BURNOUT, PSYCHOLOGICAL MORBIDITY AND JOB SATISFACTION.
A COMPARATIVE STUDY BETWEEN STAFF WHO WORK IN
SUBSTANCE MISUSE SERVICE AND STAFF WHO WORK IN ADULT
MENTAL HEALTH SERVICE.

Alessia Bruno

2010

Thesis submitted to the University of Edinburgh in part fulfilment of the degree
of Doctorate in Clinical Psychology
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Alessia Bruno

Dated 19th January 2010
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ABSTRACT

Introduction: The aim of this study was to compare levels of burnout and psychological morbidity between mental health professionals working in substance misuse services and generic adult mental health services; and to examine whether job satisfaction moderates the effect of burnout and psychological morbidity.

Method: A cross-sectional survey design was adopted. Seventy-three mental health professionals completed the Maslach Burnout Inventory (MBI; Maslach et al., 1996), the General Health Questionnaire-28 (GHQ-28; Goldberg & Williams, 1988), and the Minnesota Job Satisfaction Questionnaire (MSQ; Weiss et al., 1967).

Results: Mann Whitney U-test was used to analyse medians between the two groups. Findings showed no significant differences between substance misuse staff and adult mental health staff. Additionally, both groups reported relatively low levels of psychological morbidity and burnout. A partial correlation, while controlling for job satisfaction, found a moderating role of extrinsic job satisfaction in relation to depersonalisation and psychological morbidity.

Conclusion: These data suggest that there is no difference on MBI and GHQ-28 measures between the two groups. Interestingly, job satisfaction (extrinsic) acted as a moderator only between depersonalisation and psychological morbidity. It would be helpful to identify which factors are predictors of job satisfaction and act as moderators. Future research might aim at including managers in the sample as they might suffer from burnout and psychological morbidity, which consequently might affect staff’s psychological morbidity, burnout levels and job satisfaction.
CHAPTER 1

INTRODUCTION

1.0 Overview

The first research objective of the current study is to investigate the experience of staff working within substance misuse and adult mental health services in terms of burnout rates and psychological morbidity. The second research objective is to examine whether job satisfaction mitigates the risk of burnout and psychological morbidity therefore acting as a protective factor. The research is a comparative study and will initially broadly describe and define the variables of interest exploring their aetiology and prevalence within substance misuse as well as adult mental health settings. Furthermore, the research will discuss theoretical models of burnout and job satisfaction. Subsequent to this, the variables and their relationship will be examined by providing a systematic review.

Recent changes within the health sector have led to increased job stress, poorer staff mental health, shortage in personnel recruitment and a lowering of job satisfaction (Calnan & Williams, 1995; Firth-Cozens, 1998; Forsythe et al., 1999; Pearce & Calnan, 1998; Sutherland & Cooper, 1992). In the UK, a government policy document has highlighted how important it is to comprehend work stress and health, not just for the individual, but for the entire organisation (Calnan et al., 2001). A recent study (Borrill & Haynes, 2000) explored, within the National Health Service
(NHS), stress levels for all staff in the NHS. Findings showed that more than one quarter of participants suffered from high stress levels (Borrill & Haynes, 2000).

Burnout appears to be the result of chronic stress among professionals, and is a common problem especially in developed countries (Ahola et al., 2007). According to the three-factor model (Evans & Fischer, 1993), burnout is a multidimensional syndrome which involves three cognitive/affective aspects: emotional exhaustion (EE), lack of personal accomplishment (PA) and depersonalisation (DP), which consists of, becoming cynical and beginning to withdraw from clients and colleagues. This model assumes that all three components of the syndrome are required in order to diagnose burnout (Leiter, 1988). Other authors (Garden, 1987, 1989, 1991; Shirom, 1989) argue that burnout can be explained by using a unidimensional model which consists of physical and emotional exhaustion. Authors (Garden, 1987, 1989; Jackson et al., 1986; Shirom, 1989) report that while exhaustion falls within the umbrella of the concept of stress in the literature, depersonalisation and lack of personal accomplishment are less correlated with work-related reasons for burnout. Other researchers (Wallace & Brinkerhoff, 1991) have reported that for some individuals depersonalisation can be seen as a coping strategy rather than a sign of burnout. Wallace and Brinkerhoff (1991) also support the idea that personal accomplishment does not have strong connection with stress at work. Golembiewsky et al. (1986) argue that personal accomplishment and depersonalisation scales are partly constructed by items that seem to reflect more the attitudes of professionals about their clients rather than about other relationships such as those with colleagues. However, Golembiewsky et al. (1986) support the three
factor model of burnout suggesting that this is a sequential phase model with
depersonalisation occurring first, followed by diminished personal accomplishment
and by emotional exhaustion. When describing the depersonalisation scale within the
Maslach Burnout Inventory (MBI, Maslach, 1982), the concept of depersonalisation
refers to emotional withdrawal and hostility towards clients as well as colleagues. In
contrast to this view, Garden (1987, 1989) reports that within the MBI, the scale
describing depersonalisation is not accurate. Some studies (Belcastro \textit{et al.}, 1983;
Fimian \& Blanton, 1987; Green \& Walkey, 1988; Leiter, 1988) explored the factors
of the MBI in different samples of professionals. The findings supported a three-
factor model although a four-factor and a two-factor have also been found (Corcoran,
1985; Dignam \textit{et al.}, 1986; Gold, 1984; Powers \& Gose, 1986). Some factor analytic
studies (Evans \& Fischer, 1993; Gold \textit{et al.}, 1989; Pierce \& Molloy, 1989) have
supported the three-factor model in services working in a professional capacity.
Leiter (1993) has reported the essential role that emotional exhaustion has in terms of
the social interaction typical of working in human services. Although, this is
highlighted as the most sensitive factor amongst the three dimensions, this role is not
‘exclusive’ (Maslach \textit{et al.}, 1996, p.34). Cox \textit{et al.} (1993) support these findings
stating that conceptualising burnout as a one-dimensional model would be reductive.
In addition, Cox \textit{et al.} (1993) reported that by excluding the dimensions of
depersonalisation and personal accomplishment, the concept of burnout could be
similar to the one of occupational stress. Lee and Ashforth (1990) found a
correlation amongst the three burnout dimensions of emotional exhaustion,
depersonalisation and personal accomplishment. In particular, a strong correlation ($r$
$= .66$) was reported between emotional exhaustion and depersonalisation (Lee \&
Ashforth, 1990). A subsequent meta-analysis (Lee & Ashforth, 1996) corroborated the factor structure of burnout. Evidence of the validity of the three factor model has been provided across cultures (Geurts et al., 1998; Green et al., 1991; Kansie et al., 2006; Poncet et al., 2007; Rupert & Kent, 2007) and across different occupational groups (Evans et al., 2006; Green et al., 1991; Jackson et al., 1986; Schaufeli et al., 1993; Steven & Higgins, 2002). As a result of the numerous empirical studies (Lacoursiere, 2001) and the wide use of the three-factor model of burnout in these services, this model will be the one used to describe burnout in this study.

The second concept of Psychological morbidity is particularly important when discussing burnout. Psychological morbidity in burnout can take the form of emotional as well as somatic complaints (Belcastro et al., 1982; Greenglass et al., 1990). Research (Conrad & Kellar-Guenther, 2006) has found that burnout can create, in mental health professionals, feelings of loneliness, helplessness, anxiety and depression. It is interesting to note that, besides these psychological symptoms, the burnout component of emotional exhaustion has been found in people suffering from chronic fatigue (Honkonen et al., 2006). Burnout can therefore be associated with psychological disorders and with physical diseases such as fatigue (Franssen et al., 2003). Additionally, as burnout is the result of chronic stress, evidence (Appels & Schouten, 1991; Melamed et al., 1992) shows that this may result in cardiovascular disease. Studies that have been conducted investigating psychological morbidity have focussed on different settings (Avery et al., 1998), but few have been carried out in substance misuse settings (Oyefesto et al., 2008). Working within substance misuse services can be particularly demanding and this
can be the result of high drop-out and relapse rates amongst patients (Elman & Dowd, 1997). Additionally, working within substance misuse services places high demands on staff in terms of the type of patients seen, often described as chronic and difficult (Elman & Dowd, 1997). Therefore the few studies conducted have found that professionals working within this field of expertise are likely to experience stress, burnout and psychological morbidity consisting of somatic as well as emotional symptoms.

The third concept in the study is job satisfaction. This concept as well as burnout is an important area of study due to its financial and social impact on professionals (Martin & Schinke, 1998). Job satisfaction is a fundamental element for organisations that are involved with treatment resistant and difficult clients (Martin & Schinke, 1998). Additionally, job satisfaction has been found to be negatively correlated with staff turnover and absenteeism (Farber, 1983; Freudenberger, 1975). Thus, increased burnout and decreased satisfaction may affect staff long before they decide to leave their jobs (Shapiro et al., 1999; Silver et al., 1997). Job satisfaction consists of the degree of positive emotions resulting from the appraisal of own employment (Locke, 1976). Low levels of job satisfaction might result in difficulties within the quality of health service (Bodur, 2002). Additionally, Bodur’s study (2002) has also found that amongst different health care professions, there might be different degrees of job satisfaction. It is important to note that these findings might not be generalised to health services in the UK as Bodur’s study (2002) was conducted in Turkey. Therefore, health services may differ significantly in terms of structure of the organisation and resources. Furthermore, authors (Hackman, 1980;
Jayaratne & Chess, 1984) report that the absence of certain job characteristics such as financial rewards, autonomy, task identity, task significance, and feedback from the job creates an increase or decrease in job satisfaction levels and has an impact on the level of absenteeism. Job satisfaction and burnout appear to be negatively correlated in that burnout results from dissatisfaction with aspects of one’s job (Martin & Schinke, 1998). In addition, the presence of job dissatisfaction as well as the absence of the above mentioned job characteristics such as financial rewards, autonomy, task identity, task significance, and feedback from the job, can not only lead to exhaustion & depersonalisation but can also cause psychological and physical symptoms (Martin & Schinke, 1998). Other studies (Morton & Salus, 1994) found that there are several aspects that have an impact on workers’ job satisfaction and motivation, such as praise for accomplishments, responsibility, achievements and the job perceived as being challenging. Another variable that research (Vinokur-Kaplan, 1991) found to affect worker’s motivation and job satisfaction is self-actualization, particularly in terms of working with clients and with colleagues. Additionally, other factors that may increase job satisfaction are linked to organizational aspects (Jimmieson & Griffin, 1998). Authors (Wood & Bandura, 1989) report that factors such as lack of clarity about goals have an impact on the worker’s feelings of accomplishment.

Various studies have been conducted to investigate burnout, psychological morbidity and job satisfaction in different professional groups. This study is novel because no previous comparative studies have been carried out to find whether professionals who work within substance misuse experience higher burnout rate and higher
psychological morbidity than professionals who work within adult mental health service in Scotland. Additionally, no previous studies have explored the impact that job satisfaction has in terms of acting as a protective factor against burnout and psychological morbidity, for professionals working within substance misuse services.

1.1 Burnout Syndrome

1.1.1 Defining the Burnout Syndrome

The term ‘burnout’ was coined by Herbert Freudenberger (1974) and it originated from the 1974-1975 economic recession, which had a worldwide impact (Freudenberger, 1974). In the caring profession this resulted in cutbacks which led to increased workloads, less resources, greater job stress and needier clients (Cherniss, 1995). Around the same time burnout started to be identified within substance user treatment (Lacoursiere, 2001). According to Freudenberger (1974, 1975, 1986), Maslach (1978) and Maslach and Jackson (1981), burnout is defined as a syndrome of emotional and physical exhaustion, which leads to the development of negative job attitudes and negative self-concept together with a loss of concern for clients. It therefore manifests with a variety of symptoms such as physical, emotional, behavioural and mental conditions (Lacoursiere, 2001). Burnout affects the professional’s values, dignity, will and it is a phenomenon that spreads gradually and constantly over the years and becomes a malady from which is difficult to recover (Maslach & Leiter, 1997).

Burnout has also been seen as an occupational hazard for professionals who work directly with the public, and especially for those caring professionals who would
work extra hours and who are willing to go 'the extra mile' to help a patient (Maslach & Goldberg, 1998, p.63). Discussing the topic of burnout from a transactional analysis perspective, helpers are drawn into a dysfunctional dynamic with passive-dependent patients where professionals start to perceive themselves as rescuers and view their patients as victims (Maslach, 2003).

Burnout phenomenon affects a high proportion of workers and this appears to be the result of changes in the work place as well as in the nature of jobs (Maslach & Leiter, 1997). Burnout is a tragic outcome for professionals who began their job with enthusiasm and high expectations (Maslach & Goldberg, 1998). Studies (Schaufeli & Enzmann, 1998; Schaufeli & Bakker, 2004; Thomsen et al., 1999; Weber & Jaekel-Reinhard, 2000) report that occupational burnout is the result of the interplay between resources and internal and external demands, and maladaptive coping strategies.

Janssen et al. (1999) measured the association between factors such as work-related demands and self-esteem with the three dimensions of burnout. The authors investigated whether these variables were differently associated to the burnout syndrome. Janssen et al. (1999) found emotional exhaustion being strongly correlated to job demands ($r = .45$) and less negatively strongly with self-esteem ($r = -.29$). Self-esteem was negatively associated with personal accomplishment ($r = -.26$). Findings showed no association between depersonalisation and personal accomplishment with job demands such as work overload. When association within the three burnout dimensions was investigated, outcomes highlighted a strong correlation between emotional exhaustion and depersonalisation ($r = .40$).
Additionally lower personal accomplishment was positively associated with depersonalisation \((r = .19)\). Janssen et al. (1999) critically report that a limitation of the study is the unclear causal relationship between self-esteem and burnout, whether self-esteem is the consequence or the cause of burnout syndrome. Janssen et al. (1999) also state that as the sample was composed mainly of women, it is difficult to generalise the findings. The author warns about the possibility that other confounding variables could have played a role in determining burnout. Work-related variables can include diverse aspects of the job such as degree of control and responsibility with one’s job and insufficient rewards for subjects which have not been included in the study. Another limitation might be the study being cross-sectional meaning that no definite conclusion regarding causation can be inferred as the construct is measured at one point in time. Furthermore, the results based on self-report measures rely on the participants’ interpretation of the construct.

In the present study, the concept of burnout is measured using the most widely used instrument, the Maslach Burnout Inventory-Human Services Survey, which is a self-report questionnaire (MBI-HSS; Maslach & Jackson, 1981, 1986; Maslach et al., 1996). According to Freudenberger and Richelson (1980), emotional exhaustion can be the first reaction to stress and it refers to professionals feeling drained and overstretched physically and emotionally to the extent that they are unable to recover and they are constantly tired. Although, Freudenberger and Richelson (1980) stated that emotional exhaustion can be the first reaction to stress, it might be important to highlight that burnout, and therefore emotional as well as physical exhaustion, is the result of chronic stress. Thus, other initial reactions such as general arousal, tension
or sleep difficulties might be present before emotional exhaustion (Schaufeli et al., 1993). Moss (1989) supported these findings by reporting that physical exhaustion is the first component experienced by professionals, followed by emotional exhaustion. Also, Moss (1989) highlighted the similarities between burnout and Selye's general adaptation syndrome (1950) and reported that emotional exhaustion is the final phase to stress rather than the first response. Additionally, McManus et al. (2002) argued that the causal relationship between emotional exhaustion and stress is reciprocal in that high levels of stress create emotional exhaustion and high levels of emotional exhaustion produce stress.

Depersonalisation describes a feeling of detachment that professionals experience in relation to their job and their colleagues (Cherniss, 1980). According to Maslach and Jackson (1984), depersonalisation can be seen as a loss of idealism; professionals may become cold, cynical and minimise their involvement in their job in order to protect themselves from disappointments and exhaustion. As reported by Elman and Dowd (1997) people who begin to work in the field of human service might have an idealised view and high expectations of making other people's lives better. As highlighted by Gordon (2008), when a discrepancy between professional's idealistic expectation and the reality they are confronted with occurs, professionals might lose their idealistic view about their job. When defining depersonalisation, it might be important to note that, as burnout is a work-related concept, loss of idealism might apply specifically to the job. Despite Maslach and Goldberg (1998) describing depersonalisation also as a loss of idealism, several studies (Ahola et al., 2007; Farmer, 1995; Jackson et al., 1986; Ogresta et al., 2008; Price & Spence, 1994) tend to define this concept more as a cynical, detached and negative attitude towards
clients and colleagues. According to Maslach (1982) depersonalisation can also be understood as a coping strategy in that people are seen as numbers or objects in order to reduce the perceived threat or avoid unwanted demands. Although developing negative expectations has the intended aim of personal protection, in the long term this negativity affects professionals’ effectiveness in their job and can become dehumanising for professionals (Schaufeli et al., 1993). Feelings of personal accomplishment when professionals are burned out are very low (Schaufeli et al., 1993). Professionals feel inadequate to help patients and ineffective in their job; they lose confidence in themselves and struggle to cope with changes (Schaufeli et al., 1993).

Glasberg et al. (2007) conducted a qualitative study with the aim to investigate healthcare managers’ perspective on factors contributing to healthcare employees’ sick leave resulting from burnout. Variables that contributed to burnout were found to be a reduction of resources, with consequent increased demands and responsibilities for healthcare employees. Additionally, a discrepancy between these organisational needs and the employees’ expectations were found to have an impact on staff feelings of self-efficacy and self-worth. The authors (Glasberg et al., 2007) comment on the difficulties related to the type of sample used, as managers themselves may be a source of burnout in terms of management style, lack of support and leadership. Although the authors (Glasberg et al., 2007) argue that being both a manager and a staff member provides broader insight into the factors leading to burnout, no corresponding actions are discussed to prevent burnout.
Beside the emotional implications of burnout, there has been emphasis on the physical aspects of burnout, which include headaches, sleeplessness, maladaptive eating patterns and gastrointestinal problems (National Drug Abuse Centre for Training & Resource Development; NDACTRD, 1980). Professionals who work within mental health services can be required to have continuous involvement with patients and this can be difficult when applied on a constant basis (Maslach, 1978). Furthermore, professionals are expected to emotionally contain the distress of their patients, which increases the likelihood of burnout (Maslach, 1978).

When discussing burnout it might be important to highlight that this concept is different from one of dissatisfaction (Meier, 1984). Although burnout and dissatisfaction express a negative emotional experience, burnout involves exhaustion which results from prolonged occupational stress (Firth & Britton, 1989). Additionally, burnout differs from the concept of compassionate fatigue otherwise known as vicarious traumatisation as traumatologist Charles Figley (1995) describes: compassionate fatigue is ‘the stress resulting from helping or wanting to help a traumatized or suffering person’ (p.7). Compassionate fatigue is therefore an element of burnout and might manifest as a consequence of a single exposure to traumatic material while burnout itself occurs from prolonged levels of job stress (Conrad & Kellar-Guenther, 2006).

Conrad and Kellar-Guenther (2006) measured burnout, compassionate fatigue and satisfaction among child protection workers. Results showed that 50 per cent of staff suffered high levels of compassion fatigue and compassion satisfaction, while risk of
burnout was low. Staff with high levels of satisfaction had lower levels of burnout and lower levels of compassionate fatigue. Findings highlighted that more than 70 per cent of staff had high levels of satisfaction, and that this factor has a moderating effect on burnout. A limitation is the study being cross-sectional, meaning that variables investigated are measured at one point in time making unclear the relationship among the constructs. The author notes that a possible weakness of the study was that no control group was used. This might have been helpful to further explore which organisational factors implemented might mitigate the effect of burnout and compassion satisfaction.

Furthermore, there are clear differences between the term stress and burnout. According to Seaward (1997) stress is a physiological response and adaptation to a perceived or real threat. Although burnout is the result of prolonged stress, stressed professionals can still feel better when they gain back control over their tasks at work. Professionals who suffer from burnout feel empty, and beyond caring, they stop seeing hope of positive changes in their condition.

Table 1. summarises the differences between the concepts of stress and burnout.

<table>
<thead>
<tr>
<th>Stress</th>
<th>Burnout</th>
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<tbody>
<tr>
<td>Characterized by overengagement</td>
<td>Characterized by disengagement</td>
</tr>
<tr>
<td>Emotions are overreactive</td>
<td>Emotions are blunted</td>
</tr>
<tr>
<td>Produces urgency and hyperactivity</td>
<td>Produces helplessness and hopelessness</td>
</tr>
<tr>
<td>Loss of energy</td>
<td>Loss of motivation, ideals, and hope</td>
</tr>
<tr>
<td>Leads to anxiety disorders</td>
<td>Leads to detachment and depression</td>
</tr>
<tr>
<td>Primary damage is physical</td>
<td>Primary damage is emotional</td>
</tr>
<tr>
<td>May kill individuals prematurely</td>
<td>May make life seem not worth living</td>
</tr>
</tbody>
</table>

*Table 1. Stress versus Burnout*

(helpguide.org, www.helpguide.org/mental/burnout_signs_symptoms.htm#difference)
When discussing occupational stress, as reported by Le Fevre et al. (2006), it might be important to be aware of the positive conceptualisation of stress, originally defined by Selye (1956) with the term eustress. This is in order to clarify that pressure at work may or may not result in negative stress or distress (Le Fevre et al., 2006). According to Simmons and Nelson (2001) eustress can result from a positive appraisal of stressors, while distress can result from the individual’s negative appraisal of stressors. To determine whether the individual will perceive stressors as positive or negative can depend on several factors such as the demands the stressors represent, their source, timing, degree to which the individual thinks they are desirable and the degree of control over them (Le Fevre et al., 2006). Coster and Schwebel (1997) discuss how professional psychologists use several strategies such as self-awareness, monitoring, peer and family support, supervision, and a balanced life to reduce stress. All these aspects might make this professionals group to be more prone to eustress rather than negative stress (distress), in that they might see stressors as a positive challenge.

Prazetina (2005) reports that stress in the workplace reflects incongruence between a job’s requirements and a person’s abilities and wishes to fulfil these requirements. Burnout is a form of chronic stress and results from a mismatch between the nature and the resources of the person who does the job and the nature and the demands of the job (Golembiewski et al., 1986). According to Prazetina (2005), burnout syndrome begins with some warning signs and is a gradual process involving four stages. Figure 1 illustrates the four stages of burnout.
In the first stage the person experiences a high degree of enthusiasm with unreal expectations and invests a significant amount of level of energy which is then followed by positive achievements (Prazetina, 2005). The second stage is characterised by the person’s realization that work is not as expected and signs of pessimism, psychological exhaustion and lack of satisfaction with the job start to appear (Prazetina, 2005). The third stage consists of the person’s emotional
withdrawal and isolation leading to avoidance of colleagues along with feelings of hostility, negativity and depression (Prazetina, 2005). The final stage reflects a further deterioration during which physical symptoms manifest, including insomnia, headache, allergies, as well as apathy and a ‘complete lack of life interests’ (Prazetina, 2005, p.88). The person at this stage loses confidence, becomes cynical and experiences emotional difficulties to the extent of not being able to communicate with colleagues (Prazetina, 2005). Burnout affects human service interventions and it might ultimately lead to increased job turnover, and absenteeism (Lacoursiere, 2001). Bednar (2003) reports that turnover rates decrease when professionals, who enter the job, are flexible to move to positions that are more appropriate to their needs, and enjoy a supportive relationship with their supervisor.

Professionals who work within human services have been found to be particularly prone to burnout (Pines & Aronson, 1988). This seems to be the result of typical character traits of helping professionals which may increase the risk of developing burnout (Pines & Aronson, 1988). Additionally, factors that may contribute to burnout consist of work being emotionally demanding, of professionals being characteristically sensitive to people, with a client-centred orientation (Elman & Dowd, 1997). As reported previously, according to Elman and Dowd (1997), people who enter the field of human service often aim to make other people’s lives better and to make their own life more meaningful. Freudenberger (1980) and Glicken (1983) report that the greater commitment to these idealistic values, the greater the risk of developing burnout. This seems to be the result of disappointment of
unrealistically high standards and expectations (Freudenberger, 1980; Glicken, 1983). Furthermore, the demand of investing emotionally in the job may depend on internal or external stressors both on the job and in an individual’s private life (Elman & Dowd, 1997).

Staff who work within substance misuse services may be at higher risk of burnout compared to other staff who work within a different area of expertise (Knauert & Davidson, 1979; Valle, 1979). This may be due to the nature of their client work which is difficult and chronic (Elman & Dowd, 1997). Working with substance misuse clients can be particularly frustrating, emotionally exhausting and ‘thankless’ (Elman & Dowd, 1997, p.2). In addition, the high rate of drop out, and relapse as well as recidivism increases the stress level that may eventually lead to burnout (Elman & Dowd, 1997). Also, working with substance abusing clients may be perceived by staff as demanding as a result of clients’ denial and often minimization of their difficulties (Elman & Dowd, 1997). Furthermore, having to deal with manipulation and clients’ defences can be draining for professionals (Elman & Dowd, 1997). Staff who work within substance misuse service are therefore at risk because of their everyday duty to communicate to this group of clients, listen to their complex life problems, traumatic events and often legal implications.
1.1.2. Prevalence of Burnout Syndrome

Considering the high turnover of staff and therefore the loss of trained professionals, research studies of burnout are particularly important. According to Zancajo et al. (2005) the prevalence of burnout in the Health Care Services can range between 10 to 20 per cent in general practitioners and up to 25 per cent in nursing staff. However, Zancajo et al.’s study (2005) was conducted in Spain, therefore prevalence rates in Health Care Services in the UK might be different. Carson et al. (1995) reported a higher prevalence rate of 48 per cent in community psychiatric nurses. A similar proportion (45 per cent) is highlighted by Onyett et al. (1997) in a sample of community mental health teams. Lacoursiere (2001) reported that there might not be clear rates about overall burnout in the field of substance misuse. Lacoursiere (2001) argued that this may be the result of a lack of service funding, staff shortages, workload pressure, and lack of clarity with work policies. Given that studies (Dickinson & Perry, 2002; Kammerman & Kahn, 1989; Salovitz & Keys, 1988) found a strong relationship between burnout and turnover, prevalence of staff burnout can be inferred by reporting turnover rates.

The NDACTRD (1980) reports an estimate of 20-30 per cent turnover among staff working within substance misuse. However this study was carried out in American substance misuse services. Thus, organisational aspects might not make these rates comparable to substance misuse services in the UK. A study conducted in United States (Liu, 1997) found the annual turnover rate of 32 per cent. Among this rate, 60 per cent of the workers who left their job were counsellors and 10 per cent were clinical directors, psychiatrists, psychologists and nurses (Liu, 1997). As Liu’s study
(1997) was carried out in United States, findings may not be generalised to substance misuse in the UK. A study conducted in Ontario (Ogborne et al., 1998) showed a very low turnover rate, and it found that only 3.1 per cent of staff working within substance misuse reported an intention to leave their job and only 15 per cent of the sample stated that they had sought jobs in other areas. However, it might be that turnover rates reported by Ogborne et al.'s study (1998) might not be representative as those services may differ from UK services in terms of resources available.

1.1.3 Factors contributing to Burnout Syndrome

Factors that have been found to increase the likelihood of burnout include: work overload, low self-esteem, lack of control, insufficient reward, breakdown in community, demographic characteristics and conflicting values (Maslach & Leiter, 1997). Each of these factors will now be considered in turn.

Work overload

Workload can prove to be problematic when there is a discrepancy between the view of the organization compared to that of the professional (Cox, 1990). Workload for an organisation might be measured in terms of productivity, while for professionals it might be measured in terms of energy and time (Leiter, 1991). In the presence of lack of resources, organizations place people under strains, beyond their competence, therefore increasing the risk of failure (Janssen et al., 1999). The imbalance between the demands of the job and the resources available can result in professionals having more patients to manage (Maslach & Goldberg, 1998). Furthermore, jobs are becoming more complex and professionals having to manage several tasks
simultaneously (Maslach & Leiter, 1997). When professionals are exhausted, this can result in their inability to accomplish their tasks, particularly if they are overloaded, or face a difficult problem which requires creativity to solve (Janssen et al., 1999). Other authors (Hobfoll & Freedy, 1993; Lee & Ashforth, 1996) confirm these findings by stating that emotional exhaustion is strongly associated with work overload. Unrealistic expectations about what professionals should achieve, besides causing emotional exhaustion, increase feelings of isolation and frustration (Ray, 1991).

**Low self-esteem**

Research (Rosse et al., 1991; Shirom, 1989) has found that self-esteem is an attribute that is associated with burnout. Self-esteem represents the belief in self-worth as well as one’s ability to function effectively (Locke et al., 1996). People with low self-esteem rely on others for reassurance and validation; this can be risky in demanding environments where the challenges can undermine professionals’ perception of self-efficacy (Janssen, et al., 1999). Furthermore, Maslach (1993) reports that self-esteem involves self-evaluation and people with low self-esteem are more vulnerable to stress and criticism and therefore more likely to develop burnout. This occurs especially in terms of the dimensions of personal accomplishment and exhaustion (Maslach, 1993). A typical response to symptoms of burnout is the ‘mea culpa’ reaction (Maslach, 2003, p.15). High self-esteem may to some extent prevent people from developing burnout, as people with this attribute perceive themselves as more able and competent (Janssen, et al., 1999). Despite this, it is important to remember that, although individuals may feel confident about themselves, exposure to chronic
stress in the workplace can negatively affect a professional’s self-esteem (Locke et al., 1996)

**Lack of control**

Having control over making decisions can be an important factor for professionals (Maslach, 2003). When control over making decisions is absent, professionals may feel trapped and may perceive a decrease in their autonomy (Maslach, 2003). In addition, lack of autonomy has been found to be strongly correlated to depersonalisation and poor personal accomplishment (Leiter, 1991). When professionals have some degree of control, they can generate creative solutions and can act on problems (Leiter, 1993). However, professionals might feel they have no rights to express their opinion even when the approach they have been told to follow is ineffective, or when their view collides with that of the organisation (Schaufeli et al., 1993).

**Insufficient Reward**

Another factor that can contribute to burnout is when organisations are unable to provide professionals with an appropriate reward for the work they have done (Schaufeli et al., 1993). Rewards can be given in the form of money, security and prestige (Maslach & Leiter, 1997). In terms of rewards, dissatisfaction with pay may be higher when professionals are overloaded and feel trapped in unrewarding jobs (Spector, 1997). In addition, a form of insufficient reward can manifest when professionals lose intrinsic satisfaction with their job (Spector, 1997). This can occur when management does not allow professionals to use their skills and become
rewarded by their job (Maslach & Leiter, 1997). Furthermore, when working with more challenging groups of patients, such as high risk patients, rewards might be perceived by professionals as non-existent making them feel unappreciated (Elman & Dowd, 1997).

Breakdown of Community

This term is used by Maslach (2003) to refer to the risk of the loss of job security and to a disproportionate interest in organisational short-term achievements (Maslach, 2003). As reported by Maslach and Leiter (1997), this modern utilitarian approach affects the feelings of community within an organisation, making professionals feel lonelier. Additionally, Leiter (1993) found that resources such as poor supervision and lack of co-worker support are strongly linked to the domain of poor personal accomplishment and depersonalisation. As Edwards et al. (2006) reported supervisors and co-workers can have a significant impact on the work setting in terms of support. In fact, lack of support from them may cause stress in professionals, as well as a lack of positive resources for professionals to rely upon (Schaufeli et al., 1993). In particular, a lack of support from a supervisor can be difficult for professionals to cope with, as the supervisor has a position of authority and influence over the work between professionals and their patients (Jackson & Schuler, 1985).

Demographic Characteristics

An early study (Glicken, 1983) suggested that women tend to burnout more than men. By contrast some research (Farber, 1985; Raquepaw & Miller, 1989; Thornton,
1992) has not found significant differences in terms of gender and burnout. There seems to be only a small difference regarding the dimensions of exhaustion and depersonalisation between gender. Research (Edwards et al., 2006) shows that men tend to display more callous and distant feelings, while women seem to experience a higher degree of emotional exhaustion. A limitation to the study is that findings may reflect a Western cultural stereotype where women are supposed to be more in touch with their emotions; but it may also represent a difference in terms of occupation that different genders tend to have rather than their traits (Maslach, 2003).

With regard to age, Glicken (1983) found that older workers have a lower burnout rate compared to younger workers. This seems to be the result of younger people having less experience as well as a less balanced and mature perspective on life (Poncet et al., 2007). Another factor that has been found to contribute to burnout is marital status. Interestingly, professionals who are single can be at higher risk of developing burnout as a result of not receiving support from their family, as well as not having had the possibility to develop ability in dealing with conflicts within the family (Maslach, 2003). In terms of education, Schaufeli et al. (1993) reported that professionals who have not completed a post graduate training can be at higher risk of showing signs of burnout. Additionally, Maslach (2003) states that in professionals with a post graduate qualification, signs of burnout are significant on the emotional exhaustion domain rather than on the depersonalisation and personal accomplishment domain; and this may be due to their high level of education.
Conflicting Values

Values are particularly important in terms of conflicts between professionals and their organisation (Lewandowski, 2003). As a result of limited resources, organisations may be, at times, money oriented thus missing out the needs of professionals who consequently become frustrated (Maslach & Leiter, 1997). Furthermore, professionals may feel irritated when they are requested to spend hours on administrative tasks rather than with their patients, as the latter increases the professional’s sense of purpose and the value of helping others (Gomez & Michaelis, 1995).

The afore-mentioned factors that contribute to burnout may also be described by using the general model of burnout (Figure 2.)
Burnout is a syndrome of emotional and physical exhaustion that leads to negative self-concept and cynicism. Burnout is the result of the interplay between resources and internal and external demands and maladaptive coping strategies. The concept of burnout is different from the one of dissatisfaction, compassionate fatigue and stress. Burnout develops gradually over a prolonged period of time, and it involves four stages.

Mental health professionals, especially the ones working in the field of substance misuse are at higher risk of burnout. This seems to be the result of the nature of their
clients being seen as particularly demanding. Prevalence rates of burnout in mental health professionals working in substance misuse services and adult mental health services appear to range between 10 and 48 per cent.

In terms of factors contributing to burnout, research has found an association with workload, workers' low self-esteem, lack of control over decision making, insufficient rewards from the organisation, lack of support from co-workers and supervisor, conflicting values between professionals and their organisation, younger age and to some degree gender.

1.2 Psychological Morbidity

1.2.1 Defining Psychological Morbidity

When reviewing studies of burnout, it is interesting to note how this syndrome can be associated with psychological morbidity (Lacoursiere, 2001; NDACTRD, 1980) Although, some studies (Franssen et al., 2003; Honkonen et al., 2006) found that staff who experience burnout will score significantly more negatively on measures of psychological well-being, other studies (Bakker et al., 2000; Bennett et al., 2005) do not entirely support this result.

Ahola et al. (2005) measured the overlap between depressive disorders and burnout and they found that half of the participants with severe burnout have a depressive disorder. Strengths of this study are the use of the standardised Composite International Diagnostic Interview (CIDI; Wittchen et al., 1998), rather than self-report inventories, to measure psychological morbidity, and the high participants'
response rate as measured by returned questionnaires. A clear limitation of this study is its cross-sectional nature which does not allow establishing causation between burnout and depression (Ahola et al., 2005).

Despite the similarities between presentations in terms of symptoms, depression results from different types of negative life events, while burnout is work-related (Bouma et al., 1995). Staff affected by depression may experience loss of energy at work as well as during their free time (Warr, 1987). In contrast, staff affected by burnout experience symptoms of exhaustion mainly at work (Bakker et al. 2000).

Bakker et al. (2000) measured the discriminant validity between burnout and depression. Results showed that the two syndromes can be statistically discriminated and that burnout is job-related, while depression may be the result of various life events. Some obvious limitations are its cross-sectional nature which does not allow inferring causal relationships between the variables. The author notes the use of self-report measures which may partly explain the results due to the participants' interpretation of the construct. Additionally, the sample was composed specifically of teachers therefore not allowing the generalisation of the findings to mental health professionals.

Figure 3 summarises these differences according to the integrated model of reciprocity (Bakker et al., 2000).
Belcastro et al. (1982) suggested that burnout can be related to psychosomatic complaints such as gastrointestinal problems and headaches; to psychological symptoms such as depression, anxiety (Greenglass et al., 1990), and to stress related behavioural responses such as increased use of cigarettes or alcohol (Siedman & Zager, 1991).

Honkonen et al. (2006) conducted a health study with the aim to investigate the association between burnout and physical illness in a representative nationwide population. Findings highlighted that poor health is more common in subjects who scored significantly on a burnout measure. A clear strength is the sample size of 3,368 participants. Some limitations consist of the study being cross-sectional which prevents from inferring causation between burnout and physical illness. A healthy control group would have been helpful to further explore the causal relation between

Figure 3. Differences between Burnout and Depression. Reproduced from Bakker et al. (2000, p.252).
the variables. Furthermore, the sample was composed of a variety of professionals rather than specific mental health professionals. This might be important considering that organisational factors such as support, workload, and levels of education such as post graduate training might have an impact on developing burnout.

As a result of the interplay of the symptoms of depression and those of burnout, in the present study it is important to define what it is meant by psychological morbidity and what aspects of it are investigated. The term psychological morbidity was chosen for its ability to reflect a range of psychological disorders, but mainly on the anxiety and depression spectrum, but also as a term that could incorporate wider aspects of mental health difficulties such as somatic symptoms and social dysfunction.

In the present study the concept of psychological morbidity is assessed using the General Health Questionnaire-28 (GHQ-28; Goldberg & Williams, 1988). Although, in order to increase understanding of psychological morbidity, the measure is here briefly discussed, a detailed description of this will be incorporated in the methods section. This questionnaire is a self-report measure, which investigates the following domains: somatic symptoms, anxiety and insomnia, social dysfunction and severe depression (Goldberg & Hillier, 1979). In order to better understand the factors investigated using the GHQ-28, its domains will be briefly discussed.
Somatic Symptoms

Examples of somatic conditions associated with psychological morbidity include: headache or facial pain, chronic fatigue, non-cardiac chest pain, muscle-joint pain, palpitation, irritable bowel and dizziness (Mayou & Farmer, 2002). These physical symptoms are not the result of a diagnosed physical illness (Lipowsky, 1986). These symptoms can be common and require clinical attention when the individual is distressed and constantly seeks medical help (Lipowsky, 1986). Somatic symptoms can be attributed to a pathological cause such as a virus or to a psychological reason such as stress; and Mayou and Farmer (2002) suggested that many different factors such as biological, interpersonal and health related factors are important when assessing somatic symptoms.

Anxiety

The Diagnostic and Statistical Manual of Mental Disorders Text Revised (DSM-IV-TR, American Psychiatric Association, APA, 2000) divides anxiety into three main categories: phobias, general anxiety and panic disorder. Anxiety becomes a problem when it is experienced persistently and intensively to the extent that it affects individuals’ psychological well-being and therefore their personal and professional functioning (APA, 2000). Typical symptoms of anxiety include thinking about the worst outcome, being preoccupied obsessively with one subject, palpitations, muscle tension, which may cause pain and trembling, dizziness, headache, sweating, and a dry mouth (APA, 2000).
Insomnia

Insomnia describes a condition characterized by persistent difficulty falling asleep or maintaining sleep (APA, 2000). Insomnia can be associated with a variety of conditions such as anxiety disorders, pain disorders or clinical depression (Redeker, et al., 2000). Insomnia can also manifest as difficulty returning to sleep once awakened from a sleep, otherwise termed middle-of-the-night-insomnia (Ohayon, 2008). Insomnia affects the individual’s functioning causing tiredness, irritability and difficulties with concentration. Other causes of insomnia can be life problems like stress, emotional or mental tension and work problems (NHS choices, www.nhs.uk/conditions/insomnia/Pages/Introduction.aspx).

Severe Depression

According to the American Psychiatric Association (2000), depression can be categorized into two types, which are major depression and dysthymia disorder. Symptoms of depression include low mood as well as loss of interest in activities. Additionally, other signs of depression include problems with sleeping, at times feelings of anxiety, a slowing down of thought, speech and movement, irritability, tearfulness, lack of concentration and energy, hopelessness, an increase or decrease in appetite, feelings of worthlessness and in some cases suicidal ideation such as thoughts of killing yourself (APA, 2000).

1.2.2 Prevalence of Psychological Morbidity

In a Nepalese study (Sreeramareddy et al., 2007) the prevalence of psychological morbidity, when stress is present, has been found to be 20.9 per cent among student
doctors. However, Sreeramareddy et al.'s study (2007) was conducted in Nepal and thus results might not be representative and therefore cannot be generalised to other countries. A higher rate (27 per cent) has been reported by hospital consultants (Ramirez & Graham, 1996). In the UK prevalence rates ranging between 28 per cent, in ward nurses, and 41 percent, in community nurses, have been highlighted by Butterworth et al. (1999). In a study of community mental health teams 41 per cent of participants reported psychological morbidity (Onyett et al., 1997). A more recent study on mental health social workers conducted in the UK (Evans et al., 2006), revealed a high rate of psychological morbidity (47 per cent). These findings suggest that professionals who work within the mental health sector have high rates of psychological distress. Interestingly, Oyefeso, et al. (2008) found that professionals who work within substance misuse have a very high rate of psychological morbidity (82 per cent). Oyefeso et al. (2008) reported that the concerning high rate might indicate a high degree of vulnerability in staff working in substance misuse services. Additionally, it might be that such high rate of psychological morbidity is the result of mis-scoring the GHQ questionnaire, as the measure can be scored by using the binary method (0-0-1-1) or the 4-point Likert scale method (0-1-2-3) (Goldberg & Hillier, 1979). Thus, by maintaining the same threshold value of 4 as a cut-off point (Jackson, 2007), while using the 4-point Likert scale, can lead to a discrepancy in the results. Additionally, when investigating job strain in primary care settings in the UK, using the GHQ-28 questionnaire, it was found that 23 per cent of the workforce suffers from mental distress (Calnan et al., 2001). According to McManus et al. (1999) this finding is higher than figures obtained when investigating the general population (14 per cent-18 per cent).
1.2.3 Factors contributing to Psychological Morbidity

Recent studies (Calnan et al., 2001; Rabin et al., 2005) found that there are several factors that contribute to professionals' mental distress. These factors are: personality factors, job demands, low job control and job satisfaction.

Personality Factors

Costa and McCrae (1992) list five personality traits, also named the Big Five which are: openness, conscientiousness, extraversion, agreeableness and neuroticism. Openness refers to being intellectual, open, and imaginative (Costa & McCrae, 1992). Conscientiousness describes being organized, persistent and reliable (Costa & McCrae, 1992). Extraversion is linked to ambitiousness, assertiveness and sociability (Costa & McCrae, 1992). Agreeableness is associated with being likeable, cooperative and caring, and finally neuroticism refers to proneness to stress, depression, instability and feelings of insecurity (Costa & McCrae, 1992). Research (Burke et al., 2006) shows that high scores on neuroticism and openness traits positively correlate with mental ill health. However, Neuroticism has the highest effect on mental ill health (Korotkow & Hannah, 2004). This finding shows that in studies of psychological morbidity personality traits must be taken into account (Hochwalder, 2006).

Job Demands

Professionals who have highly demanding jobs might be more likely to develop mental distress compared to professionals with low job demands (Calnan et al., 2001). Another study (Calnan et al., 2000) found that inappropriate patient demands,
which threaten professional status and self-esteem, lead to distress. In addition, Maoz et al. (1992) support the idea that heavy demands such as information overload and the stresses of direct patient care, contribute to a chaotic environment therefore increasing the mental distress of professionals. High job demands make the professional feel overwhelmed and this can affect emotional and physical well-being (Kushnir et al., 1997). Constant demanding stressors may reduce the professional’s ability to cope, and may also affect the immune functioning and cause physical problems such as gastrointestinal complaints and cardiovascular illness (Di Martino, 1992).

**Low Job Control**

Job control refers to the power that professionals have to make decisions (Calnan et al., 2001). This power may increase self-esteem and may enhance feelings of self-efficacy (Calnan et al., 2001). Job control may allow a higher degree of autonomy and creativity for professionals (Leiter, 1993). Additionally, control means a significant degree of responsibility which can be matched with positive rewards (Calnan et al., 2001). Low levels of job control significantly increase the risk of professionals developing poor mental health (Calnan et al., 2001). However, it is important to remember that high degree of job control may also bring mental distress when it entails poor rewards and high costs (Siegrist, 1996).

**Job Satisfaction**

Factors such as social support within the work setting, company policies and practice, supervision, size of workload, moral values, rewards and security, all
contribute to job satisfaction (Faragher et al., 2005). An early study (Ferguson, 1973) has found a strong relationship between job satisfaction and mental health and also between the opportunity to use one’s own abilities in the work environment and mental health. Other studies (Kasl, 1973; Orpen, 1974) argued that there might be other factors beside job satisfaction that may contribute to mental health problems such as family stress, and poor living conditions. Although Ferguson (1973) has found that there is a relationship between job satisfaction and mental health, in terms of improving mental health, it may be that people with pre-existing mental health problems will end up working in less rewarding jobs thereby reinforcing their poor mental health and low satisfaction (Gruneberg, 1979). These findings are supported by more recent research (Faragher et al., 2005) which emphasise the impact of job satisfaction on psychological morbidity, showing that a lack of job satisfaction is likely to negatively affect professionals’ feelings about themselves and their lives. Furthermore, it is interesting to highlight the significant level of mental health problems in people who are unemployed, as being out of work also increases psychological morbidity (Gruneberg, 1979).

1.2.4 Section Summary

Some studies have found an association between burnout and psychological morbidity. In the current study the construct of psychological morbidity is assessed by the GHQ-28. This measure examines different domains such as somatic symptoms, anxiety and insomnia, social dysfunction and severe depression. Prevalence rates of psychological morbidity in mental health professionals have been found to range from 20.9 per cent to figures as high as 82 per cent.
Research has found some factors being associated to psychological morbidity. These are: personality factors of openness and neuroticism, high job demands, low job control regarding decision making, and low job satisfaction resulting from specific aspects of one’s job (colleagues support, company policies, workload, moral values, supervision, lack of opportunities for workers to use their abilities).

1.3 Job Satisfaction

1.3.1 Defining Job Satisfaction

The area of job satisfaction has experienced a significant increase in terms of research interest and has become a popular focus (Fried & Ferries, 1987; Levinson, 1990). While job satisfaction research was initially conducted in industrial settings, this topic has more recently expanded to the area of human services (Levinson, 1990). According to Spector (1997) job satisfaction is defined as ‘the degree to which people like their job and different aspects of their job’ (p.2).

The concept of job satisfaction differs from that of job morale, in that job satisfaction describes the individual’s emotional response to a specific job, while job morale refers to the wellbeing of the group in their work environment (Gruneberg, 1979). Early definitions of job satisfaction by Locke (1976) describe job satisfaction as a pleasurable emotional condition that results from the evaluation of one’s job. Job satisfaction represents the individual’s attitude and it is closely linked to motivation in the workplace (Spector, 1997). This concept can be understood as a global feeling about one’s work or as attitudes about aspects of work such as supervisors, co-workers, opportunities for promotion and the nature of the work (Spector, 1997).
However, it is important to highlight that attitudinal measures of variables linked to job satisfaction tend to change over time (Lefkowitz & Katz, 1969). Previously, authors (Porter, 1962; Wolf, 1970) conceptualised the term job satisfaction as a need for different aspects of work such as pay, while the current focus is on cognitive processes (Spector, 1997). The topic of job satisfaction is of great importance in terms of business effectiveness and retention of resources (Spector, 1997).

Job satisfaction affects the professionals as well as the organisation in terms of the physical and mental health of the individual, counterproductive behaviour, productivity, and turnover (Gruneberg, 1979). Lower levels of job satisfaction have been found to have a positive correlation with psychological morbidity (Faragher et al., 2005) as well as with poor physical health problems such as heart disease (Cooper & Marshall, 1976), headache and upset stomach (Begley & Czajka, 1993; Fox et al., 1993; O'Driscoll & Beehr, 1994).

Ramirez and Graham (1996) conducted a study to investigate consultant mental health job stress and satisfaction. Findings showed that job satisfaction acts as a protective factor against stress and mental health problems. In particular factors such as autonomy and organisational management contribute to overall job satisfaction. Ramirez and Graham (1996) note that it would be helpful to conduct a follow-up study in order to examine the effects of job stress and satisfaction over time.

The topic of job satisfaction has been mainly researched in relation to its protective function against stress, burnout and turnover. With regard to turnover, research (Drake & Yadama, 1996; Spector, 1997) has found that high levels of job satisfaction
affect turnover rate and the organisation’s reputation. It is particularly important to take into account the strong correlation between turnover and job satisfaction especially when considering the impact that it has on the organisation in terms of recruiting new professionals (Dunkin et al., 1992).

A study conducted by Dunkin et al. (1992) on nursing staff found that particularly in rural areas organisations had to focus on retaining their resources, as attracting new personnel appeared to be a challenge. A variety of studies (Blau, 1993; Crampton & Wagner, 1994; Shore et al., 1990) highlighted the need to look at this causal correlation where job dissatisfaction increases the risk of turnover and intention to quit.

Shields and Ward (2001) investigated what factors determine job satisfaction for nurses and the importance of job satisfaction in terms of intent to quit the British National Health Service (NHS). Results showed that variables such as promotion and training opportunities have a more significant impact in determining job satisfaction than pay and workload. Findings highlighted that nurses who reported to be very dissatisfied with their job were 65 per cent more likely to leave their job compared to participants who reported being satisfied. Some strengths of the current study are a thorough literature review and the large sample data are drawn from. Additionally, the outcome of the study is particularly important when determining new policies to retain the resources within the NHS (Shields & Ward, 2001). The author warns about self-report inventories which rely on participant’s interpretation of job
satisfaction. Additionally, the lack of longitudinal data does not allow measurement of changes of the construct over time.

Various researchers (Hulin, 1966; 1968; Waters & Roach, 1971; Wild, 1970) found that specific components of job satisfaction such as pay, co-workers and supervision seemed to increase the tendency to remain in the job. Other studies (Kilbridge, 1961; Taylor & Weiss, 1969; Telly et al., 1971), however have reported that these variables might not be related to turnover.

Tett and Meyer (1993) conducted a meta-analysis with the aim to investigate the relationships amongst job satisfaction, organisational commitment, turnover intention and turnover using path analyses to the correlation in order to find the effects of psychometric moderators to those relations. Findings showed that both job satisfaction and organisational commitment independently predict turnover intention with job satisfaction having a stronger negative association with turnover intention \((r = -0.479)\). Turnover intention was found to positively correlate with turnover \((r = 0.280)\). Tett and Meyer (1993) highlight some limitations consisting of the accumulated cross-sectional data which does not allow inferring a strong causal interpretation. Additionally, due to shared method variance, overestimation may have occurred regarding the relation among job satisfaction, organisational commitment and turnover intention (Tett & Meyer, 1993). The author notes the possibility that other confounding variables could have played a role in determining turnover such as non-working variables. Also, non published studies not included in the meta-analysis might have found different significant results.
Bednar (2003) supported these finding by reporting a negative strong correlation between high job satisfaction with burnout and turnover. Other studies (Bluedorn, 1982; Shore et al., 1990) that supported these findings described a consistent relationship between higher job satisfaction and the propensity to stay in the same job.

The Audit Commission (1994) reported that mental health professionals can be subjected to several strains, such as working with complex patients, providing extra resources, working out-of-hours and at weekends. Despite mental health professionals experiencing such strains with their job, other authors (Heim, 1991; Hiscott & Connop, 1990; Koelbel et al., 1991) found a high degree of job satisfaction in professionals who work in mental health services. The following study by Knapp et al. (1992) supported these findings by reporting high job satisfaction rates within community care clients groups in 28 UK settings. In the United States, Oberlander (1990) reported similar findings in professionals working within community mental health teams.

The leading theory on job satisfaction is the job characteristic theory, developed by Hackman and Oldham (1976), which primarily describes the features of a job and the impact that job characteristics have on professionals. This theory explains that professionals can be motivated to perform their jobs by intrinsic satisfaction, which is the state professionals experience from perceiving their job to be important and enjoyable (Hackman & Oldham, 1976, 1980).
Job characteristic theory demonstrates that there are five core characteristics that can influence 'job performance, job satisfaction, motivation, and turnover' (Spector, 1997, p.31). These five core characteristics are: 1) skill variety, 2) task identity, 3) task significance, 4) autonomy, and 5) job feedback. Skill variety literally refers to the different skills required to do the job (Spector, 1997). Task identity concerns the identification of a piece of a job compared to the entire job (Spector, 1997). Task significance refers to how a particular job affects others (Spector, 1997). Autonomy is the degree of independency professionals have to conduct their job (Spector, 1997). Job feedback concerns the feedback professionals require in order to know that they have correctly done their job (Spector, 1997).

According to Hackman and Oldham (1976, 1980), the core characteristics are strictly connected to three psychological states which are: the perception of one's job as meaningful, increased knowledge about one's job, and responsibility. Skill variety, task significance and task identity are linked to perceiving one's job as meaningful, autonomy to feelings of responsibility, and job feedback to increased knowledge about the results with one's work (Hackman & Oldham, 1976, 1980). The different core characteristics determine the purpose and the motivation of a job; the stronger the characteristic the more satisfying the job (Hackman & Oldham, 1976, 1980).

This model also introduced the concept of 'growth need strength' (GNS, Hackman & Oldman, 1976, p.33), which acts as a moderator and represents higher order needs such as personal growth or autonomy. Professionals who have a high GNS will be very motivated with their jobs (Hackman & Oldman, 1980). Subsequent research (Loher et al., 1985) has supported the role of GNS. A series of meta-analyses (Fried
& Ferris, 1987; Loher et al., 1985; Spector, 1985), provide further support for the findings of Hackman and Oldman (1976) by showing a strong correlation between professionals' reports of job characteristics and job satisfaction. The job characteristic model is illustrated in Figure 4.

![Figure 4. “Job Characteristics Model”](image)

Reproduced from Hackman and Oldham (1976, p.32).

1.3.2 Prevalence of Job Satisfaction

Several studies (Butterworth et al., 1999; Levinson, 1990; Elit et al., 2004; Evans et al., 2006; Shields & Ward, 2001) have investigated the prevalence of job satisfaction across different mental health professionals. Figures tend to vary across professionals.
within the mental health sector. Bennett et al. (2005) reported that 68.8 per cent of mental health workers who worked in child protection services declared feeling very satisfied with their job. The authors state that being the sample specific of child protection organisation, results cannot be generalised. However the study’s internal validity is quite high due to the use of validated measures and high response rate. (Bennett et al., 2005).

A study conducted in Turkey (Bodur, 2002) reported similar rates of job satisfaction (60 per cent) among professionals working in health centres. Interestingly, another study (Shields & Ward, 2001) reported figures showing significantly lower rate of job satisfaction (49.7 per cent) among National Health Service nurses. Contrary to Shields and Ward (2001) another study (Parahoo, 1991) found that 70 per cent of community psychiatric nurses reported to be very satisfied with their job. Other research conducted by Evans and Hohenshil (1997) investigated job satisfaction among substance abuse counsellors. Findings showed that 76.2 per cent of subjects felt satisfied with their present job (Evans & Hohenshil, 1997). However, Evans and Hohenshil’s study (1997) was conducted in the United States, therefore those prevalence rates might not be representative of professionals working in substance misuse services in the UK. Farmer (1995) reported a lower job satisfaction rate amongst professionals working in substance misuse services (57.7 per cent). Research by Martin and Schinke (1998) found that 90 per cent of professionals working within a child and family service reported feeling satisfied with their jobs. However, child and family services may differ from adult mental health and substance misuse services, thus Martin and Schinke’s findings (1998) may not be
generalised. A recent study (Elit et al., 2004) conducted within an oncology service, showed that despite professionals manifesting symptoms of burnout, they also reported a high rate of job satisfaction (92 per cent). Again, as this study (Elit et al., 2004) was carried out in different specialist settings, results may not apply to other services. In contrast to Elit et al. s’ findings (2004), mental health social workers indicated lower levels of satisfaction (47 per cent) and greater levels of intention to leave their job, when experiencing significant levels of stress and emotional exhaustion (Evans et al., 2006).

1.3.3 Factors contributing to Job Satisfaction
As reported by Spector (1997) when discussing the concept of job satisfaction, it is important to take into account a variety of factors. Job satisfaction is a historical topic; therefore some findings relating to this subject are from early studies. Despite results being to some extent still important, they currently might not be as valid as when they were initially conducted.

Organisational Constraints
This term refers to the physical environment as well as other professionals in the job (Spector, 1997). Organisational constraints tend to interfere with professionals' performance and therefore these tend to cause job dissatisfaction (Peters & O'Connor, 1980). Research (Jex & Gudanowski, 1992; Keenan & Newton, 1984; O'Connor et al., 1984; Spector et al., 1988) has shown that high job dissatisfaction is positively correlated to high degree of constraints. A particularly strong negative relation has been found between the facet of supervision satisfaction and the level of
constraints ($r = -.42$) suggesting that supervisors are seen by supervisees as the biggest source of constraints (O'Connor et al., 1984). Despite these findings, the use of self-report measures makes this conclusion tentative as this type of measures relies on participants' interpretation of the construct.

**Supervision**

A number of studies (Firth et al., 1986; Warr & Wall, 1975) have identified supervision as being correlated to job satisfaction. Some research (Weed et al., 1976) reports that supervision can be task-oriented or employee-oriented and that most of employees prefer considerate leadership. A limitation to this finding might be that it is difficult to define the direction of the correlation between supervision and job satisfaction, in that supervisors may display more consideration towards employees who are satisfied rather than employees reporting being satisfied with a specific style of supervision (Gruneberg, 1979). Despite this limitation, more recent research (Billings & Moos, 1982) supports the idea that supervisor support reduces stress related mental health problems and increases job satisfaction (Holohan & Moss, 1983).

In their study Evans and Hohenshil (1997) examined the level of job satisfaction and its association with clinical supervision in substance misuse counsellors. The Minnesota Satisfaction Questionnaire short-form (MSQ, Weiss et al., 1967) was used to assess sources and levels of job satisfaction. In order to measure supervision, an individual information form was designed to collect relevant information. Findings revealed that 76.2 per cent of participants were satisfied with their job. Additionally,
clinical supervision was a significant (p < .001) predictor of job satisfaction. Although this study widens our understanding on the impact that clinical supervision has on job satisfaction, the sample was composed of counsellors and this specificity might limit its generalisation to wider population working in substance misuse services. Another limitation is the lack of a norm group for counsellors to convert MSQ row scores into percentiles scores; therefore the authors had to use a “best fit” procedure. As normative data might not exist for all professional groups, in order to interpret the results, research is obliged to find the most similar normative group with all the limitation it contains (Weiss et al., 1967). The normative group selected is assumed to be the one with the most similar characteristics to the participants recruited in the study. In the MSQ short-version (Weiss et al., 1967), there are only seven normative groups, for example: machinists, janitors, assemblers, and engineers are the “best fit” as they are scientist practitioners. Several studies have used the MSQ short-version (Bodur, 2002; Butterworth et al., 1999; Evans & Hohenshil, 1997; Faragher et al., 2005; Martin & Schinke, 1998; Priebe et al., 2005), however they have not reported the normative group used. These studies were conducted in the UK as well as in other countries with different occupational groups.

Butterworth et al. (1999) conducted the Clinical Supervision Evaluation Project (CSEP) study on a sample of nurses (n = 568) with the aim of exploring the impact that supervision has on psychological morbidity, burnout and job satisfaction. They found supervision being associated with low scores on General Health Questionnaire-28 (GHQ-28; Goldberg & Williams, 1988) and Maslach Burnout Inventory (MBI; Maslach et al., 1996) measures and higher scores on Minnesota
Satisfaction Questionnaire short-form (MSQ; Weiss et al., 1967) especially on extrinsic job satisfaction scale.

Application of Skills and Autonomy

Hoppock’s study of job satisfaction (as cited in Gruneberg, 1979) reported that some factors can increase levels of job satisfaction in workers. These include having the opportunity to apply various skills and to perform a variety of operations, which offer professionals a greater degree of self-expression, and tend to be seen as the more pleasant aspects of the job. These findings have been confirmed by a subsequent study conducted by Hackman and Lawler (1971) who reported a positive correlation between variety of tasks and job satisfaction. Additionally, Hackman and Lawler (1971) found that a high degree of autonomy positively correlates with job satisfaction ($r = .39$). The above factors that contribute to job satisfaction are particularly important for individuals who have a strong desire for both personal and professional growth. (Gruneberg, 1979). A limitation to Hackman and Lawler’s research (1971), when discussing aspects such as autonomy and variety of task, might be the failure to take into account differences in individuals’ needs. Additionally, individuals’ needs might change over time; therefore there are some difficulties in drawing strong conclusions.

Role Variables

Role refers to a specific type of behaviour for professionals within their organisation (Spector, 1997). Role ambiguity, role conflicts, which refers respectively to lack of clarity with one’s role and to incompatibility of responsibilities, can lead to low job
satisfaction (Onyett et al., 1997). Previous research (Jackson & Schuler, 1985) found a negative significant correlation between job satisfaction with role conflict \( (r = -0.31) \) and role ambiguity \( (r = -0.30) \). Furthermore, it has been found that giving a realistic idea about what role professionals have within an organisation positively affects job satisfaction (Scott, 1972; Wanous, 1973).

**Work-Family Conflict**

Professionals who have a family as well as couples with different careers or who are single parents, often have to reach compromises between the demands at home and those of their job (Bedeian et al., 1988; Holahan & Gilbert, 1979; Hugick & Leonard, 1991; Lewis & Cooper, 1987; Rice et al., 1992). Researchers (Beatty, 1996; Parasuraman et al., 1992) found that there is a significant negative correlation between work-family conflicts and job satisfaction in men \( (r = -0.40) \), but not in women \( (r = -0.02) \). Additionally, Stewart and Barling (1996) reported a positive association between conflicts, low job satisfaction and poor parental practice. Professionals who experience work-family-conflict are more likely to have children who will poorly perform at school (Stewart & Barling, 1996). Organisational policies that include flexible work schedules have been found to greatly reduce work-family conflicts (Thomas & Ganster, 1995).

**Pay**

Research found that pay does not strongly correlate with overall job satisfaction (Spector, 1985). Despite the fact that money can represent a person’s value to a specific organisation, findings regarding the importance of pay are conflicting
Wernimont & Fitzpatrick (1972) reported that money may symbolically represent achievement and recognition, but that there are differences attributed to the value of money depending on the level of professional development of individuals. Another perspective (Warr & Wall, 1975), in relation to variable pay considers the impact of professionals comparing salaries. A study conducted on a sample of mental health professionals showed that what was important to them was fairness in pay policies process, rather than the level of salary (Rice et al., 1990). A limitation might be that these studies only partly explain the association between pay and job satisfaction. Pay satisfaction might be the result of other aspects such as the employee’s past work experience with a better salary, the individual’s levels of aspiration, and the amount of effort and energy invested in the job.

**Recognition**

According to Gruneberg (1979) professionals need external validation for their achieved goals. Recognition in the form of praise has been found to be particularly effective in terms of increasing the professional’s confidence and feelings of satisfaction with one’s job (Locke, 1976). Verbal praise has been found to significantly contribute to job satisfaction (Martin & Shinke, 1998). However, firmer conclusions could be drawn if the nature of the study was longitudinal as this would allow to measure the construct over time and examine the causal relationship between praise and job satisfaction.
Work-Groups

Grunenberg (1979) has discussed the importance of a social factor within one's job. Additionally, it seems that, when in work-groups with other professionals who have a similar level of ability, job satisfaction tends to significantly increase (Cross & Warr, 1971). Another positive aspect of being part of a group relates to its meaning to the individual, in that being a group member usually involves being accepted and valued as an individual and this consequently increases one's self-esteem (Lott & Lott, 1965).

Workload

This concept refers to the physical and emotional demands placed on professionals by their job in terms of the amount of work as well as the effort required to perform a specific job (Spector, 1997). Evidence is mixed with regard to workload and job satisfaction although some research (Jamal, 1990; Jex & Beehr, 1991) found workload to be correlated with job dissatisfaction, other studies (Fox et al., 1993; Spector & O'Connell, 1994) did not support these findings. These inconsistent outcomes may be the result of the use of different measures to investigate the variable workload (Spector, 1997).

Control

In terms of job satisfaction the variable of control has been found to have a significant impact (Spector, 1997). This concept reflects the degree of autonomy and freedom that organisations allow professionals to have (Spector, 1997). A meta-analysis conducted by Spector (1986) reported that control positively correlated with
factors such as the nature of work \( (r = .35) \), while a smaller positive correlation was found with variables such as pay and co-workers \( (r = .19) \). Other studies (Dwyer & Ganster, 1991) found a positive relation between control and workload in terms of predicting job satisfaction \( (r = .37) \). Research (Jex & Beehr, 1991) found that control is of particular importance when looking at the psychological aspects of job strain such as symptoms of anxiety and feelings of frustration. Some confirmatory research (Smith et al., 1981) has reported that, to some extent, control affects job satisfaction.

**Work Schedules**

There are four main types of work schedules: flexible, long shifts, night shifts and part-time (Spector, 1997). While some studies (Pierce & Newstrom, 1982; Ralston, 1989) found that flexible work schedules decrease absenteeism and tiredness when compared to fixed work schedules, other studies (Krausz & Freibach, 1983) found no significant positive relation with job satisfaction. In terms of long shifts, Breaugh (1983) and Ronen and Prims (1981) reported that professionals feel significantly fatigued, but that they prefer to work fewer days. These findings seem to be inconsistent with a study conducted by Raggatt (1991) who found that long hours are associated to with increased maladaptive behaviours such as alcohol consumption, higher rates of stress and sleep disturbance, deterioration of own physical health, and lower levels of job satisfaction. Interestingly, similar findings have been found for professionals who work night shifts. Research (Koller et al., 1978) showed that night shifts disrupt the physiological cycle of sleep/waking. In contrast, Barton and Folkard (1991) found that shift rotation might contribute more to low job satisfaction than night shifts. In fact, when professionals on temporarily night shifts were
compared with those on permanent night shifts, it was found that subjects who work on temporarily night shifts had lower job satisfaction (Jamal & Baba, 1992). In terms of part time versus full time work, some studies (Eberhardt & Shani, 1984; Jackofsky & Peters, 1987) of hospital employees found that despite not getting the same rewards in terms of medical insurance and pay, part-time professionals had a higher level of job satisfaction. However, subsequent research (Feldman, 1990) did not support these findings stating that the reasons for job satisfaction might be different for part-timers compared to full-timers. Barling and Gallagher (1996) reported that professionals who work part-time are less satisfied with the rewards and more satisfied with some other factors of their job such as supervision.

**Personality Traits**

Research (Arvery *et al.*, 1989) has found strong evidence that personality factors are associated with job satisfaction to the extent that some authors (Staw & Ross, 1985) suggest that there might be a genetic predisposition to job satisfaction. Additionally, Davis-Blake and Pfeffer (1989) argue that a professional’s consistent experience of satisfaction with their job may be the result of the predisposition to choose good jobs rather than just a personality trait in itself. Furthermore, a longitudinal study (Staw *et al.*, 1986) conducted over 50-years found a strong correlation over time between personality traits and job satisfaction. Subsequent studies (Gutpa *et al.*, 1992; Newton & Keenan, 1991) partly support these findings by reporting that, beside personality, environmental factors also have an impact on job satisfaction. Judge (1992) argues that, over the years, research has particularly focused on two traits; locus of control and negative affectivity. Locus of control refers to the professionals’
belief that they are able to control positive and negative reinforcements (Spector, 1997). Research (Spector, 1982; O’Brien, 1983) found a positive correlation between locus of control and leadership, work motivation, and job satisfaction. A one-year longitudinal study (Spector & O’Connell, 1994) supported the finding that job satisfaction and locus of control are positively correlated. The term negative affectivity describes a propensity to experience emotions such as anxiety or depression in different situations, therefore professionals who have high levels of negative affectivity will experience the job negatively and will consequently be dissatisfied (Watson et al., 1986). Later studies (Cropanzano et al., 1993; Schaubroeck et al., 1994) support the finding that negative affectivity is negatively correlated with job satisfaction. This may be explained by stating that professionals with high levels of negative affectivity tend to perceive situations, including their job as negative, or may make worse job choices and therefore become employed in unsatisfactory jobs (Watson et al., 1986; Moyle, 1995). In order to better explain the relationship between negative affectivity and job satisfaction, some research (Edwards, 1991) investigated person and job factors and formulated the job-fit approach which describes how job satisfaction is the result of a match between jobs and a person’s characteristics. Edwards’ study (1991) fits within the approach explained by Hackman and Oldham’s (1976) job characteristic theory.

Demographic Characteristics

Research (Clark et al., 1996) has shown that people’s satisfaction trajectory consists of high satisfaction at the beginning, a subsequent decline and after that, with older age an increase again in job satisfaction levels. The initial high rate of job
satisfaction may be interpreted as a response to entering employment (Gruneberg, 1979). In addition, authors (Kalleberg & Loscocco, 1983) found that job satisfaction increases with age. This can be explained by the greater opportunity that older professionals will have had to find a rewarding job (Gruneberg, 1979). Despite these findings, there are conflicting views (Saleh & Otis, 1964). Firstly, it is difficult to support the conclusion that job satisfaction is positively correlated to age as there are many factors that need to be considered when discussing the variable age, such as a change in moral values, life experiences, and education (Grunberger, 1979). Secondly, it has been noticed that job satisfaction tends to decline five years before retirement and this could be due to poor physical health, lack of possibility for promotion and being managed by younger staff (Saleh & Otis, 1964). Thirdly, the correlation between job satisfaction and age is only partly supported in females (Hunt & Saul, 1975). Looking at the variable gender, it is important to highlight that there are no clear conclusions. Studies (Brief & Oliver, 1976; Hulin & Smith, 1964) have reported no gender difference in terms of job satisfaction. By contrast Schuler (1975) found that females placed more value on co-worker support as a job satisfaction facet, while males valued more the opportunity to participate and influence decisions. With regard to educational level, early studies support the idea that the more a person has invested in education, the more the individual will be dissatisfied with one’s job (Klein & Maher, 1966; Vollmer & Kinney, 1955). This outcome seems to be the result of individuals’ high expectations such as pay and working conditions, following their educational investment (Vollmer & Kinney, 1955).
1.3.4 Section Summary

Job satisfaction refers to the 'degree to which people like their jobs and aspects of their job' (Spector, 1997, p.2). Job satisfaction has been mainly researched in relation to its protective function against burnout and turnover. Research has also found a strong positive association between low job satisfaction with psychological morbidity and burnout and turnover.

The job characteristic theory highlights five core aspects that can influence job performance, job satisfaction and turnover. These are: skill variety, task identity, task significance, autonomy, and job feedback. Additionally, the theory introduces the concept of growth need strength (GNS) which highlights that people with high GNS will be very motivated in their job. In terms of prevalence rates, these tend to vary according to each group of mental health professionals. Figures range between 47 to 92 per cent.

Research examined factors that contribute to job satisfaction. These are: organisational constraints, supervision, autonomy and application of skills, clarity of role, recognition in the form of praise, work groups, control, personality traits (locus of control and negative affectivity). As for the following aspects, work-family conflicts, pay, workload, work schedules, and demographic variables, research has found inconsistent outcomes.
In order to further investigate associations between burnout, psychological morbidity and the mediating role of job satisfaction a systematic review of studies was carried out and findings are reported in the next section.

1.4 Literature Review Search Strategy

Databases with such acronyms: Medline, PsychINFO, EMBASE, CINAHL and the Cochrane Library, were used to examine all peer-reviewed journal articles published between 1988 and 2008 in the English language.

A combination of the search terms 'psychological morbidity' or 'burnout' or 'job satisfaction' with 'mental health professionals' indicated 3,338 articles. A further review of these articles showed that 22 studies have examined burnout, psychological morbidity and job satisfaction in mental health professionals working in substance misuse services and adult mental health services.

All studies investigating these variables in non-mental health professionals, medical professionals, and mental health professionals working with older adults or children were excluded. This was in order to select similar samples to the one of the current study. In addition, dissertation articles and single-subject case studies were also excluded. Furthermore, cited studies, considered relevant, from the key journal articles were followed up.

The following reviewed studies are derived from the main research hypotheses. Initially, studies on burnout in adult mental health professionals and in substance
misuse professionals will be discussed. As only two studies were found discussing psychological morbidity in substance misuse services and adult mental health service, the following section will briefly discuss this topic. Following from this, a wider body of research will be reviewed on the moderating role that job satisfaction has in relation to burnout and psychological morbidity.

1.4.1 Burnout in Mental Health Professionals

Various studies have examined burnout in mental health professionals.

Firth and Britton (1989) conducted a follow-up study with the aim of investigating whether emotional exhaustion, depersonalisation, lack of personal accomplishment, lack of support from a superior, and role ambiguity would predict absence or turnover. The sample was composed of nursing staff who had participated in an earlier study, which explored role support and burnout among staff (Firth et al., 1985). In order to be included in the follow-up study, participants had to have left their job within a two-year period. Also, Firth and Britton (1989) hypothesised that depersonalisation could not be correlated with absence. Findings showed that emotional exhaustion, depersonalisation and personal accomplishment are significant predictors of sickness and turnover (Firth & Britton, 1989). They reported a significant correlation between emotional exhaustion and total time off sick ($r = .26$). Role ambiguity, lack of support from their superior and emotional exhaustion predicted the frequencies of absences, and depersonalisation was found to be a significant predictor of turnover (Firth & Britton, 1989). A strength of this study is that the sample completed measures at two points in time showing, therefore, the
effects those variables such as role ambiguity and lack of support play in developing burnout and in increasing the risk of absences and turnover. An obvious criticism that can be levelled at this study is the self-administered nature of questionnaires which relies on participants' interpretation of measures. The author warns about the possibility other confounding factors may have in determining absence and turnover. Aspects related to non-work settings that were not investigated may have had contributed to sickness and departure from the job.

A comparative study also using a nursing sample (Fielding & Weaver, 1994) examined differences in the levels of burnout between hospital (n = 67) and community nurses (n = 55). Findings did not reveal any significant difference in terms of burnout. However, nurses based in the community reported their work environment as more supportive and showed higher levels of commitment than nurses based in hospitals.

A larger comparative study (Sorgaard et al., 2007) looked at levels of burnout in community teams and in acute psychiatric care in 5 different European countries. They used the Maslach Burnout Inventory (MBI; Maslach et al., 1996) to measure burnout, The Psychosocial Work Environment and Stress Questionnaire (PWSQ; Agervold, 1998) which contains items on mental fatigue, psychological stress and psychosomatic symptoms to measures aspects of the job such as workload, job control, role clarity which might lead to burnout. Results highlighted higher
emotional exhaustion in community teams due to dissatisfaction with organisational structure, work demands and less contact with colleagues. In terms of the depersonalisation and personal accomplishment subscales, the two groups showed no significant difference. Authors discuss the clear flaw of the study consisting of lacking randomisation. Also, the selection of the countries that were included in the study was not based on representative criteria of the EU as a whole (Sorgaard et al., 2007). In addition, there was not consistency in the selection criteria for the different sites for inpatient and community teams. This might cause limitation when making comparison amongst the different services. Furthermore, although the MBI was reliably translated into different languages, this did not occur for the other measure (PWSQ). Moreover, although the overall numbers of participants in each group was equal, there were differences within the sites (Sorgaard et al., 2007).

A larger study conducted in 10 European countries (Estryn-Behar et al., 2007) has highlighted the impact that aspects of work such as social work environment, teamwork characteristics and burnout have on nurses' intent to leave. Results indicated that nurses in the UK were amongst those participants who reported a higher intention to leave. Factors such as career development and quality of teamwork appeared to contribute to intention to leave. Burnout was found positively associated with intention to leave, with 26.6 per cent of nurses with high burnout level reporting having repeatedly considered leaving their job. A strength of the study is the large sample size (n = 28,561) which increases confidence on the conclusions drawn. Additionally, the study investigates various risk factors that
contribute to intent to leave, therefore providing a broader understanding of aspects that might have an impact on intent to leave. A flaw of the research is the use of self report measures which may possibly result in a method bias (Estryn-Behar et al., 2007).

1.4.2 Burnout in Substance Misuse Professionals

Although several studies in various professionals group have examined burnout, only a few studies have investigated burnout in substance misuse professionals (Oyefeso et al, 2008).

Budrionis et al. (1994) examined burnout in alcohol addiction counsellors (n = 27). Several demographic variables such as age and gender, and other factors such as years in the field of alcohol addiction were measured. Authors found that younger counsellors had higher scores on depersonalisation subscales. Furthermore, working more years in the field, and in more jobs, was associated with higher emotional exhaustion. Number of years in the present job was not linked to any burnout subscale. A flaw of this study is the small sample size, which limits its conclusions. Additionally, the specificity of the sample does not allow generalising to other substance misuse professionals.

Price and Spence (1994) examined the relationship between work and non-work stressors in 120 substance misuse counsellors. In order to examine burnout and work-related stressors, the MBI and the Work Environment Scale (WES; Moss, 1989)
were used. Findings showed that non-work related stressors contributed to burnout. They highlighted the important role that factors outside the work setting, such as marital difficulties, serious parental illness, have in determining burnout reactions such as emotional exhaustion and negative attitudes towards work and clients (Price & Spence, 1994). These results might be important when measuring burnout levels as although the construct of burnout is work-related, high scores on the MBI might be a reflection of non-occupational factors rather than employment specific aspects.

Elman and Dowd (1977) measured the personal and occupational characteristics associated with burnout among in-patient therapists (n = 79) who worked in substance misuse settings. The study showed a significant correlation between occupational stress and burnout (r = .71). In particular factors such as excessive job demands, unclear performance expectations, lack of proper performance recognition, poor attitudes toward work, emotional distress and physical symptoms have shown to impact on burnout. A clear limitation of the study is its cross-sectional nature, which does not allow measurement of changes of burnout over time. Furthermore, the study relies on participants' perception of burnout which might undermine the accuracy of the construct (Elman & Dowd, 1997).

In her 2005 study, Prazetina looked to see if professionals (n = 40) recognise the burnout syndrome in working within alcohol services and are affected by burnout and, if so, which profession is the most affected by the syndrome, and what social-demographic characteristics contribute to burnout. Prazetina (2005) reported that all
professionals recognised the risk of developing burnout when working within alcohol services. Furthermore, in terms of gender, male professionals had higher results than female, and in terms of occupation, doctors had the highest mean burnout results and psychologists had the lowest mean burnout results. The author acknowledges some limitations. The single location where the study was conducted, only in one city, and the small sample size of forty participants could affect the generalisation of the findings. Also, participants were working within an alcohol service rather than a more general substance misuse service where substances are not freely available. This aspect might be important when working with heroin-addicted patients. This client group may present as more challenging in terms of forensic history. Also, patients with heroin addiction may be particularly ambivalent and engage with professionals in order to receive methadone, or because they are on a Drug Treatment and Testing Order (DTTO). Additionally, because the measures were administered at one point in time, it was not possible to assess the progressive nature of burnout.

1.4.3 Psychological Morbidity, Adult Mental Health Professionals, Substance Misuse Professionals.

When conducting a systematic review, only the term ‘psychological morbidity’ was used as this was the construct of interest in the present study. Few studies have investigated psychological morbidity and burnout. Authors have been found to use the terms ‘stress’, ‘psychological morbidity’ and ‘burnout’ interchangeably, when in reality the three terms measure different constructs.
Fagin et al. (1995) looked at 245 community mental health nurses (CMHNs) and 323 ward-based nurses and found that CMHNs had higher psychological morbidity measured by the General Health Questionnaire-28 (GHQ-28, Goldberg & Williams, 1988), but lower depersonalisation and higher personal accomplishment on the MBI. This outcome highlights that although working in the community might result in higher psychological morbidity, CMHNs see their jobs as more rewarding than nurses working in hospitals. The use of valid and reliable measures, and the study’s sample size, allows for strong conclusions about the findings to be made.

Oyefeso et al. (2008) measured the extent and patterns of burnout in substance misuse professionals (n = 194) and the predictors of psychological morbidity. Oyefeso et al. (2008) found high rates of burnout across its three dimensions: 33 per cent for emotional exhaustion, 17 per cent for depersonalisation and 36 per cent for diminished personal accomplishment. Interestingly alienation and job stressors predicted burnout, but not mental health problems. Diminished personal accomplishment predicted psychological morbidity. Oyefeso et al. (2008) highlight a number of limitations of their study. Firm conclusions regarding the causal relationship between job factors, burnout and psychological morbidity could be drawn if the study was longitudinal (Oyefeso et al., 2008). In addition, when using self-administered questionnaire surveys, social desirability can act as a confounding factor (Oyefeso et al., 2008). Another limitation might be the reasons behind non-response and the potential influence of the non-returned questionnaires on findings (Oyefeso et al., 2008).
1.4.4 Job Satisfaction mediating the association between Burnout and Psychological Morbidity

An early study (Farmer, 1995) looked at burnout levels, work satisfaction and perceived causes of stress and strategies or situations to prevent or alleviate stress. The sample was composed of 60 mental health professionals working in substance misuse services in London. Measures such as Maslach Burnout Inventory (MBI; Maslach et al., 1996), Job Stress Questionnaire (Hingley & Cooper, 1986) and the State-Trait Anxiety Inventory (STAI; Spielberger et al., 1970) were used. Although 51.7 per cent of participants scored high on emotional exhaustion and 56.9 per cent scored high on depersonalisation; 53.4 per cent of participants scored high on personal accomplishment and 57.7 per cent reported being satisfied with their job. In terms of perceived causes of stress, substance misuse professionals rated workload, superiors and management as most stressful. Participants, also, discussed conflicts between home and work as a mild source of stress. With regard to alleviating factors, relationships with partners or friends, with relatives and support from colleagues were rated as being protective against stress. A flaw of the study is the small sample size. Future research might, therefore, look at the same variables in a larger sample of substance misuse professionals. Also, Farmer (1995) suggests that future research might focus on conducting evaluation studies with the aim at measuring the effectiveness of strategies to alleviate stress in this specific professional group.

A study of 705 substance misuse professionals (Lacoursiere, 2001) examined their intention to stay in the profession, their level of job satisfaction and their degree of
emotional exhaustion. Single questions about being emotionally exhausted and about possible risk of burnout were carried out. Results showed that 80 per cent of participants showed high levels of job satisfaction, 32.4 per cent reported feeling emotionally drained and 18.7 per cent contemplated possible risk of developing burnout. Although the majority of participants did not report emotional exhaustion and showed high levels of job satisfaction, the lack of a standardised measure assessing the constructs does not provide a clear profile on what specific work factors cause emotional exhaustion and what aspects increase job satisfaction.

Martin and Shinke (1998) examined organisational and individual factors influencing job satisfaction and burnout in a sample of mental health professionals (n = 200). Results showed levels of job satisfaction and burnout within normal range. Factors such as praise, promotional opportunities and high salary levels were found to be positively associated to job satisfaction and negatively associated to burnout. Measurement of job satisfaction levels before and after the implementation of positive organisational strategies would allow drawing firmer conclusions on the findings.

Onyett et al. (1997) measured job satisfaction, burnout and sick leave among members of 57 community mental health teams (CMHTs). Aspects such as perceived clarity of the role of the team, personal role clarity, identification with one’s profession and the team and caseload size, composition and frequency of sessions were examined in relation to burnout, job satisfaction and sick leave. Significant levels of emotional exhaustion were found among psychiatrists, psychologists, social
workers and nurses. High levels of job satisfaction were reported with job satisfaction being positively associated with team role clarity ($r = .51$) and personal role clarity ($r = .37$). Significant differences between disciplines emerged on all variables except sick leave. Psychiatrists reported higher depersonalisation and the most personal accomplishment, and showed significantly higher job satisfaction than social workers and occupational therapists. A limitation might be the sample’s composition. For instance, the study did not consider confounding factors such as differences in participants’ level of training and expertise which may have affected the results.

Prosser et al. (1997) investigated the main perceived source of work stress and satisfaction among mental health professionals ($n = 121$) with the aim of finding which source of stress and satisfaction contribute to burnout or job satisfaction. Additionally, the study was interested in looking at differences in sources of stress and satisfaction between community mental health professionals and hospital based professionals. They found that the major source of stress derived from role, poor support, overload, future, and clients; while the major source of satisfaction originated from career, working with people, management and salary. Feeling overloaded and being based in the community was found to contribute to emotional exhaustion and worse mental health. Stress from clients contributed to depersonalisation. Higher job satisfaction was linked with management ($r = .83$) and working with people ($r = .84$). Poorer mental health and emotional exhaustion contributed to lower career satisfaction. A flaw with the study is the use of a non-standardised instrument to measure sources of stress and satisfaction. Additionally,
as the variables were measured at one point in time, there is no clarity about the
direction of an effect (Prosser et al., 1997). Also, social desirability might have an
impact on the scores of the MBI and the General Health Questionnaire-12 (GHQ-12;
Goldberg & Williams, 1988). Also, the use of the General Health Questionnaire-28
rather than the GHQ-12, due to having subscales would have allowed a wider view
regarding which aspects of psychological morbidity are associated to burnout.

Following their cross-sectional study, Prosser et al. (1999) conducted a longitudinal
study over a three year period to examine whether the adoption of a community-
based model in a mental health service in London had an impact on mental health
professionals. They aimed to examine the impact of this new model in terms of
higher scores on measures of psychological morbidity and burnout and lower scores
on job satisfaction. Finally, they were interested at comparing scores on those
measures with those of in-patient mental health professionals. The response rate
varied over the three years with 76 per cent of participants returning questionnaires
in the first year, 60 per cent in the second year and 62 per cent in the third year. Of
121 mental health professionals who participated in the first year, only 25 completed
the questionnaires on all three occasions (Prosser et al., 1999). Results did not show
significant changes over time in the outcome measures when confounding variables
such as demographics were examined. Community-based mental health professionals
showed higher psychological morbidity compared to in-patient staff. A limitation to
the study is the high drop out rates across the three years which might affect the
generalisation of findings (Prosser et al., 1999). Additionally, authors note that
characteristics of non-responders might have been very different from responders
and those participants who did not return MBI and GHQ-12 measures might have higher levels of burnout and psychological morbidity. Furthermore, the sample was composed of highly selected psychiatrists and psychologists based in an inner city mental health service (Prosser et al., 1999). Findings may not, therefore, be generalised to other rural organisations and groups of professionals (Prosser et al., 1999).

Following their quantitative study (Prosser et al., 1999), Reid et al. (1999) decided to conduct a qualitative investigation on the motives underlying their findings. Reid et al. (1999) looked at the reasons mental health professionals (n = 30) had high levels of burnout and psychological morbidity despite high levels of job satisfaction; in particular, they examined sources of stress and satisfaction at work. They explored, also, the difference in burnout scores between mental health professionals working in the community and in hospitals. Results showed that what community based and in-patient mental health professionals enjoyed most about their job was the contact with colleagues viewed as supportive. Community based mental health professionals regarded contact with patients as a source of satisfaction, but also as a source of stress due to feeling constantly responsible for their patients' actions and well-being. In-patient mental health professionals, particularly nurses, found working with patients stressful due to experience of aggression and nurses' feelings of not having control over the management of patients. When psychological morbidity was explored, symptoms such as irritability, low mood, and inability to relax were reported amongst participants. Overall, in the inpatient mental health group, conditions that were seen as improving their job satisfaction consisted of spending
more time with patients, career development, training, and better wages; while for the community-based group factors such as more effective support, supervision, reduction in caseloads were viewed as increasing job satisfaction. Future research might focus on implementing some of these conditions and measure their impact on job satisfaction for mental health professionals.

A longitudinal quasi experimental study (Innstrand et al., 2004) looked at a 10 months intervention aimed at increasing job satisfaction and reducing burnout and stress levels in mental health professionals working in learning disability services in Norway. Participants were divided into experimental group and control group. The implementation of positive strategies consisted of discussion group, physical exercise to improve well-being, lectures on specific topics regarding motivation and looking after oneself; and organisational strategies such as training, career plans, reorganisation of working schedules, opportunities for promotion and job stability. Results indicated improvements in the burnout dimension of emotional exhaustion, while no improvement was found on personal accomplishment and depersonalisation. The experimental group reported a significant improvement in job satisfaction following the 10-months intervention. Authors note that a follow-up study would be interesting in order to monitor improvements over time. Also, their use of non-equivalent control group might be a threat to internal validity by selection-maturation (Innstrand et al., 2004).

A recent meta-analysis (Faragher et al., 2005) reviewed the relationship between job satisfaction levels and health. The systematic review of 485 studies revealed a strong
correlation between job satisfaction and the health of workers. Low job satisfaction was found to be positively associated with psychological morbidity, especially with anxiety \((r = .354)\) and depression \((r = .366)\). A significant positive correlation was also found between low job satisfaction and burnout \((r = .409)\). The meta-analysis includes a large portion of studies conducted in a variety of settings throughout the world. Faragher et al. (2005) highlight some limitations regarding the cross-sectional and observational nature of most studies included. Also, the authors comment on the danger of emphasising the relationship between job satisfaction and health when using imperfect measures of effect-size such as correlations which might not provide with information about the causality of the relationships between variables. Another limitation is that facets of job satisfaction, although conceptually different, are not separated from overall job satisfaction (Faragher et al., 2005). Additionally, when including studies from different cultures, a limitation might be the cultural meaning attributed to job satisfaction (Faragher et al., 2005).

A comparative study (Priebe et al., 2005) aimed at measuring job satisfaction, burnout and morale in community mental health teams. Participants were divided into 6 groups of 30 participants from Berlin and London, and they were assessed using the Minnesota Satisfaction Scale short-form (MSQ-20; Weiss et al., 1967), the Maslach Burnout Inventory (MBI; Maslach et al., 1996), and open questions on aspects of the job they did or did not enjoy and that caused pressure. Results showed that participants who worked in London had higher burnout, lower job satisfaction and lower team identity compared to participants who worked in Berlin. Male gender was associated with lower burnout rates, and being a psychiatrist was related to
higher team identity. Both groups reported enjoying direct contact with patients and
disliking bureaucracy. A limitation to the study is the small sample size in each site
(n = 30) which does not allow detection of possible real differences between groups
therefore increasing the risk for Type II error (Priebe et al., 2005). Another flaw is
the cross-sectional nature of the study which does not allow inference of causality in
the relationship of variables.

An Australian study (Pinikahana & Happell, 2004) looked at the level of burnout, job
satisfaction and stress in rural psychiatric nurses (n = 136). Findings revealed that a
small number of rural nurses (14 per cent) suffered high levels of burnout, while the
majority (70.8 per cent) reported low levels. On emotional exhaustion and
depersonalisation, respectively 70.8 per cent and 83.6 per cent reported low levels.
On personal accomplishment the majority 67.4 per cent showed low levels.
Participants (82.7 per cent) reported workload to be the highest source of stress.
With regard to job satisfaction the majority of rural psychiatric nurses (66.1 per cent)
showed satisfaction with their job. Authors note a discrepancy between high levels of
stress and high levels of job satisfaction which might need further investigation.
Also, the sample was composed of a specific profession, therefore making difficult
generalisation of findings to other mental health professionals. Furthermore, the rural
location might have played a role in determining job satisfaction. In fact due to
difficulties of recruiting trained professionals in rural areas, managers might use
more rewards in the form of money or praise, therefore although nurses might feel
overloaded, they might also feel satisfied in other aspects of their job.
A recent study by Ogresta et al. (2008) looked at the relation between job satisfaction and burnout and aimed at identifying predictors such as manifestation of occupational stress and job satisfaction of burnout among 174 mental health professionals. Results indicated an average level of emotional exhaustion (M = 24.5, SD = 9.2) and depersonalisation (M = 16.6, SD = 7.6); and a high level on personal accomplishment subscale (M = 21.8, SD = 7.4). Stepwise multiple regression analysis revealed that factors such as pay, work climate, rewards, advancement opportunities, occupational stress predicted emotional exhaustion. Frequency of negative reactions towards colleagues and patients, occupational stress, pay and rewards were predictors of depersonalisation. Work climate satisfaction was negatively correlated with the three burnout dimensions. Ogresta et al. (2008) report the main limitation of the study consisting of its methodology. Participants were chosen according to their availability and readiness, therefore non-responders could have reported a different profile. Also, the measurement of the three constructs relies on the participants’ subjective estimation (Ogresta et al., 2008).

1.4.5 Section Summary

The body of research has highlighted the risk of burnout and psychological morbidity amongst mental health professionals both in adult mental health services and substance misuse services and their impact on turnover and absence (Firth and Britton, 1989; Estryn-Behar et al., 2007). Comparative studies have highlighted the presence of burnout in both community-based and hospital-based mental health professionals (Prosser et al., 1999; Sorgaard et al., 2007), and how different aspects of their job are seen as a source of stress or satisfaction (Reid et al., 1999). Research
has shown, also, that mental health professionals with different expertise report different levels of burnout, psychological morbidity and job satisfaction (Onyett et al., 1997) and how these factors can be improved by implementing individual and organisational strategies (Innstrand et al., 2004). It appears that burnout is an increasing phenomenon amongst professionals who work with the public (Pines & Aronson, 1988). Given the strong relationship between burnout, psychological morbidity and staff turnover (Dickinson & Perry, 2002; Kammerman & Kahn, 1989; Salovitz & Keys, 1988) and, therefore, the loss of trained and experienced professionals to the service, this topic needs to be addressed and a preventative approach employed in order for organizations to retain their resources (Prazetina, 2005). Furthermore, considering the challenging demands within mental health services (Borrill & Haynes, 2000; Calman et al., 2001) and substance misuse services (Elman & Dowd, 1997), it would be interesting to investigate whether staff who work within substance misuse service are effectively experiencing more difficulties in their profession in terms of burnout and mental health problems. Moreover, considering that some research (Bednar, 2003; Conrad & Kellar-Guenther, 2006; DePanfilis, 2006; Faragher et al., 2005; Winefield & Barlow, 1995) suggests that job satisfaction seems to mitigate the effects of burnout and reduce psychological morbidity, it would be of significant importance to see whether this applies to substance misuse staff and if so what specific aspects of the job act as protective factors.

To the author’s knowledge no previous comparative studies have been conducted investigating burnout, psychological morbidity and the moderating effect of job
satisfaction between adult mental health professionals and substance misuse professionals.

1.5 Study Hypotheses

The study aims to explore the impact that working within substance misuse has on staff in terms of burnout, psychological morbidity and job satisfaction. In addition, the study is interested in investigating whether mental health professionals working within a substance misuse service are at higher risk of burnout, and mental health problems as compared to staff working within an adult mental health service. Finally, the research aims at find out whether job satisfaction acts as a protective factor in both professional groups.

Table 2. Summary of Hypotheses

<table>
<thead>
<tr>
<th>Hypothesis 1: Substance Misuse staff experience higher burnout rates compared to staff in Adult Mental Health services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 2: Substance Misuse staff experience higher levels of mental health difficulties compared to staff in Adult Mental Health services</td>
</tr>
<tr>
<td>Hypothesis 3: In both groups, job satisfaction has a moderating effect on burnout and psychological morbidity</td>
</tr>
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</table>
CHAPTER 2

METHODS

2.0 Design

This research employed a quantitative cross-sectional design with both groups of participants being assessed at one time point. The participants were Community Mental Health professionals and Substance Misuse health care professionals. The current study was carried out in Scotland. Initially Substance misuse services and adult mental health services were contacted within Dumfries and Galloway. Also, it was planned that in the eventuality that the power requirement was not met, other substance misuse services and adult mental health services would be contacted within Scotland. As statistical power was reached, it was not necessary to contact adult mental health and substance misuse services outside the region.

Adult mental health staff and substance misuse staff working within the NHS as well as the Voluntary sectors formed the subject pool. The sample was recruited through letters sent to service managers. All participants completed a questionnaire booklet containing a section indicating which professional group they belonged to (e.g. substance misuse or adult mental health), how long they had worked within that area of expertise together with three standardised scales. Demographic variables were not investigated in order to better preserve anonymity and in the hope that an increased number of individuals would complete the questionnaires. The purpose of the design was to compare group means in terms of burnout, psychological morbidity and to
investigate whether there was a relationship between job satisfaction and the two variables, burnout and psychological morbidity, within each group.

2.1. Power and Sample Size Calculation

In order to determine the sample size to achieve statistically significant results, a power calculation was conducted using Cohen's power calculation (1992). All calculations were made on the basis of a power value of 0.80, as by selecting a smaller power value, the risk of making a Type II error increases. On the other hand, a larger power value would produce an impractical sample size (Cohen, 1992). Thus a medium effect size was assumed for the current study and a significance level of 0.05. Cohen's (1992) calculation assuming a medium effect size, a significance level of 0.05 and a power value of 0.08 indicates a required sample size of 34 subjects in each group in order to carry out two-tailed t-tests. Additionally, to detect a correlation of 0.5 a sample of 30 subjects in each group was sufficient for power of 0.8 for three independent variables (Cohen, 1992).

2.2 Ethical Approval

Ethical approval for the study was granted by Dumfries and Galloway NHS Research Ethics Committee (appendix 1). The main ethical consideration related to informed consent and confidentiality, and potential distress to participants. As requested, amendments were applied in order to protect participants.

Following an initial discussion among members of the Ethics Committee, it was agreed that considering the small area where the present research was conducted,
consent would have affected anonymity. Additionally, it was thought that in the eventuality that a discrepancy between the number of questionnaires received and the number of consent forms received occurred, the researcher would not have had the permission to use the information received (e.g. more questionnaires forms received than consent forms). The invitation to participate to the current study implied consent. Informed consent was therefore not sought in the present research.

Furthermore, in the participant information sheet (appendix 2) details of a named independent contact where participants could request additional information was added. Also, in the first draft, participants were advised, on their information sheet, that in the eventuality that by completing questionnaires they became distressed by realising that they suffered from burnout or psychological morbidity, they could contact the researcher who would have put them in contact with someone. Following the meeting with the Ethics Committee, it was recommended that in the participant information sheet, participants, if distressed were asked to contact an independent number as the researcher might have known some of the participants. As a result of that the researcher contact number was replaced by the academic supervisor number who was not familiar with the participants. This independent contact would have provided participants with information about the most helpful service to meet their need as well as debriefing if necessary.

The title until the end of the present study remained “The experience of working in Substance Misuse Service and Adult Mental Health Service” as highlighted in the participant information leaflet. The Ethics Committee agreed that participants would
have to be informed about the full title of the study and its hypotheses at the end of the research. This was in order not to influence the participants’ view on the present study.

At the meeting with the Ethic Committee, the researcher highlighted the need for a minor amendment to the form used to allocate participants to substance misuse (SM) or adult mental health (AMH) service within NHS or Voluntary sector. In this form, in the section where participants indicated number of years worked in the SM or AMH field, the first option changed from 0-3 years to 1-3 years. This had been changed as burnout is a gradual process that occurs over time and people who have worked less than a year are less likely to display signs of burnout. Studies of burnout (Conrad & Kellar-Guenther, 2006) have included individuals whose length of years in that profession was less than one.

2.3 Eligibility Criteria

The participants in the research were staff members identified by contacting the organisations’ managers in the region. At meetings with each organisation’s manager, inclusion criteria were discussed in order to recruit participants. In Table 3 the eligibility criteria for participants are listed.
**Table 3. Eligibility Criteria**

<table>
<thead>
<tr>
<th>INCLUSION CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>• All health care professionals who currently work within the Adult Mental Health (AMH) Services who have a caseload of patients with mental health problems.</td>
</tr>
<tr>
<td>• All health care professionals who currently work within the Substance Misuse Services (SM) and who have a caseload of patients with substance misuse problems.</td>
</tr>
<tr>
<td>• All health care professionals who see patients whose age category falls within adult mental health; age 18-65.</td>
</tr>
<tr>
<td>• Volunteers with an active caseload working within organisations providing services for AMH or SM patients.</td>
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</table>

<table>
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<tr>
<th>EXCLUSION CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Health care professionals who are not specialised in substance misuse or mental health service provision.</td>
</tr>
<tr>
<td>• Health care professional whose length of stay in the service is less than one year.</td>
</tr>
</tbody>
</table>

**2.4 Participants**

A total of 12 managers working within substance misuse, adult mental health services, the voluntary sector and the NHS were contacted. All managers of the organisations agreed for their teams to take part to the study and gave the researcher permission to contact their staff. Both groups of professionals worked within multidisciplinary teams and the teams had both formal and informal peer support. Additionally, it was assumed that in both professional groups, supervision took place in line with professional guidelines.
In the two groups the response rate was respectively 61 per cent adult mental health staff (n = 37) and 48 per cent substance misuse staff (n = 36) from a total of 12 settings (5 voluntary and 7 NHS) (Table 4).

### 2.5 Measures

The measures used in the current study were three standardised self-report questionnaires to assess burnout, psychological morbidity and job satisfaction (Table 5). Additionally a simple identifier form that preserved anonymity, but allowed the researcher to allocate subjects to respective groups, was used (appendix 3).

#### 2.5.1 Participant Identifier Form

The identifier form was designed specifically for the study. This form asked participants to report which service they worked in, such as substance misuse or adult mental health. Additionally, participants were asked to specify if they were NHS employees or if they worked within the voluntary sector. Furthermore, as burnout was one variable assessed in the study and considering its progressive nature over time, it was necessary to identify how long participants worked in that field of expertise. As a result, respondents were requested to rate the length of their
employment in that service. Time ranged from one year to “longer than eighteen years”. The decision to use one year as a starting point was the result of previous studies that included participants whose the minimum employment’s length in the service was one year (Conrad & Kellar-Guenther, 2006). Respondents whose employment’s length in the service was less than one year were not included in the study.

Table 5. Standardised Measures

<table>
<thead>
<tr>
<th>Study Variables</th>
<th>Measures</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout</td>
<td>Maslach Burnout Inventory-Human Services Survey, MBI-HSS</td>
<td>Maslach, Jackson &amp; Leiter (1996)</td>
</tr>
<tr>
<td>Psychological Morbidity</td>
<td>General Health Questionnaire, GHQ-28</td>
<td>Goldberg &amp; Williams (1988)</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>Minnesota Satisfaction, Questionnaire MSQ-20</td>
<td>Weiss, Dawis, England &amp; Lofquist (1967)</td>
</tr>
</tbody>
</table>

2.5.2 Maslach Burnout Inventory-Human Services Survey (MBI-HSS; Maslach et al., 1996)

The MBI-HSS scale (appendix 4) is a 22-item self-report questionnaire, which measures the frequency of burnout symptoms. In the original version of the MBI-HSS, the scale measured also the intensity of the feelings (Maslach & Jackson, 1981). As a result of the redundancy between the intensity and the frequency rating, the intensity scale was deleted in the following editions (Maslach et al., 1996). The MBI-HSS assesses people’s personal experience with their job. Items measure
feelings attributed to work specifically, rather than feelings that relate to all other aspects of the individual's life (Bakker et al., 2000; Bouma et al., 1995).

The MBI-HSS particularly measures three domains: emotional exhaustion, depersonalisation and personal accomplishment (Maslach et al., 1996). Subjects are requested to rate on a 7-point Likert Scale how often they experience the symptoms (never = 0 to every day = 6). There is no combined total score on this measure. A high degree of burnout is shown in high scores on emotional exhaustion (27+) and depersonalisation (10+) subscales and low scores on personal accomplishment (0-33). A low degree of burnout is reflected in low scores on emotional exhaustion (0-18) and depersonalisation (0-5) and high scores on personal accomplishment (40+). A moderate degree of burnout is shown in average scores on each subscale. Cut-off scores and levels of burnout scores for the three subscales are listed in Table 6.

Table 6. Cut-off and degrees of burnout scores for the Maslach Burnout Inventory Human Services Survey

<table>
<thead>
<tr>
<th>Degree of burnout</th>
<th>Sub-scale score range</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emotional Exhaustion</td>
<td>Depersonalisation</td>
</tr>
<tr>
<td>Low</td>
<td>0-18</td>
<td>0-5</td>
</tr>
<tr>
<td>Moderate</td>
<td>19-26</td>
<td>6-9</td>
</tr>
<tr>
<td>High</td>
<td>27+</td>
<td>10+</td>
</tr>
</tbody>
</table>

Test-retest coefficients and face, construct and convergent validity have been established for the MBI-HSS (Maslach et al., 1996). The reliability coefficients for
the three subscales are: .90 for emotional exhaustion, .79 for Depersonalisation, and .71 for Personal Accomplishment (Maslach et al., 1996). Studies confirm the stability of the scales over time, with correlation in the .50 to .82 range on intervals between three months to one year (Leiter & Durup, 1996).

2.5.3 The Minnesota Satisfaction Questionnaire short-form (MSQ, Weiss et al., 1967)

The MSQ has been used in many health care settings (Levinson, 1990; Martin & Schinke, 1998) and it applies to the British population (Butterworth et al., 1999). According to Weiss et al., (1967), the MSQ provides a more individualised profile of the worker’s satisfaction compared to other measures which provide a more general picture of job satisfaction. Workers can experience the same amount of job satisfaction, but the reasons for their satisfaction can be different (Weiss et al., 1967). This is very important considering that research (Weiss et al., 1967) shows that workers’ individual satisfaction vary according to their vocational needs. The MSQ has a long and a short version. The long-form consists of 100 items and it is composed of twenty sections of five items each. The author believed that, as professionals were also requested to complete the MBI-HSS and the GHQ-28 as well as the MSQ, in order to increase the participants’ response rate, the use of the MSQ short version was thought more feasible.

The MSQ short-form, is a 20-item self-administered questionnaire and it is composed of the twenty items reflecting the subscales of the long-form (appendix 5).
By completing the MSQ, subjects rate their satisfaction, at present, with a variety of work-related aspects on a scale of one (very dissatisfied) to five (very satisfied).

A high satisfaction is reflected with a percentile score of 75 or higher. A low degree of satisfaction is reflected with a percentile score of 25 or lower. An average satisfaction is reflected in the middle range between 26 and 74 percentile scores. The scores to use in interpreting the MSQ are obtained from the most appropriate norm group. The MSQ has been widely used in the field of job satisfaction and the short-form has proven its internal consistency for intrinsic, extrinsic subscales and total scores (Schriesheim et al., 1993; Spector, 1997). The scale has reliability coefficients ranging from .87 to .92 (Martin & Schinke, 1998). The MSQ test-retest correlations of .70 to .89 support the reliability of this scale (Weiss et al., 1967). Furthermore, face, construct, content and convergent validity have also been established for this questionnaire (Weiss et al., 1967). According to Weiss et al. (1967), the MSQ consists of three scales: Intrinsic Satisfaction (12 items; e.g. item 1: "The chance to do something that makes use of my ability"), Extrinsic Satisfaction (6 items; e.g. item 12: "The praise I get for doing a good job") and General Satisfaction (20 items; e.g. item 19: "The chance to do different things from time to time").

2.5.4 General Health Questionnaire (GHQ-28, Goldberg & Williams, 1988)

The GHQ-28 was chosen in order to measure the variable psychological morbidity (appendix 6). The GHQ-28 has 28 items and it detects a wide range of psychological disorders mainly on the anxiety and depression spectrum (Goldberg & Williams, 1988). The GHQ-28 consists of four subscales: somatic symptoms (A), anxiety and insomnia (B), social dysfunction (C) and severe depression (D) (Goldberg &
Williams, 1988). As reported by Goldberg and Hillier (1979) this measure can be scored by using the usual GHQ scoring method (0-0-1-1) or the 4-point Likert scale method (0-1-2-3). Piccinelli et al. (1993) argued that the Likert scoring has little advantage over the usual GHQ scoring method. Goldberg et al. (1997) supported these findings by reporting that the Likert scoring should be used if a study aims to investigate severity of psychological morbidity. Also, Goldberg and Hillier (1979) argued that if the GHQ is used as a screening method, the usual scoring (0-0-1-1) is recommended. In addition, the GHQ-28 should be used if the study aims to examine scaled scores as well as total scores (Goldberg et al., 1997). As a result of this, in the current study the GHQ binary scoring method (0-0-1-1) was used. Participants were asked to respond to how better or worse than usual their overall health has been in the past few weeks. The GHQ-28 classifies any item exceeding the threshold value of 4 as achieving ‘psychiatric caseness’ (Jackson, 2007, p.79). The concept of caseness for a measure refers to its ability to identify cases of people presenting with psychiatric symptoms ranging from mild to severe and chronic (Williams et al., 1980). Murray et al. (1997) stated that psychiatric symptoms as those described in the Diagnostic and Statistical Manual of Mental Disorder (DSM-IV; APA, 2000) and in the International Classification of Diseases (ICD-10; World Health Organisation, 1992).

The GHQ-28 has been shown to be a valid and reliable instrument across cultures and across a variety of community and occupational settings (Goldberg & Williams, 1988). Furthermore, in the study conducted by Goldberg and Hillier (1979) the scales B (anxiety and insomnia) and D (severe depression) correlates highly with clinical
interview schedule (Cronbach’s $a = 0.71$ for B scale and $a = 0.73$ for D scale). As a result of its proven reliability and validity the measure was chosen.

### 2.6 Procedure

In order to recruit participants, a letter to services’ managers was sent (appendix 7). The letters included information about the aim of the study, how confidentiality of data and anonymity would be maintained and how subsequent feedback to services would take place. It was agreed with the Ethics Committee that Participants would be informed about the research hypotheses and the research full title at the end of the study in order to avoid participants’ bias. After having sent the initial letter to managers, meetings were arranged in order to obtain approval for their staff to be contacted. Additionally, meetings allowed managers to ask further questions about the research and allowed the author to obtain, for each organisation, the number of potential participants to send the information pack to. Consequently the self-report measures, participants’ information leaflets, and the form identifying which service they worked for and the length of time they worked for it together with addressed envelopes were sent to the managers. Following this, managers distributed the research packs to all eligible staff members. Staff members, who completed the measures, returned the anonymous forms to the researcher.

On receiving the questionnaires, the researcher separated the forms into two main groups according to which service they worked for (e.g. adult mental health or substance misuse). Following this, data were analysed, using NHS password protected computers, which the author has the sole access. These computers were located at the Psychology Department. The collated data were entered anonymously
into an SPSS database for statistical analysis and a Mann-Whitney U test was used to compare medians between test scores of substance misuse staff and adult mental health staff. This analysis allowed the researcher to find whether there was a difference between these two groups in terms of stress and mental health problems. Subsequent to this, a further statistical analysis was conducted, using a partial correlation, to test whether in both groups job satisfaction has a moderating effect on burnout and psychological morbidity.

Participants were made aware that there was no obligation to take part in the research which was purely voluntary in nature and it was made clear to subjects that they had the right, at any time, to withdraw from the study. Additionally, in the participant information leaflet, contact numbers and e-mail addresses of the researcher and of the academic supervisor were made available in the eventuality that participants wished to raise concerns or needed a debriefing space after completing the measures.

2.7 Analysis of the Data

Data analysis was carried out using SPSS for Windows (Version 14). Due to data being positively (psychological morbidity and burnout), and negatively (job satisfaction) skewed, analysis was conducted using non-parametric tests. The Mann-Whitney U test was used in order to compare medians between substance misuse and adult mental health groups. A partial correlation was used to explore the relationship between variables. The decision to use non-parametric test was to avoid violating the assumptions of parametric statistic (Field, 2005).
CHAPTER 3

RESULTS

This section describes the methods of statistical analysis, the characteristics of the sample, and findings in relation to the main hypotheses.

3.0 Planned Statistical Analysis

As was noted in the previous section the data were not normally distributed, therefore non-parametric techniques (Mann-Whitney) were used to analyse differences between groups. The third hypothesis which investigated whether job satisfaction has a moderating effect on burnout and psychological morbidity was tested using a partial correlation analysis with job satisfaction being the controlled variable.

Explanatory variables such as demographics were not included, as it was thought that the familiarity of the author with the participants would have possibly decreased the response rate. A sample size of 34 participants in each group was achieved, therefore assuming a medium to large correlation with a power level of .80 and a significance level of .05 (Cohen, 1992).

Differences between averages in the two samples were investigated using non-parametric statistics. Thus, analyses were carried out on scores arranged in ranked order (Answers.com. http://www.answers.com/topic/non-parametric-statistics).
When data are not normally distributed, or outliers are present, the median score can be used as a value that divides the data set in half (Answers.com, http://www.answers.com/topic/non-parametric-statistics). This means that 50 per cent of the scores will be above or equal to the median and that 50 per cent of the scores will be below or equal to the median (Cozby, 2001). In the current study, data for each of the measures are highlighted as median scores for the comparison groups. Additionally, median scores for individual subscales are presented. Also, it was not possible to make within group comparisons of median scores among staff working within NHS and voluntary sector as the sample was not large enough.

3.1 Response Rate
A total of 139 questionnaires were sent and 75 questionnaires were returned. Amongst the 75 returned forms, 2 questionnaires from adult mental health staff were not included as in one participant length of employment was less than one year and in the other participant GHQ-28 form was missing. The overall response rate was 54 per cent, which is acceptable given the average return rate of postal questionnaires ranging between 30-40 per cent (Oppenheim, 1992). In the two groups the response rate was respectively 61 per cent adult mental health staff (n = 37) and 48 per cent substance misuse staff (n = 36) from a total of 12 settings (5 voluntary and 7 NHS).

3.2 Prevalence Rates
As mentioned previously, in the current study the GHQ binary scoring method (0-0-1-1) was used. Overall eighteen participants (25 per cent) reported significant rates of psychological morbidity. Within substance misuse services, eight participants (22 per
cent) showed high scores on GHQ-28, while within adult mental health services ten participants (27 per cent) scored high on the measure.

In terms of burnout, twelve of overall participants (16 per cent) reported high rates of emotional exhaustion, fourteen participants (19 per cent) showed average scores of emotional exhaustion and forty-seven participants (64 per cent) scored low on emotional exhaustion. When examining groups, five participants (14 per cent) working within substance misuse services scored high on emotional exhaustion, five (14 per cent) scored on the average range, and twenty-six (72 per cent) in the low range. Within staff working in adult mental health services, seven (19 per cent) reported high levels of emotional exhaustion, nine participants (24 per cent) scored within the average range and twenty-one (57 per cent) reported low levels of emotional exhaustion. When prevalence of depersonalisation was examined, six of overall participants (8 per cent) reported high levels, thirteen participants (18 per cent) an average level and fifty-four (74 per cent) low levels of depersonalisation. Amongst staff working within substance misuse services two participants’ scores (7 per cent) fell within high range, five (14 per cent) within the average range and twenty-nine (81 per cent) within the low range of depersonalisation. Four adult mental health staff (11 per cent) reported high levels, eight (22 per cent) average levels and twenty-five (68 per cent) low levels of depersonalisation. On personal accomplishment, thirty-one of overall participants (42 per cent) reported high levels, twenty-seven (37 per cent) reported an average level, and fifteen (20 per cent) low levels. Fifteen substance misuse staff (42 per cent) scored high on personal accomplishment, fourteen (39 per cent) scored within the average range and seven
(19 per cent) reported low personal accomplishment. Amongst adult mental health staff, sixteen (43 per cent) scored in the high range, thirteen (35 per cent) in the average range, and eight (22 per cent) in the low range.

In terms of job satisfaction, sixteen participants (22 per cent) reported being highly satisfied with their job, thirty-two participants (43 per cent) showed average satisfaction and twenty-five (34 per cent) low levels of job satisfaction. Within substance misuse services, nine respondents (25 per cent) reported high rates of job satisfaction, twenty participants (56 per cent) average rates and six (17 per cent) low rates. Amongst staff who work within adult mental health services, six participants (16 per cent) reported having high levels of job satisfaction, twelve (32 per cent) average rates, and nineteen (51 per cent) low rates.
3.3 Descriptive Statistics

Due to data not being normally distributed, median and Inter-quartile Range values for all variables are provided for each group (Table 7 & Table 8).

Table 7. Descriptive Statistics of variables of Adult Mental Health Group (N=37)

<table>
<thead>
<tr>
<th>Variables</th>
<th>MEDIAN</th>
<th>IR</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHQ Somatisation</td>
<td>.00</td>
<td>.00 - 3.50</td>
</tr>
<tr>
<td>GHQ Insomnia</td>
<td>.00</td>
<td>.00 - 1.00</td>
</tr>
<tr>
<td>GHQ anxiety</td>
<td>.00</td>
<td>.00 - 1.00</td>
</tr>
<tr>
<td>GHQ Depression</td>
<td>.00</td>
<td>.00 - .00</td>
</tr>
<tr>
<td>GHQ TOT</td>
<td>1.00</td>
<td>.00 - 6.00</td>
</tr>
<tr>
<td>BO Personal Accomplishment</td>
<td>38.00</td>
<td>34.00 - 43.00</td>
</tr>
<tr>
<td>BO Emotional Exhaustion</td>
<td>14.00</td>
<td>10.00 - 23.00</td>
</tr>
<tr>
<td>BO Depersonalisation</td>
<td>4.00</td>
<td>1.00 - 6.00</td>
</tr>
<tr>
<td>Internal Job Satisfaction</td>
<td>47.00</td>
<td>43.00 - 51.50</td>
</tr>
<tr>
<td>External Job Satisfaction</td>
<td>19.00</td>
<td>13.00 - 23.00</td>
</tr>
<tr>
<td>Job Sat TOT</td>
<td>74.00</td>
<td>62.00 - 81.00</td>
</tr>
</tbody>
</table>
Table 8. Descriptive Statistics of variables of Substance Misuse Group (N=36)

<table>
<thead>
<tr>
<th>Variables</th>
<th>MEDIAN</th>
<th>IR</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHQ Somatisation</td>
<td>1.00</td>
<td>.00 – 2.75</td>
</tr>
<tr>
<td>GHQ Insomnia</td>
<td>.00</td>
<td>.00 – 1.00</td>
</tr>
<tr>
<td>GHQ anxiety</td>
<td>.00</td>
<td>.00 – 1.00</td>
</tr>
<tr>
<td>GHQ Depression</td>
<td>.00</td>
<td>.00 – .00</td>
</tr>
<tr>
<td>GHQ TOT</td>
<td>1.00</td>
<td>.00 – 4.00</td>
</tr>
<tr>
<td>BO Personal Accomplishment</td>
<td>38.00</td>
<td>35.25 – 44.75</td>
</tr>
<tr>
<td>BO Emotional Exhaustion</td>
<td>9.50</td>
<td>7.00 – 21.25</td>
</tr>
<tr>
<td>BO Depersonalisation</td>
<td>1.00</td>
<td>.00 – 4.00</td>
</tr>
<tr>
<td>Internal Job Satisfaction</td>
<td>49.50</td>
<td>46.00 – 53.00</td>
</tr>
<tr>
<td>External Job Satisfaction</td>
<td>23.00</td>
<td>20.00 – 25.75</td>
</tr>
<tr>
<td>Job Sat TOT</td>
<td>78.00</td>
<td>74.25 – 84.75</td>
</tr>
</tbody>
</table>
3.4 Comparison between Maslach Burnout Inventory-Human Services Survey Groups’ Scores

Burnout was measured using the Maslach Burnout Inventory-Human Services Survey (MBI-HSS; Maslach et al., 1996). Comparison was carried out on the three burnout sub-scales. Results showed that staff working within substance misuse services did not differ significantly from staff working in adult mental health services: emotional exhaustion ($U = 497.00$, $Z = -1.867$, $p = .062$); personal accomplishment ($U = 620.50$, $Z = -.503$, $p = .615$); and depersonalisation ($U = 505.00$, $Z = -1.799$, $p = .072$).

3.5 Comparison between General Heath Questionnaire-28 Groups’ Scores

Psychological morbidity was measured using the General Health Questionnaire, a 28-item self-report inventory (GHQ-28; Goldberg & Williams, 1988). Amongst overall participants, 25 per cent had a score that fell within the definition of ‘psychiatric caseness’ (Jackson, 2007, p.79). Staff working within substance misuse did not differ significantly from staff working within adult mental health services in terms of psychological morbidity ($U = 616.00$, $Z = -.570$, $p = .510$). With regard to sub-scales, no significant differences were found; somatisation ($U = 612.00$, $Z = -.634$, $p = .526$), insomnia ($U = 658.50$, $Z = -0.099$, $p = .921$), anxiety ($U = 629$, $Z = -.512$, $p = .609$), depression ($U = 613.00$, $Z = -1.145$, $p = .252$).

3.6 The role of Job Satisfaction as a moderating factor

In order to investigate the moderating effect of job satisfaction in relation to psychological morbidity and burnout, a partial correlation was carried out. The
Minnesota Satisfaction Questionnaire (MSQ; Weiss et al., 1967) measures job satisfaction in three domains: internal satisfaction, external satisfaction and general satisfaction.

When the relationship between psychological morbidity and the three burnout sub-scales, while controlling for job satisfaction, was explored, findings showed to be significant for emotional exhaustion \((r = .453, p = .000)\), but not for personal accomplishment \((r = -.142, p = .235)\) and depersonalisation \((r = .222, p = .061)\). As shown in Table 9, when the correlation was conducted without controlling for job satisfaction, findings were significant for emotional exhaustion \((r = .470, p = .000)\) and for depersonalisation \((r = .253, p = .031)\), but not significant for personal accomplishment \((r = -.197, p = .095)\). Additionally, psychological morbidity was not significantly correlated with job satisfaction \((r = -.155, p = .189)\); while the three burnout sub-scales were correlated with job satisfaction. Findings showed that job satisfaction was negatively correlated with emotional exhaustion \((r = -.430, p = .000)\) and with depersonalisation \((r = -.267, p = .022)\) and positively correlated with personal accomplishment \((r = .472, p = .000)\).

Results suggested that controlling for job satisfaction had a significant effect on the strength of the relationship between psychological morbidity and the sub-scale depersonalisation.
Table 9. Correlations between GHO-28 and MBI-HSS sub-scales with MSQ partialed out, and between MSQ with GHO-28 and MBI-HSS sub-scales:

<table>
<thead>
<tr>
<th>Variables</th>
<th>GHQ-28</th>
<th>MBI-HSS EE</th>
<th>MBI-HSS PA</th>
<th>MBI-HSS DP</th>
<th>MSQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHQ-28</td>
<td>.470**</td>
<td>-.197</td>
<td>.253 *</td>
<td>-.155</td>
<td></td>
</tr>
<tr>
<td>MBI-HSS EE</td>
<td>.470**</td>
<td></td>
<td></td>
<td>-.430**</td>
<td></td>
</tr>
<tr>
<td>MBI-HSS PA</td>
<td>-.197</td>
<td></td>
<td></td>
<td>.472**</td>
<td></td>
</tr>
<tr>
<td>MBI-HSS DP</td>
<td>.253*</td>
<td></td>
<td></td>
<td>-.267*</td>
<td></td>
</tr>
</tbody>
</table>

**p<.001 *p<.05

In order to investigate which job satisfaction sub-scale (intrinsic/ extrinsic) mediated the relationship between psychological morbidity and depersonalisation an additional partial correlation analysis was carried out. When the relationship between psychological morbidity and depersonalisation, while controlling for intrinsic job satisfaction, was examined findings showed to be significant \( r = .242, \ p = .040 \).

As shown in Table 10, when the correlation was conducted without controlling for intrinsic job satisfaction, findings were also significant \( r = .253, \ p = .031 \).

Furthermore, intrinsic job satisfaction was neither significantly correlated with psychological morbidity \( r = -.107, \ p = .369 \) nor with depersonalisation \( r = -.138, \ p = .245 \).
Table 10. Correlations between GHQ-28 and MBI-HSS sub-scales with Intrinsic MSQ partialed out, and between Intrinsic MSQ with GHQ-28 AND MBI-HSS sub-scales

<table>
<thead>
<tr>
<th>Variables</th>
<th>GHQ-28</th>
<th>MBI-HSS EE</th>
<th>MBI-HSS PA</th>
<th>MBI-HSS DP</th>
<th>INTRINSIC MSQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHQ-28</td>
<td></td>
<td>.470**</td>
<td>-.197</td>
<td>.253 *</td>
<td>-.107</td>
</tr>
<tr>
<td>MBI-HSS EE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.237*</td>
</tr>
<tr>
<td>MBI-HSS PA</td>
<td></td>
<td>.470**</td>
<td></td>
<td></td>
<td>.355*</td>
</tr>
<tr>
<td>MBI-HSS DP</td>
<td></td>
<td>-.197</td>
<td></td>
<td></td>
<td>-.138</td>
</tr>
</tbody>
</table>

**p<.001  *p<.05

When the relationship between psychological morbidity and depersonalisation, while controlling for extrinsic job satisfaction was explored findings were not significant ($r = .186$, $p = 117$). As reported in Table 11, when the correlation was conducted without controlling for extrinsic job satisfaction, findings showed to be significant ($r = .253$, $p = .031$). Additionally, extrinsic job satisfaction was not correlated with psychological morbidity ($r = -.216$, $p = .067$), while was significantly negatively correlated with depersonalisation ($r = -.402$, $p = .000$). Results suggested that controlling for extrinsic job satisfaction had a significant effect on the strength of the relationship between psychological morbidity and the burnout sub-scales emotional exhaustion and personal accomplishment.

Intrinsic and extrinsic job satisfaction factors were found to have no moderating role in the relationship between psychological morbidity and the burnout sub-scales emotional exhaustion and personal accomplishment.
Table 11. Correlations between GHQ-28 and MBI-HSS sub-scales with Extrinsic MSQ partialed out, and between Extrinsic MSQ with GHQ-28 AND MBI-HSS sub-scales

<table>
<thead>
<tr>
<th>Variables</th>
<th>GHQ-28</th>
<th>MBI-HSS</th>
<th>MBI-HSS</th>
<th>MBI-HSS</th>
<th>EXTRINSIC MSQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHQ-28</td>
<td></td>
<td>.470**</td>
<td>-.197</td>
<td>.253*</td>
<td>-.216</td>
</tr>
<tr>
<td>MBI-HSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE</td>
<td>.470**</td>
<td></td>
<td></td>
<td></td>
<td>-.639**</td>
</tr>
<tr>
<td>PA</td>
<td>-.197</td>
<td></td>
<td></td>
<td></td>
<td>.432**</td>
</tr>
<tr>
<td>DP</td>
<td>.253*</td>
<td></td>
<td></td>
<td></td>
<td>-.402**</td>
</tr>
</tbody>
</table>

**p<.001 *p<.05

Although investigating job satisfaction differences was not one of the study hypotheses, it was interesting to find significant results. Mann-Whitney U tests revealed that staff working within substance misuse services have significant higher rates of job satisfaction ($U = 428.50, Z = -2.623, p = < .01$). Significant differences were also found within job satisfaction subscales: internal job satisfaction ($U = 475.50, Z = -2.106, p = < .01$), and external job satisfaction ($U = 407.00, Z = -2.865, p = < .01$).

3.7 Summary of Research Findings in relation to Core Hypotheses

To summarise the results concerning the initial two main differences; levels of burnout and psychological morbidity did not reach significance. Differences amongst the three burnout subscales were not significant. As regards psychological morbidity, no significant differences were found between staff who work in substance misuse...
services and staff who work in adult mental health services, nor in terms of GHQ-28 subscales. With regard to burnout, the overall prevalence of emotional exhaustion was 16 per cent with substance misuse staff reporting rates of 14 per cent and adult mental health staff of 19 per cent which was found to be no significant. Overall prevalence of depersonalisation was 8 per cent with substance misuse staff reporting rates of 7 per cent and adult mental health staff rates of 11 per cent. The overall rate of personal accomplishment was shown to be high (42 per cent), within substance misuse services being 42 per cent and within adult mental health services being 43 per cent.

The overall prevalence rate for psychological morbidity was relatively low (25 per cent). Amongst participants 22 per cent in the substance misuse sample, and 27 per cent in the adult mental health sample, scored above the cut-off for ‘psychiatric caseness’ (Jackson, 2007, p.79).

With regard to job satisfaction, 22 per cent of overall participants showed to be highly satisfied with their job, 43 per cent reported average levels of job satisfaction, and 34 per cent low levels. Within substance misuse services 25 per cent of respondents reported high rates of job satisfaction and within adult mental health services 16 per cent reported highly satisfied with their job.

In terms of the moderating role of job satisfaction, results showed that job satisfaction mediated the relationship between psychological morbidity and the burnout sub-scale depersonalisation. In addition, it was further investigated which
job satisfaction sub-scale mediated the relationship between psychological morbidity and depersonalisation. Findings showed that extrinsic job satisfaction acted as a moderator in the relationship between those two variables. Finally, it is of interest to note that, although this did not follow the initial hypotheses, job satisfaction levels were found to be significantly higher within substance misuse services professionals. This finding might provide an opportunity for future research.
4.0 Objectives of the Current Study

The objectives of the current study were to investigate differences between staff who work in substance misuse services and staff who work in adult mental health services in terms of levels of burnout and psychological morbidity. In addition, to examine whether job satisfaction has a moderating effect on burnout and psychological morbidity. The main findings of the current study will be highlighted in relation to other relevant research. Results will be discussed in terms of their clinical implications and their limitations.

4.1 Interpretation of Results

Due to data failing to achieve normality, non-parametric analyses were carried out to investigate differences between groups. To examine the third hypothesis a partial correlation analysis with job satisfaction being the controlled variable was used.

4.1.1 Comparison between Maslach Burnout Inventory-Human Services Survey Groups Scores

It was predicted that higher levels of burnout would be found in staff working within substance misuse services. The results, however, revealed no significant difference between the two groups as measured by the MBI-HSS. Further investigations were conducted on the three burnout subscales, and again no significant differences were
found, even though frequency data suggested that staff working in adult mental health services were more likely to suffer from burnout; this difference was not statistically significant. The lack of a significant difference between substance misuse staff and adult mental health staff is somewhat surprising given the number of studies that have reported that staff who work within substance misuse are at higher risk of developing burnout (Elman & Dowd, 1997; Knauert & Davidson, 1979; Oyefeso et al., 2008; Valle, 1979). This risk results from the nature of their client group who are seen to be ‘thankless’, with high drop-out and relapse rates (Elman & Dowd, 1997, p.2.).

The lack of significant differences between the two groups may reflect low levels of burnout in participants, but again the size of the effect may be such that the group sizes were too small to detect significant differences, therefore increasing the risk for Type II error. Despite the fact that the number of subjects recruited did mean that the requirements for power were met, the sample size was still relatively small. Additionally, considering that burnout has been thought to result from long-term involvement with emotionally demanding situations, it would have been interesting to investigate variables such as years in the field. Despite Schufeli et al. (1993) reported that the length of service in one’s job contributes to the development of burnout; it is of interest to not that some authors (Glicken, 1983; Poncet et al., 2007) found that younger workers have higher rates of burnout.

As reported by Budrionis et al. (1994), younger age results in higher scores on burnout subscale of depersonalisation and more years in the field is associated with
higher scores on emotional exhaustion. The findings of the current study might possibly be explained by these confounding variables. However, the sample of Budrionis et al.'s study (1994) was relatively small (n = 27), making conclusions tentative.

In terms of the heterogeneity of the sample, despite efforts being made to recruit male and female participants from across Dumfries and Galloway region, the majority of the participants were female; therefore the sample may not be representative of all substance misuse and adult mental health staff. It would be interesting to investigate whether male staff burnout levels differ from burnout in female staff. Research conducted by Priebe et al. (2005) in community mental health teams found that male gender was associated with lower burnout rates. Contrary to this finding, Edwards et al. (2006) reported that males tend to burnout more in the dimension of depersonalisation as compared to females.

Despite previous research (Prazetina, 2005) recognising burnout syndrome in alcohol services, the current study did not report high levels of burnout. This was an unexpected finding considering the challenges around general substance misuse services where the substance such as heroin is not freely available. Lack of access to substances might entail working with forensic clients who might present as more challenging, and this possibly might increase the risk of burnout in mental health professionals. The level of burnout reported in the current study within substance misuse services is generally not comparable with previous research findings.
Oyefeso et al.'s study (2008), conducted in South Thames, reported the following rates of burnout within substance misuse services: 33 per cent high emotional exhaustion, 17 per cent high depersonalisation and 36 per cent diminished personal accomplishment. When compared to the findings of Oyefeso et al. (2008), in the current study levels of emotional exhaustion (14 per cent), depersonalisation (7 per cent) and diminished personal accomplishment (19 per cent) are lower within substance misuse services. Differences in the prevalence rates may be attributed to the small sample size as well as the sample composition of the current study. Additionally it may be that different organisational factors such as level of support, workload in the substance misuse services in the South Thames region contribute to risk of burnout compared to substance misuse services in the rural location of the current study. Another reason that might explain this difference in prevalence rates might be that as it is more difficult to recruit staff in rural services, managers are more supportive of their employees and more aware of preventing burnout. As reported by Stratton et al. (1995) significant attention is placed on retaining resources in rural areas due to the difficulties in recruiting new staff. Managers might provide more rewards in the form of money, security and prestige in rural services compared to inner cities services. These factors have been found to have an impact on burnout levels (Maslach & Leiter, 1997). Different results, compared to the current research, are reported in Farmer's study (1995) which investigated levels of burnout in a sample of mental health professionals working in substance misuse services in London. Other studies (Liu, 1997; NDACTRD, 1980) report higher rates of burnout among staff working within substance misuse respectively 20-30 per cent and 32 per cent. This body of research was conducted in North America and again a different
organisational support system might be available for staff who work within substance misuse services which might have determined higher burnout rates. It might also be that factors outside the work setting contribute to burnout. As reported by Price and Spence (1994), aspects such as parental illness or marital difficulties might determine burnout reactions consisting of emotional exhaustion and a negative approach towards client and work.

With regard to staff working in adult mental health services, the current study’s results were different to the ones reported by Carson et al. (1995) and Onyett et al. (1997) which found respectively that 48 per cent and 45 per cent of participants’ scores fell in the high category for emotional exhaustion. Contrary to these findings, Pinikahana and Happel (2004) reported lower rates of burnout (14 per cent) in nurses working in rural Australia. Similar rates have been found by Zancajo et al. (2005), in Health Care Services, ranging between 10 to 20 per cent. In the current study 19 per cent of adult mental health staff scored high on emotional exhaustion, 11 per cent scored high on depersonalisation and 22 per cent reported diminished personal accomplishment. Similar findings have been reported by Sorgaard et al. (2007) who examined burnout levels in community teams and acute psychiatric care teams. Despite the current study reporting similar figures to Zancajo et al. (2005) and to Sorgaard et al. (2007) differences and similarities with previous research should be interpreted with caution as the sample of the current study was much smaller.
4.1.2 Comparison between General Health Questionnaire-28 Groups Scores

It was predicted that staff working within substance misuse services would have higher rates of psychological morbidity compared to staff working within adult mental health services. The overall General Health Questionnaire-28 scores (GHQ-28; Goldberg & Williams, 1988) and the GHQ-28 subscales scores were not found to be significantly different between the two groups. With regard to substance misuse sample, a relatively low prevalence of psychological morbidity was found. In comparison to previous studies the prevalence for psychological morbidity was significantly lower. Oyefeso et al. (2008) reported prevalence rates of 82 per cent in professionals who work within substance misuse. In the current study 22 per cent of participants in the substance misuse sample scored above the cut-off for caseness. A number of factors may account for this difference. Oyefeso et al. (2008) sample was drawn from a bigger area with a more heterogeneous sample compared to the one used in the study. Additionally, the high scores on GHQ-28, of Oyefeso et al.’s study (2008) might reflect a pre-existing condition. It might be that professionals suffered from mental health problems prior to working within that service and prior to the onset of burnout. Also, as previously mentioned, it might be that high rates of psychological morbidity reported by Oyefeso et al. (2008) are the result of a methodological error consisting of mis-scoring the measure. Furthermore, the causality of the relation between burnout and psychological morbidity was not investigated; therefore there is the possibility that confounding factors might have determined psychological morbidity.
In terms of the prevalence rate of psychological morbidity in the adult mental health sample, rates were generally comparable to the ones found by Calnan et al. (2001) in primary care settings. Twenty-seven per cent of staff working within adult mental health services scored above the cut-off for psychological morbidity. This rate is similar to the one reported by Calnan et al. (2001) which was found to be 23 per cent for all respondents, 27 per cent for district nurses and 22 per cent for practice nurses. In the study conducted by Butterworth et al. (1999) caseness scores within the sample ranged between 28 per cent, in ward nurses, to 41 per cent, in community nurses. Higher rates compared to Calnan et al. (2001) and to the current study were found by Onyett et al. (1997) which reported that 41 per cent of community psychiatric nurses crossed the threshold level of ‘psychiatric caseness’ (Jackson, 2007, p.79). Differences in prevalence rates compared to Onyett et al. (1997) may be attributed to characteristics of the work setting such as supportive social relations from colleagues which might act as a source of protection from other stresses. Additionally the sample of the current study was also composed of other NHS professionals and of staff working within the voluntary sector therefore different in terms of degree of training, education levels, pay and all this might have played a role in having lower rates of psychological morbidity. Some differences in prevalence rates with Butterworth et al. (1999), might be attributed to the sample size of their study with participants being recruited from two countries in 23 different centres compared to the current study were the sample was drawn from a small region.
Factors such as job demands have also been found to affect professionals' emotional and physical well-being (Kushnir et al., 1997). Team managers of the substance misuse services expressed concern with the author about staff sick leave and managers of the adult mental health services reported concerns about managerial changes and inability to recruit new personnel. Considering the relatively low rate of psychological morbidity, it may be that a full return of questionnaires would have shown different levels of morbidity in both samples.

The relatively low levels of both burnout and psychological morbidity found in the two groups are consistent with some studies (Franssen et al., 2003; Honkonen et al., 2006). These studies (Franssen et al., 2003; Honkonen et al., 2006) found a relationship between these two variables by reporting that subjects who experience high levels of burnout will score significantly on psychological morbidity. Results of the current study are incongruent with findings of Bakker et al. (2000), Bennett et al. (2005) who do not entirely support the association between burnout and psychological morbidity. Contrary to these authors (Bakker et al., 2000; Bennett et al., 2005), Firth and Britton’s study (1989) and Estryn-Behar et al. (2007) highlighted the role that emotional exhaustion, depersonalisation and lack of personal accomplishment play in predicting sick leave and consequently staff turnover.

4.1.3 The role of Job Satisfaction as a moderating factor

It was predicted that in both groups job satisfaction would act as a moderating factor against burnout and psychological morbidity. In order to explore the relationship between psychological morbidity and burnout while controlling for job satisfaction, a
partial correlation was carried out. In the present study findings showed that job satisfaction had a significant effect on the strength of the relationship between psychological morbidity and the burnout sub-scale depersonalisation. When the relationship between psychological morbidity and depersonalisation, while controlling for job satisfaction, was explored, findings were not significant ($r = .222, p = .061$). When the correlation was conducted without controlling for job satisfaction, results reached significance ($r = .253, p = .031$). Psychological morbidity was not correlated with job satisfaction, while emotional exhaustion ($r = -.430, p = .000$), personal accomplishment ($r = .472, p = .000$) and depersonalisation ($r = -.267, p = .022$) were significantly correlated with job satisfaction. Furthermore, when additional exploratory analyses were carried out to investigate which job satisfaction sub-scale (intrinsic/ extrinsic) mediated the relationship between psychological morbidity and depersonalisation, findings showed a moderating effect of external job satisfaction. 

Contrary to these findings, Ramirez and Graham (1996) reported that job satisfaction played a significant role as a protective factor against stress and mental health problems. Considering that burnout is conceptualised as a three factor model, and that these findings are supported by an extensive body of research (Evans et al., 2006; Geurts et al., 1998; Green et al., 1991; Jackson et al., 1986; Kanste et al., 2006; Poncet et al., 2007; Rupert & Kent, 2007; Schaufeli et al., 1993; Steven & Higgins, 2002) it was surprising that in the present study job satisfaction (extrinsic) only moderated the relationship between depersonalisation and psychological morbidity. According to Golembiewski et al. s’ phase model (1986), the three
components of burnout would develop sequentially with depersonalisation being the first phase of burnout, followed by diminished personal accomplishment and by emotional exhaustion. This model might partly explain the current findings by considering the possibility that participants, in the study, may be experiencing the first phase of burnout (depersonalisation).

In addition to this possible explanation, the author suggests that certain facets such as supervision (Butterworth et al., 1999; Evans and Hohenshil, 1997), workload and management (Farmer, 1995; Prosser et al., 1997), lack of performance recognition (Elman & Dowd, 1977), team role clarity (Onyett et al., 1997) and job control (Calnan et al., 2001) have been found to contribute to job satisfaction, to protect against burnout and to enhance psychological well-being. These factors are extrinsic aspects of a job; therefore it might be that, in the current study, these aspects have moderated the relationship between depersonalisation and psychological morbidity. Furthermore, as reported in Martin and Schinke's study (1998), extrinsic job satisfaction factors such as promotional opportunities, high salary and praise have been found to be negatively associated to burnout. In the current study these might have acted as protective factors in determining low levels of burnout, but also they may have had a mediating role in the relationship between psychological morbidity and depersonalisation.

Results from a meta-analysis conducted by Faragher et al. (2005) are consistent with findings of Ramirez and Graham (1996) in that job satisfaction positively correlates with health ($r = .312$). Faragher et al. (2005) found a positive relationship between
low job satisfaction with health, particularly with depression \( (r = .366) \) and anxiety \( (r = .354) \). In the current study no significant relationship was found between psychological morbidity and job satisfaction. In terms of psychological morbidity, Faragher et al. (2005), found different results from the current study. However, like the current study a positive correlation between low job satisfaction and burnout \( (r = .409) \) was found. The meta-analysis by Faragher et al. (2005) included a vast portion of studies in a variety of settings throughout the world and these factors might be responsible for the different findings. Psychological morbidity may have a different cultural meaning in various countries and there might be differences in the conceptualisation and manifestation of distress. Additionally, Faragher et al. (2005) reported that it is necessary to be cautious when emphasising the relationship between health and job satisfaction due to imperfect measures of effect-size used. In keeping with the current study, Ogresta et al. (2008) found a significant association between job satisfaction and burnout in mental health professionals. Their analyses revealed that aspects such as pay, rewards, advancement opportunities and occupational stress predicted emotional exhaustion. Factors such as frequency of negative reactions towards colleagues and patients, occupational stress, pay and rewards were predictors of depersonalisation.

The factors described by Ogresta et al. (2008), represent aspects of extrinsic job satisfaction. Similarly to Ogresta et al. (2008), the current study found that aspects of extrinsic job satisfaction have an effect in the relationship between mental health and depersonalisation.
As discussed, similarities and differences in all studies can be determined by a variety of factors which are further examined when comparing prevalence rates of job satisfaction between the current study with previous research. In addition, these factors might have accounted for the results of the partial correlations. Due to this, the generalisability of the present findings is questionable.

In comparison to previous studies, the prevalence of job satisfaction was generally not comparable. In the current study 22 per cent of overall respondents showed high rate of job satisfaction. In terms of groups, in the substance misuse sample 25 per cent of staff reported being highly satisfied with their job. These results show lower rates of job satisfaction compared to other studies (Farmer, 1995; Lacoursiere, 2001) who respectively found that 80 per cent and 57.7 per cent of professionals working in substance misuse services are satisfied with their job. Different prevalence rates may be attributed to the different measures used to assess the construct of job satisfaction.

In the current study the Minnesota Satisfaction Questionnaire (MSQ, Weiss et al., 1967) examines aspects of one job, ability utilisation, achievement, activity, advancement, authority, company policies and practices, compensation, co-workers, creativity, independence, moral values, recognition, responsibility, security, social service, social status, supervision-human relations, supervision-technical, variety, and working conditions. The study conducted by Farmer (1995) investigated levels of job satisfaction in substance misuse services in the UK, but it used a different standardised measure, the Job Stress Questionnaire (Hingley & Cooper, 1986), which does not evaluate job satisfaction as comprehensively as does the Minnesota Satisfaction Questionnaire. As reported by Weiss et al. (1967), the MSQ provides a
more individualised profile of worker’s satisfaction compared to other measures of job satisfaction which provide a more general picture of the construct. In addition organisational factors such as promotional opportunities and praise may have contributed to determine different levels of job satisfaction in those studies (Martin & Shinke, 1998).

With regard to the adult mental health sample, 16 per cent of participants reported having high levels of job satisfaction. Findings of the current study highlight lower rates of job satisfaction compared to previous studies. Bodur, (2002) reported that 60 per cent of professionals working in health centres in Turkey feel satisfied with their job, while Shields and Ward (2001) highlighted a lower rate of 49.7 per cent in a sample of British nurses. Higher figures have been found by Pinikahana and Happell (2004), who reported that 66.1 per cent of Australian nurses feel satisfied with their job. The difference between the present study with previous findings (Bodur, 2002; Pinikahana & Happell, 2004; Shields & Ward, 2001) might be attributed to the single location of the study (Bodur, 2002), to differences in health care systems (Pinikahana & Happell, 2004) and to the specificity of the sample (Shields & Ward, 2001). Although, factors such as cultural meaning of job satisfaction as well as different organisational policies might have had an impact in determining different levels of job satisfaction, also Shields and Ward (2001) reported higher figures amongst NHS nurses (49.7 per cent) compared to the present study. A higher level of job satisfaction (70 per cent) contrary to the present study was also reported by the research conducted by Parahoo (1991) in the UK. Differences between the current study and previous research might be the result of the different composition of the
sample. The author being familiar with the two groups recruited was aware of the sample being composed mainly of females with diverse professional background. In terms of occupation, and heterogeneity of the current study, the sample consisted of participants having diverse expertise, which might have acted as confounding factors in determining different results. Shields and Ward (2001), and Parahoo (1991) recruited nurses and community psychiatric nurses as participants for their research, while the present study sample was composed of professionals working within the NHS as well as the voluntary sector; participants included psychologists, psychiatrists, counsellors, community psychiatric nurses, occupational therapists, and support workers. Furthermore, there may have been confounding factors, not specifically investigated in the present study that may have affected the present outcomes. A variable such as supervision has previously been identified as being correlated with job satisfaction and supervisors’ support in reducing stress (Billings & Moos, 1982; Firth et al., 1986; Holohan & Moss, 1983; Warr & Wall, 1975). Also aspects such as team role clarity and personal role clarity (Onyett et al., 1997), career, management and pay (Prosser et al., 1997) have been found to be positively associated with job satisfaction. In the current study, although all those factors are found in the MSQ, they were not individually investigated, therefore results might be attributed to those factors. Additionally, it might be that the higher rates of job satisfaction in the previous studies (Bodur, 2002; Parahoo, 1991; Shields & Ward, 2001) represent participants who were most satisfied with their job and who therefore decided to return the questionnaires.
4.1.4. Other Relevant Findings

In terms of job satisfaction, when differences between averages in the two groups were investigated, significant findings emerged. The results revealed that participants working within substance misuse services reported higher levels of job satisfaction compared to participants working within adult mental health services. This was not the subject of the study hypothesis, but is of clinical relevance.

The significant average difference found between the two participants’ samples contradicts previous findings that professionals who work within substance misuse services are at higher risk of developing burnout and psychological morbidity and therefore have lower levels of job satisfaction. Findings of the present study might indicate that people who do not burnout stay in the profession and feel satisfied with their job. On the contrary professionals who burnout may tend to leave their post as previous research has shown strong positive correlations between burnout and staff turnover and job satisfaction and intention to quit (Dickinson & Perry, 2002; Firth & Britton, 1989; Kamerman & Kahn, 1989; Salovitz & Keys, 1988). Additionally, there might be a difference between professionals who are elected to the job and professionals who are forced to work in that specific post due to limited occupational options. Participants of the present study, especially staff working within substance misuse, might have chosen that area of expertise feeling particularly satisfied with their job. Additionally, as reported in the qualitative study by Reid et al. (1999) contact with patients may be regarded as a source of stress as well as satisfaction. Higher levels of job satisfaction in the substance misuse sample might reflect mental health professionals’ satisfaction in working with this specific patient group. The results of the present study do not support what has been reported previously.
regarding feelings of emotional exhaustion, the levels of stress and the challenges of working within substance misuse services due to their clients seen as chronic and 'thankless' (Elman & Dowd, 1997, p.2).

It may also be that in addition to true job satisfaction experienced by professionals working within substance misuse services, other factors could have contributed to such differences between the two participants' samples. Considering the organisational changes occurring in the management of adult mental health sample, this could have possibly determined the current outcome. Unfortunately effects of changes within the new teams and team leaders were not examined; therefore differences between groups could have been the consequence of such factors.

4.2 Clinical Implications
The clinical implications of the current study and the testing of the research hypotheses are limited in that no significant difference between groups was found. Additionally, prevalence rates for burnout were low in the current study. Had a difference between averages and high prevalence rates been found then there would have been implications for the services in terms of implementing individual and organisational strategies to address burnout (Innstrand et al., 2004). Nevertheless some participants in both groups reported average to high rates of burnout; therefore it could be argued that organisational strategies such as psycho-education sessions on burnout, discussing realistic expectations on clients’ outcome, not working excessively, being supported by the organisation with supervision and manageable workload, all need to be considered by the services (Lacourserie, 2001).
In terms of overall levels of psychological morbidity, participants reported relatively low rates (25 per cent). The level of psychological morbidity in the two samples was similar to Calnan et al.'s study (2001), but lower than the rates reported by other research (Butterworth et al., 1999; Onyett et al., 1997; Oyefeso et al., 2008). Despite these findings, it might be important to remain cautious as the rate of psychological morbidity might be different in non-respondents. As previously reported, the author was aware about staff being off sick in the substance misuse service and about managerial changes that possibly put adult mental health staff under some strain. Additionally, although the prevalence rate of psychological morbidity was low, some participants scored above ‘psychiatric caseness’ on the measure (Jackson, 2007, p.79). These scores may be the result of work stressors, but also pre-existing to working within substance misuse and adult mental health services. As a result of this definite conclusions about these findings cannot be drawn.

A moderating effect of job satisfaction was found only for extrinsic job satisfaction in the relationship with depersonalisation and psychological morbidity. As some participants reported average to high levels of satisfaction with their job, it would have been helpful to identify which specific factors contribute to job satisfaction and which extrinsic factors act as moderators. This might possibly encourage organisations to restructure organisational policies such as promotional opportunities, supervision, with the aim at increasing job satisfaction levels.
4.3 Limitations of the Study

There were a number of limitations in the current study consisting of small sample size, distribution of the data, the cross-sectional design, and reliance on retrospective measures and on participants’ own reporting of their symptoms. These limitations will be discussed in more detail.

4.3.1 Sample Size

Cohen's tables (1992) were used to determine the sample size necessary to detect a large, medium and small effect size for a power of 0.8 with an alpha of 0.05. It was anticipated that 34 subjects in each group would be required to detect a medium to large effect size.

Despite sample size being reached, in order to detect whether there are any differences in levels of burnout and psychological morbidity between staff working within substance misuse and staff working within adult mental health, the study would need to be replicated with a larger sample. Replication with a larger sample would also allow further investigation of possible differences within each participants’ sample in terms of NHS and voluntary sector. Also a larger sample decreases the risk of Type II error, therefore increasing the likelihood of finding an effect.

4.3.2 Recruitment

There were no particular difficulties in terms of recruitment. This might have possibly been the result of managers’ interest in the author’s research as well as the
helpful attitudes of professionals who took part and were known to the author. Beside this, the achievement of reaching the level of power could have also been the result of the time invested in promoting the current study. Subsequent to sending letters to services' managers, the author travelled across the region to meet with each organisation’s manager to discuss the project and any possible queries about the present study in person.

Although sample size was reached, and given the reported return rate of 30-40 per cent (Oppenheim, 1992), the overall response rate (54 per cent) was still relatively low. One possible explanation for this outcome might be due to the participants, who did not respond, having burnout syndrome or feeling dissatisfied with their job. As the author was working with both substance misuse services and adult mental health services, there was awareness about some professionals within substance misuse services being off sick and the low response rate of 48 per cent, for this group, might have been a result of this. Also, the author was informed by adult mental health services' managers about some degree of dissatisfaction and strain within adult mental health services due to managerial changes. This time of transition and major changes might have placed professionals under pressure with increased caseloads and might have decreased their motivation to complete the questionnaires therefore affecting response rates.

4.3.3 Sample Composition

Although demographic data were not gathered, the author was aware that the sample of each group lacked heterogeneity as the majority of participants were females. As
authors Edwards et al. (2006), Maslach (2003) and Priebe et al. (2005) reported, there is a difference in levels of burnout between males and females, therefore the sample might not be representative of realistic burnout levels in professionals who work within substance misuse and adult mental health services. To the best of the author's knowledge there were no other services in the region where participants' samples could have been more heterogeneous while recruiting from voluntary sector and NHS was assumed to offer the best possibility of having a variety of professionals as a sample for the study.

4.3.4 Distribution of Data

Not all variables met the assumptions of a normal distribution. As a result of this nonparametric analyses were undertaken and conclusions were made on the basis of the findings based on this statistical technique.

4.3.5 Cross-Sectional Design

The cross-sectional nature of the current study relied on current levels of burnout, psychological morbidity and job satisfaction, therefore not allowing causality to be inferred amongst these variables.

Although it may be tempting to assume that levels of burnout and psychological morbidity are the results of a participant's current occupation, it is important to remember that burnout is a progressive syndrome and its onset might have occurred before the participants started employment in the services investigated by the current study. It may also be that psychological morbidity is the result of home-related stress rather than work-related difficulties. Additionally, mental health problems might be
pre-existing to the development of burnout syndrome. The cross-sectional design does not invalidate the current findings, but a longitudinal study would have allowed variables to be investigated for their predictive power. A longitudinal design would avoid many of the limitations associated with cross-sectional design, but, given the time constraints, this was not possible.

4.3.6 Self-report

The Maslach Burnout Inventory-Human Services Survey (MBI-HSS; Maslach et al., 1996), the General Health Questionnaire-28 (GHQ-28; Goldberg & Williams, 1988) and the Minnesota Satisfaction Questionnaire (MSQ, Weiss et al., 1967) are all self-report questionnaires that were completed retrospectively with regards to attitudes and frequency of symptoms. As such the measures relied on both accurate recall and the assumption that participants would give truthful responses. In order to encourage participants to be as truthful as possible in their responses they were informed that their questionnaires would remain anonymous. If participants became distressed, the contact details of the academic supervisor, who was not familiar with participants, was provided to preserve anonymity better. As those with burnout syndrome and concerns about their mental health might not have taken part in the study, the sample may not be representative of all professionals working in substance misuse and adult mental health services. Attempts to follow-up non-responders were not feasible within the scope of the current study.

Although self-report is the most practical method within the limits of the current study and has the advantages of being quick and convenient, there is the
disadvantage of not knowing the accuracy of the participants’ own evaluations. These types of measures rely on participants’ interpretation of the construct and therefore it might be inaccurate and deviate from an objective clinical presentation of burnout symptoms and psychological morbidity.

Another possible limitation of the current study was the transformation of job satisfaction raw scores into percentiles scores. Despite averages between group samples compared using raw scores data, when prevalence of job satisfaction was calculated, raw scores were transformed into percentiles scores provided by the table in the MSQ manual (appendix 8). In the table some raw score values were not listed and therefore did not have correspondent percentile scores. In order to address this limitation, following a discussion with the statistician and the academic supervisor, the author decided than an approximate calculation could be made to generate percentile scores. When the raw score was missing in the table, the percentile score chosen was the value that fell between the minimum and the maximum range corresponding to the raw score. Furthermore, a limited selection of norm groups was available for the Minnesota Satisfaction Questionnaire short-form (MSQ; Weiss et al., 1967). The norm group selected to transform raw data into percentiles was “Engineers”. This decision was taken due to “Engineers” being the only scientifically trained group and therefore the most similar to the one of the present study. To calculate the percentile scores it was therefore used the “best-fit” procedure. Other research (Bodur, 2002; Butterworth et al., 1999; Evans & Hohenshil, 1997; Faragher et al., 2005; Martin & Schinke, 1998; Priebe et al., 2005) used the MSQ short-form
to investigated job satisfaction amongst health care professionals in other countries as well as in the UK.

4.3.7 Methodological Implications
The current study fails to provide accurate normative data for the construct of job satisfaction. Accurate normative data might have possibly given a different profile in terms of job satisfaction's prevalence rates. Data that is currently available for the MSQ short-form is drawn from the “Engineers” norm group. Also it is possible that engineers are a predominantly male profession and the current study’s participant’s samples were mainly composed of females. This could possibly imply that the raw scores obtained when transformed into percentile scores might not be accurate.

There are also questions about the accuracy of information provided in self-report measures, either deliberately or inadvertently. This limitation is a well known fact (Razavi, 2001). Factors such as social desirability might have had an impact on the outcomes of measures. Additionally, self-reports rely on the participants’ interpretation of the constructs measured. Questions might be raised as to whether participants are the most suitable to judge their symptoms.

4.4 Future Research
In the current study no differences were found between the two samples. A larger sample size might help future research to detect an effect. Furthermore, a more heterogeneous sample would possibly allow a generalisation of findings. Also collecting demographics would provide a broader understanding of participants’
individual factors possibly associated to burnout, psychological morbidity and job satisfaction. These aspects might be address by extending the study beyond a single location.

Additionally, a longitudinal design would have some advantages over the current cross-sectional study, especially considering the progressive nature of burnout. Also a longitudinal study would clarify issues around causality in the relationship between the variables examined.

In terms of measures, the use of the Minnesota Satisfaction Questionnaire Long-Form (MSQ; Weiss et al., 1967), besides providing more detailed information about facets of job satisfaction, it would also give tables with more representative norm groups such as nurses.

Also, future research might aim at including managers in the sample as they might suffer from burnout and this consequently might have an impact on staff’s psychological morbidity, burnout levels and might determine job dissatisfaction.

In addition, considering the higher levels of job satisfaction found in substance misuse services compared to adult mental health services, future research might further explore this finding by examining aspects that contribute to job satisfaction.
4.5 Concluding Summary

The present study found no differences between substance misuse professionals and adult mental health professionals. Furthermore, job satisfaction was only partly (extrinsic job satisfaction) found to act as a moderator in the relationship between psychological morbidity and burnout (depersonalisation).

Interestingly, although it was not part of the hypotheses tested, job satisfaction levels were found to be significantly higher in the substance misuse participants’ sample.

Lack of significant difference between the two groups, in terms of psychological morbidity and burnout, and higher levels of job satisfaction within substance misuse services are encouraging findings. Considering the body of research warning of the risk of burnout when working with substance misuse patients, it is reassuring to note that professionals who chose to work within this field of expertise are not more likely to develop burnout, to report psychological morbidity or to feel dissatisfied with their job than their colleagues in adult mental health services. It is necessary to highlight that given the small sample size and the single location of the current study, the conclusions are interesting and further research would be recommended to explore these findings.
CHAPTER 5
REFERENCES


APPENDIX 1:

LETTER OF ETHICAL APPROVAL AND MANAGEMENT APPROVAL
04 July 2008

Ms Alessia Bruno
Trainee Clinical Psychologist
NHS Dumfries and Galloway
Department of Clinical Psychology
Nithbank
Dumfries
DG1 2SA

Dear Ms Bruno

Full title of study: Burnout, Psychological Morbidity and Job Satisfaction. A comparative study between staff who work in Substance Misuse Service and staff who work in Adult Mental Health Service

REC reference number: 08/S0401/15

The Research Ethics Committee reviewed the above application at the meeting held on 27 June 2008. Thank you for attending to discuss the study.

Ethical opinion

The members of the Committee present gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

Members discussed with you their concerns with some aspects of the methodology of the study, particularly the proposed selection of participants by managers. It was agreed that all members of staff would be issued with the forms thus eliminating any bias that could occur and ensuring anonymity. It was also noted that you would take into consideration the fact that the characters and working environment of those employed in the voluntary sector were often very different to the NHS.

The Participant Information Sheet should include details of a named independent contact where participants can request additional information if required.

It was agreed that the title of the study should be altered as it was felt to be presumptive in its present form and could influence participants.
Ethical review of research sites

The favourable opinion applies to the research sites listed on the attached form.

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission at NHS sites ("R&D approval") should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.

Approved documents

The documents reviewed and approved at the meeting were:

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Membership of the Committee

The members of the Ethics Committee who were present at the meeting are listed on the attached sheet.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.
After ethical review

Now that you have completed the application process please visit the National Research Ethics Website > After Review

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nres.npsa.nhs.uk.

08/S0401/15 Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely

Dr Peter Hutchison
Chair
Enclosures: List of names and professions of members who were present at the meeting.
Site approval form (SF1)

Copy to: Research and Development Dept. DGRI
Dumfries & Galloway Research Ethics Committee
Attendance at Committee meeting on 27 June 2008

Committee Members:

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<tr>
<td>Dr Andrew Mitra</td>
<td>Consultant paediatrician</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Dr Gary Morrison</td>
<td>Consultant Psychiatrist</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Mrs Sheena Newberry</td>
<td>Lay Member</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Mrs Rosie Rutherford</td>
<td>Lay Member</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Miss Elisabeth Smart</td>
<td>Public Health Specialist</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Dr Bryce Watson</td>
<td>Consultant Anaesthetist</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF SITES WITH A FAVOURABLE ETHICAL OPINION

For all studies requiring site-specific assessment, this form is issued by the main REC to the Chief Investigator and sponsor with the favourable opinion letter and following subsequent notifications from site assessors. For issue 2 onwards, all sites with a favourable opinion are listed, adding the new sites approved.

<table>
<thead>
<tr>
<th>REC reference number:</th>
<th>08/S0401/15</th>
<th>Issue number:</th>
<th>1</th>
<th>Date of issue:</th>
<th>08 July 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Investigator:</td>
<td>Ms Alessia Bruno</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full title of study:</td>
<td>Burnout, Psychological Morbidity and Job Satisfaction. A comparative study between staff who work in Substance Misuse Service and staff who work in Adult Mental Health Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This study was given a favourable ethical opinion by Dumfries & Galloway Research Ethics Committee on 27 June 2008. The favourable opinion is extended to each of the sites listed below. The research may commence at each NHS site when management approval from the relevant NHS care organisation has been confirmed.

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Post</th>
<th>Research site</th>
<th>Site assessor</th>
<th>Date of favourable opinion for this site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms Alessia Bruno</td>
<td>Trainee Clinical Psychologist</td>
<td>NHS Dumfries and Galloway</td>
<td>Dumfries &amp; Galloway Research Ethics Committee</td>
<td>08/07/2008</td>
</tr>
</tbody>
</table>

Approved by the Chair on behalf of the REC:

(1) The notes column may be used by the main REC to record the early closure or withdrawal of a site (where notified by the Chief Investigator or sponsor), the suspension of termination of the favourable opinion for an individual site, or any other relevant development. The date should be recorded.
Dear Ms Bruno

BURNOUT, PSYCHOLOGICAL MORBIDITY AND JOB SATISFACTION. A COMPARATIVE STUDY BETWEEN STAFF WHO WORK IN SUBSTANCE MISUSE SERVICE AND STAFF WHO WORK IN MENTAL HEALTH SERVICE.

Thank you for sending me details of your study with a request for management approval. I can confirm that the study review team has reviewed the documentation and on that basis, I am pleased to inform you that your study has management approval for commencement within NHS Dumfries and Galloway.

It is a condition of this approval that everyone involved in this study abides by the guidelines/protocols laid down by this Health Board in respect of confidentiality and Research Governance. It is your responsibility to ensure you are familiar with these, please do not hesitate to seek advice if you are unsure (copies of Research Governance Framework document available via the website www.sehd.scot.nhs.uk and then choose the publications link).

As part of the Health Board’s responsibilities under Research Governance a sample of studies will be monitored; it is therefore important that all records, in connection with the study, are kept up to date and available for review should monitoring be required.

Please advise the R&D Support unit immediately if you require to alter your protocol in any way. I understand that performance of this study will not infringe on your own department’s ability to deliver your usual level of service.

May I take this opportunity to wish you every success with your project. Please do not hesitate to seek help and advice from the R&D Support Unit (ext 33164 and 33165) if there is anything which you feel you would like assistance with. I look forward to hearing about your work as it progresses.

Yours sincerely,

J R. Lawrence
R&D Director
APPENDIX 2:

PARTICIPANT INFORMATION LEAFLET
The experience of Working in Substance Misuse and Adult Mental Health Services.

Information about the research:

For Potential Participants

NHS
Dumfries & Galloway

THE UNIVERSITY OF EDINBURGH

Version 4
28/08/08
The experience of working in Substance Misuse Service and Adult Mental Health Service.

Information about the research: For Potential Participants

The Department of Psychological Services and Research would like to invite you to take part in a research study.

Please take the time to read the following information and feel free to ask us if there is anything that is not clear or if you would like more information about the project.

What is the research about?

The research study is looking at staff experience in working within substance misuse and working within adult mental health services. You have been chosen because you work in these areas of expertise and you have a current substance misuse or adult mental health caseload. Your Manager has given the permission to contact you. The study is completely anonymous and it aims to look at various aspects of service provisions for people working within the voluntary sector and within the NHS. We are also interested in whether working with these client groups has an effect on general well-being, stress and job satisfaction. The research will help us learn more about the difficulties that professionals experience in their field of expertise and research will help to promote further support for staff to reduce stress levels and increase a sense of well-being at work.

What does research involve?

After having been informed by your Manager about this project, if you agree to take part, you will be asked to complete the three short questionnaires together with the form indicating in which service you work and how long you have worked there for. The completion of the forms will be in your own time.

You can return these questionnaires in the stamped addressed envelope, directly to the researcher. No other person will have access to your questionnaires. The first questionnaire asks about the degree of stress experienced at this time in the field you are working. The second questionnaire asks how you feel in terms of your general health. The third questionnaire asks about your satisfaction with your job. In total, filling out all questionnaires, should only take you about 15 minutes.

Deciding to take part

This study is completely voluntary and team members have at any point the right to withdraw from the study without giving reason.
We intend to use the findings of this research to promote further support for staff in terms of managing stress and improving staff well-being in the work environment. Once we have received all your questionnaires, your answers will be anonymous and confidential and the researcher will be the only person dealing with the data.

**Your line manager will NOT be informed of your responses.** At completion of the study, an overall feedback will be provided.

Also, in the eventuality participants wish to raise some concerns, a debriefing space will be provided. After completion of the measures, you can contact Mr Mike Hopley via e-mail or phone number to receive information about the most helpful service and to receive a debrief if necessary.

**How will I find out the results of the research?**

Participants’ replies will be collated and a report will be written summarising the findings. This report will be available to you in autumn 2009. Additionally, you will be invited to an open day. This will aim to provide you with findings of the research and you will be welcome to ask any questions.

All research in the NHS is looked at by an independent group of people, called the Research Ethics Committee to protect your safety, rights and well-being. NHS Dumfries & Galloway Research Ethics Committee has reviewed this study. However, if you have any concern about any aspects of this study, please contact researchers who will answer your queries.

If your feel this leaflet does not answer entirely to your questions and you would like further information, please do not hesitate to get in contact with Alessia Bruno.

**Further Information**

For further information please contact researcher
Alessia Bruno  
**DEPARTMENT OF PSYCHOLOGICAL SERVICES AND RESEARCH**  
**NITHBANK**  
**DUMFRIES**  
**DG1 2SA**  
Tel: 01387- 244495  
alessia.bruno@nhs.net

For independent advice on questionnaires or support from psychological services please contact Mr Mike Hopley  
e-mail: mike.hopley@ed.ac.uk

If you have lost your form please contact Research and Development Dept, Gwen Baxter, NHS Dumfries & Galloway on 01387- 241 165
APPENDIX 3:

PARTICIPANT IDENTIFIER FORM
The experience of working in substance misuse and adult mental health service

Main Investigator: Alessia Bruno, Trainee Clinical Psychologist
Department of Psychology, Nithbank, Dumfries, DG1 2SA
Tel: 01387 244495 e-mail: alessia.bruno@nhs.net

Please tick the boxes that apply to you.

Which service do you work for?

- Adult Mental Health Voluntary Sector □
- Adult Mental Health NHS □
- Substance Misuse Voluntary Sector □
- Substance Misuse NHS □

How many years have you worked within this service?

- 1 – 3 years □
- 3 - 6 years □
- 6 – 9 years □
- 9 - 12 years □
- 12 – 15 years □
- 15 -18 years □
- Longer than 18 years □
APPENDIX 4:

MASLACH BURNOUT INVENTORY-HUMAN SERVICES SURVEY FORM
Human Services Survey (Maslach et al., 1996)

The purpose of this survey is to discover how various persons in the human services or helping professions view their jobs and the people with whom they work closely. Because persons in a wide variety of occupations will answer this survey, it uses the terms recipients to refer to the people for whom you provide your service, care, treatment, or instruction. When answering this survey please think of these people as recipients of the service you provide, even though you may use another term in your work.

On the following page there are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write a “0” (zero) before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

Example:

<table>
<thead>
<tr>
<th>HOW OFTEN:</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement:</td>
<td>Never</td>
<td>A few times</td>
<td>Once</td>
<td>A few times</td>
<td>Once</td>
<td>A few times</td>
<td>Every day</td>
</tr>
<tr>
<td></td>
<td>a year or less</td>
<td>a month or less</td>
<td>a month</td>
<td>a week</td>
<td>a week</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HOW OFTEN: 0 - 6

Statement:
I feel depressed at work.

If you never feel depressed at work, you should write the number “0” (zero) under the heading “HOW OFTEN”. If you rarely feel depressed at work (a few times a year or less), you would write number “1”. If your feelings of depression are fairly frequent (a few times a week, but not daily) you would write a “5”.
## Human Services Survey (Maslach et al., 1996)

**HOW OFTEN:** 0 - 6

<table>
<thead>
<tr>
<th>Statements</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel emotionally drained from my work.</td>
<td>Never</td>
<td>A few times a year or less</td>
<td>Once a month or less</td>
<td>A few times a month</td>
<td>Once a week</td>
<td>A few times a week</td>
<td>Every day</td>
</tr>
<tr>
<td>I feel used up at the end of the workday.</td>
<td>1</td>
<td>A few times a year or less</td>
<td>Once a month or less</td>
<td>A few times a month</td>
<td>Once a week</td>
<td>A few times a week</td>
<td>Every day</td>
</tr>
<tr>
<td>I feel fatigued when I get up in the morning and have to face another day on the job</td>
<td>3</td>
<td>A few times a month</td>
<td>Once a week</td>
<td>A few times a week</td>
<td>Every day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can easily understand how my recipients feel about things.</td>
<td>4</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel I treat some recipients as if they were impersonal objects.</td>
<td>5</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working with people all day is really a strain for me.</td>
<td>6</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I deal very effectively with the problems of my recipients.</td>
<td>7</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel burned out from my work.</td>
<td>8</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel I am positively influencing other people’s lives through my work.</td>
<td>9</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m becoming more callous towards people since I took this job.</td>
<td>10</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I worry that this job is hardening me emotionally.</td>
<td>11</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel very energetic.</td>
<td>12</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel frustrated by my job.</td>
<td>13</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel I’m working too hard on my job.</td>
<td>14</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not really care what happens to some recipients.</td>
<td>15</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working with people directly puts too much stress on me.</td>
<td>16</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can easily create a relaxed atmosphere with my recipients.</td>
<td>17</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel exhilarated after working closely with my recipients.</td>
<td>18</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have accomplished many worthwhile things in this job.</td>
<td>19</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel like I’m at the end of my rope.</td>
<td>20</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In my work, I deal with emotional problems very calmly.</td>
<td>21</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel recipients blame me for some of their problems.</td>
<td>22</td>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 5:

MINNESOTA SATISFACTION QUESTIONNAIRE SHORT-FORM
Minnesota Satisfaction Questionnaire (Weiss et al., 1967)

The purpose of this questionnaire is to give you a chance to tell how you feel about your present job, what things you are satisfied with and what things you are not satisfied with.

On the basis of your answers and those of people like you, we hope to get a better understanding of the things people like and dislike about their jobs.

On the next page you will find statements about your present job. Read each statement carefully. Decide how satisfied you feel about the aspect of your job described by the statement.

Keeping the statement in mind:
- if you feel that your job gives you more than you expected, check the box under “Very Sat.” (Very Satisfied);
- if you feel that your job gives you what you expected, check the box under “Sat.” (Satisfied);
- if you cannot make up your mind whether or not the job gives you what you expected, check the box under “N” (Neither Satisfied or Dissatisfied);
- if you feel that your job gives you less than you expected, check the box under “Dissat.” (Dissatisfied);
- if you feel that your job gives you much less than you expected, check the box under “Very Dissat.” (Very Dissatisfied).

Remember: Keep the statement in mind when deciding how satisfied you feel about that aspect of your job.

Do this for all statements. Please answer every item.

Be frank and honest. Give a true picture of your feelings about your present job.
Ask yourself: How satisfied am I with this aspect of my job?

**Very Sat.** means I am very satisfied with this aspect of my job.

**Sat.** means I am satisfied with this aspect of my job.

**N.** means I can't decide whether I am satisfied or not with this aspect of my job.

**Dissat.** means I am dissatisfied with this aspect of my job.

**Very Dissat.** means I am very dissatisfied with this aspect of my job.

<table>
<thead>
<tr>
<th>On my present job, this is how I feel about...</th>
<th>Very Dissat.</th>
<th>Dissat.</th>
<th>N.</th>
<th>Sat.</th>
<th>Very Sat.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Being able to keep busy all the time</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. The chance to work alone on the job</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. The chance to do different things from time to time</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. The chance to be “somebody” in the community</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. The way my boss handles his/her workers</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. The competence of my supervisor in making decisions</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. Being able to do things that don’t go against my conscience</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. The way my job provides for steady employment</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9. The chance to do things for other people</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10. The chance to tell people what to do</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>11. The chance to do something that makes use of my abilities</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>12. The way company policies are put into practice</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>13. My pay and the amount of work I do</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>14. The chances for advancement on this job</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15. The freedom to use my own judgment</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>16. The chance to try my own methods of doing the job</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>17. The working conditions</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>18. The way my co-workers get along with each other</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>19. The praise I get for doing a good job</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>20. The feeling of accomplishment I get from the job</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
APPENDIX 6:
GENERAL HEALTH QUESTIONNAIRE-28
The General Health Questionnaire (Goldberg & Williams, 1998)

Please read this carefully.

We would like to know if you have had any medical complaints and how your health has been in general, over the past few weeks. Please answer ALL the questions on the following pages simply by underlying the answer which you think most nearly applies to you. Remember that we want to know about present and recent complaints, not those that you had in the past.

It is important that you try to answer ALL the questions.
Thank you very much for your co-operation.

<table>
<thead>
<tr>
<th>Have you recently</th>
<th>A1 – been feeling perfectly well and in good health</th>
<th>A2 – been feeling in need of a good tonic?</th>
<th>A3 – been feeling run down and out of sorts?</th>
<th>A4 – felt that you are ill?</th>
<th>A5 – been getting any pains in your head</th>
<th>A6 – been getting a feeling of tightness or pressure in your head?</th>
<th>A7 – been having hot or cold spells?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer Options</td>
<td>Better than usual</td>
<td>Same as usual</td>
<td>Worse than usual</td>
<td>Much worse than usual</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
</tr>
<tr>
<td>B1 – lost much sleep over Worry</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2 – had difficulty in staying asleep once you are off?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B3 – feel constantly under strain?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>B4</strong> – been getting edgy and bad-tempered</td>
<td>Not</td>
<td>No more</td>
<td>Rather more</td>
<td>Much more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>at all</td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B5</strong> – been getting scared or panicky for no good reason?</td>
<td>Not</td>
<td>No more</td>
<td>Rather more</td>
<td>Much more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>at all</td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B6</strong> – found everything getting on top of you</td>
<td>Not</td>
<td>No more</td>
<td>Rather more</td>
<td>Much more</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>at all</td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B7</strong> – been feeling nervous and strung-up all the time?</td>
<td>Not</td>
<td>No more</td>
<td>Rather more</td>
<td>Much more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>at all</td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C1</strong> – been managing to keep yourself busy and occupied?</td>
<td>More</td>
<td>Same</td>
<td>Rather less</td>
<td>Much less</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>so</td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C2</strong> – been taking longer over the things you do</td>
<td>Quicker</td>
<td>Same</td>
<td>Longer</td>
<td>Much longer</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C3</strong> – felt on the whole you were doing things well?</td>
<td>Better</td>
<td>About</td>
<td>Less well</td>
<td>Much</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>than usual</td>
<td>the same</td>
<td>than usual</td>
<td>well</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C4</strong> – been satisfied with the way you’ve carried out your task?</td>
<td>More</td>
<td>About same</td>
<td>Less satisfied</td>
<td>Much</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied</td>
<td>as usual</td>
<td>than usual</td>
<td>satisfied</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C5</strong> – felt that you are playing a useful part in things?</td>
<td>More</td>
<td>Same</td>
<td>Less useful</td>
<td>Much less</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td>useful</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C6</strong> – felt capable of making decisions about things</td>
<td>More</td>
<td>Same</td>
<td>Less</td>
<td>Much less</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>than usual</td>
<td>than usual</td>
<td>so</td>
<td>capable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C7</strong> – been able to enjoy your normal day-to-day activities?</td>
<td>More</td>
<td>Same</td>
<td>Less so</td>
<td>Much less</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>than usual</td>
<td>as usual</td>
<td>than usual</td>
<td>than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D1</strong> – been thinking of yourself as a worthless person?</td>
<td>Not</td>
<td>No more</td>
<td>Rather more</td>
<td>Much more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>at all</td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D2</strong> – felt that life is entirely hopeless?</td>
<td>Not</td>
<td>No more</td>
<td>Rather more</td>
<td>Much more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>at all</td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D3</strong> – felt that life isn’t worth living?</td>
<td>Not</td>
<td>No more</td>
<td>Rather more</td>
<td>Much more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>at all</td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D4</strong> – thought of the possibility that you might make away with yourself?</td>
<td>Not</td>
<td>No more</td>
<td>Rather more</td>
<td>Much more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>at all</td>
<td>than usual</td>
<td>than usual</td>
<td>than usual</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>TOTAL</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>D5 – found at times you couldn’t do anything because your nerves were too bad?</td>
<td>Not</td>
<td>No more</td>
<td>Rather more</td>
<td>Much more</td>
<td>at all</td>
<td>than usual</td>
<td>than usual</td>
</tr>
<tr>
<td>D6 – found yourself wishing you were dead and away from it all?</td>
<td>Not</td>
<td>No more</td>
<td>Rather more</td>
<td>Much more</td>
<td>at all</td>
<td>than usual</td>
<td>than usual</td>
</tr>
<tr>
<td>D7 – found that the idea of taking your own life kept coming into your mind?</td>
<td>Definitely</td>
<td>I don’t</td>
<td>Has crossed</td>
<td>Definitely</td>
<td>not</td>
<td>think so</td>
<td>my mind</td>
</tr>
</tbody>
</table>

**TOTAL**
APPENDIX 7:

LETTER TO SERVICE S' MANAGER
4th June 2008

Dear Mr/Ms _______________________

Clinical Research Project

My name is Alessia Bruno and I am a Trainee Clinical Psychologist. I am currently employed by Dumfries and Galloway NHS trust and I work two days a week within the substance misuse service and two days a week within the adult mental health service. I have been working within adult mental health services and have been seeing patients for the past four years.

I would like to invite your staff to participate in a research project that I am doing as part of the fulfilment of a Clinical Doctorate with Edinburgh University. The study has been submitted to the local Ethics Committee and has received its approval.

The study is completely anonymous, confidential and participation is voluntary. The research aims to examine what differences might exist between people working in specialist services within both the voluntary sector and the NHS. In particular, the research is interested in looking at the relationship between work, perceived stress, overall well-being and job satisfaction.

Participants will be asked to complete three short questionnaires, which will take them around fifteen minutes. The first questionnaire asks about stress, the second about overall well-being and the third about job satisfaction.

Furthermore, at the end of the project, an open day will be organised to provide feedback about the findings. A written summary of the project outcome will be sent to Managers.

If necessary, a training session about stress management and psychological well-being will be provided for those organizations that might wish for such an event.

If you would like to find out more about this research, I would be happy to meet you in person and provide you with informative leaflets for the participants within your organisation. Please do not hesitate to contact me if you have any queries.

Yours sincerely,

Alessia Bruno
Trainee Clinical Psychologist
Department of Psychological Services and Research,
Nithbank, Dumfries,
DG1 2SA
Tel: 01387-244495
APPENDIX 8:
MINNESOTA SATISFACTION QUESTIONNAIRE SHORT-FORM
PERCENTILE SCORES
## Sample Characteristics

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>%</th>
<th>Tenure in present occupation</th>
<th>Data source. See page 112.</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 to 25</td>
<td>12</td>
<td>3</td>
<td>1 year or less</td>
<td>N = 387</td>
</tr>
<tr>
<td>26 to 35</td>
<td>124</td>
<td>32</td>
<td>2 to 5 years</td>
<td></td>
</tr>
<tr>
<td>36 to 45</td>
<td>49</td>
<td>10</td>
<td>6 to 10</td>
<td></td>
</tr>
<tr>
<td>46 to 55</td>
<td>77</td>
<td>20</td>
<td>11 to 20</td>
<td></td>
</tr>
<tr>
<td>56 to 65</td>
<td>37</td>
<td>10</td>
<td>21 to 30</td>
<td></td>
</tr>
<tr>
<td>65 and over</td>
<td>0</td>
<td>0</td>
<td>31 years and over</td>
<td></td>
</tr>
</tbody>
</table>

### Tenure in present occupation

- 1 year or less: 4 (1)
- 2 to 5 years: 80 (21)
- 6 to 10 years: 81 (21)
- 11 to 20 years: 32 (8)
- 21 to 30 years: 69 (18)
- 31 years and over: 21 (5)

### Disabling condition

- None: 354 (91)
- Single disabling condition: 91 (4)
- Multiple disabling condition: 4 (1)

### Number of previous jobs

- 0: 206 (69)
- 1 or 2: 87 (22)
- 3 to 5: 25 (6)
- 6 to 10: 9 (2)
- 11 and over: 0 (0)

### Years of full-time experience

- 1 year or less: 3 (1)
- 2 to 5 years: 68 (18)
- 6 to 10 years: 65 (17)
- 11 to 20 years: 129 (33)
- 21 to 30 years: 84 (22)
- 31 years and over: 38 (10)

## Normative Data

### Scale

<table>
<thead>
<tr>
<th>Mean</th>
<th>Intrinsic</th>
<th>Extrinsic</th>
<th>General</th>
</tr>
</thead>
<tbody>
<tr>
<td>48.53</td>
<td>21.32</td>
<td>77.88</td>
<td></td>
</tr>
</tbody>
</table>

### Standard Deviation

- Intrinsic: 7.54
- Extrinsic: 4.38
- General: 11.92

### Hoyt reliability coefficient

- Intrinsic: 91
- Extrinsic: 82
- General: 92

### Standard error of measurement

- Intrinsic: 2.31
- Extrinsic: 1.86
- General: 3.29

### Percentiles

| Scale       | 1  | 5  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 99 |
|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Intrinsic   | 16 | 36 | 40 | 42 | 44 | 45 | 46 | 47 | 48 | 51 | 49 | 50 | 51 | 51 | 52 | 53 | 54 | 55 | 58 | 60 | 60 |
| Extrinsic   | 8  | 13 | 14 | 16 | 17 | 18 | 19 | 20 | 20 | 21 | 23 | 22 | 22 | 23 | 23 | 24 | 25 | 25 | 27 | 29 | 29 |
| General     | 29 | 59 | 64 | 68 | 70 | 72 | 73 | 75 | 77 | 78 | 79 | 80 | 81 | 81 | 82 | 83 | 85 | 86 | 88 | 88 | 96 |