may be possibly explained by higher levels of impulsivity. Among the individuals who are street homeless, there may a proportion who 'opt out', who decide that they do not wish to hold tenancies but with little forethought or planning for the future. This is only a suggestion, and further research on impulsivity and more detailed information on the reasons for homelessness would be useful, particularly the thought processes that individuals have.

There was no significant difference between the two groups in the level of antisocial behaviour perpetrated or in being the victim of antisocial behaviour. Reliance on the self-report of antisocial behaviour raises questions about the reliability of data. Participants may have under-reported antisocial behaviour due to social desirability or concerns relating to how the information may be used. For instance, although confidentiality was assured there may have been fears that the information could be shared with homelessness services thereby affecting the service and care received by individuals. There are also issues about the accuracy of information given by participants as it is based on their memory.

### **Methodological Considerations**

Objective, confirmatory data such as information from hostels and the street homelessness prevention service was not obtained in this exploratory study due to confidentiality agreements. Such an approach may have restricted individuals from participating in the research. This study had greater ecological validity by using an opportunistic sampling method to recruit participants from the homeless population with few exclusion criteria. The disadvantage of this approach is that by having higher ecological validity and no confirmatory data, reliability can be compromised. Future research with homeless populations may wish to consider incorporating data from official services where appropriate.

Due to a lack of suitable standardised measures to investigate antisocial behaviour and tenancy breakdown, a specific measure for this study was devised by the author. There were problems with the measure. Participants were required to tick either yes or no, to indicate whether they had engaged in antisocial behaviour over the previous 12 months. If they ticked 'yes' to antisocial behaviour, they were asked to specify the frequency of antisocial acts committed. However, a number of participants answered in the affirmative but did not indicate the frequency. In the analysis, any such participants were coded as having engaged in one antisocial act, since they had ticked 'yes'. However, the actual number may have been a lot more, therefore the findings relating to antisocial behaviour must be interpreted with caution. This was a major weakness of the measure as the actual number of antisocial acts may have been substantially higher. The reliability of the measure would have been improved by asking participants to specify the frequency of antisocial behaviour and not having a tick box. Further investigation of antisocial behaviour in homeless groups would be useful as it was not adequately examined in the present study. The measure asked participants about tenancies over the previous two years, but asking participants to indicate the overall duration of homelessness and the number of times they has been made homeless (as in Happnapel et al., 1989)

would have been useful. The study would have benefitted from the collection of pilot data for the scale. Unfortunately, this was not feasible due to the small population recruited from and time limitations.

This study was limited by low statistical power. It was anticipated that 107 participants in each group as calculated by the power analysis was unlikely to be achieved, due to the size of the homeless population in the study area. Nevertheless, as an exploratory study investigating an under-researched area, it was deemed to merit completion. A post-hoc analysis identified that the study had 12% power (nQuery Advisor, version 6.0). This increases the risk of a Type II error (incorrectly accepting the null hypothesis).

This study may have had sampling bias. Participants were recruited from hostels and the street homeless prevention service, therefore these individuals were known by the respective services as they were accessing the services. The individuals who participated in the study might be those particularly motivated to gain assistance for their difficulties. Thus this study did not identify homeless individuals who were not accessing services or who did not have regular contact with services.

The present study relied on the self-report method to assess for personality disorder, similar to most of the research in the field (Millon & Davis, 1996). There are concerns about whether individuals with a personality disorder are able to describe and recognise their personality traits accurately. Some individuals may deliberately present in an excessively positive or negative way. There is a lack of consistency between self-reports and reports of significant others (Ganellen, 2007). In addition, there can be a lack of insight into difficulties relating to one's character, patterns of behaviour or interpersonal relationships (Huprich & Bornstein, 2007).

These issues often co-occur and a diagnostic threshold may not be reached due to some of the above reasons. The MCMI-III does address these potential problems through its validity scales and individuals who responded in an extreme manner were excluded from the analyses. It is also hoped that assurance of anonymity and confidentiality limited distortion of responses.

Research has demonstrated that the MCMI-III is more diagnostically accurate than clinical interviews and similar self-report measures of personality such as the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher, Dahlstrom, Graham, Tellegen & Kaemmer, 1989; Retzlaff & Dunn, 2003). However the MCMI-III has been criticised for over-diagnosing personality disorders and it has shown to be less accurate than diagnostic interviews such as the Structured Clinical Interview for DSM-IV (SCID-II; Choca, 2004; Craig, 1999; 2005). The SCID-II would have been a more robust assessment tool however, it was not pragmatic to utilise it due to time limitations.

All individuals approached to take part in the study were assured of confidentiality and made aware that participation was entirely voluntary and could be withdrawn at any point during involvement. However, given that participants were homeless and likely to have financial difficulties it may be argued that recruitment was coercive. However, the £5 food voucher was given to individuals as a thank you gesture after they completed the measures as opposed to before.

### Conclusions

This study had a number of strengths. It is the first study in the UK to specifically compare hostel and street homeless groups in the prevalence of personality disorders and associated difficulties. The study achieved a high response rate, with only a 3%

refusal rate. The study has theoretical importance, as it enriches knowledge and understanding of psychopathology in a complex client group, which is difficult to treat. The study has socio-cultural importance in that it attempts to change society positively. By enhancing knowledge, it is hoped that vulnerable individuals will benefit from improved services that address their needs, leading to a reduction in the levels of homelessness along with a decrease in associated problems including substance misuse and antisocial behaviour. The study was limited by low statistical power and issues relating to the tenancy and antisocial behaviour measure.

The study identified a high prevalence of personality disorders confirming that severe mental illness is a serious issue in the homeless population. The study did not identify any significant difference between a hostel and street homeless sample in the prevalence of personality disorders. However, the street group were significantly more likely to meet diagnostic criteria for more than one personality disorder, suggesting more varied and possibly more complex personality psychopathology.

A potential socio-political implication of linking personality disorder with homelessness is that there may be a tendency to attribute the problem to the individual. If individuals are labelled with a personality disorder diagnosis, it may be perceived that it is the individual who has the problem because they have a mental illness, rather than homelessness being a societal concern. The diagnosis of personality disorder may also have negative ramifications in terms of how individuals are treated in mental health care. UK policy has tended to focus on housing, however, this study suggests that mental illness and appropriate treatment are important. Homelessness policy would benefit from a greater emphasis on psychological care as opposed to merely concentrating on housing provision. Specialised psychological therapy services are required in order to address the needs of homeless individuals.

There was no difference between the hostel and street group in terms of substance dependence or antisocial behaviour. However, there were issues concerning the reliability of the antisocial behaviour measure and further research in this area would be useful. The street group reported significantly higher levels of impulsivity than the hostel group, and it is postulated that behaviours associated with impulsivity may partly explain the finding that nearly a third of the street group were homeless due to personal choice.

A large proportion of the street sample can be classified as long-term homeless. Further research on the long-term street homeless is necessary to ascertain whether they are a distinct group with more severe psychopathology and care needs. This may potentially indicate that long-term street homeless individuals require different interventions to other homeless sub-groups.

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## APPENDICES

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# Appendix A

Clinical Psychology Review: Notes to Authors

### CLINICAL PSYCHOLOGY REVIEW

### **Guide for Authors**

#### SUBMISSION REQUIREMENTS:

Authors should submit their articles electronically via the Elsevier Editorial System (EES) page of this journal (<u>http://ees.elsevier.com/cpr</u>). The system automatically converts source files to a single Adobe Acrobat PDF version of the article, which is used in the peer-review process. Please note that even though manuscript source files are converted to PDF at submission for the review process, these source files are needed for further processing after acceptance. All correspondence, including notification of the Editor's decision and requests for revision, takes place by e-mail and via the Author's homepage, removing the need for a hard-copy paper trail. Questions about the appropriateness of a manuscript should be directed (prior to submission) to the Editorial Office, details at URL above. Papers should not exceed 50 pages (including references).

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, without the written consent of the Publisher.

**FORMAT**: We accept most wordprocessing formats, but Word, WordPerfect or LaTeX are preferred. Always keep a backup copy of the electronic file for reference and safety. Save your files using the default extension of the program used.

Please provide the following data on the title page (in the order given).

*Title*. Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.

Author names and affiliations. Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and, if available, the e-mail address of each author.

*Corresponding author.* Clearly indicate who is willing to handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.** 

*Present/permanent address.* If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

*Abstract.* A concise and factual abstract is required (not exceeding 200 words). This should be typed on a separate page following the title page. The abstract should

state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separate from the article, so it must be able to stand alone. References should therefore be avoided, but if essential, they must be cited in full, without reference to the reference list.

**STYLE AND REFERENCES**: Manuscripts should be carefully prepared using the Publication Manual of the American Psychological Association, 5th ed., 1994, for style. The reference section must be double spaced, and all works cited must be listed. Please note that journal names are not to be abbreviated.

Reference Style for Journals: Cook, J. M., Orvaschel, H., Simco, E., Hersen, M., and Joiner, Jr., T. E. (2004). A test of the tripartite model of depression and anxiety in older adult psychiatric outpatients, *Psychology and Aging*, 19, 444-45.

For Books: Hersen, M. (Ed.). (2005). Comprehensive handbook of behavioral assessment (2 Volumes). New York: Academic Press (Elsevier Scientific).

**TABLES AND FIGURES**: Present these, in order, at the end of the article. Highresolution graphics files must always be provided separate from the main text file (see <u>http://ees.elsevier.com/cpr</u> for full instructions, including other supplementary files such as high-resolution images, movies, animation sequences, background datasets, sound clips and more).

**PAGE PROOFS AND OFFPRINTS**: When your manuscript is received by the Publisher it is considered to be in its final form. Proofs are not to be regarded as 'drafts'. One set of page proofs will be sent to the corresponding author, to be checked for typesetting/editing. No changes in, or additions to, the accepted (and subsequently edited) manuscript will be allowed at this stage. Proofreading is solely the authors' responsibility.

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<u>NIHauthorrequest@elsevier.com</u>) 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

### British Journal of Psychology: Notes to Authors

#### **British Journal of Psychology (BJP)**

#### Notes for Contributors

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 8000 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. Submission and reviewing

All manuscripts must be submitted via our <u>online peer review system</u>. The Journal operates a policy of anonymous peer review.

#### 4. Manuscript requirements

 Contributions must be typed in double spacing with wide margins. 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, 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 <u>APA Publication Manual</u> published by the American Psychological Association.

#### 5. Publication ethics

All submissions should follow the ethical submission guidelines outlined the the documents below:

Ethical Publishing Principles – A Guideline for Authors

Code of Ethics and Conduct (2006)

#### 6. Supplementary data

Supplementary data too extensive for publication may be deposited with the <u>British</u> <u>Library Document Supply Centre</u>. 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.

#### 7. Copyright

On acceptance of a paper submitted to a journal, authors will be requested to sign an appropriate assignment of copyright form. To find out more, please see our <u>Copyright Information for Authors</u>.

### Appendix C

### Antisocial Behaviour & Tenancy Scale

#### A STUDY OF THE PERSONAL CHARACTERISTICS OF THE HOMELESS POPULATION

This questionnaire asks whether you have engaged in certain behaviours and experienced them from other people. It also asks about your current and recent accommodation.

1. Please indicate whether **you** have done any of the following over the last **12 months** by ticking the no or yes column. If you answer yes, then please write the number of times you did it.

	No	Yes	If Yes, how many times?
Damaged or vandalised property			
Stolen something/burglary/theft			
Verbally abused someone			
Physically attacked/had a fight with someone	· .		

2. Have you had any contact with the police over the last **12 months**? No .... Yes

If Yes, how many times? .....

3. Please indicate whether you have **suffered from** any of the following over the last **12 months** by ticking the no or yes column. If you answer yes to anything, please indicate who did the act and who you contacted (if anyone).

	No	Yes	If Yes, how many times?	Who did it? (e.g. member of public, another homeless person, or unknown person etc)	Who did you contact? (e.g. Police, service staff, noone)
Had something belonging to you damaged or vandalised		· · · ·			, ·
Had something stolen					
Been verbally abused by someone					
Been physically attacked by someone			,		

4. (a) Where are you currently living: Hostel ...... Sleeping rough ......

(b) How many **months** have you been living there? .....

5. Please indicate which types of accommodation you have lived in over the last **2** years

How long you lived there, and the reason you moved.

<b>Type of accommodation</b> (e.g. private accommodation, hostel, shelter)	Number of months spent there?	Why did you move?
		,
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Participant id .....

Personality disorders in the homeless... 154

### Appendix D

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Permission from Mathews, K. to adapt Screening Form

RE: Friday Mathews K.

Sent:18 November 2006 11:15 To: mm305@soton.ac.uk Cc:

Dear Mohammed,

Yes, I am happy for you to adapt the screening form for your study. Good luck with it all.

Best wishes, Kerry.

Appendix E

Screening Form

University of Southampton

### Pers School of Psychology

Doctoral Programme in Clinical Psychology

University of Southampton Tel Highfield Fax Southampton SO17 1BJ +44 (0)23 8059 5321 +44 (0)23 8059 2588

#### A STUDY OF THE PERSONAL CHARACTERISTICS OF THE HOMELESS POPULATION

#### SCREENING FORM

DO / CAN YOU READ ONE OF THE DAILY NEWSPAPERS (E.G. THE MIRROR, THE INDEPENDENT)?

YES

NO

DO / CAN YOU FILL IN YOUR OWN BENEFIT FORMS WITHOUT ANY HELP/SUPPORT?



FOR THIS STUDY, HOW WOULD YOU PREFER TO FILL IN THE QUESTIONNAIRES?

Please tick one box. You will be able to change your mind on the day, if you wish.

NO



FILL IN QUESTIONNAIRES BY MYSELF



FILL IN QUESTIONNAIRES WITH SOME HELP



FILL IN QUESTIONNAIRES IN AN INTERVIEW

#### Participant name:

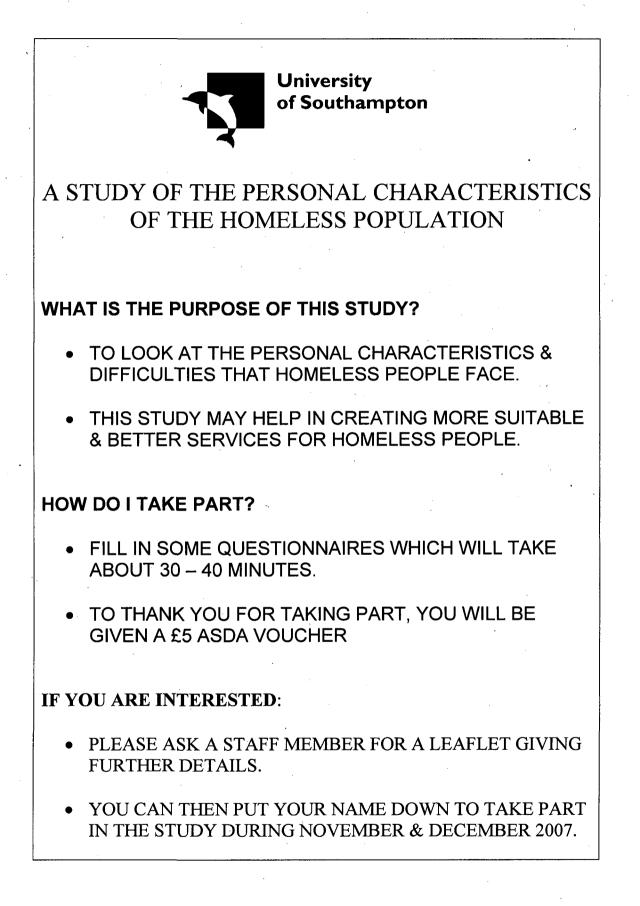
#### ID number:

Researchers:

School of Psychology, Doctoral Programme in Clinical Psychology, University of Southampton, Highfield, Southampton, SO17 IBJ. 02380 595321

# Appendix F

Study Poster



### Appendix G

### Study Information Sheet



### Pers School of Psychology

Doctoral Programme in Clinical Psychology

University of Southampton Highfield Southampton SO17 1BJ United Kingdom Tel +44 (0)23 8059 5321 Fax +44 (0)23 8059 2588

#### <u>A STUDY OF THE PERSONAL CHARACTERISTICS OF THE HOMELESS</u> <u>POPULATION</u>

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 me or a staff member if you want to. Please ask 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 personal characteristics of people who are homeless and the difficulties they face. It is hoped that the study 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. If you fill out the questionnaires, this will be taken as you giving informed consent to be included as a participant in this study. Even if you choose to take part, you will still be able to stop and withdraw at any time without giving a reason and this will not affect the services you receive.

#### WHAT WILL I HAVE TO DO IF I TAKE PART?

You will be asked to fill in 4 questionnaires. They should take a total of 30-40 minutes to fill out. Once you have completed the questionnaires, you will be asked to put them in the envelope given to you so I can collect them. If you would rather fill out the questionnaires with help from somebody or during an interview, please tell me or a member of staff and this can be arranged.

#### 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 confidential information will be used) and the information will be kept strictly confidential and in a safe place. 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 staff members and ourselves if you want.

#### 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 filling out the 4 questionnaires, you will be offered a £5 food voucher.

#### WHO ARE WE AND HOW DO YOU CONTACT US?

Our names are Mohammed Munawar and we are trainees on the Doctoral Programme in Clinical Psychology at the University of Southampton. This study is being done as part of our 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 us at:

School of Psychology Doctoral Programme in Clinical Psychology University of Southampton 34 Bassett Crescent East Southampton SO16 7PB Tel: 02380 595320

Thank you

### Appendix H

### Consent Form

### Pers School of Psychology

Doctoral Programme in Clinical Psychology

Tel

Fax

University of Southampton

University of Southampton Highfield Southampton SO17 1BJ +44 (0)23 8059 5321 +44 (0)23 8059 2588

#### A STUDY OF THE PERSONAL CHARACTERISTICS OF THE HOMELESS POPULATION

#### CONSENT FORM

Researchers: Mohammed Munawar & Dr. Nick Maguire

#### (Please tick)

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

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

3. I have agreed to take part in the study.

Name of participant ...... Date ...... Signature .....

Name of researcher ...... Date.......

Signature.....

Participant ID no: .....

U

### Appendix I Handout Sheet for Support

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University of Southampton

### Pers School of Psychology

Doctoral Programme in Clinical Psychology

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#### A STUDY OF THE PERSONAL CHARACTERISTICS OF THE HOMELESS POPULATION

Thank you for taking part in this study.

From time to time, everyone feels angry, scared, worried or sad, especially when things are not going very well in their life. 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 may not apply to you, but if it does, you might find it helpful to get some advice and support.

#### WHERE TO HELP

If you feel you need some help and support, or if you just want someone to talk to, Please contact any of these people who will be able to help you:

Your support worker at the service

Dr

(the service's healthcare GP) on

The Samaritans on: 08457 90 90 90.

Researchers: Mohammed Munawar & Dr Nick Maguire School of Psychology, Doctoral Programme in Clinical Psychology, University of Southampton, Highfield, Southampton, SO17 IBJ. 02380 595321

### Appendix J Voucher Confirmation Sheet



## Persona School of Psychology

Doctoral Programme in Clinical Psychology

University of Southampton Tel +44 (0)23 8059 53 Highfield Fax +44 (0)23 8059 25 Southampton SO17 1BJ United Kingdom

#### <u>A STUDY OF THE PERSONAL CHARACTERISTICS OF THE HOMELESS</u> <u>POPULATION</u>

#### **VOUCHERS CONFIRMATION SHEET**

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

Date	Name of participant	Signature of participant	Signature of researcher
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		And and an	

### Appendix K Ethics Approval

#### GEthics Application

Seiter B.

 Sent:
 28 August 2007 16:30

 To:
 munawar m. (mm305)

Attachments: ]

#### Dear Mohammed,

<u>Re:</u> Personality disorders in the homeless: an exploratory comparison of hostel and street dwellers

The above titled application was approved by the School of Psychology Ethics Committee on 28 August 2007.

You will now need to complete the attached form for insurance purposes, and return to the address provided.

Should you require any further information, please do not hesitate in contacting me. Please quote reference CLIN/04/60.

Best wishes,

Barbara

Barbara Seiter Academic Administrator

School of Psychology University of Southampton Shackleton Building (room 4041) Highfield, Southampton SO17 1BJ

Telephone number: 023 8059 5578 Fax number: 023 8059 2606 Email adress: <u>B.Speiser@soton.ac.uk</u> Appendix L Sponsorship / Research Governance



University of Southampton

#### Legal Services - Research Governance Office

University of Southampton Highfield Southampton SO17 IBJ United Kingdom Tel +44 (0)23 Fax +44 (0)23 Email mad4@so Id7@sote

+44 (0)23 8059 8848/9 +44 (0)23 8059 5781 mad4@soton.ac.uk ld7@soton.ac.uk

RGO REF: 5480

Mr Mohammed Munawar 48 Tremona Court Tremona Road Southampton SO16 6TH

05 December 2007

Dear Mr Munawar

Project Title: Personality disorders in the homeless: an exploratory comparison of hostel and street dwellers.

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 (2nd edition 2005).

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 Research Governance Office on this basis.

I would like to take this opportunity to remind you of your responsibilities under the terms of the Research Governance Framework, and the EU Clinical Trials Directive (Medicines for Human Use Act) if conducting a clinical trial. We encourage you to become fully conversant with the terms of the Research Governance Framework by referring to the Department of Health document which can be accessed at:

http://www.dh.gov.uk/assetRoot/04/12/24/27/04122427.pdf

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

Dr Martina Prude Research Governance Manager cc: File



# University of Southampton

#### Finance Department - Insurance Services

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Mr Mohammed Munawar 48 Tremona Court Tremona Road Southampton SO16 6TH RGO REF - 5480 School Ethics Ref - CLIN/04/60

05 December 2007

Dear Mr Munawar

**Professional Indemnity and Clinical Trials Insurance** 

Project Title: Personality disorders in the homeless: an exploratory comparison of hostel and street dwellers.

Participant Type:No Of Participants:Participant Age Group:Notes:Healthy volunteers50Adults

Thank you for forwarding the completed questionnaire and attached papers.

Having taken note of the information provided, I can confirm that this project will be covered under the terms and conditions of the above policy, subject to written consent being obtained from the participating volunteers.

If there are any changes to the above details, please advise us as failure to do so may invalidate the insurance.

Yours sincerely

Rut Mym

Ruth McFadyen Insurance Services Manager

cc: File