The effect of sheltered workshop environments on psychiatric service-users’ well-being.

By

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A NOTE ON NUMBERING

The figure numbering for each discrete piece of work (i.e. essay, case report or research report) restarts at one at the beginning of the piece. The same applies to tables, footnotes and appendices.
PART ONE:
ACADEMIC DOSSIER.
ADULT MENTAL HEALTH ESSAY

Compare and contrast the evidence base for two different theoretical models of Eating Disorders. What implications does this have for the delivery and provision of clinical services for people with Eating Disorders?

January 2002

Year 1
Introduction

The purpose of this essay is to compare and contrast the evidence-base for two different theoretical models of Eating Disorders and to discuss the implications this has for the delivery and provision of clinical services for people with Eating Disorders. This is a useful exercise given the fact that the incidence of Eating Disorders is said to be rising, and, once established, they run a serious and chronic course (Channon & Wardle, 1989, pp.127).

For the purpose of this discussion “Eating Disorders” will be taken to mean anorexia nervosa (AN) and bulimia nervosa (BN), since these are considered two of the main eating disorders (American Psychiatric Association, 2000).

Both AN and BN are characterised by intense concerns about body shape and weight; patients will judge their self-worth or value almost exclusively in terms of their shape and weight (Channon & Wardle, 1989, pp.127; Fairburn, 1997, pp. 210-211; Fairburn & Cooper, 1989, pp.277). Various behaviours designed to control body weight are also a feature of both disorders. These can include extreme dieting, self-induced vomiting, the misuse of purgatives or diuretics, and vigorous exercising. In AN the result is that patients are underweight, which is defined by a body weight less than 85% of that expected (American Psychiatric Association, 2000). In BN this is not necessarily the case since patients’ attempts to diet are punctuated by recurrent episodes of binge eating (American Psychiatric Association, 2000; Fairburn and Cooper, 1989, pp.277).

AN typically begins in the early to middle teenage years with BN beginning in late adolescence or early adulthood (American Psychiatric Association, 2000). Both are far more common in women with estimated prevalence rates of 1 and 6 per 100 000 of the population for AN and 8 per 100 000 for BN (Davison and Neale, 1997, pp.208-210; Wardle, 1994, pp.514).

Both disorders are associated with a variety of physical health hazards and reduced psychological well being (Wardle, 1994, pp.514), as well as additional general
psychopathology consisting of a range of depressive and anxiety symptoms (Fairburn & Cooper, 1989, pp.277-278). AN, in particular, is a life threatening illness with reported mortality figures as high as 21 per cent (Davison & Neale, 1997, pp.209; Wardle, 1994, pp.522).

Due to the high-risk factors and complexity of the disorders it is important to develop an evidence-based understanding of them (Wardle, 1994, pp.514-533). This discussion will focus on comparing and contrasting the evidence-base of the Structural Family model (Minuchin et al., 1975; Minuchin, Rosman, & Baker, 1978) and Cognitive-Behavioural models (e.g. Garner & Bemis, 1982; Fairburn, 1981) for Eating Disorders, since both have had a huge impact on clinical practice. (Cooper, 1997; Dare & Eisler, 1997, pp.307-324; Vitousek, 1996, pp.383).

This will be achieved by discussing each model separately, including its associated therapy and evidence base, before comparing the two. The final part of this essay will discuss how the application of such models to the treatment of Eating Disorders can be integrated and sequenced within a service delivery framework.

**Structural Family Model and Therapy of Eating Disorders**

The Family approach to eating disorders is far from being a unified conceptual system. There are a number of different models in the field, including Structural, Strategic, Milan Systemic, Post-Milan and Feminist approaches (Dare & Eisler, 1997, pp.308). The most comprehensive account of families of people with Eating Disorders appears to be provided by the “Structural” approach (Eisler, 1995, pp.161; Minuchin et al., 1975; Minuchin et al., 1978). Therefore, this model will be the focus here.

According to this model three factors in conjunction are necessary for the development and maintenance of severe psychosomatic illness in children, of which AN was considered to be a prime example (Eisler, 1995, pp.161; Minuchin et al, 1975; Minuchin et al, 1978). The three factors are as follows:
"First, the child is physiologically vulnerable...Second, the child’s family has the following four transactional characteristics: enmeshment, overprotectiveness, rigidity, and lack of conflict resolution. Third, the sick child plays an important role in the family’s patterns of conflict avoidance; and this role is an important source of reinforcement for his symptoms” (Minuchin et al, 1975, pp. 1032).

Minuchin and colleagues (Minuchin et al., 1975) describe the four characteristics exhibited by the families of children with Eating Disorders as follows: Firstly, enmeshment is viewed as an extreme form of overinvolvement and intimacy with weak boundaries between individuals. Secondly, overprotectiveness is seen as an extreme level of concern for family members’ welfare. This in turn retards the child’s development of autonomy and competence. Thirdly, rigidity is viewed as the tendency to try to maintain the status quo and avoid dealing effectively with events that require change. Finally, lack of conflict resolution is where the families’ thresholds for conflict are very low and conflict resolution is avoided either by denying the existence of any problems or by arguing continuously (Davison & Neale, 1997, pp216-217; Garfinkel & Garner, 1982, pp.181; Minuchin et al, 1975).

Since Eating Disorders are viewed as originating in family disturbance, it is argued by proponents of this model that this disorder can be treated by forms of therapy that target these causative factors (Dare & Eisler, 1995, pp.319). Therefore the goals of Structural Family Therapy are to change the enmeshment, over-involvement, rigidity, and conflict-avoidance patterns within such a family system (Levitt, 2001). If these are addressed it is assumed that the functional improvement within the family will diminish the symptom (Dare & Eisler, 1997, pp.310).

**Evidence-Base for Structural Family Models of Eating Disorders**

The family system account by Minuchin is clinically persuasive and provides important insights into family dynamics, but empirical evidence in support of this account of Eating Disorders is limited (Eisler, 1995, pp.161; Woodside et al., 1995). The majority of studies have either used self-report or observational methods.
Considering the self-report studies first, these provide inconsistent support for the presence of the characteristics of families of eating disordered patients as suggested by Minuchin et al (1978). Variation in results occurs both within and across studies. Many of them utilise questionnaires in which the dimensions only loosely fit the theory, which limits the validity of the findings based on such measures (Davison & Neale, 1997, pp.218).

An example of a self-report study, which is more directly linked to Minuchin’s theory, is by Dare and colleagues (Dare, LeGrange, Eisler & Rutherford, 1994). They assessed both eating disordered patients and their families using questionnaires designed to measure rigidity, closeness, emotional overinvolvement, critical comments and hostility. However, contrary to Minuchin’s theory the families showed considerable variation in enmeshment and reported relatively low levels of criticism and hostility. It could be argued that the latter finding may reflect Minuchin’s description of the conflict-avoidance pattern. However, the patients’ lack of emotional overinvolvement is clearly inconsistent with Minuchin’s clinical descriptions (Davison & Neale, 1997, p.218; Dare et al, 1994; Eisler, 1995, pp.163-165).

Eisler (1995, pp.166) suggests that despite considerable variation between different questionnaire studies and between families within each study, some overall conclusions can be drawn. Most studies report a perception of a lower level of closeness and restricted general communication and affective expression. It may be argued that the former is inconsistent with Minuchin’s concept of enmeshment whereas the latter offers partial support for his concepts of rigidity and lack of conflict resolution.

It is clear that questionnaire studies only provide a limited insight into family characteristics and any differences that are found could be as a result of the eating disorder, not the cause of it (Eisler, 1995, pp.166).

Observational studies provide more objective data (Davison & Neale, 1997, pp.218), but again show equivocal support for Minuchin’s theory. For example, Humphrey
(1989) demonstrated that there were unique patterns among families of eating disordered patients, whereby the families of bulimic children were observed to be hostilely enmeshed and the families of anorexic children tended to communicate a mixed message of loving affection with parental control and negation of the child's developmental needs. This finding is consistent with the theory.

However, it could be argued that these observed differences may represent a relatively small shift from normal families and in themselves may not by pathological family interactions (Eisler, 1995, pp. 168). Furthermore, other observational studies have demonstrated little difference between the characteristics of parents of children with an Eating Disorder from controls (van den Broucke, Vanereycken & Verkommen, 1995).

In summary, an examination of the research literature does not reveal empirical data to strongly support the notion that there is a distinctive and consistent pattern of structure and functioning in the families of patients with Eating Disorders (Dare & Eisler, 1995, pp.319). Even if a disturbed family interaction pattern is found its specificity and causal significance remains to be demonstrated (Eisler, 1995, pp.169; Vandereycken, 1995, pp.222).

However, while the current evidence may not offer strong support to a family aetiological model, the evidence for the importance of involving the family in treatment is increasingly strong (Dare & Eisler, 1995, pp.319).

The strongest evidence is derived from a series of randomised controlled trials of family therapy conducted at the Maudsley hospital (Dare & Eisler, 1995, pp. 319; Levitt, 2001). For example, Dare and colleagues (Dare, Eisler, Russell & Szmukler, 1990) compared Structural Family Therapy with Individual Supportive Psychotherapy in the treatment of AN. The results showed that family therapy was more effective with patients who had early onset before the age of 18 years, short duration of illness and who lived at home.

However, it was also concluded that family therapy was not universally beneficial. Patients with more chronic illness, with late onset and those with severe BN did not
gain specific benefits from family therapy in comparison with the control treatment (Dare & Eisler, 1995, pp. 319). Other studies have supported these findings (Russell, Szmukler, Dare & Eisler, 1987; Eisler et al., 2000).

Despite these findings few studies have examined what is specifically effective about family therapy. While the role of family therapy is well established in the treatment of AN, it is not necessarily effective for the reasons outlined by the theory. Furthermore, its place in the treatment of BN is less clear (Dare & Eisler, 1995, pp. 322). It appears instead that certain family characteristics may influence compliance with and responsiveness to treatment (Russell, Dare, Eisler, Daniel, & LeGrange, 1992, p. 239).

Further studies are required to delineate the specific parts of the intervention within the theoretical framework that are most effective, in order for the theoretical concepts themselves to be rigorously tested and to aid clinicians in developing more appropriate treatment plans (Levitt, 2001). Family therapy also needs to be explored more systematically for the treatment of BN (Dare & Eisler, 1995, pp. 322).

Cognitive-Behavioural Models and Therapy for Eating Disorders

A brief overview of the cognitive-behavioural models and therapy developed by Garner and Bemis (1982) and by Fairburn and colleagues (Fairburn, 1981; Fairburn Cooper & Cooper, 1986) for AN and BN, respectively, will be presented below.

The central premise of the cognitive-behavioural approach is that anorexic and bulimic symptoms are maintained by both a characteristic set of overvalued ideas (dysfunctional assumptions), about the personal implications of body shape and weight, and distorted information processing which influences the sufferer’s perceptions, automatic thoughts, affect and behaviour (Cooper, 1997; Fairburn, 1997, pp.210-211; Vitousek, 1996, pp.384). Automatic thoughts consist of a habitual pattern of thinking seen as plausible to the individual and taken to be a factual representation of reality (Fairburn et al., 1986). Other features of the disorders, such as dieting and resultant weight loss, can be understood as being secondary to the primary concern with body shape and weight (Fairburn, 1997, pp.210-211).
Typical examples provided by Fairburn and colleagues for the dysfunctional assumptions held by individuals with BN include: “To be fat is to be a failure, unattractive, and unhappy” and “to exert self control is a sign of strength and discipline” (Fairburn et al, 1986). According to this model the nature of such beliefs also reflects certain dysfunctional styles of reasoning. The latter includes dichotomous thinking, for example the belief that foods can be categorised as “fattening” or “non fattening”, overgeneralisation, such as the belief that minor dietary indiscretions are indicative of a complete absence of self-control, and errors of attribution like the belief that success and failure are largely defined by appearance (Fairburn et al, 1986).

Garner and Bemis (1982) suggested that individuals with AN are distinguished by rigid beliefs held about the importance of weight regulation, strong beliefs in self-control, and beliefs that approval and self-worth are based on body weight (Mizes & Christiano, 1995). Garner and Bemis (1982) suggest that the fundamental belief held by such individuals is “I must become thin”.

In summary, the two cognitive models that are most frequently used to guide treatment in the field of Eating Disorders (Garner & Bemis, 1987; Fairburn et al, 1986) give primary importance to a characteristic set of overvalued ideas about the personal implications of body shape and weight in maintaining anorexic and bulimic symptoms (Vitousek, 1996, pp.384). The theories highlight the importance of three features: automatic thoughts, dysfunctional information processing and underlying assumptions (Cooper, 1997).

Following from the theory Cognitive Behavioural Therapy (CBT) has emerged as the standard treatment of choice for BN (Fairburn, 1997, pp.209-241; Pike, Loeb & Vitousek, 1996, pp.258; Wilson, 1995, pp.178). There is a manual-based treatment programme originally developed by Fairburn (1985) at Oxford University. The goals of treatment for BN are to address the presenting behaviours of binge eating and purging. Dietary restraint must be replaced with more normal eating patterns and dysfunctional assumptions, thoughts and feelings about the personal significance of body weight and shape must be altered (Wilson, Fairburn & Agras, pp70, 1997).
CBT for AN has no such standard treatment manual. However, the general model of therapy shares some common features with CBT for BN. Although the key distinction between the treatments of these two disorders is based on motivation for treatment and weight gain as a target symptom (Garner, Vitousek & Pike, 1997, pp.94-95).

Both models have had a huge impact on clinical practice in the Eating Disorders field (Cooper, 1997). However, the apparent equivalent levels of acceptance do not reflect the empirical status of the two treatments. CBT for BN has gained extensive support through controlled treatment trials, while the efficacy of CBT for AN has yet to be established (Vitousek, 1996, pp.383). The evidence-base for the cognitive-behavioural models will now be examined.

**Evidence-Base of Cognitive Models of Eating Disorders**

A number of hypotheses can be derived from the cognitive models of eating disorders (Cooper, 1997). The relevant evidence for the more central predictions will be focused on in this discussion due to space limitations. For a more detailed review please refer to Cooper (1997).

The first hypothesis predicts that the negative automatic thoughts of individuals with Eating Disorders will reflect concerns with food and eating, weight and shape (Cooper, 1997). Current evidence appears to support this hypothesis in bulimic and anorexic patients groups when compared to controls (Cooper, 1997; Fairburn, 1997, pp.214; Vitousek, 1996, pp.385-388). For example, Cooper and Fairburn (1992) used concurrent verbalisation techniques, where the subjects report their thoughts out loud whilst performing a series of behavioural tests. They found that patients with Eating Disorders expressed more negative thoughts associated with eating, weight and shape, than normal controls during the tasks. In addition this study was able to discriminate between the patients with AN, who had thoughts predominately related to eating, and the bulimic group whose negative thoughts focused on weight and appearance (Cooper, 1997; Mizes & Christiano, 1995).
However, Cooper (1997) argues that information on reliability and validity is limited on most of these studies. It would therefore be necessary to replicate these findings, perhaps by using alternative measures to attempt to produce convergent validity.

The second hypothesis predicts that dysfunctional styles of reasoning or information processing errors will be found in the food and eating and in weight and shape concerns of eating disordered patients. As previously, current research based on self-report questionnaires and techniques from experimental psychology appears to be consistent with this hypothesis (Cooper, 1997; Williamson, Muller, Reas & Thaw, 1999).

For example, self-report questionnaire studies by Franko and Zuroff (1992) and Thompson, Berg, and Shatford (1987) found higher levels of distortions in patients with BN than in normal controls (Cooper, 1997). Numerous experimental studies have measured selective attention (one aspect of dysfunctional information processing), using modified versions of the original Stroop (1935) colour-naming task. (Williamson et al, 1999). Such studies, for example Ben-Tovim and Walker (1991), show that patients with AN and patients with BN were slower to colour-name words relevant to their concerns than normal controls (Cooper, 1997; Williamson et al, 1999).

However, it has been suggested that that the information processing differences found between eating disordered patients and controls may reflect differences in hunger rather than eating disordered psychopathology (Vitousek & Hollon, 1990; cited in Cooper, 1997). Since people whom are semi-starving but not anorexic are known to show similar concerns with food (Frankin, Schiele, Brozerk, & Keys, 1948).

Therefore, further studies in this area are required. Cooper (1997) argues that a future consideration for such studies would be to separate out specific concerns (e.g. weight and shape concerns versus food and eating concerns) so that possible differences can be highlighted between patients with AN and patients with BN. Since those studies which have separated out concerns between anorexic and bulimic patient groups have produced conflicting findings (Cooper, 1997). For a more detailed review of the
research on cognitive bias in eating disorders the reader is referred to Williamson and colleagues (1999).

The third hypothesis predicts that there will be a causal relationship between underlying assumptions and automatic thoughts and eating behaviour. Little research has been conducted in this area but treatment follow-up studies do provide some support for this hypothesis. For example, Fairburn, Peveler, Jones, Hope and Doll (1993) found that at a twelve month follow-up the residual level of attitudinal disturbance among patients with BN, who responded to one of three short-term psychological treatments, predicted outcome.

This provides preliminary support for a central prediction of the cognitive view of the maintenance of BN. However, according to Cooper (1997) most of the studies have fairly short follow-up periods, offer only indirect support for the causal link and have only investigated patients with BN. Therefore, more research is required to assess cognition directly and to investigate the causal link between attitudes to eating, weight and shape in patients with AN. This may involve longitudinal studies to see if changes in beliefs precede weight change.

The fourth and final hypothesis under discussion predicts that treatment based on the cognitive models will be effective for BN and AN (Cooper, 1997). Controlled trials show that CBT is a promising treatment for BN (Channon & Wardle, 1989, pp.127-156; Cooper, 1997; Pike, Loeb & Vitousek, 1996, pp.257-260; Vitousek, 1996, pp.383; Wilson & Fairburn, 1998). Craighead and Agras's (1991) summary of 10 studies showed significant reductions in binge eating, purging and dietary restraint as well as improvements in attitudes to shape and weight. In addition, 20 studies showed CBT in BN to be equal to or superior to other psychological treatments at the end of treatment and at follow-up, with CBT also producing rapid effects (Department of Health, 2001).

Although, it is important to note that many published trials include only limited follow-up data (Vitousek, 1996, pp.401). Furthermore, the finding that Interpersonal
Psychotherapy (IPT) is as effective as CBT (Fairburn, Jones, Peveler, Hope & O’Connor, 1993) at longer term follow-ups, raises the question of whether the efficacy of CBT is due to the cognitive processes outlined in the cognitive theory or whether other processes are involved in the maintenance of BN.

In contrast to BN, cognitive behavioural treatment of AN has been relatively neglected; there is no agreed procedure and there has only been one treatment trial (Fairburn, 1997, pp.219; Vitousek, 1996, 399-400). In the controlled trial conducted by Channon and colleagues (Channon, de Silva Hemsley & Perkins, 1989) no differences were found between CBT and behaviour therapy at 6- and 12-month follow-up. However, their findings are difficult to interpret given a small sample size of 8 patients in each condition, the use of a weak assessment protocol and concerns over whether the treatment itself conformed to specified procedure (Fairburn, 1997, pp.219; Vitousek, 1996, pp.399-401). Given the flaws in this trial and the lack of other treatment studies, it is clear that the efficacy of cognitive therapy with anorexic patients remains largely untested (Cooper, 1997).

In summary, the greatest support for the cognitive models of eating disorders is derived from its application to CBT treatment for BN, which in itself offers only indirect support for the validity of the cognitive theory (Vitousek, 1996, pp.407). As Cooper (1997) argues, few studies have assessed cognitive disturbance directly, therefore it is unclear which aspects of cognition are most important according to the predictions made by the theories and which need to be targeted in treatment. There is currently very limited evidence from treatment studies to support the validity of cognitive theory in AN (Cooper, 1997). More direct empirical investigations may help to inform theory and improve the effectiveness of treatments for the two disorders (Cooper, 1997).

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1 IPT is a short-term psychotherapy treatment designed by Klerman and colleagues as a treatment for depression (Klerman et al, 1994; see Fairburn, 1997, page 217) The modified version for the treatment of BN focuses on the identification and modification of current interpersonal problems and pays little attention to the eating disorder per se (Fairburn, 1997).
Comparisons of the Evidence-Base for Cognitive-Behavioural and Structural Family Models

Having separately reviewed the evidence-base for Cognitive-Behavioural and Structural Family models of Eating Disorders, we are now in a position to address the main concern of this essay, namely how the two compare.

It can be seen that unlike the family model of Eating Disorders, the cognitive models provide a comprehensive platform from which empirical testing of key theoretical concepts can be made (Beck, 1976, pp.310). This in turn has facilitated the use of more objective methodologies in testing predictions derived from the cognitive models. Researchers in this area have been able to utilise a combination of self-report and experimental techniques, which may help to balance out the well known limitations of using retrospective self-report measures alone (such as problems in reactivity and memory biases). In contrast much of the evidence-base for the family model is derived from questionnaire studies alone. Some attempts have been made to employ more objective observational techniques in testing the family theory. Unfortunately, the complexity of such methodologies has limited the interpretability of the findings (Eisler, 1995, pp.166-168).

The current evidence-base for the cognitive models of eating disorders appears to show more consistent support for its specific theoretical concepts when compared to the evidence-base for the family theory. However, for both models it is arguable that research testing their predictions has lagged behind advances in the treatments derived from them. The efficacy of both Family Therapy and CBT has been demonstrated in randomised controlled trials for specific patient groups.

It appears to be currently accepted that CBT is the standard treatment of choice with BN whereas Family Therapy is viewed to be more effective for adolescents who have a short duration of AN. However, treatment applications in themselves offer only indirect support for the validity of the associated theories.
The evidence-base for both treatment models indicates that neither treatment is universally beneficial. For example, a significant percentage of individuals with BN who engage in CBT fail to respond dramatically or sufficiently (Pike, Loeb & Vitousek, 1996, pp.260). Likewise, patients with more chronic illness, late onset and those with severe BN fail to benefit from Family Therapy (Dare & Eisler, 1995, pp. 319). Future studies need to explore the individual differences among patients that may predict responsiveness to treatment (Pike, Loeb & Vitousek, 1996, pp.260; Wilson, 1995, pp.178).

However, it must be acknowledged that one of the greatest strengths of cognitive-behavioural theories and therapy, when compared to the family theory, is that it has been deliberately designed to be empirically testable and can be modified in response to the results of these tests. This provides optimism for the future development of these theories (Cooper, 1997).

In summary, it appears that the theoretical formulations for the cognitive models of eating disorders have a stronger evidence-base than those derived from the family model. However, both models still require more direct empirical testing of their respective theoretical positions. Further research is also needed to improve the effectiveness of both CBT and Family therapy, in order to highlight what are the specific components of therapy that are most effective for different patients groups and characteristics. It is crucial to identify the active ingredients in each treatment, since intervention efficacy does not necessarily imply that the associated theory is correct.

Implications for the Delivery and Provision of Clinical Services

Given the complexity and life threatening effects of Eating Disorders and the limitations this imposes on different therapies for being universally effective, it is crucial to develop a holistic understanding of these disorders from which decisions regarding the delivery and provision of services can be based.

The aggregate cost of a single patient over the years can become very high as a result of frequent consultations, investigations and long periods of in-patient care (Crisp et
It is therefore important to look at effective interventions for treatment since the impact on services and resources is considerable. The emphasis must be on treatments that do not occur in isolation but account for the physical and psychological complexities of the disorders.

In an attempt to address the impact that the above issues have on the delivery and provision of services, there has been an interest in Stepped Care, Decision Tree and Integration models. These models provide a framework for the delivery of various treatment options (Agras, 1993, Fairburn & Peveler, 1990; Garner & Needleman, 1997, pp. 50).

Specifically, these overlapping concepts of treatment delivery share the same value system of nonallegience to a single theoretical orientation, but with differing points of emphasis. For example, the “Stepped-Care” approach involves sequencing empirically derived interventions into graded levels or “steps”, based on level of intensity, cost and probability of success. Typically all patients follow the same sequence. In contrast, the “Decision-Tree” model provides many choice points resulting in different paths for treatment depending on the clinical features of the patient as well as response to treatment delivered (Garner & Needleman, 1997, pp. 51).

Proposals for integrating and sequencing treatments have not been empirically tested in the area of Eating Disorders. This is partly due to the huge practical and theoretical problems in developing a research protocol, which is capable of testing the complexity of such service models. However, according to Garner and Needleman (1997, pp. 50-51) existing treatment research and current clinical knowledge provides a foundation for recommending the appropriate selection of treatments in the management of Eating Disorders.

The benefit of such decision making models is in their capacity to account for the complex physical and psychological needs of different eating disordered patients, of which no single therapeutic intervention could encapsulate; such as different symptom
For the purpose of this discussion it will be shown how Family Therapy and CBT can be integrated into a general model for making decisions about treatment. Within this model, Garner and Needleman (1997, pp.52-53) suggest that family therapy is the initial treatment of choice for patients with AN who are 18 years old or younger and living at home. However, even when family therapy is not the primary mode of treatment, it is argued that a comprehensive family assessment can be critical to fully understand and address specific therapeutic issues. Regardless of the theoretical orientation of treatment, family members may need assistance in dealing with an eating disordered patient. It may also be appropriate to integrate family therapy into the longer-term treatment plan, since it may be a valuable adjunct to individual therapy in addressing trauma within a family (Garner & Needleman, 1997, pp.56-57).

In contrast, CBT is recommended for the treatment of BN. It has also been suggested for the treatment of AN, largely on clinical grounds, particularly for patients whose age does not mandate family therapy and whose symptoms are moderate to severe. (Garner & Needleman, 1997, pp.57).

In summary, it can be seen that the complexity of Eating Disorders necessitates a holistic approach to the delivery and provision of services. Perhaps, by using models of treatment delivery that rely on the integration and sequencing of approaches then key patient characteristics can be fully accounted for.

Conclusion

In conclusion it can be seen that by comparing and contrasting the evidence-base of two different models of Eating Disorders, much further research is required to investigate the validity of these theoretical contributions in order to extend and develop theory. Initial evidence for cognitive models is promising and supports various aspects of the theory (Cooper, 1997), while evidence for the structural family model appears highly inconsistent.
Despite the limitations, there is strong support for the efficacy of treatments derived from these respective models when applied to specific patient groups. However, future research may need to be directed at investigating the specific components of the interventions that are successful. This may further aid clinicians in determining the most appropriate treatment plan for each individual.

Given the complexity and high-risk consequences of BN and AN, it is important that treatment is addressed at a number of levels. It is suggested that sequencing models of service delivery can help to achieve this by providing a holistic approach to the provision of services. Within such a decision-making model, a range of treatment options can be incorporated.

Garner and Needleman's general decision-making model (1997), suggests that Family Therapy is the initial treatment of choice for patients with AN, under the age of 18 years and living at home. In contrast, CBT is recommended for the treatment of BN. This proposed approach to decision-making in the delivery of services for Eating Disorders appears to be supported by the current evidence-base for effective treatment outcomes as delineated in this discussion. However, given the limited empirical testing of such a decision-making model, it is recommended that future research may need to focus on this.
References


Critically review the current status of the assessment and treatment of dementia in adults with learning disabilities.

July 2002

Year 1
Introduction

Medical advances and improved living circumstances have resulted in individuals with learning disabilities (Ld) living longer. As age is the strongest risk factor for developing dementia, the likelihood of this population developing dementia is increasing (Aylward, Burt, Thorpe, Lai, & Dalton, 1995; Cooper, 1997; Hogg & Moss, 1993).

Estimated prevalence rates for the clinical signs of dementia for all people with Ld is similar to that of the general population (5-10% over age 64), but is much higher for persons with Down Syndrome (DS)(15-40% over age 35) (LeBlanc & Matson, 1997).

Dementia is a term applied to progressive mental deterioration in adults that is coupled with personality changes in a state of clear consciousness associated with a specific configuration of neuropathological changes in the brain (American Psychiatric Association (APA), 1997; Janicki & Dalton, 1999, pp.121).

There are several causes of dementia. Alzheimer’s Disease (AD) is the most common accounting for between 50 and 75% of all dementias (APA, 1997). It is a progressive disease, but little is presently known about the causes, treatment or prevention (Janicki & Dalton, 1999, pp.121).

For the purpose of this discussion dementia will be taken to refer to AD, since many other types of dementia, including vascular and multi-infarct, are of lower prevalence and to what degree they affect adults with Ld is unknown (Janicki & Dalton, 1999, pp.121). In addition the majority of research on dementia in persons with Ld has focused on AD, since it represents a significant risk factor for people with DS (Hogg & Moss, 1993; Janicki & Dalton, 1999, pp.121).

The onset and progression of AD can be characterised into a number of stages. A three-stage model that classifies dementia into early, middle and late stages has received widespread acceptance for application to people with Ld (APA, 1997; Janicki & Dalton, 1999, pp.122). Lai and Williams (1987) suggest the first phase involves
signs of memory impairment, reduced verbal output and temporal disorientation. As
the dementia progresses, loss of self-help skills, motor impairment and a sharp
increase in seizures arise in the second stage, with incontinence and pathological
reflexes becoming apparent in the later stage (LeBlanc & Matson, 1997), leading
eventually to a complete loss of motor, language and self-care skills (Wisniewski &
Silverman, 1996, pp.43).

In the absence of a “Gold Standard” for diagnosing dementia in people with Ld or
effective treatments for the underlying pathology, there is an increasing interest in
accurate detection of dementia in persons with Ld in order to facilitate effective
program planning and clinical care (Cooper, 1997; Deb & Braganza, 1999; Pary,
2002).

This discussion will focus on critically reviewing the current status of assessment and
treatment of dementia in adults with Ld. This will be achieved by firstly evaluating a
range of assessment instruments that have been recommended for assessing decline in
various aspects of functioning associated with dementia, followed by the evaluation of
pharmacological and Strength Approaches to the care-management of dementia.

Assessment

New initiatives are producing a range of assessment techniques for the early detection
of dementia in people with Ld (Moss et al., 1997). The IASSID/AAMR Working
Group for the Establishment of Criteria for the Diagnosis of Dementia in Individuals
with Mental Retardation (Aylward et al., 1995) have proposed a standardised set of
procedures for such an assessment.

The current status of these techniques will be critically reviewed by evaluating those
instruments associated first, with the clinical evaluation of caregiver reports and then
with specific areas of functioning, as indicated by research with Ld populations
(LeBlanc & Matson, 1997).
Clinical Evaluation of Care-Giver Reports

Due to the absence of a validated optimal neuropsychological test battery for detecting dementia in people with Ld, the diagnosis of dementia relies heavily on the clinical evaluation and caregiver interview (Aylward et al., 1995; Oliver, 1999; Whitehouse & Chamberlain, 2000).

There are a number of standardised instruments that may be useful for eliciting information from caregivers. The IASSID/AAMR Working Group (Aylward et al., 1995) recommends the Dementia Questionnaire for Mentally Retarded Persons (DMR; Evenhuis, Kengen, & Eurlings, 1990), and the Dementia Scale for Down Syndrome (DSDS; Gedye, 1995). These two rating scales have been specifically designed for use with people with Ld and incorporate changes in both cognitive and daily living skills.

The DMR has been evaluated in a number of studies and is considered a useful tool when used in conjunction with other standardised tools, having shown acceptable levels of specificity and sensitivity in the diagnosis of dementia (Deb & Braganza, 1999; Thompson, 2001). The DSDS allows for a differential diagnosis of AD with depression, hypothyroidism, visual and hearing impairments, the symptoms of which can mimic those associated with dementia, but are themselves potentially treatable (Deb & Braganza, 1999; Thompson, 2001).

However, some studies have highlighted limitations in the utility of these scales. For example, Thomson (2001) found difficulties in using the DMR to correctly diagnose dementia in cases of a low intellectual level (severe or profound), extreme apathy or clouded consciousness. Deb and Braganza (1999) highlighted the fact that the DSDS requires a Chartered Psychologist to interview two caregivers, which may cause practical problems for the administration of the scale.

The reliability of informant-based information can be influenced by a number of factors. Caregivers vary in how well they know the individual with Ld and in how well they are able to objectively describe changes in his or her functioning.
Individuals with Ld may also display quite different behaviours in different situations and settings, therefore informant reports will vary according to the setting in which they see the person in. Furthermore, longitudinal data relies on reports from staff that have known the person for a long time, but many Learning Disability Services are characterised by a high rate of staff turnover (Aylward et al. 1995; Janicki & Dalton, 1999, pp.134-136; Oliver, 1999; Whitehouse & Chamberlain, 2000). When a decline in ability is observed, it may be incorrectly attributed to variations in a person’s cognitive functioning resulting from their Ld (Oliver, 1999, pp.135; Whitehouse & Chamberlain, 2000).

Given these limitations, it is recommended that the clinical evaluation of caregiver reports should involve multiple informants, from a variety of settings and considers the informant’s level of familiarity and nature of the relationship with the individual being assessed (Aylward et al., 1995).

Assessment of Specific Areas of Functioning

Cognitive Functioning

To date, there appears to be no consensus on suitable instruments for assessing cognitive functioning in persons with Ld suspected of having dementia and only a few are available (Aylward et al., 1997; Cosgrave et al., 1998).

Mental state examinations have long been an integral part of an assessment of orientation and cognitive functioning in elderly persons (LeBlanc & Matson, 1997). Several mental state examinations have been developed for or adapted for use with individuals with Ld. The IASSID/AAMR Working Group recommends the Down Syndrome Mental Status Examination (DSMSE; Haxby, 1989) and the Test for Severe Impairment (Albert & Cohen, 1992).

The DSMSE and The Test for Severe Impairment are both easy-to-administer neuropsychological test batteries designed to assess a broad range of cognitive areas
of functioning important in the diagnosis of dementia (Cosgrave et al., 1998; LeBlanc & Matson, 1997).

Haxby (1989) found that DSMSE scores for older DS participants with dementia were significantly lower than nondemented and younger participants, suggesting this instrument may be useful in detecting dementia in the former group. However, there does not appear to be any psychometric information available on this research instrument and persons with severe Ld frequently score low on it (Leblanc & Matson, 1997; Tyrrell, Cosgrave, McLaughlin, & Lawlor, 1996).

In light of these limitations, the IASSID/AAMR Working Group recommends that the Test for Severe Impairment (Albert & Cohen, 1992) may be appropriate for use with individuals who are functioning at a very low level, since although it was not designed specifically for people with Ld, the level of difficulty is such that most persons with moderate and severe Ld should be able to score on it unless they are in an advanced stage of dementia. Research findings provide support for this assertion (Cosgrave et al., 1998). For example, Tyrrell and colleagues (1996) found that this Test took only ten minutes to administer and showed a good range of values with almost no "Floor Effect".

The IASSID/AAMR Working Group also propose that the standardised administration of a mental status instrument is preferable to less formal assessments of cognitive functioning because it allows comparisons of results over time. However, it is still not yet possible to state the minimum number or percentage of test "points" that must be lost over a specific time period to warrant a diagnosis of dementia in persons with Ld.

Further work is required to establish cut-off scores for dementia and annual rates of change scores for those with dementia (Cosgrave et al., 1998). This is particularly important since a low level of pre-morbid functioning in persons with Ld may preclude observation of substantial decline (Aylward et al., 1995). Given the absence of a cognitive assessment based on a single administration, the most reliable and valid approach at present appears to be reliant on repeated test follow-ups (Oliver, 1999, pp.137).
Documentation of dementia in persons with Ld requires that cognitive decline interferes with previous levels of social and adaptive functioning (APA, 1997). Therefore, the ability to perform activities of daily living and changes from previous higher levels of functioning need to be assessed.

Research on adaptive behaviour with this population has focused on two scales: the American Association on Mental Deficiency Adaptive Behaviour Scale (AAMD-ABS) (Nihira, Foster, Shellhaas, & Leland, 1974), which was specifically designed for use with people with Ld, and the Behavioural Scales (see LeBlanc & Matson, 1997). Prasher and colleagues (Prasher, Krishnan, Clarke & Corbett, 1994) used the ABS to determine if serial assessments of adaptive behaviour in people with DS may assist in the diagnosis of dementia in this group. They demonstrated that ABS profiles of adaptive behaviour did differentiate between moderate and severe demented and non-demented DS subjects over a 1-year period. This was consistent with findings from other studies (for example: Fenner, Hewitt, & Torpy, 1987).

However, it has been suggested that the ABS profile cannot be used in itself as a diagnostic instrument, particularly since very early dementia may not lead to significant impairments in adaptive functioning (and therefore may not be detected on the ABS), but serial assessments of adaptive behaviour can assist in making a probable diagnosis of dementia in a clinical context (Prasher et al., 1994).

The Behavioural Scales is an abbreviated version of the Minnesota Developmental Programming System Behavioural Scales (Joiner & Krantz, 1979; as cited in LeBlanc & Matson, 1997). The eighty-item test is divided into eight equal behavioural domains, which load onto two major factors: activities of daily living and cognitive skills (LeBlanc & Matson, 1997).

Zigman and colleagues investigated the age-specific disparities in adaptive abilities between individuals with DS and those with Ld of different aetiologies (Zigman, Schupf, Lubin, & Silverman, 1987; Zigman, Schupf, Silverman, & Stirling, 1989).
They concluded that each of the 5 domains included in the daily living factor were sensitive indicators of decline in functioning for elderly persons with Ld (LeBlanc & Matson, 1997).

In general, adaptive behaviour scores have been shown to be better predictors of decline in functioning than neuropsychological batteries examining decline in cognitive functioning (see LeBlanc & Matson, 1997 for a review). However, to maximise the effectiveness of the former tests, the instruments need to be administered on a longitudinal basis to document change (Aylward et al., 1995).

**Psychiatric Characteristics**

A psychiatric assessment aims to detect declines in emotional control or motivation, or to identify psychiatric disorders that could also affect functioning, but may in themselves be treatable (Aylward et al., 1995). It is considered an essential part of the dementia assessment process, since research indicates that these characteristics may be the first indicators of dementia especially in individuals with moderate to severe Ld (Cooper, 1997; Moss & Patel, 1995).

Several instruments have been recommended by the IASSID/AAMR Working Group to determine the presence of a psychiatric disorder (Aylward, et al., 1995), the most common of which will now be considered.

The Reiss Screen for Maladaptive Behaviour (Reiss, 1987) is considered an appropriate caregiver-report instrument to screen for psychopathology in individuals with all levels of Ld. The Diagnostic Assessment for the Severely Handicapped (DASH; Matson, Gardner, Coe, & Sovner, 1991) is designed to assess psychopathology in adults with severe to profound levels of Ld (Caine & Hatton, 1998, pp.216-218).

The Psychopathology Inventory for Mentally Retarded Adults (PIMRA; Matson, 1988), and the Psychiatric Assessment Schedule for Adults with a Developmental Disability (PAS-ADD; Moss et al., 1993), have been considered useful for obtaining
information from both the caregiver and individual with Ld (Aylward et al., 1995). The latter is a semi-structured clinical interview and the former is a structured rating scale.

The psychometric properties of the PIMRA are considered less robust than those of the Reiss Screen (Reiss, 1987). The total scores show greater sensitivity (total scores can identify cases), on the latter instrument than on the former. However, data concerning the validity of individual subscales on both these instruments have been questioned. The DASH appears to have had no independent psychometric evaluation (Caine & Hatton, 1998; pp.217-218; Sturmey, Reed, & Corbett, 1991).

The PAS-ADD (Moss et al., 1993) has been shown to have good reliability and validity (Costello, Moss, Prosser, & Hatton, 1997). It can be used with a broad range of level of Ld and is designed to maximise the proportion of valid responses in this population (Moss, 1999, pp.28). The current version will give an ICD-10 diagnosis (McCarthy & Mullen, 1996).

However, there are a number of limitations when using the above approach in clinical practice (Caine & Hatton, 1998; pp216). These include the fact that interviewers require extensive training, the interview itself can be time consuming for both interviewer and interviewee and translating the scores into diagnosis is complex, all of which may render diagnosis difficult in many settings (Caine & Hatton, 1998; pp216). In summary, structured rating scales have the advantage of being relatively short, easy to score, require little training to administer and are designed to gain information exclusively from the informants. The latter helps to overcome the difficulties in interviewing those individuals with severe impairments (Caine & Hatton, 1998, pp. 217). However, for an accurate diagnosis to be reached these scales do have their own limitations when compared to semi-structured interviews.

The former scales omit the experiences of the individual with Ld and are typically not scorable to standard diagnostic criteria. They typically measure current symptoms, but do not provide a history or exclude other causes for these symptoms (Sturmey, 1999, pp.5). Such scales are often good at showing sensitivity (picking up general
“caseness”), but fail to show adequate specificity (based on diagnosing specific types of psychiatric disorder). Moss and colleagues recommends that they are best viewed as screening instruments to indicate likely “cases”, who can then be assessed more fully using an interview method (Caine & Hatton, 1998, pp.217; Moss et al., 1993).

Summary of Current Status of Assessment

The assessment of dementia in adults with LD presents significant problems to both clinicians and researchers. Many of these problems arise from the variability in the degree of LD and the cognitive impairments associated with profound and severe LD (Oliver & Holland, 1986). These factors have immediate effects on the administration of assessments as well as indirect effects on the reliability and validity of the results (Oliver, 1999, pp.126). It is important to note that persons with LD may also be predisposed to a host of medical and physical problems, which may mimic or aggravate the deterioration process. These conditions must also be appropriately assessed to account for any differential diagnosis (Evenhuis, 1999, pp.104).

There are measures sensitive enough to detect decline in functioning in persons with LD. (LeBlanc & Matson, 1997). The techniques recommended by the IASSID/AAMR Working Group represent the most current ones at present and are a starting point for clinicians in the assessment of dementia. However, most of the published work has been conducted with persons with DS. Consequently the conclusions drawn may not be generalised to individuals with other forms of LD without the risk of error (Oliver, 1999, pp.136).

These procedures require further research to establish acceptable levels of reliability and validity for use within the generic LD population (Aylward et al., 1995).

Treatment

In the absence of a definitative treatment for AD, the focus of continuing support following diagnosis is one of management (Holland, 1994). Useful information regarding interventions for managing people with LD affected by dementia is
beginning to emerge (Janicki & Dalton, 1999, pp.136). The current status of care-
management treatment options (within a Strengths Approach), and pharmacological
interventions for managing dementia in people with Ld will now be reviewed.

Pharmacological Interventions

Many medications have been tried with limited beneficial effects in older persons with
AD but without Ld, in an attempt to delay the process of AD (Tsiouris, 1999, pp.248).
Only two drugs, tachrine and donepezil, have been approved for the treatment of AD
in the US. Both drugs have been shown to improve cognitive performance in the early
stages of AD in the general population (Rogers, Friedhoff, & Group, 1996). However,
there is no evidence that either drug delays the course of the underlying dementing
process (Tsiouris, 1999).

The possible beneficial effects of pharmacological interventions with older adults with
dementia and Ld have yet to be demonstrated through systematic trials, although the
use of donepezil in three people with DS reported positive results (Krishnan et al.,
1999; Leblanc & Matson, 1997; Tsiouris, 1999). However, these drugs produce
serious side effects in the general population, such as liver failure and vomiting. It is
argued that such side effects could be exacerbated by the physical difficulties of many
Ld persons (LeBlanc & Matson, 1997).

In January 2001, the National Institute for Clinical Excellence (NICE) published
“Guidance on the use of Donepezil, Rivastigmine and Galantamine for the Treatment
of Alzheimer’s Disease” (NICE, 2001). The guidance indicates that these drugs
should be made available to people with mild to moderate AD whose mini mental
state exam (MMSE) is above 12 points. However, the Institute’s guidance does not
mention the use of these drugs for people with Ld and AD. Furthermore, these
guidelines suggest MMSE scores should monitor treatment, but the MMSE cannot be
used reliably with people with Ld (Arshad, Sridharan, & Brown, 2001; Deb &
Braganza, 1999; Stewart, 2001).
At present research in the general population with AD is showing possible beneficial effects in the application of pharmacological interventions, although no drug as yet can be considered a proven treatment for AD (LeBlanc & Matson, 1997). Further research is required to systematically assess the effectiveness of these treatments both in the general population and for those specifically with Ld (LeBlanc & Matson, 1997; Holland, Hon, Huppert, & Stevens, 2000; Tsiouris, 1999).

Care-Management

Consideration of programs for persons with Ld and dementia is a relatively new phenomenon. The primary Service models in the UK were built at a time when the majority of people with Ld were not expected to live beyond middle age, and those models focused on skill and independence acquisition. However, it is clear that these models are not appropriate for persons with Ld and dementia where the focus needs to be on skill maintenance (McCallion, 1999, pp.262).

Useful models and training programmes for families and carers in the general population with AD are available and it is proposed that these could be usefully applied to people with Ld suffering from dementia (Janicki & Dalton, 1999, pp.143; McCallion, 1999, pp.262). It is recommended that modifications are made to this population, since these individuals are more likely to have difficulties with communication and to experience problems with everyday activities (Janicki & Dalton, 1999; McCallion, 1999).

One such adapted model is the Five-Part program, maintaining communication and independence (MCI), proposed by McCallion (1999). The five parts to MCI include the following: (1) strength identification and deficit assessment, (2) environmental modification, (3) good communication, (4) memory aids, and (5) taking care of the carer (McCallion, 1999).

Such Strength approaches have been shown to be effective with other populations with AD (McCallion, 1999). These sections will be used as a framework for
evaluating care-management intervention strategies for people with Ld and dementia, in light of current research findings.

**Strengths Identification**

It is argued that by shifting attention away from impairments to a focus on what strengths remain, can provide the basis for appropriate interventions (Janicki & Dalton, 1999; McCallion, 1999). Behavioural interventions aimed at maintaining a range of skill levels in persons with dementia in the general population have been shown to be effective.

McEvoy & Patterson (1986) explored the effects of five behavioural retraining modules on the skill levels of dementing participants. The modules covered the areas of personal information, spatial orientation, communication, and two levels of activities of daily living. Each retraining program produced significant increases in the skills levels of the participants (LeBlanc & Matson, 1997).

Similarly other researchers have shown that a range of daily living skills such as feeding, dressing or bathing, which can decline as dementia progresses, can be maintained if tasks are broken down into small steps by carers, with prompting and assistance provided at each step (Holland, 1994, pp.164). Although no empirical investigations have been conducted with older persons with Ld, the evidence of success with the general population of older persons with dementia indicates the potential for adapting these strategies (LeBlanc & Matson, 1997).

**Environmental Modification**

McCallion suggests (1999) that consideration of environmental modifications must address both age-related changes and the specific functional losses associated with dementia, with the emphasis of tailoring the modifications to meet the individual’s needs. For example, as deficits in sensory functions increases over time, environmental changes such as increasing the brightness of lighting, using larger size lettering, greater range of colours for signs and reducing distractions and background
noise may help to compensate for these changes (Janicki & Dalton, 1999, pp.136-144; Janicki, Heller, Seltzer, & Hogg, 1996; McCallion, 1999).

Redundant cueing, the designed invoking of a number of senses to convey the same information, may be necessary for maintaining understanding and communication when sensitivity of one of the senses is diminished (Christenson, 1990; as cited in McCallion, 1999). Research has indicated that when senses are not stimulated, deterioration may accelerate and people may withdraw from social contacts (Bourgeois, 1991).

**Maintaining Communication**

With the progression of the effects of dementia there is a steady deterioration in the ability to communicate. However, learned communication behaviours will remain into the later stages of AD (McCallion, 1999). Research indicates that simplification of conversations and greater use of prompts, cues and structure can help to maintain previous communicative abilities and reduce frustrations experienced by both the carer and person with dementia (Hart & Wells, 1997; McCallion, 1999).

**Memory Aids**

There are various types of memory aids, which have been shown to be effective in the general elderly population with dementia in helping to maintain communication, particularly in the early stages of dementia (McCallion, 1999). For example, Bourgeois (1993) studied the impact of memory aids on the conversation skills of elderly demented participants. A booklet with statements and pictures relevant to the participant's daily schedule, family, and life was compiled. Three of the four participants were able to increase the quality of their conversations with other dementing persons (LeBlanc & Matson, 1997).

It has been suggested that the similarity of these memory aids to picture boards used by many clients with Ld may simplify the transition to this type of intervention for the latter population (LeBlanc & Matson, 1997). Systematic research is required to
evaluate the effectiveness of these interventions for persons who have Ld and dementia.

**Carer Support and Training**

Researchers investigating the knowledge and attributions of dementia held by care staff working with older adults with dementia suggest that care staff may have difficulty in noticing changes associated with dementia in older adults with Ld. This may be because the care staff have limited knowledge about aging in general and dementia in particular (Janicki et al., 1996; Whitehouse & Chamberlain, 2000).

Carers have indicated that they need training and service models that assist them to maintain existing independence and living situations and to respond appropriately to the growing deficits associated with AD (Janicki & Dalton, 1999; McCallion, 1999).

The AMMR/IASSID practice guidelines for the care-management of dementia among adults with Ld (Janicki, et al., 1996) recommend that, in order to promote appropriate care, training should be provided in care-management techniques and specific approaches for coping with functional limitations and death. They argue that the organising principle underlying this training should be “the individuality of the person with dementia, and a perspective that promotes personal dignity, autonomy and personal welfare” (Janicki et al., 1996, pp.379).

A number of workers have provided detailed advice based on the identification of the subtle links between the functional changes of an affected person in the initial stages of dementia with the impact and consequences to the person’s friends, family and staff. This approach has then been extended to offer guidance as the individual with dementia progresses through to the later stages of the disease (Janicki & Dalton, 1999).

For example, Newroth and Newroth (1981) have published a manual, which focuses on the practical day-to-day judgments of function and suggests simple ways to provide the best care possible for the individual. It uses plain language and simple tables to
help families and carers. It also addresses the issue of the huge physical and emotional pressure placed on carers having to work with individuals who will eventually be left completely bedridden and dependent on others (Janicki & Dalton, 1999, pp.137-138).

Information about dementia is also beginning to emerge from national learning disability organisations. There is an ongoing need for more dissemination of the resources of both learning disability networks and dementia networks (Kendall, Rinck, & Wright, 1999, pp.364).

However, there is little research investigating the effectiveness of such training initiatives, and the role of carers and families in the lives of this group of people remains relatively unknown. Clearly this is an area for future research to address (McCarthy & Mullan, 1996).

Summary of Current Status of Treatment

In the absence of any specific treatment, the diagnosis of dementia requires the development of care-management strategies, which can modify the impact of the developing impairments, and those shown to be effective in the general population need to be more systematically researched and evaluated for people with Ld (Holland, 1994, pp.165).

It is clear that the quality of life for persons with Ld experiencing dementia is more likely to be maintained, if the strengths that remain are emphasised, environmental modifications, productive communication strategies and use of memory aids are fully explored, and support given to the carers in order to capitalise on these remaining strengths. McCallion’s MCI model places emphasis on maximising the individuals existing strengths (McCallion, 1999). This model may provide a useful starting point from which systematic research can be developed to investigate the efficacy of specific treatment options in the management of people with Ld and dementia.
Furthermore, the specific practice guidelines proposed by the AAMR/IASSID (Janicki et al., 1996) provide a rational basis for making clinical decisions and for developing programmes that are specifically in response to the needs of individuals affected with dementia (Janicki & Dalton, 1999, pp.136).

**Conclusion**

It has been pointed out that the greatest impediment to the progress in the assessment and treatment of dementia in adults with Ld is the lack of standardised criteria and diagnostic procedures (Aylward et al., 1995). As the population with Ld continues to increase developments in these areas become imperative to usefully address service-users needs (LeBlanc & Matson, 1997; Whitehouse & Chamberlain, 2000).

New initiatives are developing and provide optimism for the future. The AAMR/IASSID have proposed criteria and procedures for the diagnosis and care-management of dementia in adults with Ld (Aylward et al., 1995; Janicki et al., 1996). Consistent application of criteria by clinicians and researchers is required in order to provide the basis for systematic comparisons of findings and ultimately lead to improved understanding of the clinical course and natural progression of dementia. This may then help in the development of standardised assessment procedures and effective care-management practices for this population (Aylward et al., 1995; Pary, 2002).

To account for the limitations presented for individual assessment tools as well as the additional challenges of assessing dementia in persons with Ld, it appears that a multidimensional approach to such an assessment is required. This may involve combining information from various sources to examine a wide range of functional and cognitive domains, on a longitudinal basis (Sturmey 1999, pp.12). Recognition and treatment of co-existing conditions are vitally important to prevent unnecessary aggravation of the deterioration process (Evenhuis, 1999, pp.104).

Until systematic research provides an effective treatment to slow down and prevent the progression of AD, interventions must be aimed at palliative care and the
preservation of human dignity (Dalton & Janicki, 1999, pp.26). Pharmacological and Strength Approaches to the management of dementia in the general population may be usefully adapted for people with Ld. Clearly systematic research evaluating the efficacy of such approaches in this population is required.

At this point the recognition that a person with Ld has dementia is but the starting point in the development of an appropriate package of support that helps minimise the increasing disabilities that emerge as dementia progresses (Holland, 1999, pp.193).


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CHILD ESSAY

Critically discuss any two psychoanalytic concepts that a Clinical Psychologist might use to enhance their understanding and practice in work with children.

December 2002

Year 2
Introduction

The rise of object relation’s theories in psychoanalysis was associated with a shift of interest towards developmental issues, where the infant-mother relationship is considered central to human psychological development and may influence the quality of later relationships, both in terms of the actual relationships and the fantasies surrounding them (Bateman & Holmes, 1995, pp.10; Fonagy, 2001, pp.81; Lemma-Wright, 1995, pp.117; Likierman & Urban, 1999, pp.27). Direct studies of early mother-baby interaction provide empirical support for the premise that early relationships are crucial to our psychological development (Balbernie, 1997; Lemma-Wright, 1995, pp. 115).

Melanie Klein was considered to be a dominant psychoanalytic figure whose theories gave rise to the British “object relations” school. She was primarily a clinician whose specific interest in the careful observation of the inner-world of children helped to shape the profession of child psychotherapy (Bateman & Holmes, 1995, pp.38; Steele & Steele, 1998). The concept of projective identification is central to the Kleinian model of development (Fonagy, 2001, pp.83; Klein, 1946). Bion extended her ideas through his concept of containment, which is considered to be one of the most influential concepts in psychoanalytic theory (Douglas & Ginty, 2001; Hinshelwood, 1991).

The concepts of projective identification and containment will be critically discussed in relation to how they enhance a Clinical Psychologist’s understanding and practice in working with children. In the first part of the discussion each concept will be considered in turn, based on its defining characteristics and theoretical implications for understanding children’s psychological development. The latter will be achieved, in part, by drawing upon the empirical base of attachment research, a rationale for which can be justified on the following grounds:

Both object relations and attachment theorists place emphasis on the first years of life in their consideration of the relationship between social environment and personality development (Fonagy, 2001, pp.159; Cassidy, 1998). Psychoanalytic work is viewed
as being rich in theory but limited in empirical research. Bowlby’s linking of ethology with psychoanalysis and subsequent development of attachment theory provided scientific support for object relation’s ideas (Bateman & Holmes, 1995, pp.11). Empirical tools from attachment research, such as the famous Strange Situation paradigm (Ainsworth, Blehar, Waters, & Wall, 1978) and the Adult Attachment Interview (AAI) (George, Kaplan, & Main, 1985), have enhanced the latter (Cassidy, 1998; Steele & Steele, 1998).

Therefore, it may be justifiable to consider the psychoanalytic concepts, with their emphasis on the representational process, within an empirical framework of attachment research.

The second part of this discussion will examine the clinical implications of these two psychoanalytic concepts for working with children. Object relations is the most prevalent psychoanalytic model currently used in psychoanalytic therapy and a major factor in treatment is the relationship with the therapist (Fonagy, 2001, pp.81). Yet in clinical practice there is little evidence of a clear delineation of different psychoanalytic theoretical perspectives (Bateman & Holmes, 1995, pp16-17; Fonagy, 1999). In light of these issues the clinical implications of projective identification and containment will be considered in relation to their specific application to the therapeutic relationship/process and finally, the efficacy of child psychoanalytic psychotherapy as a treatment per se will be evaluated. The latter will include a discussion on how these psychoanalytic concepts can be specifically integrated with other therapeutic approaches.

**Projective Identification**

**Overview of Projective Identification**

Klein (1932) observed that the children she analysed appeared to have extremely sadistic and ruthless fantasies about which they typically felt guilty and anxious (Fonagy, 2002, pp.83; Spillius, 1994). She proposed that the infant’s self is from the outset, constantly threatened by destruction from within by the aggressive drive.
Klein assumed that such an aggressive drive was a strong determinant of the position the infant assumes in relation to the external world. In this model the human psyche has two basic positions: the paranoid-schizoid and the depressive position (Fonagy 2001 pp.83; Klein, 1935).

In the paranoid-schizoid position the relationship to the object (caregiver), is to a part object, split into a persecutory and idealised relationship, and similarly the self (the ego) is split. In the depressive position the relationship is to an integrated parental image, both loved and hated. The infant recognises his/her destructive wishes toward the object and this brings with it a characteristic sadness, but correspondingly the ego is more integrated (Fonagy, 2001, pp.83).

The concept of projective identification is central to the Kleinian model of development (Fonagy 2001, pp.83; Klein, 1946). Klein’s form of projective identification was closely linked with obliteration and aggression; a pathological view stemming from her observations of very disturbed children (Hinshelwood, 1994, pp.127).

As Klein originally conceived it, projective identification combines two classical psychoanalytic notions in a very specific way, that of projection and identification. The latter may be described as the unconscious process by which self-representations are built up and modified during development, and the former as the attribution of a person’s more difficult feelings to others (Bateman & Holmes, 1995, pp.83; Klein, 1946). Klein described projective identification as an unconscious infantile fantasy by which the infant is able to “relocate his persecutory experiences” by separating them (splitting off) from the rest of the self and projecting into the object. As a result the infant feels that the object (i.e. the mother) has “become” the bad parts of himself/herself (Bateman & Holmes, 1995, pp.84; Fonagy, 2001, pp.87).
For an infant with an as of yet ill-defined sense of self, it is taken for granted that projective identification is a basic mental process, linked inextricably to the paranoid-schizoid position, and one which is in the course of normal development largely left behind. In contrast, it is suggested that an emotionally troubled individual persists in relying upon this primitive psychological defence, which can manifest itself in various ways. In the paranoid-schizoid position Klein thought that the infant might project the “bad” sadistic parts of himself/herself into the mother’s body in order to control and injure her from within (Bateman & Holmes, 1995, pp.84; Hinshelwood, 1994, pp.119; Klein, 1946).

Critique of Projective Identification

In Klein’s original formulation projective identification was “defensive and intrapsychic, a mental transaction involving the self and a perception, but not the participation of the other” (Bateman & Holmes, 1995, pp.84). According to Cassidy (1998), there is substantial convergent empirical evidence that underpins the relevance of the child’s experiences for the organisation of attachment behaviour and for social and emotional functioning.

Klein’s concept is therefore criticised on the grounds of its neglect of actual environmental experience (Cassidy, 1998; Fonagy, 2001, pp.90; Steele & Steele, 1998). However, it must be acknowledged that post-Kleinian psychoanalysts have successfully integrated environmental accounts with her ideas (Fonagy, 2001, pp.90).

Klein also assumed that the child’s inner fantasies, heavily invested with energies derived from the death instinct, influenced the child’s mentally constructed images of the parents (Steele & Steele, 1998). This perspective has been refuted by observational data (Cassidy, 1998). For example, attachment research shows that when ordinarily cared for infants feel less than understood or that their caregiver is not “tuned” into them, the infant will persist in their primary strategy of seeking proximity with the caregiver. While they may experience disappointment and anger, this will not endure and those infants on a path of secure attachment will not be overwhelmed
by aggressive urges toward the mother, as Klein mistakenly assumed (Fonagy, 2001, pp.91; Steele & Steele, 1998).

It appears that Klein’s pathological view of projective identification may not account for the normal course of development and therefore not be applicable to all infants. Yet in order to understand children who have experienced severe early trauma and emotional difficulties it is vital to have a clear sense of the normal developmental processes at work which lead to positive emotional health and functioning (Horne, 1999, pp.31).

However, researchers suggest it may be applicable to a sub-group, who are on the path toward developing a disorganised attachment pattern that has been observed in infancy and is described below (Cassidy, 1998; Fonagy, 2001, pp.183; Main & Solomon, 1990; Steele & Steele, 1998).

Approximately 10% of “low risk” (middle-class, non-clinical) samples and more than 50% of high-risk (especially maltreated) samples show marked and pervasive fear in the presence of the parent (Steele, 2002). It has been demonstrated in separation-reunion situations that such infants are prone to develop extremely controlling behaviour in relation to their caregivers at pre-school age and in the early school years (Fonagy, 2001, pp.88 & 183).

As Fonagy points out (2001, pp.88), while explanations other than pathological projective identification may be possible, the background of such children makes a strong argument for this concept being a likely account. Disorganisation of attachment has been shown to be associated with parental experience of unresolved trauma, infant histories of maltreatment, maternal depression, and prenatal parental drug and alcohol abuse (Fonagy 2001, pp.88).

Fonagy (2001, pp.88) suggests that it is likely these children are repeatedly confronted with intolerable levels of confusing and hostile care-giving and are forced to internalise aspects of their caregiver that they are incapable of integrating. According to Fonagy (2001, pp.88), the process of projective identification fits the behavioural
descriptions of these children as they attempt to experience themselves as coherent selves and force the unfamiliar and unintegrated parts of themselves into the other. They maintain the fantasy that these parts are now outside through subtle manipulative control of the other’s behaviour (Fonagy & Target, 1997).

Thus it appears that Klein’s conceptualisation of projective identification is confirmed at least in part by the discovery of this new and disturbing category of infant behaviour (Main & Solomon, 1990; Steele & Steele, 1998). While the link may be tenuous at an empirical level, the relevance of Klein’s concept to this disorganised attachment category certainly warrants further investigation. Infant disorganisation has been shown to have far-reaching consequences for the young child’s later mental health (Steele, 2002).

This is particularly significant given the strong empirical base showing how the difficulties parents have in relating to their children and promoting a healthy regulation of conflict, may stem from unresolved conflicts originating in their own childhood (van Ijzendoorn, Juffer, & Duyvesteyn, 1995). With such a transgenerational connection now clearly established in attachment research the next step for future research is to demonstrate effective modes of intervention with such parents and children so that the cross-generational transmission of social and emotional impairment can be interrupted (Steele & Steele, 1998).

While Klein’s conceptualisation of projective identification may be criticised on the grounds of both its pathological and intrapsychic emphasis, it may help to enhance a Clinical Psychologist’s understanding of the disorganised attachment pattern observed in some disturbed infants, who may well present to Child Services.

This discussion will now consider the concept of containment.
Containment

Overview of Containment

Bion’s concept of “container” and the “contained” (1958, 1959, 1962a, 1962b) was derived from his clinical work with borderline and psychotic patients, but he later showed that containment could be applied to normal adults and to children (Britton, 1992, pp102; Gerrard, 1992, Grotstein, 1997).

Bion assumed that the infant, overwhelmed by impressions of the world, received another human mind (a container) with the capability to accept, absorb, and transform these experiences into meaning. The container (i.e. mother) is seen as a robust object receptive to the infant’s state of mind (able to receive the infant’s projections), capable of allowing it to be evoked in herself and process it in such a way that she can attend to it in the infant in an identifiable form. This requires integrated and active thinking on the part of the container, which Bion referred to as “reverie” (Bion, 1962b, pp.35; Britton, 1992, pp.105; Gerrard, 1992).

According to Bion the experiences in the infant that are near sensory and somatic (“undigested”) are transformed into something more mental by the mother, which can be used for thought or stored as memory. Bion called the unprocessed elements of experience “beta elements” and those, which become mental in character “alpha elements”. Bion considered this alpha function to be the essential ingredient for the production of rudimentary thinking (Anderson, 1992, pp.11; Britton, 1992, pp.105). The mother’s capacity for “reverie” ensures the success of containment through the alpha function (Fonagy, 2001, pp.89).

According to Bion (1962a, 1962b) the process of containment reflected a normal stage of development between mother and infant by providing a primitive method of communication, which he believed to be a forerunner of thinking (Britton, 1992, pp.103-105).
Within this model, when a maternal object fails to introject (i.e. absorb the infant’s projections) and thus, containment goes wrong, a large defensive structure is thought to arise and the child then perceives the maternal object as hostile to any attempt at projective identification and develops an idea of a world that does not want to know it or to be known. As a result the child fails to develop a capacity to both experience and think about themselves (Bion, 1959, pp.106, Britton, 1992, pp.106-109; Fonagy, 2001, pp.88-89).

Bion proposed that mental and emotional development were fundamentally dependent on a series of processes that transpire between the container (of experience), the mind and the raw experiences themselves (Grotstein, 1997). Fantasies created in the early relationship between the container to the contained fundamentally shape for the individual his/her expectations in all subsequent situations and in his relationship to himself/herself (Britton, 1992, pp.111).

Critique of Containment

In Bion’s concept there is an explicitly interactional component, which extends Kleinian thinking from its traditional one-person model to the then newly developing two-person model (Bateman & Holmes, 1995, pp.40; Grotstein, 1997; LaFarge, 2000).

Bions’s work suggests a distinction between normal projective identification, where less pathological aspects of the self are externalised and which underpin normal empathy and understanding, and pathological projective identification, which is linked to an absence of empathy and understanding (Fonagy, 2001, pp.84). Therefore, where Klein failed to account for projective identification within the normal process of development, Bion was able to elaborate on this.

According to Fonagy (2001, pp.88) the concept of containment can help in understanding the process of sensitive care-giving observed in attachment studies between mother and infant, whereby capable (or secure) caregivers are likely to experience and transform an infant’s intolerable feelings into a manageable form by responding in terms of physical and emotional care.
The non-verbal nature of this process, according to Fonagy (2001, pp.89), implies that the physical proximity of the caregiver is essential. This provides an alternative perspective on the socio-biological root of the infant's need for proximity to the psychological caregiver, the adult mind. It may also help explain the basis of an infant's vulnerability to adults who incapable of understanding through experience provide inhumane care (Fonagy, 2001, pp160).

There is a significant correlation between a parent’s representation of their attachment (as elicited in the AAI) and the nature of their child’s attachment to them (Fonagy et al., 1991; Hughes, 1999, pp.305). Parents of securely attached infants tend to give a fluent, consistent and coherent account of their childhoods regardless of whether the childhood experience itself was positive or not. It seems that it is not the experiences themselves, which determine the quality of adult attachment, but the processing or sense that had been made of these experiences.

For children, the ability to process experience is dependent on the presence of an adult who can bear to be in touch with the full range of the child’s experience. The nature of a child’s attachments in the first year of life have been found to be predictive of attachment patterns at six years of age (Lanyado, 1999, pp.305). This is consistent with the concept of containment and its impact on future relationships (Fonagy, 2001, pp.97).

According to Bion the absence of containment can cause distortion in mental functioning and delay the establishment of an internal environment that could become the essence of the self. Empirical evidence has accumulated to suggest that attachment security with the mother is a good concurrent predictor of metacognitive capacity in the child, in the domains of memory, comprehension and communication (Fonagy, 2001, pp.100).

Developmentalists over the past ten years have demonstrated the universal capacity of young children to interpret the behaviour of themselves, as well as others in terms of putative mental states (e.g. Fonagy, 2001, pp.165; Morton & Frith, 1995). Exploring the meaning of actions of others has been crucially linked to the child’s ability to label
and find meaningful his/her own experiences (Fonagy, 2001, pp.165). This relationship has been shown in both cross-sectional and longitudinal studies and may contribute to affect regulation, self-monitoring and impulse control (Fonagy, 2001, pp.165-166; Fonagy & Target, 1997).

It could be argued, in Bion’s terms, that to provide a containing function is necessary to facilitate the modulation of pain and distress (Bion, 1962b; Hughes, 1999, pp305). This has implications for child psychoanalytic psychotherapy, which attempts to help an individual integrate past experiences and make sense of their emotional lives (Hughes, 1999, pp.305).

However, this concept could be criticised on the grounds that it focuses on the consequences and organising impact of this process on a child’s self-development. Bion did acknowledge that the infant’s predisposition has a highly significant role in determining the nature of the mother-infant relationship, but failed to consider other environmental factors. Attachment theorists argue that factors in the external environment can impact on infant-mother relationships independent of the maternal caregiver’s role. This is an important consideration, without which the mother may be viewed as central to all of a child’s difficulties, giving rise to “mother-blaming” (Fonagy, 2001, pp.103 & 160).

In support of Bion’s ideas on containment, independent reports from longitudinal attachment studies of mothers, fathers and their children point to the “inner-world emotional lessons taught by mothers” and the more “outer-world social lessons taught by fathers” (Steele, 2002, pp.520). Such studies suggest, according to Steele (2002) that it may be in the early and ongoing mother-child relationship that children acquire their understanding of complex feelings. This may include the ability to acknowledge distress in others and the capacity to generate a flexible coping strategy (Steele et al., 1999).

Bion’s concept of containment has had considerable impact on psychotherapy in general and can usefully enhance a clinician’s understanding of working therapeutically with children (Anderson, 1992, pp.10). His concepts helped to provide
a new rationale for the efficacy of psychoanalysis, based on the notion of the transformation of experience through the process of “containment” (Britton, 1992, pp.104).

**Clinical Implications**

**Therapeutic Relationship and Process**

It has been argued that theoretical concepts such as containment and projective identification have contributed to the psychotherapist’s understanding of some of the processes present in the psychotherapy session. They may provide some of the main tools for psychoanalytic work, particularly when working with children and young people because facilitation of normal emotional development is central to the therapeutic process (Lanyado & Horne, 1999, pp.55).

It is argued that Bion’s work, in particular brought the theory and practice of child psychoanalytic work a step forward. His theories on the relation between the early development of the mind and the mother-infant relationship can be shown to be useful in working with clients (Norman, 2001, pp 85).

It is proposed that when a child experiences extremely distressing emotions and these feelings may threaten to overwhelm them, the therapist in the first instance may try to “contain” the feelings, before exploring ways of talking about what is being communicated. The distinguishing feature of containment as a process is that the therapist attempts to understand and reflect on the process of what is happening between them and the client, by listening carefully and accepting the client’s projections of intense feelings which often cannot be verbalised (but may be expressed through behaviour and symbolic play, e.g., destruction of toys) (Lanyado & Horne, 1999, pp.67).

The analyst’s function of receiving, containing and transforming the patient’s communication may help the patient to eventually internalise the capacity to bear feelings and to think about them (Lemma-Wright, 1995, pp.192). This model of non-
verbal communication derives from observations and theories about communication during the first days of life and may therefore be particularly applicable to working with children (Lanyado & Horne, 1999, pp.68).

According to many authors in the field, central to psychotherapeutic work is understanding the nature of the patient’s fantasies. Projective identification can be used as a vehicle for these fantasies and therefore it is important to understand how this is achieved (Bateman & Holmes, 1995, pp.95-111; Waska, 1999). A therapist can be aware of this defence mechanism by attending to the transference and countertransference which occurs within the clinical setting and which may be expressed symbolically through a child’s play. While the content of the aforementioned therapeutic processes are much debated there is general agreement amongst psychoanalytic theoreticians about their existence as phenomena (Bateman & Holmes, 1995, pp.95).

Through Klein’s clinical work with children, she observed how play was the child’s natural means of dramatising his or her fantasies and working through conflicts (Daniel, 1992, pp.14-23). Within psychotherapy sessions, Youell, for example, observed how children treat their therapist in various ways, “as if the therapist was a kindly grandparent, a stern teacher or a neglectful parent...” (Youell, 2000, pp.13).

While the concept of projective identification and its use within the therapeutic relationship may require further elucidation, by attending to the transference and countertransference, it may help a clinician become aware and give meaning to a child’s nonverbal communications and place these within the context of the child’s relationship with significant others.

There are various case study illustrations in the literature, which show how projective identification and containment can be successfully utilised in the clinical situation with children who have a range of emotional and behavioural difficulties (Meltzer, 1982; Norman, 2001; Rustin, 2001; Youell, 2000). For example, Norman, a Child Psychotherapist, has demonstrated how, through interaction between the infant and
analyst, it was possible to “activate and retrieve those parts of the infant’s world that have been excluded from containment” (Norman, 2001, pp.98).

In addition, psychotherapy process studies report that psychoanalytic interpretations given to clients that are judged to be accurate are associated with relatively good outcomes (Joyce & Piper, 1993). Finally, a therapist, regardless of theoretical orientation, can offer confidentiality and the possibility of talking about issues that cannot be talked about elsewhere. This can be viewed as one of the more obvious ways in which therapeutic experiences provide containment of the client’s anxieties. For children in particular, the fear of rejection and abandonment is common and may then come into therapy. If the therapist demonstrates continuing commitment and availability, they may help provide a growing sense of containment in which fears can be accepted and thought about (Lanyado & Horne, 1999, pp.68; Youell, 2000).

It is important to note that in clinical practice there is little evidence of theoretical demarcation of anxieties and defences; the therapist is likely to use knowledge from different perspectives in order to provide a broad understanding of their patients (Lanyado & Horne, 1999, pp.61). While a Clinical Psychologist may not be specifically trained in child psychoanalytic therapy these concepts may be usefully applied within other therapeutic frameworks (e.g. cognitive behaviour therapy [CBT]). It can be seen that the concepts of containment and projective identification have the potential to be applied to clinical practice, regardless of what therapy model the clinician is working in, by enhancing a clinician’s understanding of the therapeutic process.

The effectiveness of child psychotherapy will be now considered.

**Child Psychotherapy**

There have been many more systematic studies of behavioural and cognitive-behavioural treatments for children than there have been for psychodynamic-psychotherapy treatments. This is due in part to the inherent methodological difficulties in operationalising and measuring psychoanalytic concepts (Hodges, 1999,
pp.106-119). Most evidence for psychoanalysis is at the case study level, which according to Fonagy (2000) can only at best establish an expectable time frame for change. However, there are some recent studies, which are attempting to overcome these issues.

For example, a large pre-post study of psychoanalytic treatments examined the clinical records of 763 children who were evaluated and treated at the Anna Freud Centre (Fonagy & Target, 1996). The results provided preliminary evidence that psychodynamic psychotherapy may be effective in the treatment of anxiety disorders, with younger children deriving the greatest benefit from intensive treatment (Fonagy, 2000; Hodges, 1999, pp.108-109).

Although there were extensive methodological difficulties with this retrospective study, it was proposed by a comprehensive review of the outcomes of all treatments of psychiatric disorder in childhood (Fonagy, Target, Cottrell, Phillips & Kurtz, 2000), that a controlled prospective study would be worth undertaking. At a service level, such findings may be important for identifying those groups who warrant more intensive treatment (Fonagy, 2000). Examining the evidence-base for child psychotherapy may help a Clinical Psychologist to identify which clients would find this form of therapy suitable and those for whom it may not be an effective mode of treatment.

However, the review of outcomes report (Fonagy et al., 2000) concluded that overall there is little evidence either for or against the effectiveness of psychodynamic therapies for children with a range of psychiatric disorders, but there are some suggestions that it may be useful particularly in situations where other treatments have failed. The report also acknowledges that while there is less evidence to support psychodynamic treatments of childhood disorders than CBT, this is often due to the shortage of well-conducted research in this area, as opposed to the efficacy of the treatment itself (Fonagy et al., 2000).

When therapists work as part of a team, as is often the case in Child and Adolescent Mental Health Services (CAMHS), psychotherapy may be provided as one part of a
broad treatment plan or be integrated with other therapies (Lanyado & Horne, 1999, pp.56). One such integrated approach is the Solihull Approach (Douglas & Ginty, 2001), a psychotherapeutic and behavioural approach for Health Visitors working with children with sleeping, feeding, toileting and behavioural difficulties. This approach has successfully integrated the psychoanalytic concept of containment (Douglas & Ginty, 2001).

The evaluation of the effect of the Solihull Approach on Health Visitor’s practice has shown it improved consistency of approach between health visitors, enabled them to work more effectively with children with less complex difficulties and these children were no longer referred to child psychology or psychotherapy services (Douglas & Ginty, 2001).

This approach is an example of how psychoanalytic concepts can be successfully integrated into other modes of treatment, has positive implications for effective use of Child Service resources, and offers a method of consultative working between Clinical Psychology and Health Visitors. Clearly this approach has yet to be systematically evaluated and comparisons are needed against other forms of treatment, but the results so far, provide optimism for future integration of psychoanalytic concepts with other forms of treatment.

In summary, while there are still few adequate research outcome studies of psychoanalytic psychotherapy with children and adolescents, recent studies have contributed towards shifting this position (Hodges, 1999, pp.118). Ongoing systematic research is important so that professionals, such as Clinical Psychologists, and Child Services can evaluate the most useful and cost-effective approach from which their clients may benefit from. As Fonagy (2000) comments, there is evidence available to support therapeutic interventions that are clear derivatives of psychoanalysis.
Conclusion

In conclusion it can be seen that psychoanalytic concepts such as containment and projective identification, may contribute to a Clinical Psychologist’s understanding of how representations of specific relationships to caregivers during early childhood, become, in the course of development, integrated within “higher-order meta-representational systems”, which have been measured during adulthood using the AAI (Steele & Steele, 1998, pp.113). If future research attempts to identify and chart the lifespan development of these mental capacities, it may help to locate the specific characteristics, which are a product of past relationships and the determinants of future ones (Steele & Steele, 1998). As Steele and Steele (1998), suggest, such theoretical psychoanalytic concepts may enhance and refine the empirically based understanding of attachment and therefore our understanding of personality and social development.

However, in order to fully understand the nature of childhood difficulties and to work effectively with such children in clinical practice, it is essential that attention be paid to their real life experiences as well as their fantasies about them, and to both their intrapersonal and interpersonal defences. This in turn may provide a Clinical Psychologist with a holistic understanding (Rutter, 1995). As Steele and Steele (1998) point out much is to be gained by being open to perspectives from a variety of fields. Observations from clinical experiences can provide insights and contribute to progress within more structured empirical research.

Specifically, the Klein-Bion model of mother-infant interaction has facilitated increasing attention by psychoanalysts on the finer details of the patient-analyst interaction (Taylor, 1997). A Clinical Psychologist working therapeutically with children may benefit from such insights into the therapeutic process, by enhancing the level of communication that can be achieved between the therapist and child.

Psychoanalytic theory and therapy has been criticised for lacking falsifiable postulates and a sound empirical basis. So far empirical evidence for psychoanalytic concepts are weak. However, rather than dismissing them, Bateman & Holmes (1995, pp.20)
suggest that we need to intensify the attempt to find scientific ways to study such phenomena. They argue that the theories and technical practices need to be coherent if they are to be robust enough to face clinical or conceptual challenge. However, the promising findings of recent child outcome studies in helping children, particularly with anxiety disorders, overcome their difficulties, as well as the tentative studies focusing on integrating psychoanalytic concepts into other forms of therapy, may serve to enhance a Clinical Psychologist’s practice in working with children.

Whatever the ultimate scientific validity psychoanalytic ideas proves to be, Lemma-Wright points out (1995, pp.7) that one of the greatest contributions of psychoanalysis has been to focus on issues relevant to human experience. It has shown unfailing commitment to understanding the workings of our internal life and its impact on our experiences in the outside world.
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OLDER ADULTS ESSAY

What factors in older people (a) cause "depression" and (b) are addressed in treating depression psychologically.

August 2003

Year 2
Introduction

The aggregate data from large-scale epidemiological studies estimate that depression, which meets the full diagnostic criteria for major depressive disorder (MDD) (American Psychological Association, 2000), is less prevalent in community-dwelling adults over the age of 65 years than it is in younger age groups; with 1% of older adults having a life-time prevalence compared to 6% of younger adults (Blazer, 1994; Weissman, Bruce, Leaf, Florio, & Holzer, 1991). Successively higher rates of depression have been observed in outpatient and inpatient medical settings as well as nursing homes, indicating that older adults who are functionally disabled by medical illness are at highest risk for depression (Blazer, 1999; Karel & Hinrichsen, 2000).

It is argued that there is a great deal of heterogeneity in the presentation of mood disorders in older adults, as well as co-morbid illnesses, that are artificially excluded from clinical research and may lead to the under detection of psychopathology\(^1\) (King & Markus, 2000). Depression is the most common mental health problem among older adults and one of the most frequently encountered by clinicians (Gottfries, 2001; Zarit & Zarit, 1998). There is also growing evidence of a cohort effect in which future generations of older adults are likely to experience greater rates of depression (King & Markus, 2000; Joiner, 2000).

Depression has substantial debilitating effects in terms of the persistent suffering, excess medical disability, increased use of health services and mortality (Baldwin, 2000; Karel & Hinrichsen, 2000). Suicide rates are the highest among older white men than in any other age group and often related to underlying MDD (Karel & Hinrichsen, 2000; King & Markus, 2000; Pearson & Brown, 2000).

Depression in late-life constitutes a major public health concern that warrants further understanding and investigation (Arean, Uncapher, & Satre, 1998; Joiner, 2000). As Karel and Hinrichsen (2000) comment, the complex contribution of biological,

\(^1\) Older adults have been shown to report high rates of “subsyndromal” depression, characterised by clinically significant symptoms of depression that do not meet the full diagnostic criteria for MDD, but results in functional impairment. Both MDD and subsyndromal depression are equally applicable in terms of their responsiveness to treatment (Karel & Hinrichsen, 2000; King & Markus, 2000).
psychological and social factors to the origins and amelioration of depression in older adults challenges both clinicians and researchers to think in a holistic way about depression in late-life.

The purpose of this discussion is to present firstly what factors cause depression and secondly, what factors are addressed in treating depression in older adults psychologically.

Depression will be taken to mean the more severe diagnostic category of MDD, given that the majority of the research literature on late-life depression focuses on this clinical condition. Table 1 (overleaf) summarises the diagnostic criteria for MDD (DSM-IV-TR; American Psychological Association, 2000). It is important to note that DSM-IV-TR has a separate diagnostic category for MDD due to a general medical condition. Given the high prevalence of medical conditions within older adult populations, some have questioned the utility of making a dichotomous distinction between MDD and MDD due to a general medical condition (King & Markus, 2000). This issue has relevance when considering physical illness as a causal factor and in treating co-morbid depression and illness.

The biological and psychosocial factors that might cause depression will be considered first and defined within the diathesis-stress approach that is common among current models of depression. This approach accounts for the interaction between predisposing, precipitating and perpetuating factors (Ingram & Siegle, 2002).

Secondly, factors addressed in treating depression psychologically will be taken to mean those factors that may need modifying when working psychotherapeutically with depressed older adults per se, as well as those factors involved in precipitating and maintaining depression that can be addressed by working within specific psychotherapeutic interventions shown to be efficacious with this population (Karel & Hinrichsen, 2000).
Table 1. A summary of DSM-IV-TR criteria for a Major Depressive Episode (American Psychological Association, 2000).

**Major Depressive Episode**

A. For a minimum of two weeks, clients manifest at least five of the following symptoms, which represent a change from previous functioning, occur most days, and with at least one of the symptoms being either (1) depressed mood or (2) loss of interest or pleasure:
   - Depressed mood
   - Markedly diminished interest or pleasure in most activities
   - Significant weight change
   - Sleep disturbance
   - Psychomotor agitation or retardation
   - Fatigue
   - Excessive guilt or worthlessness
   - Reduced concentration
   - Recurrent suicidal ideation

B. The symptoms do not meet criteria for a mixed episode
C. The symptoms cause clinically significant distress or impairment in functioning
D. The symptoms are not due to the effects of a substance or a general medical condition
E. The symptoms are not better accounted for by bereavement.
Causes of Depression

The causes of depression in older adults are multifactorial and are more heterogeneous than in younger adults (Gottfries, 2001). Many such factors occur over the lifespan, but their relative importance may change and this may in part be determined by the onset of depression\(^2\) in older adults (Baldwin, 2000). This section will consider the most prominent "bio-psychosocial" factors that have been specifically applied to older adults or have applicability in the treatment of depression in late-life (King & Markus, 2000).

Biological Factors

Aging leads to changes in several neurobiological systems that may influence the development of depression (King & Markus, 2000). Age-associated changes in brain chemistry, neuroendocrine systems and brain structure are among the most prominent systems featured in biological theories of late-life depression (Arean et al., 1998; King & Markus, 2000). Each of these will be considered in turn.

Neurobiology

Significant age changes have been found in the neurotransmitter systems (known as catecholamines and indoleamines), associated with depression (Morgan, 1992; Post, 1996; Zarit & Zarit, 1998). Controlled studies have provided some evidence that both aging and depression are associated with decreased brain concentrations of serotonin, dopamine, noradrenaline and their metabolites, and increased monoamine oxidase (MAO) activity (Akiskal, 1996; King & Markus, 2000; Post, 1996).

From this data researchers have inferred that decreased neurotransmitter levels may reduce the threshold for depression in older adults (Gottfries, 2001). The biogenic amine hypothesis has provided meaningful links to psychopharmacological interventions proven effective in treating depression across the life span (King &

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\(^2\) For many older adults depression is a recurrent disorder first experienced in young adulthood (early-onset). For others it appears for the first time in late-life (late-onset) (King & Markus, 2000).
However, findings from studies have been mixed with the amine hypothesis not receiving unequivocal support. It remains unclear whether reduced neurotransmitter activity is a cause or consequence of developing a depressive episode in late-life (King & Markus, 2000).

**Neuroendocrinology**

A variety of neuroendocrine changes are associated with aging (Baldwin, 1998). The most compelling appears to be the role of cortisol in the development of late-life depression (Arean et al., 1998). High levels of cortisol have been consistently related to physical illness, stress and depression (Blazer, 1990).

Given that depression is a relatively rare disorder in older adults, the cortisol hypothesis does not explain all depression, but it may explain why older adults who are physically ill are more likely to be depressed (Arean et al., 1998).

To date there appears to be little research in this area on specifically depressed older adults. It has been argued that neither neuroendocrine tests nor neurochemical markers are sufficiently sensitive or specific to have clinical utility in late-life depression (Baldwin, 1998; Schneider, 1992). Further research in this area is warranted; particularly relating to what extent these markers can discriminate between different subgroups of depressed older adults when compared to nondepressed adults.

**Structural Brain Changes**

The role of genetic predisposition to depression has been consistently shown to decrease with age (Baldwin 1998). It has been argued that, since the lowered genetic risk has not led to reduced prevalence rates, overall, of depression in late-life, other factors such as age-associated subcortical damage may be active (Baldwin, 2000).

Specifically, older depressed patients have shown both central and cortical atrophy on CT scans (Morris & Rapoport, 1990) and late-onset depression is associated with high rates of subcortical hyper intensities in the brain on MRI images (Baldwin, 2000;
Greenwald et al., 1996). These neurological abnormalities have also been associated with neuropsychological impairment (Nussbaum, Kazniak, & Allender, 1991), and suggest that the well-documented cognitive impairments of older depressed adults may constitute a marker for subtle cerebral changes that influence the course of late-life depression (King & Markus, 2000).

There is a vast heterogeneity of methods in these studies, which limits the interpretation of findings (King & Markus, 2000). Given that depression is frequently an early symptom in dementia, these findings may at least be partly due to the inclusion of people who have early dementia and co-morbid depression (Zarit & Zarit, 1998).

Longitudinal studies of early- and late-onset depressed older adults are needed, which combine strict diagnostic procedures with functional imaging techniques. This may then provide a more comprehensive understanding of the relationship among neuroanatomical changes, cognitive dysfunction and depression; while at the same time helping to clarify whether late-life depression has a distinct aetiological basis (King & Markus, 2000).

Considerable debate remains as to the relative significance of the biological factors discussed. Although it has not been conclusively determined that late-life depression is a clinical entity distinct from early-onset depression, studies have revealed that important biological changes may be characteristic of depression in older adults (Katona, 1993; King & Markus, 2000).

Physical Illness and Disability

Disability is known to predispose to depression and acute medical illness can often precipitate it in patients of all ages, but may assume greater importance in older adults (Baldwin, 2000; Gatz, 2000). Cross-sectional and longitudinal follow-up studies in both community and nursing home samples have found chronic illness to be highly significantly associated with depression scores (Katona, 1993).
However, the possible relationship between physical illness and depression is multifaceted and not mutually exclusive. While depression can be caused by the biological changes brought about by physical illness or its treatment, depression can also lead to physical illness (it has been prospectively associated with poor health in terms of mortality and morbidity). Furthermore, depression can lead to the stressors created by physical illness, and physical illness and depression can co-occur as independent conditions. Thus, the direction of causation is reciprocal and complex (Gatz, 2000; Kasl-Godley, Gatz, & Fiske, 1998).

**Psychosocial Factors**

Many different psychosocial theories have addressed the aetiology of depression. This discussion will draw upon those theories that in varying degrees have been most extensively applied to the study of late-life depression (Zarit & Zarit, 1998).

**Stressful Life Events**

As a precipitant, the number of stressful life events has been found to be related to depression in samples of older people (Lewinsohn et al., 1991; Zarit & Zarit, 1998). Among the most common events that older adults identify as a precursor to a depressive episode are: physical illnesses, financial strains, caring for a chronically ill family member, family conflict and grief over the loss of a social role or important family member (Arean et al., 1998; Murrell & Meeks, 1992).

While most depressed older people identify negative events as precipitants, the majority of older adults who experience such stressors do not become depressed (Gatz, 2000). At any age, studies show that stressful life events account for only a small amount of the variance in depression (Gatz, 2000; Murrell & Meeks, 1992). According to Boyd and colleagues (Boyd, Kiernan, & Waller, 2000), the life events and chronic stress literature suggests that an accumulation of stressors combined with poor social support is more likely to precipitate depression in older adults.
Interpersonal Difficulties

It has been argued that the quality of interpersonal relationships may be more important in determining whether older people become depressed than concrete social variables (e.g. the number of social contacts) (Katona, 1993). Studies have revealed that high levels of expressed emotion (characterised by hostility, criticism, and emotional over-involvement), from adult offspring of depressed older adults were associated with higher relapse rates and lower recovery rates from depression (Hinrichsen & Pollack, 1997; King & Markus, 2000).

However, the association between interpersonal difficulties and depression may reflect various processes: the depressed individual may act in ways that strain and disrupt the interpersonal relationship; depression may influence the person’s perception of social relationships and losses in support or demanding nonreciprocal interpersonal interactions may precipitate depression (Kasl-Godley et al., 1998).

Whether depression is an outcome of interpersonal difficulties may be determined, in part, by other variables such as self-efficacy and degree of social integration (Kasl-Godley et al., 1998; King & Markus, 2000). Nonetheless, the fact that studies have established that significant relationships play a major role in the recovery of depression and, given the prominence of families in the lives of older people, these factors may have important implications for the role of family and interpersonal relationships in treatment (Zarit & Zarit, 1998).

Cognitive-Behavioural Factors

Old age can be a period of chronic stress and significant loss, yet the majority of older adults do not become depressed (Boyd, et al, 2000). The success with which the older adult adapts and copes with the stresses of aging may determine susceptibility to depression. For this reason cognitive mechanisms of appraisal and reinforcement contingencies may also have an important role in perpetuating or preventing depression (Katona, 1993).
Distorted Cognitive Appraisals: Beck’s Cognitive Theory of depression (Beck, 1967; Beck, 1976; Beck, 1987) may have particular utility with older adult populations. It is one of the most well validated psychological theories for the understanding and treatment of early-life depression and has been investigated in older adults (Boyd et al., 2000).

Beck’s cognitive theory postulates that depression is associated with and maintained by, a negatively distorted view of the self, one’s world and one’s future (Beck, 1995). The theory predicts that depression arises when negative life events interact with predisposing depressogenic cognitive styles formed during childhood, but which remain latent until activated by chronic or acute negative life stresses (Beck, 1987; Boyd et al., 2000).

Older adults may be especially prone to cognitive distortions, particularly regarding the true nature or prognosis of medical illness or their own perceived value to family members or friends (King & Markus, 2000). Old age is associated with a variety of negative stereotypes and expectations as well as increased risk of real losses. The extent to which older adults incorporate negative cultural views of aging into their self concept and the extent to which losses activate negative belief systems are associated with increased depression and may predispose an older adult to developing negative cognitions and depressive affect (Stoudemire & Blazer, 1985; Zarit & Zarit, 1998).

Deceased Reinforcement Contingencies: According to behavioural theories of depression (Ferster, 1973; Lewinsohn, 1975; Lewinsohn et al., 1991; Teri & Lewinsohn, 1982), depressed people engage in lower rates of behaviour and receive lower levels of reinforcement. Loss of reinforcement may occur as a result of losses of significant people, erosion of positive exchanges with other people, or because the depression-prone person has fewer social skills to elicit positive reinforcement from others (Zarit & Zarit, 1998). Decreases in positive reinforcement then sets up a vicious cycle: the person decreases the output of behaviour, which further reduces the amount of reinforcement, which lowers mood, behaviour output and so on (Zarit & Zarit, 1998).
Older adults may be especially vulnerable to experiencing decreased positive reinforcement because of the age-associated stressors, such as retirement, medical illness and loss of significant others (King & Markus, 2000). Self-report studies have supported this view; showing that depressed older people engage in few pleasant activities and find fewer activities enjoyable, although as expected this pattern was consistent across all age groups (Lewinsohn & Macphillamy, 1974; Lewinsohn et al., 1991; Zarit & Zarit, 1998).

While cognitive and behavioural models all contribute to the understanding of the maintaining factors of depression in older adults, it is argued that they must also have explanatory power concerning the continuity of the person across the life span while adapting to the age-associated changes and stresses. Further work is needed in this area (Meador & Blazer, 1998).

Summary of Causal Factors

Depression can result from a complex interaction of factors at the biological, psychological and social levels of organisation with the particular combination of factors varying across individuals (King & Markus, 2000). Many factors are correlated rather than causal as the temporal and causal relationship to depression is often difficult to ascertain (Kasl-Godley et al., 1998).

Future research into the aetiology of late-life depression would benefit from studies examining the relative impact and potential interaction that all these factors play in depression, so that preventative measures and treatment decisions can be fully implemented (Arean et al., 1998; Katona, 1993).

Factors Addressed in Treatment

A small body of controlled outcome research supports the efficacy of psychotherapy for treating depression in older adults (Gatz et al., 1998; Karel & Hinrichsen, 2000).
This section will focus on what factors are addressed in treating older adults with depression psychologically. This will be achieved by firstly highlighting factors that clinicians may encounter, which require modification when working psychotherapeutically with depressed older adults. Secondly, this section will consider specific factors that would be addressed within the context of cognitive-behavioural (CBT) and Interpersonal Psychotherapy (IPT) approaches, before finally considering relapse prevention as an important generic treatment factor and the impact of diversity issues in the treatment of depressed older adults. The former approaches have been chosen because research indicates that they have been applied the most extensively to, and are efficacious with, depressed older adults (Karel & Hinrichsen, 2000).

**General Psychotherapeutic Factors**

It is suggested that, in the main, psychotherapy with depressed older adults per se is more similar than different to psychotherapy with younger adults. However, there are several common factors that specifically characterise psychotherapeutic work with older adults, where adaptations may be necessary (Karel & Hinrichsen, 2000).

**Recognition of Symptoms and Coordination of Treatment**

Older adults are less likely to spontaneously report symptoms of depressed mood and more likely to present with somatic symptoms (Lyness et al., 1995). Yet depressed older adults frequently present with co-morbid psychiatric and medical disorders, whose symptoms may overlap with depressive symptoms. Inadequate recognition of depression may be the greatest barrier to effective treatment (Karel & Hinrichsen, 2000).

There are a number of tools that can aid assessment of depression that have been specifically designed and validated for older people (Karel & Hinrichsen, 2000; Pachana, Gallagher-Thompson & Thompson, 1994). However, even when depression is clearly identified it may be important to rule out potential medical problems or side effects from medications that can cause depression and/or interfere with its treatment.
(Karel & Hinrichsen, 2000; Woods, 1994). When working psychotherapeutically with older depressed adults it is important to communicate with medical or other care providers in order to coordinate treatment planning (Karel & Hinrichsen, 2000). Whether the onset of symptoms is primarily medical or psychiatric, treatment of depression can reduce the patient’s distress and lead to a better medical and psychiatric prognosis (Zarit & Zarit, 1998).

**Patient Expectations and Socialisation to Treatment**

During the lives of the current cohort of older adults, psychotherapy has changed greatly, in terms of how it is practised and viewed by the public (Zarit & Zarit, 1998). In light of this historical context, the current cohort of older adults may be more likely to passively expect help given to them by an “expert” and may view depression as a sign of being “crazy” (Karel & Hinrichsen, 2000).

Emery (1981) refers to the need for “treatment socialisation”, where older adults may require more initial education about the nature of depression, the purpose and process of therapy, in order to clear up any misconceptions and allow the client to be more active in their own treatment (Woods, 1994). This type of socialisation for treatment has been found to be helpful in many different types of psychotherapy and results in improved outcomes (Lewinsohn, Munoz, Youngren, & Zeiss, 1992; Zarit & Zarit, 1998).

**Accommodating Sensory and/or Cognitive Deficits**

It is suggested in the literature on psychotherapy for late-life depression that the pace of therapy may need to be slower and more flexible than with younger adults in order to accommodate for sensory and/or cognitive deficits (Karel & Hinrichsen, 2000; Woods, 1994). For older adults with these deficits clinicians may need to focus therapy on fewer points and to repeat themes during sessions. Sensory and/or memory aids may be a useful adjunct to therapy. However, there are great individual variations between clients and therapy needs to be tailored to each person's intellectual/sensory capacities (Woods, 1994).
Family Involvement

As cited earlier, family issues are frequently central in older adults with depression and successful treatment may involve bringing in the relevant family members (Zarit & Zarit, 1998). There are several well-developed theories of late-life family functioning and subsequent interventions (e.g. Knight & McCallum, 1998; Qualls, 1995; Shields, King & Wynne, 1995). However, there appears to be little or no direct empirical evidence to support their applicability to the understanding or treatment of late-life depression (King & Markus, 2000).

There are clinical recommendations offered in the literature on how best to work with families of depressed older adults (Hinrichsen & Zweig, 1994; Karel & Hinrichsen, 2000), but there is a great need for outcome research that test existing models of family treatment. Nonetheless, current research indicates that major depression is treated more successfully when family members are involved and depression can worsen or only partially resolve when conflictual family environments are not addressed in treatment (King & Markus, 2000).

Despite minor modifications, it is argued that older adults are often especially well suited to engaging in psychotherapy compared to younger age groups. Given their life stage of development, they may be relatively more introspective, have more developed sense of values and a lifetime of coping resources and relationships to draw upon in tackling their problems (Karel & Hinrichsen, 2000).

Factors addressed within Specific Psychotherapeutic Interventions

A review of the literature suggests that cognitive-behavioural psychotherapies (CBT) and Interpersonal Psychotherapy (IPT) are well established empirically supported treatments for depression in adults (Chambless et al., 1996), and are relatively well documented in their efficacy for treating depressed older adults compared to other modes of therapeutic treatments (such as systemic and life review therapies) (Karel &
This section will now consider factors addressed within these therapies that are most relevant to depressed older adults.

**Interpersonal Difficulties**

Interpersonal relationships are considered central to the sustained recovery of both depressed younger and older persons (Karel & Hinrichsen, 2000). IPT (Klerman, Weissman, Rounsaville, & Chevron, 1984) is a short-term psychodynamic treatment approach that specifically targets interpersonally relevant problems. It has a treatment manual specifically for older adults (Karel & Hinrichsen, 2000).

IPT addresses the following four interpersonal risk factors that are considered to be especially relevant for depressed older adults, since they occur with increasing frequency in this age group and are associated with poorer emotional well-being (Karel & Hinrichsen, 2000): Grief (such as death of a loved one); Interpersonal role disputes (conflicts with significant others); Role transitions (change in life circumstance such as illness, retirement); and Interpersonal deficits (individuals who lack skills to develop and sustain social relationships) (Karel & Hinrichsen, 2000; Klerman et al., 1984).

IPT typically focuses on two sets of goals, first the therapy aims to reduce depressive symptoms and improve self-esteem and second treatment is focused on the development of more effective strategies for dealing with current social and interpersonal problems (King & Markus, 2000). Clinicians have reported that IPT requires little adaptation for older adults, other than the more generic modifications mentioned earlier. However, older adults may have more limited options for replacing problem relationships and the therapist may need to encourage working out of these problems rather than discarding relationships (Zarit & Zarit, 1998).

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3 It is important to note that studies to date have not identified which psychotherapies are most effective. There may be significant differences in the efficacy of psychotherapeutic treatments for depression in late life (Karel & Hinrichsen, 2000; Zarit & Zarit, 1998).
IPT is less well researched in older adults than younger adults, but results from a few randomised comparative trials indicate that IPT may be as effective as antidepressant medication in the acute treatment of major depression and depression in the medically ill (Karel & Hinrichsen, 2000; Mossey, Knott, Higgins, & Talerico, 1996). The latter is particularly important given that this sub-group are at the highest risk for depression.

Cognitive Appraisals and Behavioural Responses to Depression

There is now a significant literature on the application and adaptation of cognitive-behavioural psychotherapies for depressed older adults (Karel & Hinrichsen, 2000) (see reviews by Gallagher-Thompson, & Thompson, 1996; Zeiss & Steffen, 1996). Gallagher-Thomson and colleagues provide the most systemic outcome data. They have developed a cognitive-behavioural treatment model specifically for older adults with depression (Gallagher & Thompson, 1983).

Primary elements addressed in this treatment include: daily tracking of behaviour (pleasant and unpleasant events), establishing the relationship between behaviour and mood, identifying behavioural aspects of the older adults life that are amenable to change, developing social and cognitive skills to increase the frequency of pleasant events and developing a plan for change. Older adults are also taught cognitive skills for monitoring negative self-statements and correcting cognitive distortions, on which they are based (King & Markus, 2000).

Again, very little change is needed to use CBT for depression with relatively healthy older adults, apart from the general considerations for psychotherapy mentioned earlier (Karel & Hinrichsen, 2000; Knight & Satre, 1999). However, there are some specific issues that clinicians may need to address within CBT (Zarit & Zarit, 1998).

According to Blazer (1993) clinicians need to be able to differentiate exaggerated or negative thoughts from social stereotypes about aging. For example, a depressed client may report they are too old to change or attribute their problems solely to other people or the difficult situation in which they are in. These beliefs may seem
compelling, especially if they are linked with adverse life circumstances, such as physical disability and multiple losses (Zarit & Zarit, 1998). This requires the therapist to help the person distinguish between depressive hopelessness and helplessness from a realistic appraisal of his/her limitations, whilst at the same time being aware of the therapist’s own potential negative stereotypical attitudes towards the elderly (Woods, 1994).

While CBT appears to be effective for a significant proportion of relatively healthy community-dwelling depressed older adults, little data is available for how to modify CBT with older adults who present with physical disability or cognitive deficits, or who lack the motivation or capacity to commit to the structured nature of treatment. Many of these clients are likely to present to services and therefore empirical research that focuses on which older adults do and don’t benefit from CBT would be beneficial (Karel & Hinrichsen, 2000).

**Relapse Prevention**

Epidemiological studies show that older adults who have experienced a previous episode of depression are more likely to experience a reoccurrence of their symptoms and those over the age of 70 are significantly more likely to experience a relapse (King & Markus, 2000; Reynolds et al., 1999). Maintenance psychotherapy which follows initial treatment and remission of the current episode of depression may be important, in combination with medication, for the prevention of relapses in older adults with recurrent major depression (Karel & Hinrichsen, 2000; Reynolds, 1997). Studies have shown that when IPT is used as a maintenance treatment, it significantly reduces rates of relapse in recurrent major depression over one year (Reynolds, 1997). While treatment gains using CBT appear to be enduring with follow-up studies suggesting maintenance of improvement over two years (Karel & Hinrichsen, 2000; Gallagher-Thompson, Hanley-Peterson, & Thompson, 1990).

All types of therapy need to attempt to prevent relapse and recurrence and this can be achieved through the use of booster sessions (Arean et al., 1998).
Diversity Issues

To date few psychotherapy outcome studies have examined the treatment of depression in older adults who are frail, over the age of 80, or from ethnic minority groups (Karel & Hinrichsen, 2000). Studies on the potential efficacy of psychotherapy in treating depression within these minority groups are much needed. Such outcomes may translate better into clinical practice where clinicians are working with diverse populations, whose experience and expression of mental distress will be highly variable and in part determined by the cultural context (Karel & Hinrichsen, 2000; O'Connor & Nazroo, 2000).

Summary of Treatment Factors

It is widely acknowledged that depressed older adults suffer from a complex, interactive blend of illnesses and problems. Treatment therefore needs to consider the multidimensional nature of these problems and may be most effective when multiple therapeutic approaches are integrated in order to tailor treatment to the individual needs of the client (King & Markus, 2000).

The cognitive-behavioural and interpersonal psychotherapeutic treatment approaches considered for depression in older adults all share many points of similarities: They are structured and time-limited, focusing on immediate events and beliefs associated with depression and require the active role of the therapist and client. They all have a strong psychoeducational component and emphasise the changing of habitual patterns that have contributed to depression and replacing them with more adaptive behaviour (Zarit & Zarit, 1998).

Given the similarities, clinicians may be able to combine elements from each of these approaches in creative ways to develop individualised treatment plans for particular clients. Furthermore, the convergence of techniques implies that the method of treatment may be just as important to the positive outcome as the specific theoretical orientation (Woods, 1994; Zarit & Zarit, 1998).
However, regardless of orientation, certain modifications might be needed when working psychotherapeutically with depressed older adults, and treatment needs to aim towards not only reducing symptoms of depression, but also preventing relapse, improving functioning, physical health status and quality of life (Karel & Hinrichsen, 2000).

**Conclusion**

Major depression in older adults is a significant health problem. It is the most prevalent mood disorder in older adults but may be difficult to detect because of the frequent psychiatric and medical co-morbidity (King & Markus, 2000). Depression in older adults appears to be a complex function of several interacting biological and psychosocial factors (King & Markus, 2000). Clinicians would benefit from studies examining the relative impact all these factors play in depression in older adults so that treatment decisions and preventative measures can be most effectively implemented (Arean et al., 1998).

There is tremendous scope for psychotherapeutic approaches in the treatment of depression in older adults. In general, approaches used with younger clients appear applicable to older adults. The most important consideration may be that older adults show greater individual differences, therefore treatment plans need to be carefully individualised (Arean et al., 1998; Woods, 1994). Given that older adults suffer from a complex interactive blend of illnesses and problems, treatment needs to be based on a multidimensional assessment and draw upon multiple therapeutic approaches (King & Markus, 2000).

To date cognitive-behavioural and interpersonal psychotherapies have received the most empirical support, relative to other psychotherapies, as effective interventions for late-life depression (Karel & Hinrichsen, 2000). The convergence of techniques in the cognitive-behavioural and interpersonal approaches provides scope for such an integrated approach and suggests that the method of treatment may be as important as the specific treatment orientation (Zarit & Zarit, 1998).
Existing studies have tended to focus on relatively healthy community living older adult populations for evaluating the efficacy of treatments. Research still needs to investigate the roles that gender and ethnicity have on the development, presentation and treatment of depression, whether some methods of treatment are more useful than others and how effective these interventions are in treating depression in special populations (e.g. medically ill). Research on these questions will help to further shape our understanding of depression in late-life (Arean et al., 1998; Karel & Hinrichsen, 2000; Powers et al., 2002).

Much progress has been made in understanding the causes of, and developing treatments for, late-life depression. While treatment of depression remains a challenge to clinicians, it ultimately provides opportunities to reduce suffering and increase quality of life, prevent suicide, restore optimal levels of functioning and independence as well as decrease societal costs of healthcare (Salzman, 1997).
References


PART TWO:
SUMMARY OF CLINICAL DOSSIER
OVERVIEW OF CLINICAL EXPERIENCE
The names of supervisors and placement locations have been omitted from this summary to maintain confidentiality. They may be found in Volume Two.

**Adult Mental Health Placement**

**Dates:** October 2001 to March 2002  
**Setting:** Community Mental Health Team  
**Main Models:** Cognitive-behavioural and behavioural  
**Cases Seen:** Observed supervisor and other clinicians working with 21 different clients including people with personality disorders, depression, drug and alcohol addictions, panic disorder, severe and enduring mental health problems, anxiety, history of sexual abuse and relationship difficulties. Observed systemic therapy with two families and a psychoanalytic assessment interview.

Worked jointly with supervisor to assess and treat three clients and undertook neuropsychological assessments of two clients presenting with memory problems and a queried learning disability, respectively.

Conducted cognitive-behavioural therapy with 9 different clients including people with severe and enduring needs, OCD, depression, panic disorder, relationship difficulties, anxiety & depression associated with multiple sclerosis, generalised anxiety disorder, personality disorder and substance misuse.

**Meetings & Visits:** Participated in psychology business and clinical meetings and CMHT case allocation meetings. Attended operational management, Forensic Service MDT, child protection committee review, inpatient discharge, and social services housing referral meetings. Visited inpatient psychiatric unit, youth offender’s institution and eating disorders service. Met with various mental health professionals to learn about their roles.

**Other Experience:** Conducted my Service Related Research Project and met with various students of other professions to explain role of a trainee and function of a clinical psychologist.
People with Learning Disabilities Placement

**Dates:** April 2002 to September 2002

**Setting:** Community Learning Disabilities Team

**Main Models:** Behavioural and Cognitive-Behavioural

**Cases Seen:** Observed supervisor and other clinicians working with 12 different cases. This included direct work with people with learning disabilities and indirect work with staff teams and carers.

Worked jointly with supervisor and other professionals to assess five clients and co-facilitated a psycho-educational group session on assertiveness at a social services sheltered housing hostel.

Had a caseload comprising 7 people with learning disabilities ranging from mild to severe, with problems including challenging behaviour, depression, bi-polar disorder, childhood sexual abuse and obsessional behaviour. This work included psychometric assessments, developing behavioural guidelines, working indirectly with staff teams and carers and direct cognitive-behavioural work with clients.

**Meetings & Visits:** Participated in weekly case allocation meetings and met with various professionals to learn about their roles. Actively involved in a series of planning meetings to develop sexuality & health groups in social services day centre. Attended several training workshops, including one on depression and learning disabilities.

**Other Experience:** Actively involved in a shared care protocols workshop attended by a range of senior managers and clinicians to brainstorm how PLD services can fit into AMH protocols developed to meet NSF requirements. Undertook a formal presentation on DBT and personality disorders to 25 senior health and social services staff and presented three different behavioural management guidelines to managers and care staff at two community hospital residential units.
Child Placement

Dates: October 2002 to March 2003
Setting: Child and Adolescent Mental Health Service
Main Models: Cognitive-behavioural, developmental and systemic
Cases Seen: Observed supervisor and other clinicians working directly and indirectly with 23 different clients and their families including children with behavioural, developmental, anxiety, anorexia, sleep and adjustment problems. This included observing EMDR, Family therapy, ADHD clinic and attending psychotherapy supervision group and health visitor consultation group. Worked jointly with supervisor and other clinicians to assess 5 different cases.

Set up and facilitated a cognitive-behavioural anxiety management group for children aged between 9 and 12 years old. Set up and facilitated psycho-educational parent group sessions on anxiety. Participated in an opportunity playgroup, portage educational group and specialised play therapy group for children and babies with developmental difficulties. Worked with 13 cases including children with behavioural, anxiety and school refusal problems, as well as developmental delay and mild head injury. This involved working both directly with children and indirectly with families and psychometric assessments.

Meetings & Visits: Participated in weekly allocation meetings and psychology service meetings. Attended several training events including a service development away day, child health conference, psychometric training, anger management and play therapy workshops. Met with various professionals including clinical director to learn about roles.

Other Experience: Supervised an assistant psychologist on an individual case and in her role as co-facilitator on the anxiety group. Undertook a formal presentation of anxiety group to MDT.
Older Adults Placement

Dates: April 2003 to September 2003

Setting: A community mental health team for older people

Main Models: Psychoanalytic, cognitive-behavioural and neuropsychological

Cases Seen: Observed other clinicians working directly with 3 different clients with presenting problems of depression, memory difficulties, carer stress and dementia.

Worked directly with 5 different cases including people with anxiety, depression, life adjustment issues, memory loss and stroke. This involved using psychoanalytic and cognitive-behavioural interventions as well as undertaking cognitive assessments.

Undertook an extended neuropsychological assessment with one case presenting with possible Alzheimer’s disease, supervised by a consultant neuropsychologist.

Meetings & Visits: Participated in team meetings and visited day hospital unit, inpatient unit, physical rehabilitation unit and specialist neuropsychological unit.

Attended training events and met with various professionals to learn about their roles.

Other Experience: Participated in weekly joint supervision sessions and actively engaged in discussions on the formulation and intervention of 8 different cases, using predominantly a psychoanalytic model. Presenting problems included depression, childhood and adult sexual and emotional abuse, challenging behaviour and psychosis.

Undertook two experiential psychodynamic observations at a residential ward for dementia and actively engaged in two complementary psychodynamic observation feedback sessions. Met with two psychology graduates to explain process of clinical training.
Psychiatric Rehabilitation Specialist Placement

Dates: October 2003 to March 2004
Setting: Continuing needs service for clients with severe and enduring mental health problems
Main Models: Cognitive-behavioural, behavioural
Cases Seen: Observed supervisor and other professionals working directly and indirectly with 12 clients and their families, who had problems including psychosis, paranoid schizophrenia, dual diagnosis, non-compliance, challenging behaviour, depression, deficits in ADL skills, self-neglect, vulnerability to exploitation, personality disorders.

Co-facilitated sessions in a coping skills group and healthy living group on an inpatient intensive rehabilitation unit.

Undertook direct and indirect therapeutic work with 5 individual cases that had problems including chronic depression, anxiety, travel phobia, paranoid schizophrenia and borderline personality disorder.

Meetings & Visits: Participated in case conferences and clinical meetings held at two different inpatient therapy units. Visited Assertive outreach service and eight different work-links services. Attended work services meetings and a formal operational managers meeting. Met with various professionals, managers and clinicians to learn about roles.

Other Experience: Undertook my Major Research Project. Made a formal presentation of MRP at managers work-services meeting and conducted group presentations of MRP protocol to managers and service-users at each of the 8 sheltered workshops. Met with an Occupational therapist who requested advice on undertaking an audit at her service.
Cognitive-Behavioural Therapy Specialist Placement

Dates: April 2004 to September 2004
Setting: Community Adult Mental Health Team
Main Models: Cognitive-behavioural
Cases Seen: Observed supervisor and other clinicians working with 3 different clients presenting with problems that included bi-polar disorder, impaired impulse control and depression.

Worked jointly with supervisor to undertake assessments on 3 different clients presenting with depression, PTSD, and alcohol substance misuse.
Conducted cognitive-behavioural therapy including working at the deeper cognition level, with 8 different clients. Presenting problems included health anxiety, panic disorder, PTSD, recurrent depression, and personality difficulties.

Meetings & Visits: Participated in CMHT clinical and business meeting, psychology service meetings, forensic service meetings, DBT clinical and service development meetings. Visited category B adult male prison. Met with various mental health professionals to learn about their roles. Attended several training events including a postnatal depression conference.

Other Experience: Undertook consultancy work with a CPN to help her use a CBT framework in a client session. Set up and delivered a ¾ day training workshop on CBT and panic disorder for mental health professionals within the trust, as part of a wider training programme on CBT.
ADULT MENTAL HEALTH CLINICAL CASE

REPORT SUMMARY


March 2002

Year 1

Note: Some of the details in this report have been changed to preserve the anonymity of the client and all names used in the report are fictitious.
Referral of the Problem

The trainee’s placement supervisor referred Miss N for Cognitive-Behaviour Therapy (CBT) to help address her Obsessive-Compulsive Disorder (OCD). Miss N’s ethnic background was White and British. Her first language was English.

Presenting Problem

Miss N has suffered from OCD for the past 15 years. Miss N reported experiencing almost constant intrusive thoughts and images associated with both the fear of objects becoming contaminated when she came into contact with them and fears of something bad happening to people close to her. Miss N was afraid that if she allowed herself to have these intrusions, the feared event might actually occur. She responded by neutralising these thoughts as quickly as possible through the extensive use of overt and covert rituals. She also avoided an extensive range of activities and objects and engaged in reassurance seeking behaviours.

Initial Assessment

The assessment consisted of a clinical interview completed over two sessions.

Current Psycho-Social Situation

Miss N was a 30-year-old woman who lived with her partner, of two years. She described this relationship as close and supportive. Despite the severity of her obsessive-compulsive symptoms her day-to-day functioning was considered very good; she worked full-time as a personal assistant in an education agency.

History and Development of the Problem

Miss N’s OCD started at around the time when she was fifteen years old; her family moved from Holland to England and Miss N found it difficult to adjust to her new school and started to engage in overt compulsive behaviours. She described a number
of incidents from her early life, which might have contributed to the development of her OCD. These included, having “bad thoughts” about her uncle. Shortly after her uncle died. At this time Miss N remembered thinking, “I must be evil”. Secondly, Miss N recalled spontaneously masturbating for the first time and then experiencing such thoughts, as “I am dirty”.

Initial Investigations

Miss N was asked to complete the Beck Depression Inventory II (BDI-II; Beck, Steer, & Brown, 1996), the Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988), and the Padua Inventory (Sanavio, 1988).

Initial Formulation

From the information gathered at assessment Miss N was thought to fulfil criteria for a diagnosis of OCD as described in DSM IV-TR (American Psychiatric Association, 2000). The cognitive-behavioural model of OCD was thought to be relevant in the formulation of Miss N’s problems.

It is hypothesised within the cognitive-behavioural model that her early experience of having “bad thoughts” about her uncle and his subsequent death, may have contributed to the development of her heightened sense of responsibility for events which may not be completely within her control (Salkovskis, Shafron, Rachman, & Freeston, 1999).

Within this model, Miss N’s OCD had been maintained by the fact that she avoided situations in which she believed herself to be dangerous and engaged in extensive rituals and reassurance seeking behaviours. It is hypothesised that these behaviours reinforced her belief that she was responsible for preventing and/or causing harm, which maintained her anxiety. Her attempts at mentally replacing her intrusive images, may have only served to increase their accessibility (Salkovskis & Kirk, 1997). All of these actions prevented her from receiving any evidence to disconfirm her beliefs (Salkovskis & Kirk, 1987; Salkovskis et al., 2000, pp.206-210).
**Action Plan**

In discussion with the trainee’s supervisor, it was envisaged that Miss N would require long-term therapy for the OCD, given its complex and persistent nature. It was agreed that the trainee would conduct the initial phase of therapy and the supervisor would then continue this once the trainee had finished the placement. In collaboration with the client, the aim of the initial phase of therapy was to target one of the two classes of obsessions identified, challenge the relevant dysfunctional assumptions and appraisals prior to setting up behavioural experiments aimed at targeting one or two of the least distressing compulsions. Moreover, the initial aim was to instil hope that things could improve and to normalise the existence of such intrusions.

**Intervention**

Miss N attended ten weekly sessions, which followed the standard cognitive therapy format (Beck, 1995). In the first session the nature of intrusions was normalised and Miss N was socialised to the cognitive conceptualisation of her OCD (Salkovskis & Kirk, 1997; Wells, 1997). Throughout therapy the function of anxiety was normalised and emphasis was placed on looking for more adaptive ways of coping with it by teaching relaxation techniques.

Guided discovery (Padesky & Greenberger, 1995) and behavioural experiments were used to challenge Miss N’s dysfunctional assumption that her images could cause something bad to happen if she did not neutralise them. Socratic questioning and responsibility pie charts were used to evaluate the evidence for and against her responsibility beliefs (Wells, 1997). By session five response prevention was initiated. The last session reviewed the skills Miss N had developed and highlighted her achievements in order to maintain treatment gains and motivation for future therapy.
Outcome

At the end of therapy Miss N reported feeling more in control of resisting her rituals by challenging her thinking and using more adaptive ways of coping with her anxiety. This helped her to resist a number of rituals that had not been directly targeted during therapy. Her improvement was seen in the overall reduction in scores on the self-report measures as well as in her belief ratings.

Prognosis

Given the fact that Miss N’s OCD was severe and longstanding, it was unlikely that she would be completely free of her symptoms. However, the progress she made in ten sessions may be predicative for further change in the future.

Reformulation

The reformulation elaborated on the contributing factors involved in the maintenance of her OCD; by including two additional life experiences, which enhanced Miss N’s perceived level of responsibility and caused her compulsive behaviours to increase.

Critical Evaluation

The response prevention phase could have been speeded up to incorporate other less distressing rituals. There may have been a danger that Miss N managed her anxiety during this phase by planning to ritualise in other situations, which had not been targeted (Leahy & Holland, 2000). Little work was done on targeting avoidance behaviours, which is considered a strong maintaining factor (Salkovskis et al., 1998, pp.48). This would need to be addressed in future therapy.

References


PEOPLE WITH LEARNING DISABILITIES

CLINICAL CASE REPORT SUMMARY

Behavioural Assessment and Management of a 42-Year-Old Man

Presenting With Severe Learning Disabilities and Challenging Behaviour

Sept 2002

Year 1

Note: Some of the details in this report have been changed to preserve the anonymity of the client and all names used in the report are fictitious.
Referral of the Problem

A staff nurse referred Mr F to the community learning disabilities health team (LDHT). Over the past year Mr F had presented with a range of new and difficult to manage behaviours. Mr F’s ethnic background was White and British.

Presenting Problem

Mr F would slap service-users around the head, wrap his arms around their necks (hard enough to restrict breathing), push over chairs, slam doors and bang on tables and glass windows.

Initial Assessment Process

The trainee undertook the initial assessment over a two-month period, which included clinical interviews and direct naturalistic behavioural observations. Mr F was not directly interviewed due to his communication impairments.

Current Psycho-Social Situation

Mr F was a 42 year-old gentleman with a severe learning disability. He lived in a 24-hour staffed community bungalow. Staff and his parents described Mr F as a likable and sociable person who enjoyed going on outings. In the past year the unit had experienced significant changes in the core staff and an ongoing staff-shortage problem. Staff had little time to engage with clients in meaningful activity or interaction. He was fully dependent on staff in most aspects of self-care.

History and Development of the Presenting Problem

Between the ages of seven and 37 years old Mr F remained in the local “mental handicap” institution, until it closed and he was moved to his current place of residence. Mr F did not have any previous history of significant behavioural difficulties. Two events had coincided with the onset of the difficult behaviours.
Firstly, a fellow client who Mr F used to attempt to hug tightly around the neck and slap on the head had been moved to another unit. These behaviours were then directed towards other clients. Secondly, the other behaviours started when the number of days that Mr F attended the local day hospital was reduced.

**Initial Investigations**

This part of the assessment was conducted within an applied behavioural analysis framework. A functional analysis highlighted that Mr F’s behaviours were more likely to occur when contact or activities were potentially available but not being provided. His behaviours were less likely to occur in situations involving high levels of contact or during preferred activities (Emerson, 1998, pp.141). Staff were likely to respond to these behaviours through the use of punishment strategies.

**Initial Formulation**

It was considered appropriate to formulate this case within a behavioural framework.

The two classes of behaviours identified (making physical contact with others and inanimate objects), appeared to serve the same function of Demand Creation. Mr F’s behaviours appeared to be intermittently reinforced by staff attention. Target behaviours were on a continuum, ranging from more frequent low-level behaviours (e.g. tapping others gently) to the higher-level behaviours (e.g. slapping). The lower-level behaviours may have become a less efficient way for obtaining interaction as a result of the recent changes in Mr F’s environment. The higher-level behaviours may have acted as a means for Mr F to control his changing environment and to continue to communicate his needs more effectively in light of these changes.

**Action Plan**

It was agreed with the unit manager and supervisor that the trainee would develop guidelines to manage the behaviours and implement them at the unit. The guidelines covered the following areas: Changing the context in which the challenging
behaviours took place (Bradshaw, 1998; Brown, 1998), accounting for Mr F’s preferences as expressed through his challenging behaviour (Emerson, 1998), enhancing more appropriate behaviours that served the same function and provide new learning (Benson & Havercamp, 1999, pp. 271-272), and a reactive strategy for managing behaviour in the short-term (Baker et al., 1998; Emerson, 1998).

**Intervention**

An Overlay Programme was introduced for increasing the levels of staff interaction within existing resources in order to enhance compliance with the programme. Mr F was also referred to a community day service to increase access to stimulating activities. Staff were advised to allow Mr F to engage in the low-level behaviours. To reduce the aversiveness of certain setting conditions (which triggered low-level behaviours), it was recommended that staff increase the rate of positive reinforcers immediately before and following the occurrence of these conditions.

Mr F was observed to frequently express his desire to interact with staff verbally through the use of single words, which they often ignored. Staff had come to preferentially respond only to the more difficult behaviours, therefore the response efficiency of alternative behaviours had reduced. Staff were advised to respond immediately to these verbal behaviours with a few words of encouragement. In order to maximise the impact of the latter intervention, it was important to decrease the efficiency of the difficult behaviours (Emerson, 1998). This involved an extinction procedure.

**Outcome**

The guidelines were reviewed weekly over a three-week period following their implementation. Mr F’s behaviours appeared to increase in frequency and variability in the first week following the implementation of the guidelines. This may reflect an “extinction burst” (Emerson, 1998, pp.150). However, by week three Mr F’s overall target behaviours had reduced in frequency, below the levels reported prior to the implementation phase.
Prognosis

It may be difficult to maintain consistency in the short term for implementing these guidelines, in light of staff shortages and turnover. The fact that Mr F was such a likeable and sociable gentleman, who staff responded positively to, does provide hope for the future that staff may be motivated to engage with him and find alternative activities for him.

Reformulation

The reformulation elaborated on the staff system that appeared to play a greater role in the maintenance of the challenging behaviour than was first considered.

Critical Evaluation

The trainee did not directly address the difficulties experienced at the staffing level, this would need to be addressed in the future. It may have been more practical to introduce different components of the guidelines gradually, so staff could get accustomed to implementing them. This would have helped to determine which components were successful. The trainee was only able to model aspects of the guidelines when present on the house. It may have been useful to spend time on a whole shift to fully demonstrate the guidelines.

References


developmental disabilities and mental retardation (pp. 262-278). Cambridge: University Press.


CHILD CLINICAL CASE REPORT SUMMARY

A Cognitive-Behavioural Anxiety Management Group for Children
Aged Between 9 and 12 years old.

April 2003

Year 2

Note: Some of the details in this report have been changed to preserve the anonymity of the clients and all names used in the report are fictitious.
Referral of the Problem

The psychology service within the Child and Adolescent Mental Health Service (CAMHS) had received several referrals requesting intervention for clients aged between 9 and 12 years old who presented with a range of anxiety problems.

Planning Process

It was agreed with the trainee’s supervisor that the trainee and assistant psychologist would facilitate a structured six-session closed cognitive-behavioural group. The criteria for inclusion were set by combining the principles outlined by Dwivedi (1993) for selecting child group members with those advocated in the literature for engaging children in CBT (Doe et al., 2002; Graham, 1998; Kendall et al., 1997; Stallard, 2002)

Initial Assessment

Eight clients and their families, referred for anxiety problems were invited to attend individual clinical assessment interviews conducted by the trainee and assistant psychologist. Of the eight children assessed, four met the criteria for inclusion and wanted to attend a group. Jane was 11 years old, Max was 10, Henry was 12 and Lucy was 9. They all experienced anxiety symptoms associated with certain situations that they perceived to be fearful.

Initial Investigations

Each group member was asked to complete the Spence Children’s Anxiety Scale (SCAS) (Spence, 1994a). The parents were asked to complete the Strengths and Difficulties Questionnaire (SDQ P4-16) (Goodman, 1997).

Initial Formulation

The group members’ anxiety difficulties were formulated within a generic cognitive-behavioural framework for anxiety. All four children reported distress associated with
the misperceived threatening nature of certain situations, could readily access the associated negative thoughts and subsequently engaged in avoidance and/or safety behaviours in an attempt to reduce the perceived danger (Graham, 1998; Wells, 1997). The latter factors served to maintain the anxiety. Anxiety may also have been maintained by parental roles and family culture (Carr, 1999). For example, by allowing the children to avoid certain stimuli the parents may have inadvertently reinforced the avoidant behaviour by giving credibility to the misperceived threatening nature of these situations.

**Action Plan**

The anxiety management group was a small structured time-limited group (6 sessions) based on the cognitive-behavioural skills based learning approach (Ronan & Deane, 1998; Stallard, 2002). The family were to be centrally involved in coaching the child in coping skills and managing the exposure process to reduce the risk of anxiety-maintaining family interactions and enhance the maintenance of treatment gains (Carr, 1999; Ronan & Deane, 1998). Group processes were hypothesised to effect change by: enhancing social skills and self-esteem, reducing the sense of isolation, normalising responses and facilitating the sharing of feelings through the processes of identification, peer reinforcement and modelling (Barratt & Kerman, 2001; Dwivedi, 1993; Reid, 1999).

**Intervention**

**Initial Phase**

The first session was used to set the agenda for the rest of the sessions and establish group norms. The group were initially introduced to an overview of anxiety using their own ideas from brainstorming, followed by more didactic teaching on the three systems of anxiety. The group were taught a range of relaxation techniques (Carr, 1999; Stallard, 2002). In the initial stages of the group there was a high dependency on the group facilitators. To facilitate the development of group cohesion, exercises were directed towards introductions and bridging the children together through the sharing of common experiences.
Middle Phase

The group were taught how to divert their attention away from unpleasant anxiety-provoking symptoms and generate positive self-talk as a coping strategy for the negative thoughts, using a variety of behavioural activities and cognitive strategies (Powell, 1992; Stallard, 2002). The group members began to identify with each other more coherently. Differentiation of group roles also began to develop.

Later Phase

In the last 2 sessions the group were taught problem solving strategies to help manage their avoidance behaviours (Carr, 1999; Spence, 1994b; Stallard, 2002). By session 5 it was clear that the group were able to talk more openly about themselves and demonstrate a degree of closeness (Dwivedi, 1993).

Parent Sessions

All four sets of parents attended two psychoeducational sessions and were provided with an information pack (Carr, 1999; Ronan & Deane, 1998).

Outcomes

Group members appeared to develop in confidence and utilise each other as role models for promoting change. It was clear from the group members written and verbal feedback that they had all not only enjoyed the group but had been able to identify a useful strategy for managing the anxiety, and this in turn had helped them to achieve concrete behavioural goals through the process of exposure. The parents themselves seemed to have benefited from the group experience, in terms of it having an impact on their own responses to the child’s anxiety. However, minimal change was observed on the total scores obtained from the re-administered questionnaires post-group.
Reformulation

The cognitive-behavioural model embedded within the systemic context and accounting for psychotherapeutic group processes, appeared to describe three of the group members' anxiety adequately. The exception was Jane. It was thought that systemic factors played a greater role in Jane's difficulties than first considered. Recommendations derived from a systemic reformulation were put to the Consultant Psychiatrist who planned to engage in systemic work.

Critical Evaluation

The greatest benefit of a cognitive-behavioural group approach appeared to be in building up the children's confidence in their ability to cope with perceived threat. The group process itself helped to achieve this through peer-reinforcement, role modelling and normalisation of experiences (Dwivedi, 1993). However, the limited change in anxiety levels shown on the standardised measures may indicate that the skills learnt were not fully generalised or maintained outside of the group setting. The children may have needed longer than six sessions to assimilate these skills (Ronan & Deane, 1998). A future consideration may be to set up a longer group within the school environment.

References


OLDER ADULTS CLINICAL CASE REPORT

SUMMARY

A Report of a Neuropsychological Assessment with a 74-year-old woman who presented with memory problems.

September 2003

Year 2

Note: Some of the details in this report have been changed to preserve the anonymity of the client and all names used in the report are fictitious.
Reason for Referral

Dr Field was referred by a PsychoGeriatrician to the Consultant Neuropsychologist for a detailed neuropsychological assessment. Dr Field had reported ongoing memory complaints. The trainee undertook the assessment over the course of two three-hour sessions. The assessment comprised a clinical interview with both Dr Field and her husband, followed by neuropsychological testing with Dr Field on her own.

Presenting Problem

Dr Field reported forgetting acquaintances’ names, memorable dates and information that her husband told her in conversation. She heavily compensated for her difficulties by using a range of memory support strategies and with effort could perform everyday activities independently. Dr Field’s husband noted that, on occasions, his wife had forgotten the names of some cooking ingredients and mislaid items around the house.

History of Presenting Problem

Both Dr Field and her husband reported first noticing a significant change in her memory immediately following an emergency hip operation four years ago, in which there were complications with the anaesthetic and Dr Field was starved of oxygen. Since the operation Dr Field was uncertain whether the memory difficulties had become worse over time, but her husband thought that there might have been a gradual and slow deterioration. Dr Field was not aware of any difficulties in functioning prior to the operation, but her husband had noted some subtle changes.

Medical History

At the time of the assessment, Dr Field was taking Aricept 5 mg daily and reported a general feeling of mental well-being. Dr Field underwent a MRI scan four years ago, which indicated no significant focal abnormalities. Her father and paternal aunt were diagnosed with Alzheimer’s disease.
Personal History

Dr Field was 74 years old and right-handed for all activities. Dr Field excelled at school and medical university. She had a successful employment history. Dr Field and her husband actively engaged in a full social life.

Previous Assessment

Dr Field had attended the memory clinic over the past four years and was administered the Addenbrooks Cognitive Examination (ACE; Mathuranath et al., 2000) at regular intervals. Dr Field’s scores were consistently above the cut-off, indicating no significant cognitive impairment. It has been suggested that highly educated and intelligent individuals might score perfectly on mental status tests whilst experiencing obvious difficulties in cognitive functioning (Zarit & Zarit, 1998).

Hypotheses

Hypothesis 1: Dr Field’s memory difficulties could be caused by insufficient blood oxygen sustained in the course of the emergency hip operation under general anaesthetic (Lezak, 1995).

Hypotheses 2: Dr Field might have a neuropsychological profile consistent with probable AD (Nussbaum, 2000).

Hypothesis 3: Dr Field might have a neuropsychological profile consistent with the progressive non-fluent aphasia (PA) variant of frontotemporal dementia (FTD) (Neary et al., 1998; Snowden et al., 2002).

Rationale

The purpose of the assessment was primarily to assess the nature and severity of cognitive difficulties, which in turn might aid a neurological diagnosis. To meet these aims the trainee administered a range of cognitive tests, which included: the Wechsler
Test of Adult Reading (WTAR; Psychological Corporation, 2001), the Graded Naming Test (Mckenna & Warrington, 1983), the Item Naming and Description Recognition Test (Coughlan & Warrington, 1978), the Trail Making Test (e.g. Spreen & Strauss, 1998), as well as subtests on the following scales: Wechsler Adult Intelligence Scale (WAIS-III; Wechsler, 1997a), Wechsler Memory Scale (WMS-III; Wechsler, 1997b), Adult Memory and Information Processing Battery (AMIPB; Coughlan & Hollows, 1985) and Delis-Kaplan Executive Function System (D-KEFS; Delis, Kaplan, & Kramer, 2001).

** Behaviour During Assessment **

Dr Field was oriented in time and place. There were no obvious speech abnormalities, psychomotor or concentration difficulties. Dr Field quickly assimilated the purpose of each task and showed good insight into her capabilities and limitations.

** Findings **

The results on the WTAR and the WAIS-III subtests indicated that Dr Field’s current intellectual ability was intact. The results on the WMS-III and the AMIPB subtests showed impairment in verbal and nonverbal memory. Her ability to both retain and recognise information recalled immediately after presentation over a delay was intact. Her scores on the Graded Naming test fell well below her premorbid estimate. However, she scored 100% on the Item Naming and Descriptive Naming Recognition test, obtained scores within the very superior range on the Vocabulary and Similarities subtests, and did not present as dysphasic. These factors indicated that Dr Field could retrieve words on the basis of definition as well as in spontaneous conversation. Therefore, her difficulties on the Graded Naming test may be attributed to problems with the visual-lexical link, which is required for this test, rather than indicating a generalised word retrieval problem. A significant difference was found between the Letter fluency and Category fluency scores. It is not uncommon for impairment to be greater on category fluency than on letter fluency in the early stages of AD (Delis, Kaplan, & Kramer, 2001). Dr Field’s score for attention span was slightly lower than would be expected for her premorbid estimate.
Discussion

Such findings addressed one of the issues raised by the referrer, namely the severity and extent of Dr Field’s impairments. However, a diagnosis could not be reached on the basis of this assessment alone, without first establishing whether or not Dr Field’s difficulties were progressive. The clinical picture was further complicated by the fact that Dr Field’s cognitive profile did not represent a typical neuropsychological picture for a primary progressive dementia. Such a variable profile could implicate hypoxic damage until evidence of deterioration was obtained (Lezak, 1995).

The only conclusions to be drawn were based on highlighting evidence for and against the dementia hypotheses, which might then form the basis of future re-testing. A clinical diagnosis of dementia must be made with great care given the huge implications for the person and family (NICE, 2001).

Recommendations

It was recommended that Dr Field be re-tested in a year’s time and a repeat MRI scan undertaken, using a protocol that would be sensitive enough to detect gross atrophy if it were present (Collie & Maruff, 2000). In the meantime it was also suggested that Dr Field continue to receive support from the memory clinic.

Critique

Given the mixed profile of cognitive performance, it would have been preferable to administer the whole WMS battery and the WAIS-III, as well as a more detailed assessment of executive functions. A fuller assessment of memory and language functions might have been of particular use in aiding differential diagnosis (Neary et al., 1998). However, it would have been clinically inappropriate to expect Dr Field to travel such a long distance on several more occasions to undergo these tests.
References


SPECIALIST PLACEMENT CLINICAL CASE
REPORT SUMMARY
(ADULT MENTAL HEALTH REHABILITATION & RECOVERY)

The development and initiation of a graded in vivo exposure programme with a 59 year old woman with severe and enduring mental health problems who presented with anxiety over travelling on a bus.

April 2004

Year 3

Note: Some of the details in this report have been changed to preserve the anonymity of the client and all names used in the report are fictitious
Referral of the Problem

Mrs A was a 59-year-old woman diagnosed with chronic paranoid schizophrenia. Mrs A’s community psychiatric nurse (CPN), from the continuing needs rehabilitation and recovery service, verbally referred her to the trainee for help in addressing Mrs A’s fear over travelling on a bus.

Presenting Problems

Mrs A described experiencing anticipatory anxiety prior to going out on a bus, associated with a fear of not being able to get on and off the bus on her own. Mrs A identified various physical symptoms associated with her “nerves”, which she experienced as “unbearable”. She therefore avoided going on a bus. She had never experienced a panic attack or fallen over on the bus.

Initial Assessment

The assessment consisted of a clinical interview completed over three sessions and conducted at Mrs A’s home with the trainee. The primary aim was to maximise engagement and minimise the difficulties Mrs A was observed to have in concentrating for long periods and understanding abstract concepts or ideas.

Current Psychosocial Situation

Mrs A was divorced and lived in a council flat with her 30-year-old son. She required ongoing and intensive support from the service for her mental health needs and community living skills. Mrs A would not travel beyond the “safety” of the local town due to her “nerves”. Over the past 7 years her mental state had been stabilised by medication.

History and Development of the Presenting Problem

Mrs A had a long-standing fear of travelling on her own. A number of life experiences, in combination with an anxious predisposition might have contributed to
the development of her anxiety. She had led a very sheltered life in which she relied heavily on others for support. Since the age of 29, she had repeated hospital admissions due to the re-occurrence of psychotic symptoms that caused her to experience increased anxiety, sleep disturbance and stopped her from leaving the “safety” of her house. Mrs A also described several specific incidents associated with travelling on a bus, which heightened her anxiety and prevented her from travelling alone.

**Initial Investigations**

Mrs A was asked to complete the Beck Anxiety Inventory (BAI) (Beck, Epstein, Brown, & Steer, 1980).

**Initial Formulation**

From the information gathered at assessment it was felt appropriate to formulate Mrs A’s anxiety over travelling within a cognitive-behavioural framework for understanding phobias (Butler, 2000). It was hypothesised that Mrs A’s fear of travelling on a bus was currently being maintained by her reactions to the symptoms that she had previously experienced when travelling (Butler, 2000; DiTomasso & Gosch, 2002). It was hypothesised that the most disruptive reaction was avoidance.

Mrs A reported being highly motivated and determined to address her avoidance. She reported that despite feeling “nervy” she wanted to “get on with it”.

**Action Plan**

These strengths provided some indication of Mrs A’s capacity to work within a graded exposure intervention designed to reduce her anxiety and avoidance by systematically exposing Mrs A to the feared situation and combining practical coping strategies for managing anxiety (Butler, 2000; Meadows & Phipps, 2002). The aims were to foster feelings of control and contain potentially overwhelming feelings of anxiety during exposure, which in itself may contribute to an exacerbation of her psychotic symptoms (Fowler, et al., 1999).
In discussion with the CPN, community support worker (CSW) and Mrs A, it was agreed that the trainee would set up and initiate a graded exposure programme until the placement was completed, from which staff could then take over.

**Intervention**

The trainee met with Mrs A at her home on a weekly basis for 12 sessions. Psycho-education on the function of anxiety and rationale for graded exposure treatment was delivered in a simple format using visual aids (Perkins & Dilks, 1992). Various coping strategies for managing anxiety were explored with Mrs A, placed on a flash card to serve as a memory aid and selected for repeated practice during the exposure sessions (Lindsay, 1994; Powell, 1992).

The parameters and goals for the graded exposure programme were set up prior to devising the tasks for the graded hierarchy, the aim of which was to gradually reduce Mrs A’s dependence on having someone accompany her on different aspects of the journey. Mrs A’s ultimate goal was to travel to the local town independently by bus. On completion of the initial set of tasks, written guidelines for carrying out the rest of the programme were given to the staff.

**Outcome**

During the initial phase of the graded exposure programme Mrs A had successfully achieved the first 5 tasks on the graded hierarchy. A decline in her expected versus actual anxiety ratings, both within each task and across the tasks, provided an indication of her overall progress for managing her fear over travelling on the bus. Over the course of the intervention period Mrs A’s BAI scores decreased in severity, providing some support for the effectiveness of the intervention.

**Prognosis**

Mrs A was highly motivated and committed to persevering during the intervention. However, it was felt that she was able to achieve the initial set of tasks so quickly in part because of the trainee’s presence, which served to give her reassurance that she
was not alone. It was likely that Mrs A would find the next phase of exposure tasks much harder as they would increasingly require her to complete aspects of the journey completely independently. For change to continue to take place Mrs A would require consistent, regular practice over an extended period of time, which the CPN was aware of.

**Reformulation**

Additional information came to light during the intervention, which served to elaborate on the formulation. This included identifying an information processing bias, which contributed to the maintenance of anxiety symptoms. Mrs A also recalled other negative experiences associated with travelling. These served to support the hypothesis that her fear over travelling had gradually built up over time as a result of repeated distressing experiences, and when they occurred at times of high arousal her fear responses were more easily learned and reinforced (Butler, 2000; DiTomasso & Gosch, 2002).

**Critique**

The trainee was unable to cover all dimensions of Mrs A’s anxiety. Mrs A did not want to address these and the trainee’s priority was to maximise her engagement and motivation to travel on a bus, within the limits set (Fowler et al., 1999). The graded exposure was highly specific to the practice situation. It was unlikely that Mrs A learning to ‘face her fear’ during the exposure programme, would generalise to any other situation. However, emphasis was placed on Mrs A’s positive capabilities, which in turn would ultimately facilitate the achievement of a functional goal.

**References**


PART THREE:
RESEARCH DOSSIER
<table>
<thead>
<tr>
<th>Research Skill</th>
<th>Description of Research Skill</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Conduct a literature search</td>
<td>Conducted computerised literature searches using BIDS, PsychInfo, Medline &amp; Cochrane Library databases for all my essays, case reports &amp; research projects. This allowed me to enhance my skills in using these search engines. For example, learning how to combine &amp; exclude key words in searches.</td>
<td>October 2001 to June 2004</td>
</tr>
<tr>
<td>Critically review the literature</td>
<td>Reviewed the relevant literature to answer each of the essay topics and as part of every research project. This allowed me to further develop my critical analysis skills in assessing what were the most important studies conducted in the area of interest, what were the outcomes, discrepancies or limitations and how best to summarise the literature.</td>
<td>October 2001 to June 2004</td>
</tr>
<tr>
<td>Formulate a specific research question</td>
<td>Formulated specific research questions for both my service-related and major research project. This allowed me to gain experience of how the process evolves from generating broad areas of interest to operationalising a specific question, by considering gaps in existing literature base, practical and clinical relevance and ethical issues.</td>
<td>November 2001 to September 2003</td>
</tr>
<tr>
<td>Write brief and detailed research proposals</td>
<td>Wrote brief and longer proposals for both my service related research and major research project. I learnt how to tailor the proposals for the different readerships and how to modify them in response to feedback.</td>
<td>November 2001 to April 2003</td>
</tr>
<tr>
<td>Obtain appropriate supervision for research</td>
<td>I was supervised for all the research projects I conducted on the course both by a course tutor and field supervisor. For my major research project I recruited the supervisors myself.</td>
<td>October 2001 to June 2003</td>
</tr>
<tr>
<td>Write a participant information sheet and consent form</td>
<td>I prepared an information sheet for participants in my service related research project and information sheets &amp; consent forms for participants in my major research project and qualitative project. This taught me how to tailor information to the needs of the participants &amp; consider pertinent ethical issues.</td>
<td>January 2002 to April 2003</td>
</tr>
<tr>
<td>Judge ethical issues in research and amend plans accordingly</td>
<td>Discussed ethical issues with course supervisor and placement supervisor for service related project. It was agreed that it was an audit and therefore my placement supervisor signed an audit declaration form. Initially considered ethical issues for my major research project with field supervisor in relation to how participants with severe &amp; enduring mental health problems would give informed consent, length of questionnaires, how to present information verbally and whether to do this on an individual or group basis. Considered more detailed ethical issues for ethics application: obtaining informed consent, confidentiality of data, anonymity, voluntary participation, additional supports put in place for potential distress. Following these discussions research plans were amended accordingly, which taught me the value of consulting others.</td>
<td>October 2001 to April 2003</td>
</tr>
<tr>
<td>Research Skill</td>
<td>Description of Research Skill</td>
<td>Dates</td>
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<tr>
<td>Obtain approval from a research ethics committee</td>
<td>For my major research project I obtained ethical approval both from the Health Authority’s Local Research Ethics Committee and the University’s ethics committee. These were valuable learning experiences since I had not done this before.</td>
<td>May 2003 to September 2003</td>
</tr>
<tr>
<td>Collect data from research participants</td>
<td>I collected data from the questionnaires returned by participants in my service-related research project and from participants who completed questionnaires for my major research project. I also helped design a semi-structured interview and collected data from a participant, as part of a group qualitative research project. The latter was a particularly useful learning experience, as I had not previously conducted qualitative research.</td>
<td>February 2002 to March 2004</td>
</tr>
<tr>
<td>Set up a data file</td>
<td>For both the service related and major research projects I created SPSS data files. This was a valuable experience, as I had not used SPSS before.</td>
<td>March 2002 to June 2004</td>
</tr>
<tr>
<td>Analyse quantitative data</td>
<td>For my service related project quantitative data analysis involved carrying out survey methods, t-tests and chi-squared tests. For my major research project I mainly used correlations, both parametric and non-parametric. Within my major research project, conducting partial correlations and comparing the magnitude of difference between two correlations was a useful learning experience, since I had not performed these tests before.</td>
<td>April 2002 to June 2004</td>
</tr>
<tr>
<td>Analyse qualitative data</td>
<td>I learnt for the first time how to analyse qualitative data as part of a group qualitative project that employed Interpretative Phenomenological analysis.</td>
<td>February 2003 to May 2003</td>
</tr>
<tr>
<td>Summarise results in figures or graphs</td>
<td>Results were summarised in figures and graphs in my service-related and major research projects. This enhanced my experience of how to present data in the clearest possible way for the reader.</td>
<td>March 2002 to June 2004</td>
</tr>
<tr>
<td>Interpret results from data analysis</td>
<td>Quantitative results were interpreted in my service related and major research project, and qualitative results interpreted in the group qualitative project. This gave me a broader range of experience in interpretation and refined my skills in keeping the interpretation within the limits set by data analysis and design.</td>
<td>May 2002 to June 2004</td>
</tr>
<tr>
<td>Research Skill</td>
<td>Description of Research Skill</td>
<td>Dates</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Present research findings and plans to an audience</td>
<td>Presented the findings of my service related research project back to the service and to the trainees on the course. Presented outline of major research project and initial findings on separate occasions to sheltered workshop managers and senior clinicians at the formal work services management meetings. Also presented major research protocol to workshop managers and service-users on a group basis at each of the eight workshops.</td>
<td>August 2002 to April 2004</td>
</tr>
<tr>
<td>Produce a written report on a research project</td>
<td>I produced written reports on my service related, major and qualitative research projects as part of the course requirements.</td>
<td>June 2002 to July 2004</td>
</tr>
<tr>
<td>Defend research project at an oral examination</td>
<td>This will occur during my Psych. D. viva.</td>
<td>September 2004</td>
</tr>
<tr>
<td>Submit research report for publication in a journal/book</td>
<td>In discussion with my research tutor and field supervisor I plan to write up my major research project for journal publication following the viva.</td>
<td>September 2004</td>
</tr>
</tbody>
</table>
| Apply research findings to clinical practise (give examples of 3 papers published during your training which influenced your practice. | During the older adults placement I used a paper by Davenhill and colleagues (2003), which described the processes involved in psychodynamic observation in later life, to help me undertake two psychodynamic observations and to formulate the outcome within this model.  
On my child placement, I used a paper by Sprince (2002), which described how to develop containment within a children’s group, to help set up a safe and containing group experience for an anxiety management group.  
During my specialist rehabilitation placement I used a paper by Young and colleagues (2003), which described how to apply cognitive therapy for chronic depression, to help me work with a client. | September 2001 to July 2004 |

References


SERVICE RELATED RESEARCH PROJECT

An investigation into the factors associated with client non-attendance to psychological therapy at a Community Mental Health Team

June 2002

Year 1
Abstract

Objective: To investigate factors associated with client non-attendance to psychological therapy at a Community Mental Health Team. This included clients who were offered an initial appointment but never attended any appointments and clients who attended their initial appointment but missed some of their subsequent appointments without cancelling.

Methods: The study comprised two parts: (1) A retrospective case note analysis of 73 cases, seen within the year 2001, on a range of demographic measures using chi-square tests and t-tests. (2) A questionnaire, comprising a list of 12 possible reasons why it might be difficult to attend appointments, was administered to 9 clients attending therapy. A full response rate was obtained.

Results: (1) When multiple comparisons were controlled for, the statistical analyses did not reveal any significant effect of demographic factors on attendance. However, two interesting trends were present in the data; clients who failed to attend some of their appointments were more likely to be offered initial appointments in the spring/summer months and had a shorter average travelling distance when compared to clients who never missed appointments.

(2) The questionnaire showed that the most frequently cited suggested reasons, for difficulty in attending appointments, were associated with the perception of whether psychological therapy was beneficial and/or the only option and appointment times. However, the small sample size and characteristics limited the interpretability of the findings.

Conclusions: The limitations and clinical implications of these findings and how they may contribute to more targeted future research on non-attendance are critically discussed.
Acknowledgements

The author would like to thank the research respondents for their time and effort and the field supervisor (Consultant Clinical Psychologist), research supervisor (Course), and medical records for their help and guidance.
Introduction

The Consultant Clinical Psychologist based at a Community Mental Health Team (CMHT) expressed concern over the perceived high rate of client non-attendance. This included clients who were offered an initial appointment but never attended any appointments and clients who attended the initial appointment but missed some of their subsequent appointments without cancelling. With increasing demand for clinical psychology services non-attendance is a concern for a number of reasons. Administrative, professional time and appointment slots can be wasted; clients may not be receiving the appropriate help and non-attendance can demoralise the therapist (Cross & Warren, 1984; Gerhand & Blakey, 1994, Hughes, 1995; Loumidis & Shropshire, 1997).

In order to develop effective interventions for increasing attendance, it is first necessary to establish what factors are associated with non-attendance. According to Loumidis and Shropshire (1997) the variables associated with non-attendance at initial appointment to clinical psychology services in the British National Health Service (NHS) are relatively unresearched. A number of studies on non-attendance have been conducted in countries other than the UK (Carpenter et al., 1981; Hunsley, Aubry, Verstervelt & Vito, 1999). However, it is unclear to what extent these findings can generalise to an NHS setting, given that overseas services can differ substantially in service structure, organisation and delivery (Hughes, 1995; Loumidis & Shropshire, 1997; Nicholson, 1994). There appears to be even fewer studies that have attempted to examine appointment keeping (clients who fail to attend some of their appointments), within clinical psychology services (Berrigan & Garfield, 1981; Weighill, Hodge, & Peck, 1983).

The main approach adopted by UK studies is based on retrospective quantitative analyses of client records on a range of variables. These variables have included presenting problem, gender, socio-economic status, public transport, referral agents, previous psychiatric history and waiting time. (Loumidis & Shropshire, 1997; Madden & Hinks, 1987; Munro & Blakey, 1988; Trepka, 1986; Weighill et al., 1983).
These studies have failed to show agreement on these factors. For example, Madden and Hinks (1987) found no relationship between non-attendance of first appointments and referral agent. In contrast, Munro and Blakey (1988) found that clients who self-referred were more likely to attend their first appointment. The statistical analyses in these studies were flawed because they failed to control for multiple comparisons (Howell, 1997; pp.348-399).

Weighill and colleagues (1983) examined factors associated with broken appointments within a clinical psychology service. The findings showed that clients, who miss some appointments without cancelling were more likely to come from a lower social class, have no professional qualifications, travelled to appointments by means other than their own car and had children between the ages of 11-15 years. The lower social class factor supported the findings of Berrigan and Garfield (1981), but researchers do not appear to have investigated any of the other factors. The former study did not control for multiple comparisons and the degree of association although statistically significant was of low magnitude (Weighill et al., 1983).

It has been concluded that little is known about the factors associated with non-attendance (Madden & Hinks, 1987; Trepka, 1986; Weighill et al., 1983). As far as the author is aware, there are no studies, which have focused directly on asking clients themselves for reasons of non-attendance. Questionnaire-based studies have been conducted in the area of premature termination of therapy ("drop-outs") (Hughes, 1995; Pekerik, 1992; Trepka, 1986). However, drop-outs are considered a distinct group from clients who never attend appointments and from clients who fail to keep some of their appointments (Trepka, 1986; Weighill, 1988). Drop-outs did not pose a problem for the current service under investigation.

The majority of studies investigating non-attendance have focused on generic clinical psychology service settings (Loumidis & Shropshire, 1997; Weighill et al., 1983). This Service differs from those included in previous studies in a number of respects, such as CMHT setting, referral process, geographical location, and identity of the Psychologist. There may be factors associated with client non-attendance that are unique to this
service (Wiseman and McBride, 1998). A new study is warranted to address this Service’s concerns.

The first objective of the present study was to establish what factors were associated with the two forms of client non-attendance previously identified, by collating data from case note files. The second objective was to establish what factors made it difficult for existing clients to attend appointments, using a questionnaire. Given the fact that mail questionnaires have generally low response rates (Young, Nicholson, & Davis, 1995) and due to the time constraints of this study, it was considered more practical to distribute a questionnaire to existing clients who had missed some of their appointments.

Method

Part 1 Analysis Of Case Note Files

Participants

The criteria for inclusion of a client’s details in the analysis were as follows:

1. The client was offered an initial appointment with the Clinical Psychologist in the year 2001.

2. Their file contained all the data listed in the “measures” section.

The resulting sample comprised 73 cases out of a potential sample of 88. 2 cases were excluded because of missing data and 7 because they constituted drop-outs. 6 cases were inaccessible due to the unknown location of files within the Trust.

Measures

The following data were collated for each eligible case.

1. Whether the client attended the initial appointment (Yes or No). A client was classified as a non-attender if they never attended any appointments without cancelling.
2. For those clients who did attend the initial appointment, the proportion of subsequent missed appointments. Missed appointments were defined as not attending an appointment without cancelling.

3. The total number of appointments attended.

4. Length of waiting time between the referral date and the date of the initial appointment that was offered (in weeks).

5. Gender.

6. Age at time of referral (in years).

7. Time of year of the initial appointment (month).


9. Referrer’s identity (General Practitioner, CMHT Psychiatrist, Other Psychiatrist, Community Psychiatric Nurse, Occupational Therapist, Other).

10. Location of GP’s Surgery (6 locations).

11. Shortest road distance between the client’s home and the treatment location (in miles). This was calculated using “AA Auto-route”\(^1\).

12. Ethnic Group (White, Other).


14. Occupation (Employed, Unemployed, Other).

15. Previous contact with psychiatric services (Yes or No).

Other factors of interest cited by previous investigators, such as socio-economic status, professional qualifications, type of transport used to get to the appointment, and age of children (Weighill et al., 1983), were not included because this information was not recorded for the majority of clients.

\(^1\) Available at http://www.theAA.co.uk/.
Part 11 Questionnaire

Participants/Procedure

The questionnaire was given to 9 clients who were attending therapy with the Consultant Clinical Psychologist. A 100% response rate was achieved. Clients were invited to participate by the Consultant Clinical Psychologist. On completion, the questionnaires were placed into a sealed box to preserve anonymity. However, due to administrative difficulties only 3 out of the 9 respondents had actually missed some of their appointments. Time constraints placed on the Consultant Clinical Psychologist also meant that the potential sample of 30 clients attending therapy over the one-month period of administration could not be targeted.

Measures

Respondents received a questionnaire with a cover sheet (see Appendix 1). The latter explained the purpose of the study, emphasised voluntary participation, confidentiality and anonymity and how future treatment within the service would not be affected by their decision to participate. If they had any concerns regarding the questionnaire they were invited to contact the researcher.

The questionnaire format was adapted from Hughes (1995). Items were selected on the basis of three common themes identified by previous researchers in this field of non-attendance: Everyday practical difficulties, perceived improvement, and dissatisfaction with the service (Garfield, 1963; Hughes, 1995; Weighill et al., 1983). Advice was obtained from the Clinical Psychologist regarding which items should be selected on the basis of their relevance to the service.

The questionnaire mainly comprised a list of 12 possible reasons why clients may have missed an appointment. Participants were asked to rate the importance of each reason on a 5 point scale ranging from “a very important reason” to “not a reason at all”.
Results

Part 1 Analyses Of Case Note Files

The first set of analyses compared the 15 clients who were offered an initial appointment but never attended any appointments with the 58 clients who did attend their initial appointment. The second set of analyses compared the 18 clients who attended their initial appointment but missed some of their subsequent appointments to the 40 clients who never missed appointments. T-tests were used for the continuous measures and chi-square tests for the nominal measures.

Homogeneity of variance was met for all the reported t-tests, with the exception of one (see *, Table 3) (Coakes & Stead, 1999, pp.66). In order to meet the low expected frequencies assumption for the chi-square tests (Coakes & Steed, 1999, pp.197), the original categories comprising the following variables were collapsed: referrer identity, occupation and time of year (refer to Tables 2 and 4, for the definition of the new categories). The Time of year variable was collapsed into two groups on the basis of British Summer Time.

Presenting problem and marital status could only be meaningfully collapsed for the missed appointment analyses. Chi-square tests on GP location for both forms of non-attendance were not valid because more than 20% of the cells had expected frequencies of less than 5 (Coakes & Steed, 1999, pp.197) and the groups could not be collapsed in a meaningful way.

Ethnic group was excluded from all analyses because all 73 cases were White and British.

Non-Attendance Rates At Initial Appointment

15 of the 73 cases (20.5%) analysed constituted non-attenders at initial and subsequent appointments. The results are shown in Tables 1 and 2.
It can be seen that there are no significant differences on any variable between clients who did not attend any appointments and those clients who did attend the initial appointment.

Table 1. A comparison of the clients who never attended any appointments with those who did attend their initial appointment, on the continuous measures using t-tests.

<table>
<thead>
<tr>
<th>Did Attend Initial Appointment (N=58)</th>
<th>Did not Attend Any Appointments (N=15)</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waiting time (weeks)</td>
<td></td>
<td>5.75</td>
<td>1.80</td>
<td>5.93</td>
<td>1.39</td>
<td>-.358</td>
<td>71</td>
<td>n.s.</td>
</tr>
<tr>
<td>Age at referral (years)</td>
<td></td>
<td>37.59</td>
<td>12.57</td>
<td>37.53</td>
<td>11.51</td>
<td>.015</td>
<td>71</td>
<td>n.s.</td>
</tr>
<tr>
<td>Travelling distance (miles)</td>
<td></td>
<td>4.39</td>
<td>3.57</td>
<td>4.29</td>
<td>4.20</td>
<td>.095</td>
<td>71</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Table 2. A comparison of the clients who never attended any appointments with those who did attend their initial appointment, on the nominal measures using chi-square tests.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Did Attend (N=58)</th>
<th>Did Not Attend (N=15)</th>
<th>χ²</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>20</td>
<td>6</td>
<td>.158</td>
<td>1</td>
<td>n.s.</td>
</tr>
<tr>
<td>Female</td>
<td>38</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referrer’s Identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GP</td>
<td>33</td>
<td>8</td>
<td>.061</td>
<td>1</td>
<td>n.s.</td>
</tr>
<tr>
<td>Other</td>
<td>25</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>40</td>
<td>8</td>
<td>1.293</td>
<td>1</td>
<td>n.s.</td>
</tr>
<tr>
<td>Not Employed</td>
<td>18</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time of Year for Initial Appt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-March</td>
<td>33</td>
<td>6</td>
<td>1.367</td>
<td>1</td>
<td>n.s.</td>
</tr>
<tr>
<td>April-Sept</td>
<td>25</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous Psychiatric Contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>29</td>
<td>7</td>
<td>.053</td>
<td>1</td>
<td>n.s.</td>
</tr>
<tr>
<td>No</td>
<td>29</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Missed Appointment Rates

18 of the 58 cases (31%) analysed for those who did attend the initial appointment constituted non-attendance of some subsequent appointments (missed appointments). The results are shown in Tables 3 and 4.

Table 3. A comparison of the clients who did attend the initial appointment but missed some subsequent appointments with those who did not miss any appointments, using t-tests on the continuous measures.

<table>
<thead>
<tr>
<th>Attended all Appointments (N=40)</th>
<th>Missed some Appointments (N=18)</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Standard Deviation</td>
<td>Mean Standard Deviation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiting time (weeks) 5.58 1.97</td>
<td>6.18 1.24</td>
<td>-1.161*</td>
<td>56</td>
<td>n.s.</td>
</tr>
<tr>
<td>Age at referral (years) 38.80 13.31</td>
<td>34.89 10.60</td>
<td>1.098</td>
<td>56</td>
<td>n.s.</td>
</tr>
<tr>
<td>Total number of appts. attended 3.68 3.31</td>
<td>4.72 2.93</td>
<td>-1.154</td>
<td>56</td>
<td>n.s.</td>
</tr>
<tr>
<td>Travelling distance (miles) 5.12 3.71</td>
<td>2.81 2.70</td>
<td>2.351</td>
<td>56</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

*Levene's Test for equality of variances was significant. Therefore, the t-test for "equal variances not assumed" was used.
Table 4. A comparison of the clients who attended the initial appointment but missed some subsequent appointments with those who did not miss any appointments, on the nominal measures using chi-square tests.

<table>
<thead>
<tr>
<th></th>
<th>Frequency Counts</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attended All (N=40)</td>
<td>Missed Some (N=18)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>8</td>
<td>1.146</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referrer's Identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GP</td>
<td>26</td>
<td>7</td>
<td>3.451</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>27</td>
<td>13</td>
<td>.129</td>
<td>1</td>
</tr>
<tr>
<td>Not Employed</td>
<td>13</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time of Year for Initial Appt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-March</td>
<td>27</td>
<td>6</td>
<td>5.909</td>
<td>1</td>
</tr>
<tr>
<td>April-Sept</td>
<td>13</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous Psychiatric Contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>19</td>
<td>10</td>
<td>.322</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenting Problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>14</td>
<td>6</td>
<td>1.976</td>
<td>2</td>
</tr>
<tr>
<td>Depression</td>
<td>7</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>22</td>
<td>8</td>
<td>.554</td>
<td>1</td>
</tr>
<tr>
<td>Not married/Other</td>
<td>18</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It can be seen that there was a significant difference between clients who attended all their appointments and those who missed some appointments on travelling distance ($t$ (56)=2.351, $p<0.05$). The average distance travelled by those who missed some appointments (2.81 miles) was shorter than for clients who did not miss appointments (5.12 miles).

Those clients who missed some appointments were more likely to have had their initial appointment in the spring/summer months. Whereas clients who never missed appointments tended to have the initial appointment in the winter/autumn months (Chi-Square=5.909, d.f. =1, $p<0.05$). There were no other reliable group differences.
However, when the Bonferroni correction (Howell, 1997, pp.362-369) is applied to adjust for multiple comparisons (i.e. p-values are multiplied by the total number of comparisons, 12), the above two findings are no longer strictly significant. Nonetheless, they are noteworthy as trends that may merit further examination in future research.

Part II Questionnaire Findings

Unfortunately, due to administrative errors, clients who had not missed any appointments completed 6 out of the 9 questionnaires. Given the limited sample size it was considered useful to include these in the findings, since these clients may still have experienced difficulties in attending appointments.

The ratings of the listed reasons on the 9 replies were analysed by assigning the following values to each point on the scale: “A very important reason”= 3, “A fairly important reason”= 2, “A minor reason”= 1, “Not a reason at all”= 0. No participant selected “Not Sure”. The mean values for each listed reason are shown in Table 5. Strictly speaking the data was ordinal, but the means were calculated rather than the medians because the majority of the latter were 0 and did not provide much useful information. Table 5 also shows the number of respondents who selected each suggested reason according to its degree of importance.
Table 5. The mean and frequency ratings of each listed reason and the associated standard deviations.

<table>
<thead>
<tr>
<th>Suggested Reason why it was difficult to attend an appointment</th>
<th>A Very Important Reason</th>
<th>A Fairly Important Reason</th>
<th>A Minor Reason</th>
<th>Not A Reason At All</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not knowing what will happen during therapy</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>0.55</td>
<td>1.13</td>
</tr>
<tr>
<td>Difficulty in travelling to the place of appointment</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>0.77</td>
<td>0.97</td>
</tr>
<tr>
<td>Not certain psychological therapy can help me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1.11</td>
<td>1.05</td>
</tr>
<tr>
<td>Having to wait a long time for my first appointment</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>0.77</td>
<td>1.05</td>
</tr>
<tr>
<td>Thinking that there may be other ways to tackle my problems</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1.11</td>
<td>0.93</td>
</tr>
<tr>
<td>Difficulty in finding the time to fit in an appointment</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>0.88</td>
<td>1.05</td>
</tr>
<tr>
<td>The appointment(s) offered were at inconvenient times</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>0.88</td>
<td>1.05</td>
</tr>
<tr>
<td>Finding it difficult to remember the appointment</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>0.22</td>
<td>0.44</td>
</tr>
<tr>
<td>Not agreeing to be referred for therapy in the first place</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>0.33</td>
<td>0.71</td>
</tr>
<tr>
<td>Unpleasant location for therapy</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>0.33</td>
<td>0.71</td>
</tr>
<tr>
<td>Not wanting to be seen as having a mental health problem</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>0.66</td>
<td>1</td>
</tr>
<tr>
<td>Sickness</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>0.66</td>
<td>1.12</td>
</tr>
</tbody>
</table>

It can be seen that the most commonly cited reasons were associated with either questioning the appropriateness of therapy as an option for help or timing/convenience of appointments. Overall it can be seen that there were a variety of reasons endorsed.

**Discussion**

In summary, the Clinical Psychologist at a CMHT was concerned about the perceived high rate of client non-attendance as it impacted on staff time and resources. In order to be in a position to develop effective interventions for increasing attendance it seemed appropriate to begin by identifying some of the factors influencing attendance (Munro & Blakey, 1995).
Part 1 Case Note Analyses

The retrospective case note analysis showed that 20% of those invited for an initial appointment did not attend. This is consistent with other research on non-compliance rates (Crawford et al., 1987; Hughes, 1995; Munro & Blakey, 1988; Philip, 1983; Weighill et al., 1983). This analysis did not reveal any significant effect of demographic factors on the two forms of non-attendance studied, which is consistent with the findings of other studies (Carpenter, et al., 1981).

When comparing those who attended the initial appointment, but missed some subsequent appointments with those who never missed appointments, there were two interesting trends observed. Although these trends were not significant it may be interesting to speculate on the factors that gave rise to them, in anticipation of future research on establishing their reliability.

Clients who missed appointments were more likely to have shorter travelling distances from their home to the CMHT, on average, than those clients who did not miss appointments. This may reflect a variety of factors idiosyncratic to the geographical area of the service. For example, the more affluent outlying areas may be predictive of the level of car ownership. In contrast, those living closer to the service may be dependent on public transport, which is known to be unreliable in this area.

Transportation factors may be worthy of investigation, since previous researchers have found an association between attendance and transport type (Weighill et al., 1983).

Attendance was poorer in the spring and summer months for clients who missed appointments. Many factors could be speculated for impacting on this trend, such as this is a holiday period for adults and children. However, the current study only looked at time of year for initial appointments; clients may not have commenced therapy until a later date. To analyse seasonal variations future work would need to identify the actual dates of those appointments missed.
It is important to emphasise that these trends did not reach statistical significance when the Bonferroni correction was applied. Non-significant findings may indicate that the demographic variables measured do not present a barrier to attendance. Alternatively, there may be many other factors, which do influence attendance that were not included in this study. For example, whether clients suggested the referral themselves (Munro & Blakey, 1988). In addition, the power of the study was difficult to determine; since it was uncertain what effect sizes the analyses needed to detect. Therefore some of the variables may not have reached statistical significance due to lack of power.

Despite these criticisms, the trends observed may be useful for planned comparisons should the study be replicated. Alternatively, clients could be sent a questionnaire or interviewed at the start of therapy regarding flexibility of appointments at certain times of year and transport issues. The results from which could provide the basis for intervention to enhance attendance (Markman & Beaney, 1990; Wiseman & McBride, 1998).

**Part II Questionnaire**

The findings from the questionnaire indicated that reasons cited by clients for difficulty in attending appointments were varied, with concerns over the utility of psychological therapy and whether alternative ways could help solve their problems, being the most frequent. A suggestion for addressing these issues could involve sending information on the nature of therapy prior to the client attending the appointment (Skuse, 1975). However, further work investigating client reasons for missing appointments would be a priority, given the following criticisms.

The questionnaire was originally designed for clients who had missed appointments, but 6 out of the 9 respondents had not missed any appointments. Therefore, any suggested reason that was cited by the former group as being an important factor in making it difficult to attend must be interpreted with caution.

Suggested improvements to the method of administering the questionnaire in the future would be to identify specific clients who had missed appointments and only give out questionnaires to them.
The questionnaire itself may be limited in content validity, by not tapping into the reasons most relevant to this client group. 10/13 suggested reasons had a mode of zero, which indicates "not a reason at all". This may be due to the inappropriate target group answering the questions, but it would be important for any future questionnaire to be piloted (time constraints in this study did not permit this).

The small sample may indicate that respondents were not representative of the target group regardless of the administrative errors. It would be useful to extend the distribution time period of the questionnaire and target all clients who missed appointments.

Without previous questionnaire-based research in this area it is difficult to determine if the findings are reliable. However, it may be reasonable to suggest that clients report a variety of reasons why it may be difficult to attend appointments, regardless of whether they actually attended or not. (Hillis, Alexander, Eagles, 1993).

**Conclusion**

In conclusion, this study found no effect of demographic factors on non-attendance. The questionnaire findings lead to a tentative suggestion that both practical factors (i.e. appointment times) and beliefs associated with the efficacy of therapy may be important determinants of attendance. While the results overall are inconclusive, they may provide a springboard from which more targeted research on non-attendance can be pursued. This in turn may lead to the development of effective interventions to enhance attendance.
References


Appendix A

A copy of the questionnaire and cover letter that was distributed to clients attending psychological therapy at the CMHT.
PLEASE HELP US EVALUATE OUR SERVICE

XXXX Community Mental Health Team Psychology Service would like to offer as good a service as possible to its clients. We understand that it can be difficult to attend appointments for psychological therapy. By attempting to understand the reasons behind this we hope to improve the service in the future.

Therefore, I have been asked, as a Trainee Clinical Psychologist from Surrey University, to find out why people may find it difficult to attend appointments.

If you have ever had to miss an appointment, I would be very grateful if you could spend 5 minutes filling in the attached questionnaire, which asks you about possible reasons why it was difficult to attend an appointment.

You are under no obligation to fill out this questionnaire. Any future treatment that you may receive from the service will not be affected by your decision.

If you choose to fill in the questionnaire, your responses will be seen only by myself. The service will be given a summary of the combined results of all the questionnaires that are returned.

You are not required to give your name so that all of your responses will be completely anonymous.

If you have any questions or concerns about the questionnaire then please do not hesitate to contact me. I am at XXX XXXX on Wednesdays, Thursdays and Friday morning.

Please return the questionnaire into the box marked “Returned Questionnaires”, in the waiting area.

We would really appreciate your help in this matter.

Thank you for your time.

Yours Sincerely

Trainee Clinical Psychologist
Supervised by XXXXX Consultant Clinical Psychologist
PLEASE HELP US EVALUATE OUR SERVICE

Below is a list of some of the possible reasons that could have made it difficult for you to attend an appointment for psychological therapy.

For each suggested reason please indicate to what extent it was a reason behind you finding it difficult to attend an appointment, by placing a tick in the appropriate box.

<table>
<thead>
<tr>
<th>Suggested reasons why it was difficult to attend an appointment.</th>
<th>Please tick one of the following boxes to indicate how important each suggested reason was in making it difficult to attend.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A very important reason</td>
</tr>
<tr>
<td>Not knowing what will happen during therapy</td>
<td></td>
</tr>
<tr>
<td>Difficulty in travelling to the place of appointment</td>
<td></td>
</tr>
<tr>
<td>Not certain that psychological therapy can help me</td>
<td></td>
</tr>
<tr>
<td>Having to wait a long time for my first appointment</td>
<td></td>
</tr>
<tr>
<td>Thinking that there may be other ways to tackle my problems</td>
<td></td>
</tr>
<tr>
<td>Difficulty in finding the time to fit in an appointment</td>
<td></td>
</tr>
<tr>
<td>The appointment(s) offered were at inconvenient times</td>
<td></td>
</tr>
<tr>
<td>Finding it difficult to remember the appointment</td>
<td></td>
</tr>
<tr>
<td>Not agreeing to be referred for therapy in the first place</td>
<td></td>
</tr>
<tr>
<td>Unpleasant location for therapy</td>
<td></td>
</tr>
<tr>
<td>Not wanting to be seen as having a mental health problem</td>
<td></td>
</tr>
<tr>
<td>Sickness</td>
<td></td>
</tr>
<tr>
<td>Other... please specify:</td>
<td></td>
</tr>
</tbody>
</table>

CONT...
If you have indicated that a suggested reason has played a part in making it difficult to attend then please give extra details below, if you feel it is appropriate:

*For example: you might explain that the appointment(s) offered at inconvenient times was a fairly important reason for you finding it difficult to attend because you have problems with childcare or arranging time off work.*

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Please indicate in the box below the total number of appointments you have been offered, regardless of whether you were able to attend or not:

[ ]

Please indicate in the box below how many appointments you have had to miss:

[ ]

If you have had to miss an appointment(s), please indicate below if you were able to telephone and cancel your appointment, by placing a tick in the appropriate box:

YES  NO

[ ] [ ]

If there are any improvements that could be made by the psychology service then please give details below:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

THANK YOU FOR YOUR HELP
Appendix B

A copy of the Ethical Scrutiny Form
The nature of the proposed project is such that I am satisfied that it will not require scrutiny by the trust’s ethical committee.

Name of Supervisor: ..................
Signature of Supervisor: ...............

Name of Trainee: DAWN-MARIE CROCKARD

Title of SRRP: AN INVESTIGATION INTO THE FACTORS ASSOCIATED WITH CLIENT NON-ATTENDANCE TO PSYCHOLOGICAL THERAPY AT A COMMUNITY MENTAL HEALTH TEAM

Date: 16/11/01..............................................
Appendix C

A Copy of a letter from the service confirming that I have presented this research to them.
TO WHOM IT MAY CONCERN

Dear Sirs,

I am writing to confirm that on 2nd September 2002 Dawn-Marie Crockard fed back to the Service the results of her Service Related Project entitled:

An investigation into the factors associated with client non-attendance to psychological therapy at a Community Mental Health Team

Yours faithfully,

[Signature]

Consultant Clinical Psychologist
MAJOR RESEARCH PROJECT

The effect of sheltered workshop environments on psychiatric service-users' well-being.

July 2004

Year 3
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Acknowledgements

The author would like to thank Dr Mick Finlay and Dr Alison Conning for their help and guidance in supervising the various stages of this work. The author would also like to thank the managers, technical support assistants and senior clinicians at the eight sheltered workshops, which was the setting for this research, for their invaluable input and support. Above all I would like to express my gratitude to the service-users for their time and effort in participating in this project.
Abstract

The global aim of this project was to examine the relationship between features of sheltered workshop environments and psychological well-being of service-users with severe and persistent mental health problems. Based on the predictions derived from Warr's model (1987) on work environment and mental health, specific research aims were as follows: First, to explicitly test whether linear or non-linear patterns were apparent in the relationship between work environment features and indices of job-specific (work-related) and context-free (global) well-being. Second, to examine whether job-specific measures of well-being showed a stronger relationship with work features than context-free measures. A cross-sectional correlation design was employed, using five self-report measures: The Work Environment Survey, an instrument originally developed by Dick and Shepherd (1994) to assess the presence of Warr's work features, two measures of context-free well-being; the Generalised Self-Efficacy Scale (Jerusalem & Schwarzer, 2003) and Rosenberg Self-Esteem Scale (Rosenberg, 1965), and two measures of job-specific well-being developed for the purpose of this study; the Self-Efficacy at Work and Self-Esteem at Work scales. The five measures were administered to a sample of seventy-one service-users at eight sheltered workshops within an NHS trust serving a wide rural area. The predicted linear and non-linear patterns were not found in the relationships between work features and well-being. Consistent with Warr's predictions, job-specific indices of well-being were found to have correlations of a significantly greater magnitude with certain work features than context-free measures. The limitations and implications of these findings and how they may contribute to future research on the work environment and well-being are discussed.
1.0 Introduction

The focus of this research project was to examine how features of the sheltered workshop environment affect the psychological well-being of service-users with severe and persistent mental health problems. In particular, it examines the impact of work features on global and work-related self-esteem and self-efficacy beliefs using Warr's model of work environments and mental health (Warr, 1987). Prior to examining the existing empirical and theoretical work relevant to this project, it is useful to give an overview of some of the various terminologies referred to in the vocational rehabilitation literature, which are pertinent to this project and to set the clinical context for this piece of work.

1.1 Definitions

1.1.1 Severe and persistent mental illness

At present there does not appear to be an internationally agreed definition of severe and persistent mental illness nor has it been consistently defined in clinical practice (Ruggeri, Leese, Thornicroft, Bisoffi, & Tansella, 2000; Slade, Powell, & Strathdee, 1996). However, in broad terms severe and persistent mental health problems refer to impaired functioning associated with a major mental disorder over a long period of time (c.f. Bachrach, 1988). People suffering long-term and serious psychiatric problems can be characterised by a high vulnerability to stress, deficits in coping skills, extreme dependency, as well as having difficulties with living skills, maintaining work in competitive jobs and managing interpersonal relationships (Test & Stein, 1978; Vostanis, 1990; Warner, Huxley, & Berg, 1999). The terms used here to refer to the long-term psychiatric population will represent this broad definition, since it is important to acknowledge that people with severe and persistent mental health problems are a heterogeneous group (Barker, 1994; Cook & Razzano, 2000).
1.1.2 Work versus employment

For the purpose of this study it is important to make a distinction between work and employment. After Hartley (1980), Shepherd defines work as “any activity, which is purposeful, which requires effort and discretion, which has social significance, and which operates within some set of structural parameters” (Shepherd, 1989, pp. 231). Thus work can involve a wide range of meaningful activity, including volunteering or participation in education or training (Department of Health, 2002). Employment on the other hand is “work linked to wages...it is an economic exchange between employer and employee within the context of a larger economic structure” (Shepherd, 1989, pp. 231). Thus work is not necessarily synonymous with employment (Ekdawi & Conning, 1994). Vocational rehabilitation represents this wider context for work.

1.1.3 Vocational Rehabilitation

Vocational Rehabilitation is an umbrella term used in the literature to encompass the many different types of work and work-based training schemes that have been developed and implemented within health and employment services for people with mental health problems (Young, 2001). There are three main types of work schemes/employment initiatives currently practised in the United Kingdom (UK) (Boardman, Grove, Perkins, & Shepherd, 2003; O'Flynn & Craig, 2001). These can be broadly categorised as sheltered employment, “open” supported employment and social firms. Table 1 provides a summary of the definitions for these three main types of work schemes.
Table 1. Definitions of the three main work schemes practised in the UK
(adapted from Schneider, 1998).

| **Social Firm** | a business created for the employment of people who are disadvantaged in the labour market. At least 30% of employees fit this description. Work opportunities should be equal between disadvantaged and non-disadvantaged employees. |
| **Supported Employment** | involves clients working in open employment with ongoing support from job coach or other support staff: clients are paid the going rate for the job, which can be full or part time. |
| **Sheltered Workshop** | where clients are engaged in work activities in a sheltered setting but due to a variety of factors do not receive a wage at the going rate for a job, but might receive therapeutic earnings, for example. Clients with a range of mental health problems are usually congregated together within these settings (O’Flynn & Craig, 2001; Young, 2001). |

1.2 Setting the Context

Work has long been considered fundamental to health and psychological well-being (c.f. Mee & Sumsion, 2001; Szymanski, 2000). For people who have experienced mental health problems, work is considered to be important in both maintaining mental health and in promoting recovery (Boardman et al., 2003; Grove, 1999; Provencher, Gregg, Mead, & Mueser, 2002). Recent consumer surveys of psychiatric service-users’ views on work have shown that the majority of this group are interested in engaging in work or employment activities for at least part of the week (Boardman, et al., 2003; Department of Health, 2002; Grove, 1999; Warner, 2002).

In a recent report on mental illness published by the British Psychological Society (BPS, 2000), it was argued “people who are already vulnerable as a result of mental health problems should have work opportunities that do not make their difficulties worse.” (BPS, 2000, pp. 55). A central determinant of work behaviour is considered to be the work environment (Dorio, Guitar, Solheim, Dvorkin, & Marine, 2002; Szymanski, 2000). The work environment can be both a potential source of stress as well as benefit (BPS, 2000; Schneider, 1998; Warner, 2002; Warr, 1987). Psychiatric
vocational rehabilitation researchers argue that the work environment itself must provide “the conditions that will actively assist in the promotion of a state of positive mental health” (Mills, 1991, pp.69).

Increasing access to a range of vocational and employment opportunities for people with mental health problems is central to the government’s plans for modernising mental health services in the UK (Boardman et al., 2003; Department of Health, 1999; 2002). Surveys of the provision of existing work schemes in the UK estimate that there are one hundred and thirty five organisations offering sheltered employment, seventy-seven offering supported employment and fifty providing social firms (Boardman, et al., 2003; Crowther, Marshall, & Bond, 2001; O’Flynn & Craig, 2001). However, the current responsibility for providing these work and employment services is divided between various organisations dealing with health and employment, such as the National Health Service (NHS), Social Services, and the Department for Education and Skills. As a consequence who has responsibility for what is not clearly defined. Many of the work projects use measurements of disability, recovery and reintegration that are poorly operationalised resulting in limited evidence being available about the effectiveness of different work schemes in helping people with mental health problems to work (Boardman et al., 2003; BPS, 2000; O’Flynn & Craig, 2001; Schneider, 1998).

It is important to understand the costs and benefits of different work environments for people with mental health problems (Schneider, 1998). There is a need to investigate in what way existing sheltered workshop environments positively and negatively affect the psychological well-being of service-users. Such research would help contribute to the evidence-base for making decisions about evaluating and shaping the direction of future work-based services. The empirical and theoretical work bearing on this matter will now be reviewed.

1.3 Work Environment and Psychological Well-Being

Historically, the social and psychological benefits of work for people with severe and enduring mental health problems have been much discussed in the literature in the UK (Bennett, 1970; Hamilton, 1964; Jahoda, 1981; Miles, 1971; Shepherd, 1989; Watts,
1978; Wing & Brown, 1970). These proposed benefits have included social identity and status, social contacts and supports, a means of occupying and structuring time, involvement and activity, and a sense of personal achievement, purpose and value (Boardman et al., 2003; British Psychological Society, 2000).

However, these early reports on the value of work were mainly anecdotal (cf. Bennett, 1970; Shepherd, 1989) or empirical studies (cf. Miles, 1970; Wing & Brown, 1970) that were undertaken some thirty to forty years ago in institutional settings within hospital-based industrial therapy units. Small sample sizes (e.g. Hamilton, 1964) and the use of clinical staff as raters (e.g. Miles, 1971), leading to potential biases in the results, are among some of the criticisms levied at these studies (Schneider, 1998). While such research has been clearly valuable in furthering our understanding of this area, these findings cannot necessarily be applied to current community mental health care and vocational rehabilitation practices. The nature of work opportunities as well as the needs and nature of the psychiatric population engaging in these activities have changed over time (O’Flynn & Craig, 2001; Pilling, 1988; Schneider, 1998).

Up until now, systematic empirical research has paid little attention to understanding the psychological impact of work environments from the perspective of the service-users (Cunningham, Wolbert, & Brockmeier, 2000; Honey, 2000; Rollins, Mueser, Bond, & Becker, 2002; Schneider, 1998). Researchers have argued that it is precisely these subjective accounts, which are likely to be a key indicator of future success in the workplace (Browne, 1999; Fabian, 2000; Honey, 2000; Young, 2001). It is only relatively recently that mainstream research has shifted its focus away from examining objective work-related outcomes (such as length of time employed, hours worked, earned wages) towards more subjective therapeutic outcomes of work, such as job satisfaction, subjective quality of life and self-esteem (Browne, 1999; McGilloway & Donnelly, 2000; Provencher, Gregg, Mead, & Mueser, 2002; Twamley, Jeste, & Lehman, 2003; Young, 2001).
1.3.1 Empirical evaluative studies on the impact of work schemes on psychological well-being

A small number of studies in America and beyond have observed that a change in vocational status (work versus no work) positively impacted on self-esteem and/or overall quality of life, as measured by the Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965) and the Quality of Life Interview (Lehman, 1983) (Bond et al., 2001; Creed, Bloxsome, & Johnston, 2001; Mueser, et al., 1997). One of the few studies to focus on therapeutic outcomes of vocational rehabilitation in Europe is McGilloway and Donnelly’s (2000) evaluation of an ACCEPT initiative in Ireland (Assessment Counselling and Coaching in Employment Placement and Training for people with mental health problems) (McGilloway & Donnelly, 2000). Post-training, statistically significant improvements were found in participants’ self-esteem scores (as measured by the RSE), as well as satisfaction with employment status, religion and purpose in life, social relationships and overall well-being (as measured by the Lancashire Quality of Life Profile; Oliver, Huxley, & Bridges, 1995) when compared to the baseline assessments. The authors concluded that meaningful work-related activity served a crucial role to the extent that it “provides a valued social position and strong sense of identity and self-worth” for people with mental health problems (McGilloway & Donnelly, 2000, pp. 207). However, evidence for the impact of work on global self-esteem, in particular, has been equivocal. Some studies have failed to identify improvements in self-esteem as a result of working (e.g. Torrey, Mueser, McHugo, & Drake, 2000).

Casper & Fishbein’s (2002) empirical study, on job satisfaction as a moderator of self-esteem for people with mental health problems, has helped to clarify the complex and inconsistent relationship between working and self-esteem (Drake, Becker, & Bond, 2001). The authors found that self-esteem, as measured by the RSE (Rosenberg, 1965), was positively related to satisfaction and success with work, as measured by the Need for Change Scales (Anthony, Cohen, & Farkus, 1990; Cohen, Farkus, & Cohen, 1992), and not merely to status of work (work versus no work) (Drake et al., 2003). This is consistent with the possibility that satisfying work experiences may increase self-esteem and dissatisfaction could erode it (Casper & Fishbein, 2002). It is
important to note that these findings were based on correlations, which does not prove causation.

This finding is consistent with research that has indicated how the work environment itself can be a potential source of stress as well as of benefit for people with mental health problems (cf. Bond et al., 2001; Floyd, Gregory, Murray, & Weichman, 1983; Pilling, 1988; Schneider, 1998), as indeed it can be for the general population (Warr, 1987). A useful example, which highlights this point, is Rollins and colleagues (Rollins, et al., 2002) exploratory study of service-user’s satisfaction with social networks at work. One hundred and four clients attending two types of work schemes were interviewed in this study. One of the employment programmes used was an approach equivalent to sheltered work schemes whilst the other was more in line with a supported employment approach. One of the key findings of interest to this discussion derives from clients attending the more sheltered work approach: this approach was associated with more satisfaction with supervisors’ relationships and more emotional support but also more stress from co-workers’ relationships than the supported employment approach (Rollins, et al., 2002). Thus the authors concluded that interpersonal relationships were sources of both support and of stress (Rollins et al., 2002). Reviews of supported employment programmes in America have drawn similar conclusions where ongoing support is considered essential to sustain success of job placements, but that this support needs to be tailored as too much support can be as damaging as too little (Cook & Razzano, 2000; O’Flynn & Craig, 2001).

The findings of the above studies provide some indication of how work can positively impact on the psychological well-being of people with severe and enduring mental health problems. However, the research has been predominantly cross-sectional, with relatively brief follow-up periods. Small sample sizes and participants selected on the basis of convenience rather than random sampling procedures also limit the generalisability of these findings. Furthermore, with the exception of the Rollins study (Rollins et al., 2002), these findings reflect the benefits of being exposed to work activity per se rather than highlighting the benefits of specific aspects of the work environment. According to Bond and colleagues (2001) one of the major limitations in the literature to date has been the “lack of clarity regarding the active ingredients
explaining improved nonvocational outcomes as a result of working” (Bond et al., 2001, pp. 490).

1.3.2 Exploratory and qualitative studies highlighting specific aspects of the work environment thought to impact on well-being

There have been several recent qualitative studies exploring the experience and effects of working from the perspective of persons with severe and persistent mental health problems, undertaken by investigators in the UK and beyond. These are a useful source of evidence for highlighting specific aspects of the work environment thought to positively and negatively affect subjective well-being (Drake, Becker, & Bond, 2003).

For example, Scheid & Anderson (1995) interviewed members of a community support programme in America about what people liked and disliked about working. They concluded that a supportive work environment was a key factor in enabling people to maintain jobs, but work that was perceived as too demanding was a source of stress. Other studies have highlighted the importance of having a safe and secure work environment to maintain mental health as well as the negative psychological impact of both under-demanding and over-stimulating environments (Mee & Sumption, 2001; Nagle, Valiant, Cook, & Polatajko, 2002).

Frequent themes to emerge from various qualitative studies highlight several other aspects of the work environment valued by individuals with severe mental health problems. These include the opportunity to develop skills (cf. Mitchell, 1998; Nagle et al., 2002), have variety within work tasks (cf. Mitchell, 1998; Nagle et al., 2002; Mee & Sumson, 2001), have control and structure in the day (cf. Mee & Sumson, 2001; Nagle et al., 2002; Scheid & Anderson, 1995) and to engage in work perceived as meaningful, which provides a sense of purpose and/or offers a self-empowering experience (Mee & Sumson, 2001; Mitchell, 1998; Nagle et al., 2002; Provencher et al., 2002).
These findings are consistent with recent surveys undertaken in the UK. For example, the Mental Health Foundation asked five hundred people who had experienced mental health problems about their experiences of mental health in the workplace (Warner, 2002). Nearly two out of three respondents believed that unrealistic workload, too high expectations or too long hours had caused or exacerbated their mental health problems. Too much support in the workplace (over-protection) was also a focus of people’s criticism of their work experiences (Warner, 2002). It is of interest to note that aspects of the work environment highlighted as sources of stress and benefit, from these recent investigations, are consistent with those work features proposed by earlier studies undertaken in the UK (cf. Floyd, 1983; Miles, 1971).

However, many of the above studies have been descriptive and/or qualitative in nature and may not generalise beyond the samples studied. In addition, the majority of studies reviewed so far were undertaken in America or Canada (e.g. Bond et al., 2001; Mueser et al., 1997; Provencher et al., 2002; Nagle et al., 2002; Scheid & Anderson, 1995; Torrey et al., 2000). While they offer invaluable insights into the importance of taking into account the conditions in which a person with mental health problems works, it would be useful to have more studies within the British context of vocational rehabilitation (Grove, 1988; Grove, 1999; Mills, 1991; O’Flynn & Craig, 2001; Schneider, 1998). Dick and Shepherd pointed out ten years ago that it is difficult to draw together data which has been derived from diverse sources without a conceptual framework to help in understanding it (Dick & Shepherd, 1994, pp.388). From the above overview of the most recent literature it appears that this argument still applies.

1.4 Warr’s Model for the Study of Work Environments and Mental Health

Within the vocational rehabilitation literature, Warr’s model (1987, 1994) appears to be the most commonly cited framework in helping to understand the impact of the work environment on mental health. Warr (1987) identified nine principle features of work environments thought to affect mental health and attempted to clarify the processes through which these environmental features influence mental health (Warr, 1987; 1994). The nine environmental features are viewed as categories within which
Table 2. *Nine principle environmental categories and subcategories identified by Warr (1987) (adapted from Warr, 1987, pp. 282).*

<table>
<thead>
<tr>
<th>Principle Environmental Feature</th>
<th>Subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opportunity for Control</td>
<td>Opportunity for intrinsic control, over job content and procedures</td>
</tr>
<tr>
<td></td>
<td>Level and type of pacing</td>
</tr>
<tr>
<td></td>
<td>Opportunity for extrinsic control, over employment conditions and company policies</td>
</tr>
<tr>
<td></td>
<td>Control over other environmental features within the model</td>
</tr>
<tr>
<td>2. Opportunity for Skill Use</td>
<td>Opportunity to use current skills</td>
</tr>
<tr>
<td></td>
<td>Opportunity to acquire new skills</td>
</tr>
<tr>
<td>3. Externally Generated Goals</td>
<td>Intrinsic job demands</td>
</tr>
<tr>
<td></td>
<td>Conflicts between demands</td>
</tr>
<tr>
<td></td>
<td>Task identity</td>
</tr>
<tr>
<td></td>
<td>Traction and Flow</td>
</tr>
<tr>
<td></td>
<td>Time demands</td>
</tr>
<tr>
<td>4. Variety</td>
<td>Intrinsic variety, within job tasks</td>
</tr>
<tr>
<td></td>
<td>Length of cycle time</td>
</tr>
<tr>
<td></td>
<td>Extrinsic variety, in respect of job contexts</td>
</tr>
<tr>
<td>5. Environmental Clarity</td>
<td>Information about the consequences of actions (feedback)</td>
</tr>
<tr>
<td></td>
<td>Information about future developments (job future ambiguity versus clarity)</td>
</tr>
<tr>
<td></td>
<td>Information about role requirements and performance standards (role ambiguity versus clarity)</td>
</tr>
<tr>
<td>6. Availability of Money</td>
<td>Income relative to need (deprivation/adequacy)</td>
</tr>
<tr>
<td></td>
<td>Income relative to other people (inequity/fairness)</td>
</tr>
<tr>
<td>7. Physical Security</td>
<td>Temperature, noise, illumination, vibration</td>
</tr>
<tr>
<td></td>
<td>Absence of danger</td>
</tr>
<tr>
<td></td>
<td>Good equipment design</td>
</tr>
<tr>
<td>8. Opportunity for Interpersonal Contact</td>
<td>Amount of interaction which is possible (level of contact)</td>
</tr>
<tr>
<td></td>
<td>Quality of available interaction (friendship opportunities, social support)</td>
</tr>
<tr>
<td></td>
<td>Privacy and personal territory</td>
</tr>
<tr>
<td>9. Valued Social Position</td>
<td>Esteem from roles</td>
</tr>
<tr>
<td></td>
<td>Personal meaningfulness of job</td>
</tr>
</tbody>
</table>
Warr proposed that mental health was influenced by the environment in a way similar to the effect of vitamins on physical health. His framework is sometimes referred to as the “vitamin model” (Warr, 1987; 1994).

1.4.1 Vitamin model

As Warr (1987) observed the availability of vitamins are important for physical health up to but not beyond a certain level. When vitamins are taken at low levels, vitamin deficiency will give rise to physiological impairment and ill health, but once the optimal levels of vitamin intake have been achieved there are no additional benefits to physical health by taking further quantities (Warr, 1987). This applies to vitamin C and E (Warr, 1987). However, other vitamins such as, vitamin A and D become harmful to physical health when taken in very large quantities (Warr, 1987).

Warr suggested that the principle environmental features are important to mental health in a similar way to vitamins on physical health. The absence of environmental features may be associated with impairment in mental health, but their presence beyond a certain level will not produce any additional benefit (Warr, 1987). Warr refers to this relationship as “Constant Effect” (CE). Certain environmental features, however, may come to have a negative impact on mental health at extremely high levels. Warr describes this pattern as an “Additional Decrement” (AD) effect (Warr, 1987; 1994). Figure 1 provides an illustration of the nature of the AD and CE relationship between work environment features and mental health.
Figure 1. An illustration of the two assumed relationships between work environment and mental health

Within this “Vitamin Model” Warr (1987) identifies six of the principle environmental features as having an AD relationship to mental health and three with a CE relationship to mental health. Table 3 highlights the suggested pattern.

Table 3. AD and CE patterns proposed for each of the nine principle environmental categories (adapted from Warr, 1994, pp. 88).

<table>
<thead>
<tr>
<th>Principle Environmental Feature</th>
<th>Nature of Relationship to Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity for Control</td>
<td>AD</td>
</tr>
<tr>
<td>Opportunity for Skill Use</td>
<td>AD</td>
</tr>
<tr>
<td>Externally Generated Goals</td>
<td>AD</td>
</tr>
<tr>
<td>Variety</td>
<td>AD</td>
</tr>
<tr>
<td>Environmental Clarity</td>
<td>AD</td>
</tr>
<tr>
<td>Availability of Money</td>
<td>CE</td>
</tr>
<tr>
<td>Physical Security</td>
<td>CE</td>
</tr>
<tr>
<td>Opportunity for Interpersonal Contact</td>
<td>AD</td>
</tr>
<tr>
<td>Valued Social Position</td>
<td>CE</td>
</tr>
</tbody>
</table>

Warr also distinguished between two different levels of mental health. Firstly, he proposed that it can be measured at a general level, without the restriction of a particular setting. He referred to this as “context-free” mental health. Mental health
can also be measured in one limited situation, as in respect of jobs. Warr referred to this as “context-specific” mental health (Warr, 1994, pp. 85).

Mental health includes both affective well-being and competence. Affective well-being refers to feelings of distress, life satisfaction, anxiety, depression, and self-esteem. Competence refers to a person’s ability to handle life’s problems and act on the environment with some level of success. Self-efficacy can be used as a measure of competence (Warr, 1994). Warr proposed that an individual’s perception of the presence of different features of the work environment is related to their feelings of well-being and sense of competence at work (“context-specific” mental health). In turn these are related to their general mental health (“context-free”) (Dick & Shepherd, 1994; Warr, 1987; 1994). Warr predicted that a more direct (stronger), relationship would be present between environmental features and context-specific mental health than with context-free mental health (Warr, 1994).

In summary, the Vitamin model provides a framework to characterise work environments in terms of nine broad categories. This framework emphasises that the majority of job features can both promote and impair mental health, depending on the amount that is present in the environment (Warr, 1987, 1994). It proposes two different patterns of relationships between work environment features and mental health, an AD relationship, which can be described as a curvilinear relationship, and a CE relationship, which reaches a constant level. Finally, Warr predicted that context-specific mental health is likely to show a more direct relationship to work environment features than context-free mental health (Warr, 1987, 1994).

1.4.2 Support for the model

Warr’s model was derived from an extensive review of studies evaluating the effect of different work environment features on employee mental health in the general population (Warr, 1987). Aspects of the model have been validated for the general population by other studies (e.g. Kelloway & Barling, 1991; Sevastos, Smith, & Cordery, 1992).
It has been argued that there is no apriori reason why this model should not be applicable to a psychiatric population (Dick & Shepherd, 1994; Shepherd, 1989). Qualitative research has highlighted that people suffering from severe and enduring mental health problems can be affected by the same environmental work features as affect the mental health of the general population (Mee & Sumsion, 2001; Nagle et al., 2002). Studies have also indicated that work place features can be both sources of stress and benefit (e.g. Rollins et al., Scheid & Anderson, 1995). The latter is consistent with Warr’s (1994) predictions of a curvilinear relationship between aspects of work and mental health. Casper and Fishbein’s (2002) study on job satisfaction as a moderator of self-esteem also lends tentative support to the proposition that job-related mental well-being could impact on global well-being.

Only one study to date has set out to empirically test Warr’s model in sheltered workshops for clients with severe mental health problems (Dick & Shepherd, 1994). Dick and Shepherd’s study (1994) will now be reviewed in more detail since it forms the basis of the present project.

1.5 An empirical study of Warr’s model in sheltered workshops (Dick & Shepherd, 1994)

Dick and Shepherd’s study (1994) had two broad aims. Firstly, given that there was no single measure available of Warr’s environmental features at the time of the study for a psychiatric population (or indeed since then, as far as the author is aware), the authors developed an instrument called the Work Environment Survey (WES). The WES was designed to cover the key environmental categories, proposed by Warr (1987) using a format that could be completed with relative ease by service-users (Dick & Shepherd, 1994). It assessed client’s perceptions of the degree to which different work features were present in the sheltered workshop environments.

The WES was developed initially from exploratory interviews held with individuals who attended a psychiatric day centre who were presently working or who had worked in the past. The interviews sought to determine the relative importance of each of the twenty-seven subcategories of environmental features identified by Warr
(which were encompassed by the nine main dimensions), as perceived by these clients in relation to their work experience. From the interviews thirteen items were identified as most relevant and these were operationalised by the authors in an initial version of the WES. This was piloted on ten participants from one of the workshops (these participants were excluded from the actual study). From the feedback, the final version of the WES was developed, consisting of fourteen items, which examined the work environment across all nine key dimensions and included some of the subcategories to varying degrees (Dick & Shepherd, 1994; see Table 4.).

**Table 4. Warr's (1989) work environment dimensions and associated subcategories used on the WES (adapted from Dick & Shepherd, 1994, pp. 388).**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Sub Category/definition</th>
<th>WES Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opportunity for Control</td>
<td>A. Intrinsic control, over job content and procedures</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>B. Extrinsic control, over employment conditions and workshop policies</td>
<td>13</td>
</tr>
<tr>
<td>2. Variety</td>
<td>Amount of variety in type of work</td>
<td>2</td>
</tr>
<tr>
<td>3. Externally Generated Goals</td>
<td>A. Traction – jobs designated the responsibility of the particular individual</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>B. Time demands – amount of work expected of the individual</td>
<td>6</td>
</tr>
<tr>
<td>4. Environmental Clarity</td>
<td>A. Information about the consequences of actions (feedback)</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>B. Information about role requirements and performance standards (role ambiguity versus clarity)</td>
<td>3 7</td>
</tr>
<tr>
<td></td>
<td>C. Information about future job security</td>
<td>10</td>
</tr>
<tr>
<td>5. Opportunity for Interpersonal Contact</td>
<td>Amount of contact necessary to carry out work tasks</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>B. Quality of available interaction (friendship opportunities)</td>
<td>4</td>
</tr>
<tr>
<td>6. Opportunity for Skill Use</td>
<td>Opportunity to use current skills</td>
<td>14</td>
</tr>
<tr>
<td>7. Availability of Money</td>
<td>Amount of pay available</td>
<td>11</td>
</tr>
<tr>
<td>8. Physical Security</td>
<td>Physical comfort of the workshop building – temperature, noise, etc</td>
<td>12</td>
</tr>
<tr>
<td>9. Valued Social Position</td>
<td>Social value attached to the role of employee at the workshop</td>
<td>9</td>
</tr>
</tbody>
</table>

Secondly, the study aimed to investigate the nature of the relationship between the different work environment features and mental health. Based on the predictions made by Warr (1987), the authors focused on exploring whether linear and non-linear patterns were present in the relationship of work environment features (as measured by the WES) to two measures of global psychological well-being, the General Health Questionnaire (GHQ-28; Goldberg & Hillier, 1979) and the Rosenberg Self Esteem.
Scale (Rosenberg, 1965) (Dick & Shepherd, 1994). The latter two were considered reliable measures of context-free mental health.

In order to establish the nature of any relationship between psychological well-being and ratings of the work environment, the authors conducted stepwise multiple regressions, using the GHQ-28 scores and self-esteem scores, as the dependent variables (DV's) and the scores of all the WES items and a transformation of the WES scores as independent variables (IV's). This transformation was the square of the deviation from the centre of the scale (4.5). The purpose of this procedure was to identify any curvilinear relationships between the WES and the GHQ-28 or self-esteem scores, since scores near the centre of the scale on the WES are transformed into low values and scores at either end transformed into high values (Dick & Shepherd, 1994). The regression analyses therefore investigated whether the WES items were associated with the dependent variables in either a linear or curvilinear manner (Dick & Shepherd, 1994, pp. 394).

Contrary to the predictions made from Warr's model, only one feature of the work environment was found to be associated with global well-being. Clients' level of self-esteem showed a positive linear relationship with the degree of importance they felt the general public viewed their job (Valued Social Position feature) (Dick & Shepherd, 1994). The relationship between an individual's level of self-esteem and the sense of social value attached to the job was analogous to the CE pattern described by Warr (1987). A perception of low social value of the work corresponded with low self-esteem, whereas increasing perceptions of social value corresponded with higher levels of self-esteem. Very high levels of social value did not appear to be detrimental to mental health. No significant curvilinear relations were found (Dick & Shepherd, 1994).

This study represented an important step in trying to integrate past research on work environment and well-being into a more coherent form by drawing from a theoretical framework shown to be useful for the general population, testing its predictions empirically and developing a new measure for assessing the presence of work features.
applicable to a psychiatric sample. However, in light of the fact that this study only demonstrated one significant association, it is important to consider the limitations.

Firstly, one of the reasons the authors may not have found significant results may be due to problems with the reliability of the WES measure. Despite conducting relatively “extensive” pilot work (Dick & Shepherd, 1994, pp. 395), in developing the WES, the majority of the items only showed moderate levels of test-retest reliability. Three of the items did not reach statistical significance at all (Item 4: Interpersonal Contact (Quality), Item 10: Environmental clarity (Feedback), and Item 12: Physical Security. Thus, as the authors themselves acknowledged, the participants’ interpretations of some of the items may have shown temporal instability (i.e. responses could have varied each time they completed the questionnaire). Such variability may indicate a problem with the wording of the items (Dick & Shepherd, 1994).

Secondly, the study drew participants from a restricted range of only four workshops. As Dick and Shepherd (1994) suggested “homogeneity across work settings might also have contributed to an attenuation of the relationships between environmental features and indices of psychological well-being” (pp. 396).

Finally, the authors employed global measures of psychological well-being (context-free mental health), only one of which yielded a significant result. Yet according to Warr’s model (1987, 1994), it is predicted that context-specific measures (i.e. job-related well-being) would be more sensitive for detecting an association with work environment features. Dick and Shepherd (1994) suggested that any future test of Warr’s model would need to develop and employ context-specific measures of mental health appropriate for use with psychiatric populations.

1.6 The Current Study

The overall objective of the project described here was to undertake a partial replication and extension of Dick and Shepherd’s study (1994). The aim of the present study was to examine how different features of sheltered workshop
environments affect job-specific and context-free psychological well-being of people with severe and enduring mental health problems, using Warr’s model (1987). As only one study to date had tested Warr’s model in sheltered workshop environments (Dick & Shepherd, 1994), the present research used a cross-sectional correlational design. It was considered important to first identify whether patterns of associations existed before undertaking a more extensive longitudinal study.

The global aim was subdivided into more specific research aims, which also incorporated those issues that had not been satisfactorily addressed by the original study. Firstly, in order to create greater heterogeneity across work settings the current study aimed to draw the participants from eight sheltered workshops, which offered a diverse range of work-related activities ranging from the more traditional industrial therapy type of work to more vocationally and socially oriented business work.

Secondly, in order to provide a direct test of Warr’s (1987) predictions for the relationship between different levels of mental health and the presence of work environment features, the current project proposed to employ two measures of context-free well-being and two measures of job-specific well-being, using self-esteem and self-efficacy as indices of psychological well-being. Self-esteem is related to emotional states that directly implicate the self (Brown & Marshall, 2001). It refers to the global evaluation of one’s own characteristics and attributes and is considered to be one of the most powerful elements in human motivation (Sorgaard et al., 2001). Lack of self-esteem is associated with various forms of distress including anxiety and depression (Elliot, 1986). People with low self-esteem also tend to have low self-efficacy (Scholz, Dona, Sud, & Schwarzer, 2002). Self-efficacy is commonly understood as being domain-specific, referring to the belief that one is capable of performing the behaviours required to produce a desired outcome within a certain domain or situation (Leganger, Kraft, & Roysamb, 2000; Scholz et al., 2002). However, some researchers have also conceptualised a generalised sense of self-efficacy. This refers to global confidence in one’s coping ability across a wide range of demanding or novel situations (Scholz et al., 2002; Schwarzer, 1992).
The constructs of self-esteem and self-efficacy beliefs have been used in psychological research in many domains (including vocational rehabilitation) as indicators of global well-being (Casper & Fishbein, 2002; Creed, Bloxsom, Johnston, 2001; Johnston, Wright, Weinman, 1995; Scholz, Dona, Sud, & Schwarzer, 2002). Standard measures are available for the global evaluation of self-esteem and self-efficacy beliefs, respectively (Rosenberg, 1965; Schwarzer, 1992). A literature search did not reveal any measures available for assessing work-related psychological well-being in a psychiatric population based in the UK. Existing measures of global self-esteem and generalised self-efficacy were therefore adapted to provide additional measures of job-specific self-esteem and self-efficacy. It is proposed in the literature that measures of generalised self-efficacy can be adapted to cover the particular content of the domain under investigation (Schwarzer & Fuchs, 1995).

The third research aim was to attempt to improve the reliability of the WES, by rewording three of the items that had yielded low test-retest reliabilities in the original study, conducting a replication of the test-retest procedure employed by Dick and Shepherd (1994), and exploring whether composite scales could be formed from the WES items.

A fourth aim was to establish the test-retest reliability of the two newly developed job-specific measures, as well as the convergent validity and internal consistency of all four indices of psychological well-being. Such information would enable researchers in the field of vocational rehabilitation to know whether these measures could be employed in the future to assess the psychological well-being of people with severe and enduring mental health problems.

Finally, this study aimed to examine whether linear and non-linear patterns were apparent in the relationship between sheltered work environment features (as measured by the WES) (Dick and Shepherd, 1994), and each of the four indices of psychological well-being (job-specific self-esteem and job-specific self-efficacy, global self-esteem and generalised self-efficacy).
1.6.1 Hypotheses

This study planned to test a number of specific hypotheses that were derived from the predictions made by Warr's model (1987).

First, three work features assessed on the WES; Valued Social Position, Availability of Money and Physical Security, would be expected to have a linear relationship with indices of psychological well-being, as predicted by Warr's CE model (Warr, 1987, 1994).

Second, the remaining eleven work features assessed on the WES (see below) would be expected to have a curvilinear relationship with indices of psychological well-being, as predicted by Warr's AD model (Warr, 1987, 1994):

- Opportunity for Control (*Intrinsic*)
- Variety
- Environmental Clarity (*Role Requirements*)
- Interpersonal Contact (*Quality*)
- Externally Generated Goals (*Traction*)
- Externally Generated Goals (*Time Demands*)
- Environmental Clarity (*Certainty of Future*)
- Interpersonal Contact (*Quantity*)
- Environmental Clarity (*Feedback*)
- Opportunity for Control (*Extrinsic*)
- Opportunity for Skill Use

Third, Warr's model (1987) suggested that job-specific mental health would show a more direct relationship with work features than context-free indices. It was therefore predicted that the relationship between work features and job-specific indices of psychological well-being would be stronger than those with the context-free measures.
2.0 Method

2.1 Design

A cross-sectional correlational design was used to examine the relationships between work environment features and indices of psychological well-being in sheltered workshops for people with severe and enduring mental health problems. The independent variables were items on the WES and the dependent variables were two measures of context-free well-being and two measures of job-specific well-being.

2.2 Participants and Setting

Participants were recruited from a population of employees at eight sheltered workshops run by the work services division within an NHS trust that covered a wide rural area and several commuter belt towns. The work services division served the vocational training, occupational and employment needs of people with mental health problems and learning disabilities who lived within the geographical boundaries covered by the Trust. The inclusion criteria were adapted from Dick and Shepherd (1994). Following Dick and Shepherd (1994) workers were included in the sample if they: (a) were referred to the sheltered workshops primarily because of psychiatric difficulties; (b) were between the ages of 18 and 65 years old inclusive; (c) had attended the workshop for a minimum of one month; (d) had attended for a minimum of two days per week; (e) did not attend any other workshop for more than two days a week; and (f) were English speaking and literate. In order to identify those service-users with severe and enduring mental health problems, an additional inclusion criterion was set by the current author, which required participants to be on the enhanced Care Programme Approach (CPA). The CPA provides a systematic approach to caring for people with mental health difficulties who need the support of a number of services and agencies. The CPA process has two levels according to the complexity of the person’s needs and services required. Service-users on enhanced CPA tend to have some of the following characteristics:

- Multiple care needs, and/or are only willing to co-operate with one professional or agency but still have multiple care needs
- Require more frequent and intensive intervention
- Mental health problems co-existing with other problems such as substance misuse
- At risk of harming themselves or others
- More likely to disengage with services (Lekh & Oddoye, 2002).

However, many potential participants only worked one day a week at the workshops and concerns over recruiting the necessary number of participants were raised. Therefore, the inclusion criteria was expanded to include service-users who attended a workshop for a minimum of one day a week providing that they did not attend another workshop for more than one day a week. The Operational Manager responsible for the work services estimated a potential sample size of around one hundred service-users who met the criteria for inclusion.

An a priori power analysis using G*Power (Erdfelder, Faul, & Buchner, 1996), suggested that to detect a "medium" effect using parametric analyses (i.e. Pearson's Product Moment Correlations), a sample size of 64 would be sufficient, for conventional levels of power (.80) and significance (.05). In order to achieve the same level of power when using non-parametric analyses (i.e. Spearman's Rho) for detecting a medium effect size, a sample size of 70 would be sufficient, following Clark-Carter's (2002) recommendation (i.e. multiply the parametric equivalent of sample size by 1.1). A medium effect size was chosen because in order for the findings to be clinically useful, the effect of work environment features on well-being would need to be reasonably substantial.

A description of the workshops and the proportion of participants recruited from each are provided in Table 5.
### Table 5. Descriptions of the eight workshops and proportion of participants recruited from each.

<table>
<thead>
<tr>
<th>Workshop</th>
<th>Description (White, 1999)</th>
<th>Number of Participants Recruited from Each Workshop (N = 71)</th>
<th>Frequency Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Offers training &amp; work experience in office &amp; computer skills</td>
<td>14</td>
<td>19.7</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Provides an industrial work environment where a variety of assembly and packaging work is undertaken for local companies</td>
<td>12</td>
<td>16.9</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Specialises in creating and producing art and craft items which are sold directly through a local retail outlet or craft fairs</td>
<td>19</td>
<td>26.8</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Offers training &amp; work experience in office &amp; computer skills</td>
<td>4</td>
<td>5.6</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>A picture framing and woodwork project selling products directly to the public</td>
<td>7</td>
<td>9.9</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>A print and finishing firm offering services directly to local business and/or individual customers</td>
<td>3</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>A travel agency which offers vocational training in a generic range of office and business skills</td>
<td>3</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>A community garden centre which sells products and offers contract gardening services directly to the public</td>
<td>9</td>
<td>12.7</td>
<td></td>
</tr>
</tbody>
</table>

Eighty-seven service-users, who were identified as meeting the criteria for inclusion and for whom approval to approach was given by the managers and senior clinicians, were approached by the author. Seventy-one participants (42 males and 29 females) gave informed consent and completed the questionnaires (details of the consent procedure will be given below). Sixteen potential participants declined to participate. Information pertaining to a number of individual demographic and vocational characteristics was obtained from a demographic questionnaire (Appendix A). Sample characteristics are summarised in Tables 6a and 6b. Participants were between the ages of 24 years and 63 years old (mean age = 46 years, S.D. = 8.9). Ninety-four percent of the total sample (67 participants) reported having a British cultural background and ninety-nine percent (70 participants) rated their ethnic group as white. Eighty-three percent (59 participants) of the total sample reported that they were taking
some form of psychiatric medication, forty-four percent of which was classified as antipsychotic medication and the remainder as antidepressant and/or anxiolytic medication (British Medical Association & Royal Pharmaceutical Society, 2003).

Eighty-nine percent (63 participants) of the total sample reported having a psychiatric diagnosis; within which the most commonly reported diagnoses could be classified as mood and/or anxiety disorders (45%), closely followed by schizophrenia (35%). Eight participants out of the total sample reported that they did not know their diagnosis.

The majority of participants (70%) had been employed at the workshops for at least one year (mean = 40.72 months, S.D. = 38.74). Fifty-five percent of the sample spent at least two days a week working at the workshops (mean = 2.27, S.D. = 1.37) and eighty-three percent did not attend any other workshops. Participants frequently reported having difficulty in recalling full details of their employment and vocational history. To minimise any potential frustration experienced by participants, the researcher asked participants to limit their recall to the duration and nature of their most recent and longest held jobs prior to their attendance at the workshops. About six percent of participants could not recall the nature or the duration of the longest job held and twenty percent could not recall the nature or duration of their most recent job. A third of participants' job descriptions could be classified within the elementary or process, plant and machine operative categories derived from the Standard Occupational Classification (2000). Forty-five percent (32 participants) reported having no academic qualifications, but fifty-five percent reported having undertaken some form of vocational training (39 participants).

Table 6a. Self-reported demographic and vocational characteristics of the sample (continuous variables).

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>46.41</td>
<td>8.88</td>
<td>24-63</td>
<td>71</td>
</tr>
<tr>
<td>Number of days at current workshop (days)</td>
<td>2.27</td>
<td>1.37</td>
<td>1-5</td>
<td>71</td>
</tr>
<tr>
<td>Number of days working at other workshops (days)</td>
<td>0.18</td>
<td>0.46</td>
<td>0-2</td>
<td>71</td>
</tr>
<tr>
<td>Length of time at workshop (months)</td>
<td>40.72</td>
<td>38.74</td>
<td>1-126</td>
<td>71</td>
</tr>
<tr>
<td>Length of most recent job (months)</td>
<td>77.18</td>
<td>76.38</td>
<td>1-300</td>
<td>55</td>
</tr>
<tr>
<td>Length of longest held job (months)</td>
<td>99.91</td>
<td>75.00</td>
<td>6-300</td>
<td>66</td>
</tr>
<tr>
<td>Age on leaving school</td>
<td>16.09</td>
<td>1.11</td>
<td>14-20</td>
<td>70</td>
</tr>
</tbody>
</table>
Table 6b. Self-reported demographic and vocational characteristics of the sample (categorical variables) (N = 71).

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>42</td>
<td>59.2</td>
</tr>
<tr>
<td>Female</td>
<td>29</td>
<td>40.8</td>
</tr>
<tr>
<td>Ethnic Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>70</td>
<td>98.6</td>
</tr>
<tr>
<td>Mixed</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Cultural Background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>British</td>
<td>67</td>
<td>94.4</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>5.6</td>
</tr>
<tr>
<td>Current Main Medication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AntiPsychotic</td>
<td>31</td>
<td>43.7</td>
</tr>
<tr>
<td>Antidepressant</td>
<td>22</td>
<td>31.0</td>
</tr>
<tr>
<td>Anxiolytics</td>
<td>6</td>
<td>8.5</td>
</tr>
<tr>
<td>Not known</td>
<td>12</td>
<td>16.9</td>
</tr>
<tr>
<td>Primary Diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>25</td>
<td>35.2</td>
</tr>
<tr>
<td>Mood and/or Anxiety Disorders</td>
<td>32</td>
<td>45.1</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>8.4</td>
</tr>
<tr>
<td>Not known</td>
<td>8</td>
<td>11.3</td>
</tr>
<tr>
<td>Attendance at Another Workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES</td>
<td>12</td>
<td>16.9</td>
</tr>
<tr>
<td>NO</td>
<td>59</td>
<td>83.1</td>
</tr>
<tr>
<td>Occupational Classifications¹ for most recent job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary/Process, Plant &amp; Machine operatives</td>
<td>22</td>
<td>31.0</td>
</tr>
<tr>
<td>Sales, Customer Service &amp; Personal Services</td>
<td>15</td>
<td>21.1</td>
</tr>
<tr>
<td>Skilled Trade &amp; Admin</td>
<td>10</td>
<td>14.1</td>
</tr>
<tr>
<td>Associate Professional/Professional &amp; Management</td>
<td>10</td>
<td>14.1</td>
</tr>
<tr>
<td>Not Known</td>
<td>14</td>
<td>19.7</td>
</tr>
<tr>
<td>Occupational Classifications² for longest held job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary/Process, Plant &amp; Machine Operatives</td>
<td>25</td>
<td>35.2</td>
</tr>
<tr>
<td>Sales, Customer Service &amp; Personal Services</td>
<td>17</td>
<td>24</td>
</tr>
<tr>
<td>Skilled Trade &amp; Admin</td>
<td>17</td>
<td>24</td>
</tr>
<tr>
<td>Associate Professional/Professional &amp; Management</td>
<td>8</td>
<td>11.2</td>
</tr>
<tr>
<td>Not Known</td>
<td>4</td>
<td>5.6</td>
</tr>
<tr>
<td>Previous experience of Vocational Rehab. Programme</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES</td>
<td>28</td>
<td>39.4</td>
</tr>
<tr>
<td>NO</td>
<td>43</td>
<td>60.6</td>
</tr>
<tr>
<td>Vocational Training Course Undertaken</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES</td>
<td>39</td>
<td>54.9</td>
</tr>
<tr>
<td>NO</td>
<td>32</td>
<td>45.1</td>
</tr>
<tr>
<td>Highest Academic Qualification Obtained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>32</td>
<td>45.1</td>
</tr>
<tr>
<td>CSE</td>
<td>7</td>
<td>9.9</td>
</tr>
<tr>
<td>O’Levels/GCSE’s</td>
<td>13</td>
<td>18.3</td>
</tr>
<tr>
<td>A’Levels</td>
<td>8</td>
<td>11.3</td>
</tr>
<tr>
<td>HNC/HND/Diploma</td>
<td>3</td>
<td>4.2</td>
</tr>
<tr>
<td>Degree</td>
<td>8</td>
<td>11.3</td>
</tr>
</tbody>
</table>

2.3 Measures

2.3.1 Work Environment Survey (WES) (Dick & Shepherd, 1994).

The WES was used as the independent measure and is shown in Section C of the questionnaire pack (Appendix B). It was devised by Dick and Shepherd (1994), for mentally ill service-users of sheltered workshops. The latter authors piloted it on a psychiatric sample attending a day centre in the UK, who either were currently working or had worked in the past. The WES consists of fourteen independent items, examining the work environment across the nine principle work environment categories, including some of the sub-categories proposed by Warr (1987) (see Table 4 in the introduction section). Participants respond to each question by marking a visual analogue scale to indicate the degree to which each feature was present in their work environment. After completion each visual analogue scale was divided up into ten equal segments, which were numbered 0-9. A score of 0-9 was then allocated to each response, with higher scores indicating the environmental feature to be present to a greater degree. Figure 2 provides an example of a typical question and how the response scale was scored.

Figure 2. Example question and scoring format for the WES.

How much work do you have to do at the workshop?

very little | | | | | | | | | a lot

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Scoring Format

According to Dick and Shepherd (1994) the WES was shown to have high face validity in the pilot work. Dick and Shepherd (1994) also assessed test-retest reliability separately for each item over a seven-day intervening period. Five items showed satisfactory stability over time according to the standards given by the British Psychological Society (i.e. $r > .7$) (Kline, 1986, pp.3; Steering Committee on Test Standards, 1995, pp.4). However, in total, eleven items did reach statistical significance between $p < .05$ and $p < .001$. Three items did not reach statistical significance ($r < .5$) (Dick & Shepherd, 1994). For the test-retest reliability correlation coefficients from Dick and Shepherd’s study please refer to Table 10 in the results section.
Dick and Shepherd (1994) suggested that given there were no significant changes in the environment during the intervening time period for testing reliability, there might have been ambiguity in the wording of these three items. In an attempt to improve upon the reliabilities of the three WES items, the current author reworded them using Warr's definitions for the relevant work feature dimension (1987). Table 7 presents the original wording of each item alongside the new re-worded version. In the current study test-retest reliabilities were assessed for all WES items (see results section for details). In order to further enhance the reliability of the WES, exploratory analyses were undertaken to determine if the WES could form any composite scales, based on Warr's (1987) predictions for certain work features to have an AD or CE pattern to well-being (see results section).

Table 7. Rewording of three items on the WES (Dick & Shepherd, 1994).

<table>
<thead>
<tr>
<th>Dimension/Item Number</th>
<th>Original Item</th>
<th>Reworded Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 4 Interpersonal Contact (Quality)</td>
<td>“How much opportunity do you have in this job to make friends with other people?”</td>
<td>“To what extent are other people at work supportive and friendly towards you?”</td>
</tr>
<tr>
<td>Item 10 Environmental Clarity (Feedback)</td>
<td>“To what extent do other people in the workshop make it clear to you how well or badly you are doing your job?”</td>
<td>“To what extent does your supervisor give you clear feedback on your job performance?”</td>
</tr>
<tr>
<td>Item 12 Physical Security</td>
<td>“How comfortable is the workshop building to work in?”</td>
<td>“How comfortable are your physical working conditions?”</td>
</tr>
</tbody>
</table>

2.3.2 The Generalised Self-Efficacy Scale (GSE) (Jerusalem & Schwarzer, 2003).

The GSE was used as one measure of context-free psychological well-being (general self-efficacy) and is shown in Section A of the questionnaire pack (Appendix B). The GSE is a 10 item self-administered scale, which takes roughly two to three minutes to complete. It assesses the strength of an individual’s belief in his or her own ability to respond to novel or difficult situations and to deal with associated setbacks (Johnston, Wright, & Weinman, 1995). Each item refers to successful coping. A typical item is, “I can always manage to solve difficult problems if I try hard enough”. Respondents are required to indicate to what extent each statement applies to them. For each item there is a four choice response from “not at all true”, which scores 1 to “exactly true”, 208
which scores 4. The scores for each of the ten items are summed to yield a composite score with a range from 10 to 40. The score reflects the strength of an individual’s perceived self-efficacy beliefs. Thus, the higher the score, the greater is the individual’s generalised sense of perceived self-efficacy (Jerusalem & Schwarzer, 2003; Johnston et al., 1995; Scholz et al., 2002).

The scale was designed for the general adult population (Jerusalem & Schwarzer, 2003). It has been translated from the original German version into twenty-seven languages, including English. In samples from twenty-three nations, Cronbach’s alphas ranged from .76 to .90, with the majority in the high .80’s. For Great Britain an alpha coefficient of .88 has been reported (N = 447) (Scholz et al., 2002). The results of a factor analysis were consistent with the scale measuring a unitary concept (Johnston et al., 1995). Concurrent validity has been established on the basis of appropriate correlations with other tests. An expected positive correlation has been found with measures of self-esteem (r = .52) (Johnston et al., 1995; Jerusalem & Schwarzer, 2003). Internal consistency and convergent validity were assessed for the current sample (see results section for details).

2.3.3 Self-Efficacy at Work Scale

As mentioned previously and as far as the author is aware, an appropriate context specific self-efficacy scale for psychiatric vocational work was not present in the literature. However, the self-efficacy construct was originally conceptualised by Bandura (1977) as being situationally specific and research has demonstrated a relationship between perceived self-efficacy and performance in specific behavioural domains (Shelton, 1990). It is proposed in the literature that the GSE can be adapted to cover the particular content of the domain under investigation (Schwarzer & Fuchs, 1996).

In light of this, the 10-item GSE was adapted with the aim of creating a specific measure of work-related self-efficacy by pre-fixing “at work” to each of the 10 items (e.g. “At work I can always manage to solve difficult problems if I try hard enough”). Please refer to Section D of the questionnaire pack (Appendix B). The scale’s internal
consistency, test-retest reliability and construct validity was assessed in the current study (see results section for details).

### 2.3.4 Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965).

The RSE was used as the second measure of context-free well-being and is shown in Section B of the questionnaire pack (Appendix B). It is a 10-item self-administered unidimensional measure of global self-esteem. A typical item is “I feel that I have a number of good qualities”. As measured by this scale, high self-esteem involves the individual feeling that they are a person of worth and have self-respect. Low self-esteem implies dissatisfaction with oneself and self-rejection. It takes about five minutes to complete. The items are answered on a four-point scale ranging from “strongly agree” to “strongly disagree”. Half the items elicit responses to positive statements of self-esteem and half to negative statements (Johnston et al., 1995; Salyers, et al., 2001). For each positive statement the response is scored on a scale of 1 (“strongly agree”) to 4 (“strongly disagree”). Negatively phrased items are reversed scored and the total score is the sum of the scores for each item. Thus, total scores range from 10 (highest self-esteem) to 40 (lowest self-esteem). The RSE is the most widely used measure of self-esteem in health psychology and has been used in occupational studies (Creed et al., 2001; Johnston et al., 1995).

Reliability coefficients from previous studies of adults with severe mental health problems found internal consistency coefficients (Cronbach’s alpha) exceeding .80 and test-retest reliability of at least .70 (Creed et al., 2001; Torrey et al., 2000). The scale’s internal consistency and convergent validity was assessed for the current sample (see results section for details).

### 2.3.5 Self-Esteem at Work Scale

In order to develop a job-specific measure of self-esteem all ten items on the RSE were adapted to create a new measure. This was achieved by adding “at work” to the end of each of the ten items (e.g. “I feel that I have a number of good qualities at work”). See Section E of the questionnaire pack (Appendix B). The scale’s internal
consistency, test-retest reliability and construct validity was assessed in the current study (see results section for details).

In order to help participants distinguish the question items associated with their experiences at work from those items associated with life in general, the questionnaire pack was designed with headings and a brief description of the relevant domain at the top of each section. A typical heading and description was as follows:

SECTION A: YOUR LIFE IN GENERAL
This section asks you questions about the general beliefs you have about yourself.

2.3.6 Demographic Questionnaire

A participant self-report information front sheet was designed by the author to obtain the following demographic information: Age, gender, ethnic group, medication, psychiatric diagnosis, length of time at the work unit, type of work unit, days working elsewhere, days at the workshop, vocational and educational history (Appendix A). Research has highlighted how people with severe and enduring mental health problems are able to articulate clear accounts of their vocational experiences (cf. Becker, Drake, Farabaugh, & Bond, 1996; Mueser, Becker, & Wolfe, 2001). Furthermore, many studies have failed to show any significant relationships between individually-based demographic variables and vocational outcome (cf. Kirsh, 2000). Therefore, it was not considered necessary to the aims of this study to verify the demographic information obtained from participants.

2.4 Procedure

Once ethical approval had been obtained from the local Health Authority’s and the University’s ethics committee (Appendix C) the author presented the purpose of the project to the workshop managers and senior clinicians responsible for those employees with mental health problems attending the eight sheltered workshops. All workshop managers and senior clinicians approached gave permission for the study to be conducted in the workshops they had responsibility for. The managers and senior clinicians were asked to identify potential participants that met the criteria for inclusion. Potential participants were then invited to attend single session
presentations held on a group basis at each of the eight workshops, at a time that was
deeled by the managers to be convenient for the service-users to get time off work.
These sessions were conducted by the researcher and consisted of presenting the
purpose of the study, what it entailed and the research pack. This contained a client
information sheet explaining the purpose of the study (Appendix D), consent form
(Appendix E), demographic questionnaire (Appendix A) and the five outcome
measures (Appendix B). The researcher used simple and clear language to try to
ensure that the participants understood what was being said. Emphasis was placed on
voluntary participation, withdrawal at any time, anonymity and confidentiality.

Following the presentation of the study, service-users who were interested in taking
part in the study were given the client information sheet to read. Service-users were
informed that they could take as much time as they needed to decide whether or not
they wished to participate. They were encouraged to discuss this with others (such as
family, friends and key worker). In the section titled: “What will happen to me if I
take part?” on the client information sheet, service-users who expressed an initial
interest in taking part were invited to write their name on the tear-off slip that appears
at the end of the client information sheet. They were asked to pass on this slip to
either the workshop manager or to the researcher. The researcher then arranged a
convenient time with the named service-users to administer the questionnaire at the
workshop. Service-users were given the opportunity to take part in the study either on
a group or individual basis. The majority of participants opted to take part in the
study on an individual basis.

Service-users were asked to sign the consent form at the time of the administration of
the questionnaire. The researcher was satisfied that participants were giving informed
consent because they were able to paraphrase or explain to the researcher the key
points from the information sheet. The researcher administered the demographic
questionnaire and five outcome measures to service-users that had given informed
consent to participate, in a single session at their workshop. Sessions were held in
quiet rooms at each of the workshops. Despite being literate, many participants
requested that the researcher read out the questions within the research pack. In order
to maintain rapport and minimise the problems of impersonal use of formal measures
(Young, 2001), the researcher agreed to do this, but stuck to the wording of the
questionnaire. The questionnaires took about twenty minutes to complete and the whole research pack took no longer than thirty minutes to complete.

To assess test-retest reliabilities of the WES and the two job-specific scales, a subgroup of twenty-four consenting participants were re-administered the latter three scales, following an intervening time period of seven days from the first administration.

The researcher was present both throughout and ten minutes after the presentation and administration sessions to answer any queries from the participants. The participants were also given the option of receiving by post written feedback of the general findings of the study and their implications. A tear-off slip with the researcher’s contact details was attached at the end of the questionnaire for this purpose (Appendix B). Given that the administration of the questionnaires took place at the work units, there was also immediate access to the manager for participants, if required.
3.0 Results

Independent Measure

WES = Work Environment Survey

Abbreviations

Dependent Measures: Indices of Psychological Well-being

Context-Free Well-Being

RSE = Rosenberg Self-Esteem Scale
GSE = Generalised Self-Efficacy Scale

Job-Specific Well-Being

Self-Esteem at Work Scale
Self-Efficacy at Work Scale

Composite Variables

Scores on WES items combined in various ways to form composite scales

AD Raw Total = Combined raw scores on 11 of the WES items predicted to show an AD relationship to well-being
AD Transformed Total = Combined transformed scores on 11 of the WES items predicted to show an AD relationship to well-being
CE Raw Total = Combined raw scores on the 3 WES items predicted to show a CE relationship to well-being
CE Transformed Total = Combined transformed scores on the 3 WES items predicted to show a CE relationship to well-being
WES Raw Total = Raw scores from all 14 items on the WES combined to form an overall scale
3.1 Summary Statistics of the Distribution of Scores

In order to establish whether or not parametric tests could be used the distribution of raw scores were assessed on each of the fourteen work features and each of the four indices of psychological well-being.

3.1.1 The distribution of scores on the WES

Each of the 14 items on the WES produces a single score on a 9-point likert scale with a range of possible scores between 0 and 9. Higher scores indicated the environmental feature to be present to a greater degree. Subsequent analyses using the WES employed nonparametric tests since the distribution of scores on eight items deviated significantly from normality (Clark-Carter, 2002). Table 8 shows the summary statistics for each work feature assessed by the WES and Appendix F provides the histograms for the distribution of raw scores.

3.1.2 The distribution of scores on the four well-being measures

The distributions of total raw scores on all four well-being measures (RSE, GSE, Self-Esteem at Work and Self-Efficacy at Work scales) did not deviate significantly from normality. Furthermore, previous studies have assumed that the GSE and RSE are on an interval scale (e.g. Casper & Fishbein, 2002; Creed et al., 2001; Scholz et al., 2002). Since the Self-Esteem at Work and Self-Efficacy at Work scales were developed by modifying the RSE and GSE, these can also be assumed to be on an interval scale. Therefore, parametric tests were used to analyse the data derived from the four well-being measures (Clark-Carter, 2002). Table 9 shows the summary statistics for the total raw scores on each of the four well-being measures. Appendix G provides the histograms to illustrate the distribution of scores on these measures.
Table 8. Summary statistics for each work feature assessed by the WES\textsuperscript{3}

<table>
<thead>
<tr>
<th>WES Item</th>
<th>Description</th>
<th>N = 71</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Mode</td>
</tr>
<tr>
<td>1</td>
<td>Control (Intrinsic)</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Variety</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Environmental Clarity (Role Requirements)</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Interpersonal Contact (Quality)</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Externally Generated Goals (Traction)</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Externally Generated Goals (Time Demands)</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Environmental Clarity (Certainty of Future)</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Interpersonal Contact (Quantity)</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Valued Social Position</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Environmental Clarity (Feedback)</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>Availability of Money</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>Physical Security</td>
<td>8</td>
</tr>
<tr>
<td>13</td>
<td>Control (Extrinsic)</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>Skill Use</td>
<td>8</td>
</tr>
</tbody>
</table>

* Multiple modes exist. The smallest value is shown

** Distribution of scores was significantly skewed (Clark-Carter, 2002, pp. 416).

\textsuperscript{3} The means and standard deviations have not been presented because 8 of the work features’ distributions of scores deviated from normality.
Table 9. Summary statistics for the well-being measures

<table>
<thead>
<tr>
<th>Indices of psychological well-being</th>
<th>Min. score used</th>
<th>Max. score used</th>
<th>Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSE</td>
<td>10</td>
<td>40</td>
<td>30</td>
<td>23.90</td>
<td>7.104</td>
<td>.166</td>
<td>-.302</td>
</tr>
<tr>
<td>GSE</td>
<td>11</td>
<td>40</td>
<td>29</td>
<td>25.54</td>
<td>7.512</td>
<td>-.036</td>
<td>-.959</td>
</tr>
<tr>
<td>Self-Efficacy at Work</td>
<td>13</td>
<td>40</td>
<td>27</td>
<td>28.63</td>
<td>7.031</td>
<td>-.346</td>
<td>-.568</td>
</tr>
<tr>
<td>Self Esteem at Work</td>
<td>10</td>
<td>36</td>
<td>26</td>
<td>20.28</td>
<td>5.841</td>
<td>.144</td>
<td>-.064</td>
</tr>
</tbody>
</table>

The following tests have been evaluated at a two-tailed level of significance.

3.2 Reliability of the WES

3.2.1 Test-retest reliability of the WES

Following the approach adopted by Dick and Shepherd (1994), the test-retest reliability was assessed separately for each item on the WES, over a seven-day period, with a sub-group of 24 participants from the main study. Spearman’s rho's were then computed. These are shown in Table 10 alongside the Pearson Product Moment Correlation Coefficients obtained from Dick and Shepherd’s (1994) test-retest reliability study. The shaded items represent those items that were re-worded for the current study.
Table 10. Correlation coefficients showing test-retest reliability for individual items of the WES for the current study and from Dick and Shepherd’s (1994) Study.

<table>
<thead>
<tr>
<th>WES Item</th>
<th>Current Study (N = 24)</th>
<th>Dick &amp; Shepherd’s Study (N = 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spearman’s Rho Correlation Coefficient (Two-tailed significance test)</td>
<td>Pearson Product-moment correlation coefficient (One-tailed significance test)</td>
</tr>
<tr>
<td>1: Control (Intrinsic)</td>
<td>.724**</td>
<td>.80**</td>
</tr>
<tr>
<td>2: Variety</td>
<td>.823**</td>
<td>.59*</td>
</tr>
<tr>
<td>3: Environmental Clarity (Role Requirements)</td>
<td>.606**</td>
<td>.58*</td>
</tr>
<tr>
<td>4: Interpersonal Contact (Quality)</td>
<td>.727**</td>
<td>.38</td>
</tr>
<tr>
<td>5: Externally Generated Goals (Traction)</td>
<td>.658**</td>
<td>.77***</td>
</tr>
<tr>
<td>6: Externally Generated Goals (Time Demands)</td>
<td>.780**</td>
<td>.55*</td>
</tr>
<tr>
<td>7: Environmental Clarity (Certainty of Future)</td>
<td>.497*</td>
<td>.63*</td>
</tr>
<tr>
<td>8: Interpersonal Contact (Quantity)</td>
<td>.621**</td>
<td>.75**</td>
</tr>
<tr>
<td>9: Valued Social Position</td>
<td>.378</td>
<td>.64**</td>
</tr>
<tr>
<td>10: Environmental Clarity (Feedback)</td>
<td>.352</td>
<td>.46</td>
</tr>
<tr>
<td>11: Availability of Money</td>
<td>.816**</td>
<td>.62*</td>
</tr>
<tr>
<td>12: Physical Security</td>
<td>.812**</td>
<td>.08</td>
</tr>
<tr>
<td>13: Control (Extrinsic)</td>
<td>.772**</td>
<td>.92***</td>
</tr>
<tr>
<td>14: Skill Use</td>
<td>.687**</td>
<td>.82***</td>
</tr>
</tbody>
</table>

*p<.05 **p<.01 ***p<.001

As shown in Table 10, half of the items did show satisfactory stability (i.e. rho = >.7) over time, but half did not achieve the recommended minimum requirement for a reliability coefficient of >.7 (Kline, 1986, pp.3; Steering Committee on Test Standards, 1995, pp.4). However, all but three of the items showed significant correlations at the 0.01 significance level. The reliabilities for two out of the three re-worded items (Quality of Interpersonal Contact and Physical Security) were improved when compared to the reliabilities obtained in Dick and Shepherd’s (1994) study, despite the present study using the more conservative Spearman’s rho test. This is consistent with the possibility that the original wording of these items may have contributed to the poor test-retest reliability. However, the third re-worded item (Clarity of Feedback) was found to have a similarly poor test-retest reliability (rho = 0.352) when compared to the original study (r = .46). This matter will be returned to in the discussion.
In consideration of the poor stability of half of the WES items it is important to note that at the time of the reliability study all the work schemes were in the process of undergoing dramatic changes in service organisation and structure in response to the National Service Framework initiatives. This may have impacted on participants’ perceptions of the degree to which certain work environment features were present from one test period to the next. Concerns over the complexity in wording of certain items (e.g. clarity of feedback) and the perceived irrelevance of other work features to participants' own work experiences (e.g. valued social position) were also raised. These issues will be returned to in more detail in the discussion.

Although fourteen items were used to test the hypotheses, caution should be applied in interpreting the results from those items with very poor test-re-test reliabilities.

### 3.2.2 Forming composite variables to increase reliability of the WES

In light of the poor test-retest reliabilities for half the individual items on the WES, exploratory analyses were undertaken to determine if two separate composite scales could be formed. The first, combining those work features predicted to show an AD (additional decrement) pattern and the second combining those features predicted to show a CE (constant effect) pattern to well-being. Specifically, in order to identify any linear relationships between work features and indices of psychological well-being, the raw scores from eleven of the WES items predicted to show an AD pattern with well-being were firstly combined to form an AD Raw Total variable.

Secondly, the raw scores from the remaining three WES items, which were predicted to show a CE pattern to well-being, were combined to form a CE Raw Total variable (see Table 11 for the predicted pattern of each WES item).
Table 11. AD and CE patterns proposed for each of the work features on the WES (adapted from Warr, 1994, pp. 88).

<table>
<thead>
<tr>
<th>Work Environment Feature</th>
<th>WES Item</th>
<th>Nature of Predicted Relationship to Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity for Intrinsic Control</td>
<td>1</td>
<td>AD</td>
</tr>
<tr>
<td>Variety</td>
<td>2</td>
<td>AD</td>
</tr>
<tr>
<td>Environmental Clarity (Role Requirements)</td>
<td>3</td>
<td>AD</td>
</tr>
<tr>
<td>Opportunity for Interpersonal Contact (Quality)</td>
<td>4</td>
<td>AD</td>
</tr>
<tr>
<td>Externally Generated Goals (Traction)</td>
<td>5</td>
<td>AD</td>
</tr>
<tr>
<td>Externally Generated Goals (Time Demands)</td>
<td>6</td>
<td>AD</td>
</tr>
<tr>
<td>Environmental Clarity (Certainty of Future)</td>
<td>7</td>
<td>AD</td>
</tr>
<tr>
<td>Opportunity for Interpersonal Contact (Quantity)</td>
<td>8</td>
<td>AD</td>
</tr>
<tr>
<td>Environmental Clarity (Feedback)</td>
<td>10</td>
<td>AD</td>
</tr>
<tr>
<td>Opportunity for Extrinsic Control</td>
<td>13</td>
<td>AD</td>
</tr>
<tr>
<td>Opportunity for Skill Use</td>
<td>14</td>
<td>AD</td>
</tr>
<tr>
<td>Valued Social Position</td>
<td>9</td>
<td>CE</td>
</tr>
<tr>
<td>Availability of Money</td>
<td>11</td>
<td>CE</td>
</tr>
<tr>
<td>Physical Security</td>
<td>12</td>
<td>CE</td>
</tr>
</tbody>
</table>

In order to identify any curvilinear relationships between work features and the indices of psychological well-being, the raw scores from each WES item were transformed. The transformation adopted by Dick and Shepherd (1994) was used (i.e. the square of the deviation from the centre of the scale [4.5]), since scores near the centre of the WES scale are transformed into low values and scores at either end of the scale are transformed into high values. The transformed scores from eleven of the WES items predicted to show an AD pattern with well-being were then combined to form an AD Transformed Total variable and the transformed scores from the three WES items predicted to show a CE pattern, were combined to form a CE Transformed Total variable. The transformed scores on each WES item ranged from 0 to 20. Appendix H provides the summary statistics for the transformed scores on each WES item.

A further variable was created by combining the raw scores from all fourteen WES items (WES Raw Total), in order to look at the properties of this scale and examine the relationship with the dependent variables. It is important to acknowledge that
Warr’s model would not predict these WES items to form an overall scale, since some have either AD or CE relationships with well-being. However, the WES items may form a total scale if they turn out to have linear relationships. Table 12 shows the summary statistics for the composite variables and Appendix I the histograms to illustrate the distributions of scores on these variables. The distribution of scores on the composite variables did not deviate significantly from normality, therefore parametric tests could be used to analyse the data (Clark-Carter, 2002).

Table 12. Summary statistics for the composite variables

<table>
<thead>
<tr>
<th>Composite Variable</th>
<th>N = 71</th>
<th>Min. Score used</th>
<th>Max. Score used</th>
<th>Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD Raw Total</td>
<td></td>
<td>24.00</td>
<td>98.00</td>
<td>74.00</td>
<td>64.17</td>
<td>15.16</td>
<td>-.392</td>
<td>.244</td>
</tr>
<tr>
<td>AD Transformed</td>
<td></td>
<td>18.75</td>
<td>214.75</td>
<td>196.00</td>
<td>97.00</td>
<td>46.33</td>
<td>.571</td>
<td>.009</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CE Raw Total</td>
<td></td>
<td>.00</td>
<td>24.00</td>
<td>24.00</td>
<td>13.82</td>
<td>4.19</td>
<td>-.421</td>
<td>1.230</td>
</tr>
<tr>
<td>CE Transformed</td>
<td></td>
<td>.75</td>
<td>60.75</td>
<td>60.00</td>
<td>27.06</td>
<td>15.47</td>
<td>.721</td>
<td>-.134</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WES Raw Total</td>
<td></td>
<td>29.00</td>
<td>119.00</td>
<td>90.00</td>
<td>77.99</td>
<td>17.38</td>
<td>-.463</td>
<td>.617</td>
</tr>
</tbody>
</table>

On the basis of Warr’s vitamin model (1987) a linear relationship would be predicted between CE Raw Total and indices of psychological well-being, which would be indicated by significant negative correlations between scores on the CE Raw Total variable and total scores on the RSE and Self-Esteem at Work scales (since low scores indicate high self-esteem) and significant positive correlations between CE Raw Total and the GSE and Self-Efficacy at Work scales (since high scores indicate a greater sense of self-efficacy belief). Furthermore, a curvilinear relationship would be predicted between AD Raw Total and indices of psychological well-being, as indicated by significant correlations between the AD Transformed Total and the well-being measures.

3.2.3 Reliability of composite variables for the WES items

Internal consistency estimates of reliability were computed on all the composite variables using Cronbach’s alpha. Test-retest reliability coefficients (using Pearson Product-Moment Correlations) were computed on the AD, CE and WES Raw Total composite variables. As shown in Table 13, the AD and WES composite scales were

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4 The means and standard deviations have been presented because the distribution of total scores on all of the composite variables did not deviate significantly from normality (Clark-Carter, 2002).
internally consistent (i.e. alpha > .7; Clark-Carter, 2002) and showed satisfactory stability. However, the CE subscales did not reach satisfactory reliabilities, perhaps in part because each only consisted of a limited number of items (3). Therefore, the CE subscales were excluded from any further analysis.

Table 13. Internal consistency (Cronbach's alpha) and test-retest reliability coefficients for the composite variables.

<table>
<thead>
<tr>
<th>N = 71</th>
<th>N = 24</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Composite Scale</strong></td>
<td><strong>No. of items</strong></td>
</tr>
<tr>
<td>AD Raw Total</td>
<td>11</td>
</tr>
<tr>
<td>AD Transformed Total</td>
<td>11</td>
</tr>
<tr>
<td>CE Raw Total</td>
<td>3</td>
</tr>
<tr>
<td>CE Transformed Total</td>
<td>3</td>
</tr>
<tr>
<td>WES Raw Total</td>
<td>14</td>
</tr>
</tbody>
</table>

Two-tailed significance test: **p < .01

3.3 Reliability and Validity of the Well-Being Measures

The RSE and GSE had not been standardised on a population of adults with serious and persistent mental health problems and the Self-Efficacy at Work scale and Self-Esteem at Work scale were new measures developed specifically for this study. Therefore, analyses of the reliability and validity of these measures were examined for this population.

3.3.1 Internal consistency

Internal consistency estimates of reliability were computed on all four well-being measures, using Cronbach's alpha. As shown in Table 14, all four scales were internally consistent (i.e. alpha = > .7; Clark-Carter, 2002).
Table 14. Internal consistency (Cronbach’s alpha) for well-being measures (N = 71).

<table>
<thead>
<tr>
<th>Well-Being Measure</th>
<th>No. of items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSE</td>
<td>10</td>
<td>.92</td>
</tr>
<tr>
<td>GSE</td>
<td>10</td>
<td>.91</td>
</tr>
<tr>
<td>Self-Efficacy at Work</td>
<td>10</td>
<td>.92</td>
</tr>
<tr>
<td>Self-Esteem at Work</td>
<td>10</td>
<td>.88</td>
</tr>
</tbody>
</table>

3.3.2 Test-retest reliability

Test-retest reliability was assessed for the two newly developed job-specific measures (Self-Esteem at Work Scale and the Self-Efficacy at Work Scale), over a seven-day period, with a sub-group of 24 participants from the main study. Pearson Product Moment Correlation Coefficients were then computed. The Self-Esteem at Work scale showed satisfactory stability over time (r = .825, p < .01, N = 24), as did the Self-Efficacy at Work scale (r = .805, p < .01, N = 24) (Clark-Carter, 2002). Previous research has found the RSE and GSE to be stable over time (i.e. r = >.70) (e.g. Salyers, McHugo, Cook, Razzano, Drake, & Mueser, 2001; Scholz, et al., 2002).

3.3.3 Construct validity

Convergent validity amongst the four indices of psychological well-being was assessed on the basis of the following predictions, using Pearson Product Moment Correlations.

1. According to theory and research self-efficacy is positively correlated with self-esteem (Creed et al., 2001; Leganger, Kraft, & Roysamb, 2000; Scholz et al., 2002; Johnston et al., 1995). Therefore, it was predicted that the RSE would be negatively correlated to the GSE (since lower scores on the RSE scale indicated higher self-esteem, while higher scores on the GSE indicated a greater sense of self-efficacy). Consistent with this prediction, Table 15 shows that there was a statistically significant negative correlation between participants’ total scores on the RSE and total scores on the GSE (r = -.651, p < 0.01, N = 71).

2. It was predicted that the Self-Esteem at Work scale would be negatively correlated to the Self-Efficacy at Work scale, since both scales were supposed
to be measuring the same underlying psychological constructs as the respective RSE and GSE scales (but in a different domain). Consistent with this prediction, Table 15 shows that there was a statistically significant negative correlation between participants' total scores on the Self-Efficacy at Work scale and their total scores on the Self-Esteem at Work scale (r = -.613, p < .01, N = 71).

3. A positive association was expected to be found between the context-free measures of well-being and job-specific measures of well-being. Consistent with this prediction, Table 15 shows that there were statistically significant positive correlations between participants' total scores on the Self-Efficacy at Work Scale and total scores on the GSE (r = .750, p < .01, N = 71) and between participants' total scores on the Self-Esteem at Work scale and their total scores on the RSE (r = .607, p < .01, N = 71).

Table 15. Convergent validity between the four well-being measures (N = 71).

<table>
<thead>
<tr>
<th></th>
<th>RSE</th>
<th>GSE</th>
<th>Self-Efficacy at Work</th>
<th>Self-Esteem at Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSE</td>
<td></td>
<td>r = -.651**</td>
<td>r = -.473**</td>
<td>r = .607**</td>
</tr>
<tr>
<td>GSE</td>
<td>r = -.651**</td>
<td></td>
<td>r = .750**</td>
<td>r = -.520**</td>
</tr>
<tr>
<td>Self-Efficacy at Work</td>
<td>r = -.473**</td>
<td>r = .750**</td>
<td></td>
<td>r = -.613**</td>
</tr>
<tr>
<td>Self-Esteem at Work</td>
<td>r = .607**</td>
<td>r = -.520**</td>
<td>r = -.613**</td>
<td></td>
</tr>
</tbody>
</table>

Two-tailed significance test: **p < .01

To summarise, all four indices of psychological well-being showed satisfactory reliabilities and convergent validity (cf. Steering Committee on Test Standards, 1995).

3.4 Face Validity: Subjective observations of the researcher

Face validity was not explicitly assessed in this study. However, subjective observations made by the researcher of participants' behaviour in responding to the measures employed in this study lend some confidence in the face validity of the measures. Specifically, the employment of well-being measures that distinguished between job-specific and context-free well-being appeared to be meaningful to the participants. In observing the response behaviour of participants to these measures, it
was not uncommon for them to discriminate between those items referring to how they felt at work and those same items referring to how they felt in general. For example, in responding to the self-esteem item “on the whole, I am satisfied with myself”, some participants commented how they agreed with this statement when at work but not for life in general. In some cases participants commented on how they found it useful to think about the feelings and beliefs they had at work away from those relating to life in general.

With reference to the WES, it was observed that participants found this instrument relatively easy to complete and frequently elaborated on their responses to particular items by describing relevant current experiences. There were perhaps two notable exceptions relating to WES item 9, which assessed the Valued Social Position work feature and WES item 10, Clarity in Feedback. It was not uncommon for participants to report having difficulty in knowing how to answer these questions. This will be discussed in more detail in the discussion. However, on the whole the WES appeared to ask questions that were perceived as meaningful to the participants’ experiences at the workshop.

3.5 Hypothesis Testing

This study set out to test a number of specific hypotheses that were derived from the predictions made by Warr’s Vitamin Model (1987). The first was to explicitly test whether work features assessed by the WES had an AD or CE relationship with context-free and job-specific indices of psychological well-being by exploring scatter-plots of these relationships and computing Spearman’s Rho’s using transformed and raw scores from the WES. Prior to examining the relationships between individual items of the WES and well-being the three composite variables, shown to have satisfactory internal consistency (AD Raw Total, AD Transformed Total and WES Raw Total), were first used to assess whether linear or non-linear patterns were present.
An association between the raw WES scores and the dependent variables would indicate a linear relationship\(^5\), corresponding to Warr's (1987; 1994) CE (constant effect) pattern. An association between the transformed WES scores and the dependent variables would indicate a curvilinear relationship corresponding to Warr's AD (additional decrement) pattern.

### 3.5.1 Hypothesis testing on the composite scales

Table 16 shows the Pearson Product Moment correlation coefficients computed between participants' total scores on each of the four well-being measures and the AD Raw and Transformed scales and WES Raw Total (see Appendix J for scatter-plots).

**Table 16. Correlation coefficients showing the relationship between AD Raw and Transformed and WES Raw Total Scales and each of the four well-being measures \((N = 71)\)**

<table>
<thead>
<tr>
<th>Composite Scale</th>
<th>Well-Being Measures</th>
<th>RSE</th>
<th>GSE</th>
<th>Self-Efficacy at Work</th>
<th>Self-Esteem at Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD Raw Total</td>
<td></td>
<td>-.119</td>
<td>.229</td>
<td>.406**</td>
<td>-.325**</td>
</tr>
<tr>
<td>AD Transformed Total</td>
<td></td>
<td>-.022</td>
<td>.116</td>
<td>.241*</td>
<td>-.141</td>
</tr>
<tr>
<td>WES Raw Total</td>
<td></td>
<td>-.146</td>
<td>.254*</td>
<td>.409**</td>
<td>-.319**</td>
</tr>
</tbody>
</table>

Two-tailed tests of significance: * \(p < .05\) ** \(p < .01\)

Contrary to the predictions of a curvilinear relationship between AD Raw Total and total scores on the GSE and RSE, Table 16 shows that there were no significant correlations between AD Transformed Total and GSE or RSE scores. Nor were there any obvious curvilinear trends between AD Raw Total and either GSE or RSE (see Appendix J for scatter-plots). A significant correlation was found between the WES Raw Total and the GSE but not with the RSE.

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\(^5\) It is important to note that for the RSE and Self-Esteem at Work scales the items are scored in the direction of negative self-esteem; low scores indicate high self-esteem. Therefore, for a predicted positive relationship between self-esteem and work features a negative correlation would be expected. In contrast, items on the GSE and Self-Efficacy at Work scales are scored in the positive direction of self-efficacy; high scores indicate high self-efficacy. Therefore a positive correlation would be expected in these cases.
Consistent with the prediction of a curvilinear relationship, Table 16 shows that there was a significant positive correlation between the Self-Efficacy at Work scale and AD Transformed Total. A linear relationship was also apparent, as indicated by the significant positive correlation between Self-Efficacy at Work and AD Raw Total. The presence of a linear element does not contradict the prediction made on the basis of Warr's model, because a curvilinear relationship can have a linear component. It was noted that the correlation coefficient for AD Transformed Total was smaller in magnitude than the coefficient for AD Raw Total and this curvilinear trend was not marked in the scatter-plot (see Figure 2). There was also a significant positive correlation between Self-Efficacy at Work and WES Raw Total. Participants who rated WES features as present to a greater degree tended to report higher levels of self-efficacy beliefs at work.

Figure 2. Scatter-Plot to illustrate the relationships between the total scores on the Self-Efficacy at Work scale and AD Raw Total.

Contrary to the prediction of a curvilinear relationship between AD Raw Total and the Self-Esteem at Work scale, Table 16 shows that there was no significant correlation between AD Transformed Total and Self-Esteem at Work. Nor were there any obvious curvilinear trends in the raw data. However, there were significant negative correlations between Self-Esteem at Work and both the AD Raw Total and WES Raw Total scales. Participants who rated AD work features and combined WES features as present to a greater degree tended to report higher levels of self-esteem at work.
In summary, contrary to Warr's proposed model of an AD pattern between work environment features and well-being, there were no significant curvilinear relationships between context-free indices of psychological well-being and AD Transformed Total. Only one job-specific measure (Self-Efficacy at Work) was significantly correlated with AD Transformed Total, but this curvilinear trend did not appear to be marked on closer inspection of the scatter-plot for the AD raw scores. Self-Esteem at Work was found to have only a significant linear relationship with AD scores. Linear relationships were also detected between the WES Raw Total and job-specific indices of well-being as well as with one context-free measure.

3.5.2 Hypothesis testing on the individual WES items

Table 17 shows the Spearman Rho correlation coefficients computed between participants' total scores on each of the four well-being measures and individual work features (see Appendix K for the scatter-plots). The raw WES scores were used to examine the presence of linear relationships and the transformed WES scores for non-linear relationships.
Table 17. Spearman rho correlations computed between each of the work features and indices of psychological well-being (N = 71).⑥

<table>
<thead>
<tr>
<th>Predicted Relationships</th>
<th>GSE</th>
<th>Self-Efficacy at Work</th>
<th>RSE</th>
<th>Self-Esteem at Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Linear</td>
<td>Curvilinear</td>
<td>Linear</td>
<td>Curvilinear</td>
</tr>
<tr>
<td>Linear (using WES raw scores)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ES</td>
<td>rho=</td>
<td>rho=</td>
<td>rho=</td>
<td>rho=</td>
</tr>
<tr>
<td>Linear</td>
<td>.068</td>
<td>-.067</td>
<td>.230</td>
<td>.044</td>
</tr>
<tr>
<td>Curvilinear</td>
<td>.103</td>
<td>.089</td>
<td>-.073</td>
<td>.129</td>
</tr>
<tr>
<td>Linear</td>
<td>.233</td>
<td>.224</td>
<td>-.381*</td>
<td>.356*</td>
</tr>
<tr>
<td>Curvilinear</td>
<td>-.036</td>
<td>-.045</td>
<td>-.033</td>
<td>-.146</td>
</tr>
<tr>
<td>Linear</td>
<td>.277*</td>
<td>.110</td>
<td>-.555*</td>
<td>.081</td>
</tr>
<tr>
<td>Curvilinear</td>
<td>.075</td>
<td>.164</td>
<td>.168</td>
<td>.122</td>
</tr>
<tr>
<td>Linear</td>
<td>.111</td>
<td>.010</td>
<td>.130</td>
<td>.105</td>
</tr>
<tr>
<td>Curvilinear</td>
<td>.276*</td>
<td>.108</td>
<td>.193</td>
<td>.092</td>
</tr>
<tr>
<td>Linear</td>
<td>.204</td>
<td>.136</td>
<td>.186</td>
<td>.113</td>
</tr>
<tr>
<td>Curvilinear</td>
<td>.068</td>
<td>.065</td>
<td>.176</td>
<td>.159</td>
</tr>
<tr>
<td>Linear</td>
<td>.106</td>
<td>-.045</td>
<td>.078</td>
<td>-.030</td>
</tr>
<tr>
<td>Curvilinear</td>
<td>.106</td>
<td>.081</td>
<td>.188</td>
<td>.167</td>
</tr>
<tr>
<td>Linear</td>
<td>.036</td>
<td>.129</td>
<td>.280*</td>
<td>.122</td>
</tr>
<tr>
<td>Curvilinear</td>
<td>.026</td>
<td>.060</td>
<td>.202</td>
<td>.262*</td>
</tr>
</tbody>
</table>

Two-Tailed Tests of Significance: *p < .05 **p < .01

⑥ For the purpose of this table, "linear" is taken to refer to the correlations between the raw WES scores and well-being measures, while "curvilinear" is taken to refer to the correlations between the transformed WES scores and well-being measures. Due to the restricted range of scores on WES, those items expected to show a curvilinear relationship may also show a linear relationship to indices of psychological well-being. Therefore the predictions for a linear relationship have been left blank for those items. The shaded areas represent significant correlations.
CE pattern

It was predicted that there would be positive linear relationships between indices of psychological well-being and each of the following work features: *Valued Social Position* (WES item 9), *Availability of Money* (WES item 11) and *Physical Security* (WES item 12). Contrary to this prediction, Table 17 shows no such relationships. Nor were there any obvious linear trends present in the data (see scatter-plots in Appendix K). The prediction for a CE pattern was not borne out.

AD pattern

It was predicted that there would be a curvilinear relationship (AD pattern) between indices of psychological well-being and each of the remaining eleven work features assessed on the WES. Contrary to this prediction Table 17 shows that there were no significant correlations between any of the four indices of psychological well-being and the transformed (or raw) scores on WES item 1 (*Opportunity for Intrinsic Control*), item 4 (*Quality of Interpersonal Contact*), or item 10 (*Clarity in Feedback*). Nor were there any obvious curvilinear trends in the raw data (see scatter-plots in Appendix K). The predicted AD pattern was not borne out for a further five work features. Table 17 shows that there were no significant correlations between any of the well-being measures and transformed scores on WES item 5 (*Traction*), 6 (*Time Demands*), 7 (*Certainty of Future*), 8 (*Quantity of Interpersonal Contact*), or item 13 (*Extrinsic Control*). Nor were there any obvious curvilinear trends in the raw data (Appendix K). However, linear relationships were apparent between each of the above five work features and at least one well-being measure, as indicated by significant correlations between the non-transformed work feature ratings and total raw scores on the relevant well-being measure. Given that these relationships were not predicted, caution is needed in interpreting the findings because of concerns over multiple comparisons (cf. Clark-Carter, 2002).

Consistent with the AD prediction, curvilinear relationships were apparent in the *Variety* (item 2), *Clarity in Role Requirements* (item 3) and *Skill Use* (item 14) work features in relation to at least one indices of psychological well-being. Table 17
shows that there were significant correlations between Self-Efficacy at Work and the transformed ratings on both the *Skill Use* and *Variety* work features. A linear relationship between *Variety* work feature and Self-Efficacy at Work was also found. The presence of a linear element does not contradict the prediction made on the basis of Warr’s model, because a curvilinear relationship can have a linear component. Contrary to the prediction, there were no significant correlations between transformed ratings on either the *Skill Use* or *Variety* features and context-free well-being measures, nor were there any obvious curvilinear trends in the data (Appendix K).

Curvilinear and linear relationships were apparent between the *Clarity in Role Requirements* work feature and each of the two job-specific measures (Self-Efficacy at Work and Self-Esteem at Work), but not with the context-free measures. As discussed earlier, the presence of a linear element does not contradict the prediction for an AD pattern when a curvilinear relationship is also present.

Finally, it was noted that the raw scores from the *Traction* work feature (WES item 5) was significantly related to both the GSE and Self-Efficacy at Work and the raw scores from *Certainty of Future* (item 7) was significantly related to both the RSE and Self-Esteem at Work. Therefore, a mediator variable hypothesis was tested with the work environment feature causing job-specific well-being, which then has an affect on context-free well-being (Green & Salkind, 2003). The *Traction* and *Certainty of Future* work features as well as the four well-being measures were all normally distributed and no obvious curvilinear trends were evident in the data (see scatter-plots Appendix K), so partial correlation coefficients were computed. First, with *Traction* and GSE, holding constant Self-Efficacy at Work and second, with *Certainty of Future* and RSE, holding constant Self-Esteem at Work (see Table 18).

**Table 18. Partial correlations between Traction and well-being and Certainty of Future and well-being (N = 71).**

<table>
<thead>
<tr>
<th></th>
<th>Controlling For:</th>
<th></th>
<th>Degrees of Freedom</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-Efficacy at</td>
<td>Self-Esteem at</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work</td>
<td>Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traction</td>
<td>.0729</td>
<td></td>
<td>68</td>
<td>.548</td>
</tr>
<tr>
<td>Certainty of Future</td>
<td></td>
<td>-.1226</td>
<td>68</td>
<td>.312</td>
</tr>
</tbody>
</table>
Table 18 shows that the partial correlations were not significant. This is consistent with the hypothesis of job-specific well-being acting as a mediator in the relationship between the two respective work features and context-free well-being (Green & Salkind, 2003).

In summary, there was little evidence for the predicted CE pattern for the Valued Social Position, Availability of Money and Physical Security work features in relation to indices of psychological well-being. There was also little evidence for the predicted AD pattern. The strongest evidence for an AD pattern was found for the Clarity in Role Requirements work feature in relation to both measures of job-specific well-being, but not context-free measures. Finally, the results from exploratory analyses testing a mediator hypothesis were consistent with the possibility of a mediating relationship between some work features, job-specific well-being and context-free well-being. However, this relationship was only identified in two work features.

It is important to note that the potential range of scores on eight of the work features, assessed by the WES, were restricted (see Appendix F). The distribution of raw scores were significantly negatively skewed on the following work features: Intrinsic Control (item 1), Variety (item 2), Clarity in Role Requirements (item 3), Quality of Interpersonal Contact (item 4), Clarity in Feedback (item 10), Physical Security (item 12) and Skill Use (item 14). The distribution of scores on the Availability of Money (item 11) feature was significantly positively skewed. This may have limited the extent to which reliable correlations could be detected (Clark-Carter, 2002).

3.5.3 Sensitivity of job-specific versus context-free measures of well-being for detecting significant effects with work features

Finally, on the basis of Warr’s model (1987) it was predicted that job-specific measures of well-being would show a more direct relationship to work environment features than context-free measures of well-being. Three sources of evidence derived from the data offer some support for this prediction. First, Table 19 shows a trend for job-specific measures to be more frequently significantly associated with individual
WES items than the context-free measures. This trend could not be tested using Chi-Square analysis because the data was from a non-independent sample and the frequencies were too small (Clark-Carter, 2002; Green & Salkind, 2003). It must be noted that the majority of the significant results found were mainly showing linear rather than curvilinear patterns.

Table 19. The number of WES items with significant correlations (p < .05) with context-free well-being measures versus job-specific well-being measures.

<table>
<thead>
<tr>
<th>Context-Free Measures</th>
<th>Job-Specific Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Esteem</td>
<td>1</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

Second, correlation coefficients computed between well-being measures and the AD Raw and WES Raw Total composite variables revealed significant associations with all job-specific measures but with only one context-free measure (see Table 16).

Third, in statistical terms the hypothesis that job-specific well-being would show a more direct relationship with work features translates into predicting that job-specific measures of well-being should show significantly stronger correlations with scores on the WES than context-free measures. To test this prediction, the Pearson Product Moment correlation coefficients previously calculated between the four measures of well-being and the AD Raw Total scale were selected (see Table 16). The AD Raw Total was chosen because it was normally distributed and could be considered to approximate to an interval scale, unlike the individual WES item scores, thus allowing parametric tests to be used (the well-being measures also met the assumptions necessary for parametric tests, as discussed earlier). Furthermore, AD Total scores fitted more closely with Warr’s predictions than the WES Total scores.

The procedure outlined by Clark-Carter (2002, pp. 526-527) for calculating the difference between two correlation coefficients from a non-independent sample was then used. This revealed that, as predicted, the correlation between the job-specific measure of self-esteem and AD Raw Total (r = -.325) was of significantly greater magnitude than the correlation between the context-free measure of self-esteem and the AD Raw Total (r = -.119) (t [68] = 2.03, p<.05). Similarly, as predicted by
Warr’s model, the correlation between the job-specific measure of self-efficacy and the AD Raw Total \( (r = .406) \) was significantly larger than the correlation between the context-free measure of self-efficacy \( (r = .229) \) and the AD Raw Total \( (t[68] = 2.27, p<.05) \).  

These findings are consistent with the prediction from Warr’s model that job-specific measures of well-being would show a more direct relationship with work environment features than context-free measures.

\(^7\) It is useful to note that the same pattern of significance was found for the WES Raw Total scores.
4.0 Discussion

The current research represented a partial replication and extension of Dick and Shepherd's study (1994) in an attempt to address some of the limitations of the original study. The global aim was to examine how different features of sheltered workshop environments affect job-specific and context-free psychological well-being of service-users with severe and persistent mental health problems. Specific research aims were to develop two job-specific measures of well-being (Self-Efficacy at Work and Self-Esteem at Work) by adapting the two context-free measures used in this study, GSE and RSE respectively. Second, to modify the WES instrument, in an attempt to enhance its reliability. Third, to explicitly test whether linear (CE) or non-linear (AD) patterns were apparent in the relationship between work features and well-being and if job-specific measures showed a stronger relationship to work features than context-free measures, based on the predictions derived from Warr's model (1987). To this end the well-being measures and the WES were administered to a sample of adults with severe and persistent mental health problems attending eight sheltered workshops within an NHS Trust serving a wide rural area. The findings derived from the three main predictions will each be discussed in turn with reference to the limitations and implications, prior to giving a general overview of the limitations of this study and recommendations for future research.

4.1 Predictions

4.1.1 CE pattern between work features and well-being

It was predicted that there would be positive linear relationships between indices of psychological well-being and each of the following work features: \textit{Valued Social Position} (WES item 9), \textit{Availability of Money} (WES item 11) and \textit{Physical Security} (WES item 12). Contrary to this prediction, no such relationships were found. This could be because these three work features do not have a positive impact on service-users' well-being. However, this needs to be qualified subject to a number of limitations.
First, concerns were raised over the very poor test-retest reliability coefficient of the *Valued Social Position* feature, which failed to reach statistical significance. Ambiguity in the wording of this feature may have contributed to the poor test-retest reliability. The *Valued Social Position* feature was operationalised in the WES as “How important do the general public think your job is?” It was not uncommon for participants to report being confused over the wording of this question, with some asking how would they know what the public thought. It is of interest to note that this was the only work feature that Dick and Shepherd (1994) found to be significantly correlated to one of their context-free measures (self-esteem). In their test-retest reliability study, this item reached statistical significance.

Ambiguity in the wording may not fully account for the poor reliability. In the current study the researcher also noted that in response to this question many participants reported that the public was not aware of the existence of the workshop and that whether or not the public thought their job was important was not a reason for attending the workshop. Participants cited having a “safe haven” as the primary motivating factor for attendance and not social status. This raised questions over whether the *Valued Social Position* feature, as it was operationalised in the WES, was perceived to be relevant to the service-users in the current sample. At the time of the study all the work schemes were in the process of undergoing changes in service organisation and structure. Many service-users expressed concern over the implications of the changes to their future work status. It could be speculated that this concern might have overshadowed the perceived relevance of the general public’s opinion of their job.

Furthermore, this WES item may not have effectively operationalised Warr’s description of the *Valued Social Position* work environment category. Warr (1987) identified two subcategories within this feature: esteem from roles and personal meaningfulness of the job. Thus he differentiated between the values attached to activities inherent in the work role versus the contribution these make to the wider social structure (Warr, 1987). In the WES only the first subcategory was operationalised. However, recent qualitative research has highlighted how people with severe and persistent mental health problems need to perceive work as meaningful in order to be motivated to engage in it (Mee & Sumsion, 2001; Mitchell,
1998; Nagle et al., 2002; Scheid & Anderson, 1995). For example, Nagle and colleagues (Nagle et al., 2002) undertook an in-depth qualitative exploration of the occupational lives of unemployed people with severe and persistent mental health problems to develop an understanding of the meaning and value they derive from engaging in other forms of work. Informants described seeking out occupations that were purposeful, which involved meeting personal needs and wants as well as having social value. Quantitative research on job tenure has also highlighted the importance of the personal meaningfulness of the work for clients to sustain longer tenure (Mueser et al., 2001). This offers some support for the potential importance of Warr’s subcategory relating to the personal value attached to the work role. It therefore raised questions over whether this subcategory might have been more meaningful to the current sample.

With reference to the Availability of Money and Physical Security work features, both showed satisfactory stability over time. However, the distribution of scores on both these features was significantly skewed. Participants tended to rate the physical comfort of their working conditions as present to a greater degree and the amount of pay they received as present to a lesser degree. This may have limited the extent to which reliable correlations could be detected because of the restricted range of scores (Clark-Carter, 2002).

The researcher observed that when participants responded to the Physical Security WES item, using the upper end of the scale, they often made positive comments, such as “oh yes, I like coming here because the workshop is very comfortable” or “I like working in this building”. The workshops may therefore already have been providing the optimal working conditions necessary to promote well-being. With reference to the Availability of Money work feature, there were concerns over the relevance of this feature to service-users well-being. While service-users acknowledged that pay was nominal (based on therapeutic earnings), they also reported that this was not an important concern affecting their motivation to attend the workshops. Previous research findings on the relative importance of pay for service-users involved in work activity have been equivocal. Some empirical studies have highlighted the clinical benefits of paid work (e.g. Bell & Lysaker, 1997), while other more qualitative studies
have noted that pay appears to be a less important factor regarding service-users' motivation for engaging in work activity (Mitchell, 1998; Creed et al., 2001).

In summary, the predicted CE pattern was not borne out for the Valued Social Position, Availability of Money and Physical Security work features. However, several limitations that have been cited may have impacted on the extent to which the CE pattern could be fully tested. The possible conclusions that can be drawn from the data are that these work features were not perceived to be relevant to service-users' well-being, the measures were either not relevant or sensitive enough, or the sheltered workshops were already providing the optimal conditions necessary to promote well-being.

4.1.2 AD pattern between work features and well-being

It was predicted that there would be a curvilinear relationship (AD pattern) between indices of psychological well-being and each of the remaining eleven work features assessed on the WES: Opportunity for Control (Intrinsic), Variety, Environmental Clarity (Role Requirements), Interpersonal Contact (Quality), Externally Generated Goals (Traction), Externally Generated Goals (Time Demands), Environmental Clarity (Certainty of Future), Interpersonal Contact (Quantity), Environmental Clarity (Feedback), Opportunity for Control (Extrinsic), and Opportunity for Skill Use.

Contrary to the prediction, eight work features did not show any significant curvilinear relationships with the well-being measures. Consistent with the prediction, curvilinear relationships were apparent in the Variety, Skill Use and Clarity in Role Requirements features. This pattern was not consistent across all well-being measures. Variety and Skill Use each only showed a curvilinear relationship to Self-Efficacy at Work. Previous qualitative research has highlighted the importance of having variety in work tasks in explanation of service-users' satisfaction at work (e.g. Mitchell, 1998). Variety has been identified as a central component of motivation to work (Argyle, 1992). The desire to be productive through using their skills has also been cited as an important factor in service-users' motivation to engage in work (Nagle et al., 2002).
The present findings are consistent with the possibility that moderate amounts of variety in work tasks and opportunities to use current skills are positively related to self-efficacy beliefs at work, but too much or too little of these features may come to have a negative impact on these beliefs. Thus, having variety in work tasks and opportunities to use current skills may not only be desirable but may impact on service-users’ beliefs in their ability to respond and cope with the work environment, depending on the degree to which these features are present. However, given that an association between these work features and self-efficacy beliefs at work does not imply causation, there is a strong possibility that the relationship is bi-directional. In other words, the level of service-users’ work-related self-efficacy beliefs could also impact on the degree to which they rate the presence of Variety and Skill Use in the workshops.

Perhaps the strongest evidence for an AD pattern was found in the Clarity in Role Requirements feature, in relation to both measures of job-specific well-being, but not in relation to the context-free measures. This feature was operationalised as “How clear is it to you what you are expected to do when at work?” Participants who rated the presence of moderate amounts of clarity in what they were expected to do when at the sheltered workshops were more likely to report higher levels of self-efficacy beliefs and self-esteem at work. In contrast, participants with very low or high ratings were more likely to report lower levels of job-specific well-being. This would fit with Warr’s AD model (1987) where low or high levels of this work feature tend to have a negative impact on mental health, but moderate amounts would show no such decrement. The importance of having clarity in role requirements has been highlighted by previous research.

Early research proposed that clear structures and task specification are among some of the important features of the work environment for ensuring job tenure amongst this population (cf. Floyd, 1984; Pilling, 1988; Wadsworth, Wells, & Scott, 1962). Recent qualitative studies into occupational choices of persons with severe and persistent mental health problems have also highlighted the perceived benefits of having a clear structure to the day when seeking positive work-based opportunities (Nagle et al., 2002; Scheid & Anderson, 1995). The present findings take this a step further, by offering empirical support for the possibility that the work-related psychological
benefits of having clarity in role requirements might be influenced by the degree to which role clarity is present in the workshop. Again it is important to note that this relationship might be reciprocal. However, this interpretation needs qualification (see below for problems with the WES).

Multiple comparisons were used in order to explicitly test Warr’s AD model to see if a general AD pattern emerged across the eleven work features. Given the fact that significant curvilinear relationships were only apparent in three work features, caution is required when interpreting the relative importance of these individual results. Overall, there was little evidence for the presence of the predicted AD pattern. In light of the lack of effects detected amongst the AD features a number of general limitations regarding the WES need to be considered.

Problems with the WES

First, five of the eleven features predicted to show an AD pattern did not reach the minimum recommended requirement for satisfactory stability, including Clarity in Role Requirements (i.e. rho = < 0.7) (Kline, 1986, pp.3; Steering Committee on Test Standards, 1995; pp.4). It has been acknowledged that the WES was designed to be sensitive to changes in the work environment (Dick & Shepherd, 1994). Even over a short test-retest period of seven days, in combination with the significant work service changes, it is reasonable to expect variability in responses over time. However, one feature, Clarity in Feedback, did not even reach statistical significance. This feature requires further discussion, since it represented one of the three re-worded items in the present study.

The Clarity in Feedback work feature was operationalised in the WES as “To what extent does your supervisor give you clear feedback on your job performance?” In responding to this question the researcher observed that not all participants understood the meaning of this question. The question itself consists of a number of dimensions: Whether or not the respondent receives feedback on work performance, how much feedback they get, and how clear is the feedback. The complexity in wording may have made it difficult for respondents to understand and/or know how to answer it. Responses may also have varied depending on whom the participants were interacting
with in the environment at the time of completing the questionnaire and how they interpreted the term “supervisor”; each workshop had a manager as well as a number of different technical support assistants. The environmental conditions for making feedback available may have varied from day to day as well. For example, at the time of the reliability study, the availability of staff on the workshop premises varied according to whether or not they were attending a series of work service meetings set up to address the service changes.

Second, it was possible that a further two of the AD WES items may have been ambiguous in their wording. These were the Quantity of Interpersonal Contact and Quality of Interpersonal Contact work features. Both these features were respectively operationalised in the WES as “How often do you have to work closely with other people in order to get a job done properly?” and “To what extent are other people at work supportive and friendly towards you?” The latter item achieved satisfactory stability in the current reliability study ($\rho = .727$, $p < .01$, $N = 24$), although the former item did not ($\rho = .621$, $p < .01$, $N = 24$). However, neither WES items showed any statistically significant correlations with any of the indices of psychological well-being. This is not consistent with recent research findings that have highlighted the importance of social support to service-users’ well-being at work (cf. Nagle et al., 2002). Both WES items referred only to “other people”. This fails to differentiate between the different types of interactions that may be present in the participants’ work environment and which in turn might impact on well-being to varying degrees. Recent research has highlighted how support can be both a source of stress as well as benefit depending on the type of relationship (i.e. co-workers versus supervisory relationships) (Rollins et al., 2002; Scheid & Anderson, 1995). It is important to acknowledge that the design of the WES pre-dated these studies. However, with hindsight these work features might benefit from a more explicit operationalisation of the different work relationships.

Third, the scores on six of the eleven AD features showed significantly skewed distributions. The range of responses sampled may have been artificially restricted due to the nature of the WES’s response scale (Clark-Carter, 2002). Within Warr’s vitamin model (1987, 1994), it was proposed that certain work features come to have a negative impact on well-being (an AD pattern) only when present in the
environment at “extremely high” levels (Warr, 1994, pp.88). For each WES item the visual analogue scale ranged from “very little” to “a lot”. These descriptions may not have been able to detect the presence of more extreme levels of a work feature (i.e. too much or too little).

This raised questions over whether the WES was only sensitive enough for detecting linear rather than non-linear relationships. Contrary to what might be expected from Warr’s model, the raw scores from all fourteen WES items did combine to form an internally consistent composite scale (WES Raw Total), which detected linear relationships. Significant linear relationships but not curvilinear relationships were also apparent in five individual work features predicted to show an AD relationship with well-being. These findings suggest the WES was better able at detecting linear relationships between work environment features and well-being than non-linear relationships.

4.1.3 Summary and implications of AD and CE predictions

With the exception of three work features the predictions derived from Warr’s model for specific AD and CE patterns between work features and indices of psychological well-being were not borne out in this study. At the simplest level this may suggest that Warr’s work environment features are generally not applicable to the well-being of people with severe and persistent mental health problems working in sheltered workshops (cf. Dick & Shepherd, 1994). His model was validated and indeed derived from studies conducted in non-psychiatric settings (e.g. Warr, 1987; Kelloway & Barling, 1990). Dick and Shepherd (1994) suggested that engaging in work per se might be an important factor in its own right for persons with severe and persistent mental health problems, which would reduce the magnitude of effects for individual work features (Dick & Shepherd, 1994). Empirical research has demonstrated that a change in vocational status (work versus no work) can positively impact on the well-being of this population (cf. Bond et al., 2001; Mueser et al., 1997; McGilloway & Donnelly, 2000).

However, in moving the discussion away from the predicted CE and AD patterns, the present study did detect significant linear relationships between indices of well-being
and five individual work features. In light of the concerns raised over the restricted range of the WES response scale, these work features merit further discussion. Given that these relationships were not predicted, caution is needed in interpreting the findings because of concerns over multiple comparisons (Clark-Carter, 2002). This discussion will therefore limit itself to exploring the two work features that showed linear relationships across more than one indices of well-being: Externally Generated Goals (Traction) and Environmental Clarity (Certainty of Future).

The Traction work feature was operationalised in the WES as “To what extent do other people in the workshop rely on you to do certain jobs that only you can do?” It was significantly correlated to three of the four well-being measures (GSE, RSE and Self-Efficacy at Work scales), indicating that individuals who considered that they had some jobs designated their sole responsibility were more likely to have higher levels of global self-esteem, generalised and work-related self-efficacy beliefs.

The Certainty of Future work feature was operationalised as “How secure is your job at the moment. Will it be there for as long as you want it?” It was significantly correlated with global and work-related self-esteem, indicating that individuals who considered that they have secure jobs were likely to have higher levels of self-esteem. Recent qualitative studies undertaken in the UK and beyond have highlighted that having safe and secure environments are important to persons with severe and persistent mental health problems for engaging in and sustaining work-based activities (Mee & Sumsion, 2001; Nagle et al., 2002). Sheltered workshops have been noted for their ability to provide ongoing support to service-users within a safe vocational environment (Young, 2001). Furthermore, in a descriptive study of two work rehabilitation projects set up in the UK, Mills (1991) highlighted both the positive and negative impact of having jobs designated their sole responsibility on service-users’ mental health. Using Warr’s notion of the AD pattern, Mills described examples of how the right amount of traction improved service-users’ state of mental health, but too much traction was detrimental (Mills, 1991).

These studies have highlighted how secure environments that offer some role responsibility are desirable features of the work environment for service-users. The present findings further suggest that these work features might have a positive impact
on service-users' psychological well-being. The findings have also indicated that having moderate amounts of variety in tasks, opportunities to use existing skills and clarity in role requirements might be important features of the work environment for impacting on job-specific well-being. It is important to acknowledge that these interpretations are based on results derived from correlations, which does not prove causation. In practice, it is likely that the two factors (work features and well-being) probably interact (cf. Dick & Shepherd, 1994). At the very least, these findings do suggest that Warr's (1987) work environment categories have some relevance to this population and represent a starting point for future research to explicitly test the relative merits of these five work features for service-users' well-being.

4.1.4 Strength of relationship between work features and job-specific versus context-free indices of psychological well-being

Finally, it was predicted that job-specific measures of well-being would show a stronger relationship with work environment features than context-free measures. Consistent with this prediction, there was a notable trend for job-specific measures to be more often related to individual WES items than context-free measures. Job-specific measures were also found to have correlations of a statistically greater magnitude with the AD Raw Total scale (as well as with the WES Raw Total) than the context-free measures. This finding indicates that job-specific well-being might be a better measure for detecting differences in well-being attributable to features of the work environment than more global indices of well-being, as Warr proposed (Warr, 1987; 1994).

However, it has been argued that the effects of work on more global non-vocational outcomes (e.g. quality of life, self-esteem) are cumulative for individuals with severe mental health problems and change occurs in small increments over time (cf. Bond et al., 2001). As mentioned in the introduction, previous evidence for the impact of work on global self-esteem has been equivocal (Creed et al., 2001; Torrey et al., 2000). Thus, the impact of work features on global well-being may only be evident after an extended period of employment (cf. Bond et al., 2001). Since the vast majority of participants (70%) in this study reported having been employed for at least
one year, with an average of three years, it could be argued that the service-users had already experienced a lengthy period of exposure to work.

In attempting to clarify the complex and inconsistent relationship between working and global self-esteem an alternative perspective has recently been put forward (Casper & Fishbein, 2002; Drake et al., 2003). The findings from Casper and Fishbein's study (2002) suggested that the self-esteem of people with severe mental health problems appeared to vary with the satisfaction and success they experienced with being employed (Casper and Fishbein, 2002). They proposed that self-esteem might be a more distal rather than proximal outcome of employment services: going to work may not be initially related to self-esteem but over time, as individuals experience satisfaction or dissatisfaction along with successes or disappointments at work, these variables show a relationship with self-esteem.

In the present study, some preliminary support was offered for the hypothesis that job-specific well-being acts as a mediator in the relationship between work features and context-free well-being. However, it is important to note that this evidence was derived from examining the partial correlations of the only two work features (Traction and Job Security) found to have a significant relationship with both a job-specific and a context-free measure of well-being. These findings cannot offer general evidence for a mediating relationship. Future research would need to examine the nature of the relationship between context-free and job-specific well-being across many more aspects of the work environment over time.

In examining the impact of the work environment on well-being, the above findings do highlight the importance of making a more explicit assessment of psychological "well-being" (i.e. distinguishing between job-specific and context-free well-being). From a practical viewpoint, the newly developed Self-Efficacy at Work and Self-Esteem at Work scales have initially been shown to be reliable and valid tools for assessing psychological well-being in a sample of participants with severe and persistent mental health problems attending sheltered workshops in the UK. As far as the author is aware there are no work-related measures of well-being for this population currently available in the literature. To generalise the utility of these tools and given that scale validation is always an ongoing process, further examination of
the psychometric properties of these scales would be required and validation in other contexts and a wider range of samples (Robins et al., 2001).

In summary, there was little evidence to support the predicted AD or CE pattern across work features and indices of psychological well-being. The findings offered some support for the prediction that job-specific well-being would show a more direct relationship to work features than context-free well-being. The implications of these findings were constrained by a number of limitations, an overview of which will now be presented.

4.2 Overview of Limitations

The reliability and validity of the WES and four well-being measures will first be considered in light of the general lack of effects detected between individual work features and psychological well-being. With reference to the four well-being measures, all four scales showed satisfactory internal consistency and construct validity in this study. There was no evidence to suggest that participants found these difficult to complete and statistically significant correlations between scores on the relevant job-specific scales and context-free scales (i.e. Self-Efficacy at Work with Self-Esteem at Work and GSE with RSE) offers some support for participants responding appropriately to these measures (cf. Dick & Shepherd, 1994). The newly developed job-specific measures also showed satisfactory stability over a one-week test period and appeared to have face validity from the subjective observations made by the researcher.

However, with reference to the WES several limitations have been identified, which raised questions over the extent to which this present study could adequately assess the predictions derived from Warr’s model (1987). Firstly, there were concerns over the complexity and ambiguity in the wording of certain WES items. Second, as Dick and Shepherd (1994) suggested, the WES may not have included those features most likely to affect the well-being of this population. With the benefit of more recent research that post-dates Dick and Shepherd’s study (1994), the Valued Social Position feature was criticised on these grounds. Third, due to the restricted range of the response scale, the WES may only have been sensitive enough for detecting linear
Fourth, in generating items for the WES, Dick and Shepherd (1994) interviewed attendees at a psychiatric day centre who were either working or who had worked in the past. Dick and Shepherd (1994) made no reference as to the type of work engaged in by the day hospital attendees. It may be that the work features selected by these service-users, as most relevant to their mental health, may not be of the same relevance to sheltered workshop clients. Furthermore, the subsequent piloting of the questionnaire on employees at the sheltered workshops was undertaken ten years ago. It has already been acknowledged in the literature how the nature of work opportunities as well as the needs and nature of the psychiatric population engaging in these activities change over time (O’Flynn & Craig, 2001).

As far as the author was aware the WES, with all its limitations, was the only measure available in the literature that not only attempted to assess work features derived from Warr’s model (1987) but also had been designed specifically for a psychiatric population. Furthermore, the present author made a number of modifications to the WES in an attempt to enhance reliability. The test-retest reliabilities for two out of the three re-worded items (Quality of Interpersonal Contact and Availability of Money) were greatly improved when compared to the reliabilities obtained in Dick and Shepherd’s (1994) study, despite the present study using the more conservative Spearman’s rho test. AD and Raw Total composite scales were also found to have satisfactory internal consistency, which points towards the potential for enhancing reliability of individual work features by forming such composite scales.

If the specificity of each WES item was increased and a pool of items generated that reflected the relevant subcategories identified by Warr (1987), this could be incorporated into a revised WES scale. This in turn may enhance the scale’s reliability and validity. It is acknowledged that incorporating more work environment subcategories into a scale consisting of independent items might be at the expense of making the WES too unwieldy for this population (cf. Dick and Shepherd, 1994). However, it would create a greater pool of items from which composite scales could be formed, perhaps reflecting Warr’s proposed AD and CE patterns.
Other methodological and sampling limitations will now be considered. Firstly, the participants and workshops were self-selected and not randomly selected. Participants were primarily White British from the same rural geographical area and all chose to attend sheltered workshops because of its perceived benefits. The data does not allow the author to infer anything about clients who may have dropped out of attending sheltered workshops. The findings may therefore not generalise beyond the current sample.

Secondly, Dick and Shepherd (1994) suggested that homogeneity across work setting might have contributed to the lack of significant effects detected in their study. While this current study attempted to improve upon this by using eight different workshop environments, these work schemes were still run under the same NHS organisation and each workshop had senior clinicians attached who were specially trained to oversee the mental health needs of this population. It was possible that these work settings did not contain high enough levels of the work features predicted to be detrimental to well-being. At moderate levels a single factor is unlikely to have a substantial impact on well-being (Warr, 1994). Future research would first need to revise the response scale on the WES (as the range of responses sampled may have been artificially restricted), before it could be determined whether or not the workshops were providing the optimal work conditions necessary to promote well-being. Future research may also find it useful to examine the nature of the relationship between work features and well-being across different organisations that provide sheltered work schemes in the UK for people with mental health problems.

Third, a relatively large number of outcomes were examined. Although the findings are bolstered by a priori hypotheses and the partial replication of the Dick & Shepherd study (1994), an inflated Type 1 error rate is still a concern (cf. Bond et al., 2001; Green & Salkind, 2003).

Finally, the design and analysis used in this study can only indicate associations between work features and well-being and does not imply causation. It is therefore not possible to determine whether those work features identified as having a significant relationship with well-being measures are a causal factor affecting levels
of well-being or whether causation is in the reverse direction. In practice it is possible that causation is bi-directional (cf. Dick & Shepherd, 1994). Furthermore, some work features may only impact on psychological well-being longitudinally and thus might not be detected with cross-sectional methods.

4.3 Conclusions and Future Recommendations

The present research failed to offer consistent support for Warr’s (1987) predicted AD or CE pattern across the work features and indices of psychological well-being. Questions were raised over the validity and reliability of the WES, which may have limited the extent to which this instrument could be used to directly test Warr’s model (1987). To systematically investigate the precise relationship that operates between work features and well-being, the development of standard measures of the work environment are required. Recent research into aspects of the work environment thought to impact on the psychological well-being of service-users may help to improve the specificity of WES items (cf. Mee & Sumson, 2001; Mitchell, 1998; Mueser et al., 2001; Nagle et al., 2002; Scheid & Anderson, 1995). Having multiple items for each work feature and revising the WES response scale would enhance reliability. One recommendation would be to change the written descriptions on either end of the response scale, from its current descriptions of “a little” and “a lot”, to “too little” and “too much”. This would allow for the presence of extreme levels of the work features to be assessed more directly, in line with Warr’s model (1987, 1994). Extensive pilot work on a more relevant sample would need to be undertaken. This would help to ensure that any identified work features, which are incorporated into a scale, adequately reflect the concerns of the current psychiatric population involved in vocational rehabilitation. At present Warr’s model remains to be fully tested within this population.

The findings highlighted how five work features: Clarity in Role Requirements, Certainty of Future, Traction, Variety and Skill Use, may be important aspects of the sheltered work environment in terms of their impact on service-users’ well-being. The utility in differentiating between global and work-related well-being when examining features of the work environment has also been highlighted. It is recommended that future research further establish the reliability and external validity
of the Self-Efficacy at Work and Self-Esteem at Work scales employed in this study. This may offer a step towards establishing work-related outcome measures for evaluating the effectiveness of different work environments in the UK for people with severe and persistent mental health problems (Boardman et al., 2003). This would be particularly useful, given the fact that so many different types of organisations are currently responsible for providing work and employment services for this population, but consistency in the measurements used are lacking (Boardman et al., 2003).

Finally, some tentative support was offered for work-related well-being acting as a mediator in the relationship between work features and global well-being. It is recommended that future research evaluate the impact of work features on context-free and job-specific well-being longitudinally. This would provide a more direct test of whether job-specific indices are more sensitive in detecting changes in well-being attributable to the work environment than global measures and may help to clarify the precise nature of this relationship. If global well-being is a more distal outcome of the work environment and conditionally related to job-specific well-being, this might influence the way in which vocational services are evaluated (cf. Casper & Fishbein, 2002). In order to produce changes in global well-being the work environment would need to include features that ensure satisfaction and success at the job (Casper & Fishbein, 2002).

It is hoped that these recommendations will help future research to persist in measuring and valuing therapeutic outcomes when attempting to understand the psychological impact of work environments for adults with severe and persistent mental health problems (Bond et al., 2001; Honey, 2000, McGilloway & Donnelly, 2000). As researchers have argued it is through further examination and development of work environments that facilitate well-being that service-users will continue to achieve and sustain engagement in the work place (cf. Kirsh, 2000).
References


Appendix A

Demographic Questionnaire
PARTICIPANT INFORMATION SHEET

Please complete the following information:

Age...................................................years

Gender Male □ Female □

Ethnic Group White □ Mixed □ Asian □ Black □ Other □ .......(please specify)

Cultural Background British □ Other □ .......(please specify)

Name of this Workshop Unit......................................................................................

Number of days spent working at above workshop unit..............................................

Length of time you have been attending this workshop unit.................................

Name of any other work units you are currently attending........................................

Number of days spent working at other work units...................................................

Current Medication....................................................................................................

Psychiatric Diagnosis................................................................................................

Work History:

<table>
<thead>
<tr>
<th>Title of Job</th>
<th>Start Date (year or what age you were when you started the job)</th>
<th>Length of Time Worked There (in months or years)</th>
<th>Paid or Unpaid Work</th>
<th>Was this job part of a work rehabilitation programme? √ or X</th>
</tr>
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<tbody>
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</table>

Educational History:

Age when you left school...................................................years

Qualifications gained.........................................................

Training Courses attended....................................................

Thank you for your time.
Please go on now to complete the Questionnaire...
Appendix B

Questionnaire Pack
QUESTIONNAIRE

Please Answer all the questions contained in the next 5 sections.

Each section will give you instructions on how to answer the questions in that section.

Thank you for your co-operation.
**SECTION A: YOUR LIFE IN GENERAL**

This section asks you questions about the general beliefs you have about yourself.

Here is a list of statements dealing with your general beliefs in your ability to respond to new or difficult situations and how to deal with any associated obstacles or setbacks.

Please indicate the extent to which each statement applies to you. If the statement is not at all true, circle 1. If the statement is barely true, circle 2. If the statement is moderately true, circle 3. If the statement is exactly true, circle 4. Thank you

<table>
<thead>
<tr>
<th>Not at all true</th>
<th>Barely true</th>
<th>Moderately true</th>
<th>Exactly true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can always manage to solve difficult problems if I try hard enough.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. If someone opposes me, I can find means and ways to get what I want.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. It is easy for me to stick to my aims and accomplish my goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. I am confident that I could deal efficiently with unexpected events.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Thanks to my resourcefulness, I know how to handle unforeseen situations.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. I can solve most problems if I invest the necessary effort.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. I can remain calm when facing difficulties because I can rely on my coping abilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. When I am confronted with a problem, I can usually find several solutions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. If I am in a bind, I can usually think of something to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. No matter what comes my way, I'm usually able to handle it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Thank you. Please go on to Section B...
SECTION B: YOUR LIFE IN GENERAL

This section asks you questions about how you generally feel about yourself.

Here is a list of statements dealing with your general feelings about yourself. If you agree with the statement, circle A. If you strongly agree, circle SA. If you disagree, circle D. If you strongly disagree, circle SD. Thank you.

1. On the whole, I am satisfied with myself. SA A D SD
2. At times I think I am no good at all. SA A D SD
3. I feel that I have a number of good qualities. SA A D SD
4. I am able to do things as well as most other people. SA A D SD
5. I feel I do not have much to be proud of. SA A D SD
6. I certainly feel useless at times. SA A D SD
7. I feel that I'm a person of worth, at least on an equal plane with others. SA A D SD
8. I wish I could have more respect for myself. SA A D SD
9. All in all, I am inclined to feel that I am a failure. SA A D SD
10. I take a positive attitude toward myself. SA A D SD

Thank you. Please go on to Section C...
SECTION C: AT WORK

This section asks you questions about your views of your job at the workshop.

This questionnaire is designed to obtain your perceptions of your job and your reactions to it. There are no trick questions. Your individual answers will be kept completely confidential. Please answer each question as honestly and as frankly as possible. Thank you for your co-operation.

There are 14 questions. For each question, please put a mark on the line indicating what you think about that aspect of your job. This set of questions is concerned with what actually happens in your job. We would like you to answer questions to describe what your job is like. If you do not understand any of the questions, please ask the researcher, who will explain them to you.

A sample question is given below:

To what extent does your job require you to work with mechanical equipment?

very little a lot

What is your job like?

1. How much choice do you have in your job about what to do and when and how to do it?

very little a lot

2. How much variety is there in your job? How often do you have to do different things, using different skills and talents?

very little a lot

3. How clear is it to you what you are expected to do when at work?

very unclear very clear

4. To what extent are other people at work supportive and friendly towards you?

very little a lot

5. To what extent do other people in the workshop rely on you to do certain jobs that only you can do?

very little a lot

6. How much work do you have to do at the workshop?

very little a lot
7. How secure is your job at the moment? Will it be there for as long as you want it?

very insecure __________________________________________ very secure

8. How often do you have to work closely with other people in order to get a job done properly?

very little __________________________________________ a lot

9. How important do the general public think your job is?

very unimportant ______________________________________ very important

10. To what extent does your supervisor give you clear feedback on your job performance?

very little __________________________________________ a lot

11. How much pay do you get for your job?

very little __________________________________________ a lot

12. How comfortable are your physical working conditions?

very uncomfortable ______________________________________ very comfortable

13. How much say do you have in the way the workshop is run and the type of work that is done there?

very little __________________________________________ a lot

14. How much does this job make use of your skills and abilities?

very little __________________________________________ a lot

Thank you. Please go on to Section D...
SECTION D: AT WORK

This section asks you questions about the beliefs you have about yourself when you are at the workshop.

Here is a list of statements dealing with your beliefs in your ability to respond to new or difficult situations when you are at the workshop and how to deal with any associated obstacles or setbacks at work.

These questions are similar to those asked earlier in the questionnaire, but this time I would like you to answer them in relation to the beliefs you have when at the workshop.

Please indicate the extent to which each statement applies to you when you are at the workshop. If the statement is not at all true, circle 1. If the statement is barely true, circle 2. If the statement is moderately true, circle 3. If the statement is exactly true, circle 4. Thank you

1. At work I can always manage to solve difficult problems if I try hard enough.

2. At work if someone opposes me, I can find means and ways to get what I want.

3. At work it is easy for me to stick to my aims and accomplish my goals.

4. At work I am confident that I could deal efficiently with unexpected events.

5. At work, thanks to my resourcefulness, I know how to handle unforeseen situations.

6. At work I can solve most problems if I invest the necessary effort.

7. At work I can remain calm when facing difficulties because I can rely on my coping abilities.

8. At work when I am confronted with a problem, I can usually find several solutions.

9. At work if I am in a bind, I can usually think of something to do.

10. At work no matter what comes my way, I'm usually able to handle it.

Thank you. Please go on to the last Section E...
SECTION E: AT WORK

This section asks you questions about how you feel when you are at the workshop.

Here is a list of statements dealing with your feelings about yourself when you are at the workshop. These questions are similar to those asked earlier in the questionnaire, but this time I would like you to answer them in relation to how you feel when at the workshop.

If you agree with the statement, circle A. If you strongly agree, circle SA. If you disagree, circle D. If you strongly disagree, circle SD. Thank you.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the whole, I am satisfied with myself at work.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>At times I think I am no good at all at work.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>I feel that I have a number of good qualities at work.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>I am able to do things as well as most other people at work.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>I feel I do not have much to be proud of at work.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>I certainly feel useless at times at work.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>I feel that I’m a person of worth, at least on an equal plane with others at work.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>I wish I could have more respect for myself at work.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>All in all, I am inclined to feel that I am a failure at work.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>I take a positive attitude toward myself at work.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
</tbody>
</table>

You have now completed the research pack.
Thank you very much for your co-operation and time.

If you would like to receive written feedback by post of the general findings from this study please contact the researcher at the address below:
Dee Crockard XXXXXXXXX
Appendix C
Letters of Ethical Approval
23 June 2003

Miss DM Crockard
Trainee Clinical Psychologist
University of Surrey
Dept of. Clinical Psychology
Guildford
Surrey GU2 7XH

Dear Miss Crockard

Re: The effect of work environment features in job-related and general mental well being in sheltered workshops.

LREC ref. number: 381 (Please use this reference in all future correspondence)

Thank you for submitting your research proposal for consideration at the Local Research Ethics Committee for review at its meeting on 16th May 2003. I am pleased to inform you that the committee holds no more ethical objections to the study going ahead.

The Committee would like to follow up all new trials. We would be grateful, therefore, if you could send us an update one year from the commencement of the study, showing the following details:

1.0 whether the research is still continuing

2.0 if it is, which stage it has reached:
   - Data being collected
   - Data being analysed
   - Research being written up
   - Research published

3.0 whether there have been any serious adverse events

If you are sending any Protocol Amendments to us, please ensure that you highlight the areas of change.
For your information, the following documentation was reviewed:

- Supplementary, less technical title to the project, added to part 3A of application form, client information sheet and consent form.
- Amended sections 7A, 10B and 11A of the protocol and page 2 on the information sheet.
- Tear off slip in client information sheet.
- Paragraph 7 in client information sheet.
- Typo errors in client information sheet.
- Headings in Questionnaire.

Please note that you must gain the approval of the Research & Development Committee/Lead within the Trust where you plan to carry out your research before commencing.

Local Research Ethics Committee operates in accordance with relevant ICH GCP and GAfREC guidelines.

Yours sincerely

ADMINISTRATOR
04 September 2003

Ms DM Crockard
Department of Psychology
School of Human Sciences

Dear Ms Crockard

**The effect of work environment features on job related and general mental well being in sheltered workshops – ACE/2003/83/Psych – Fast Track**

I am writing to inform you that the Ethics Committee has considered the above protocol (and the subsequent information supplied) under its ‘Fast Track’ procedure and has approved it on the understanding that the Ethical Guidelines for Teaching and Research are observed. For your information, and future reference, these Guidelines can be downloaded from the Committee’s website at http://www.surrey.ac.uk/Surrey/ACE/.

This letter of approval relates only to the study specified in your research protocol (ACE/2003/83/Psych – Fast Track). The Committee should be notified of any changes to the proposal, any adverse reactions, and if the study is terminated earlier than expected, with reasons.

Date of approval by the Ethics Committee: 04 September 2003
Date of expiry of approval by the Ethics Committee: 03 September 2008

Please inform me when the research has been completed.

Yours sincerely

[Signature]

Secretary, University Ethics Committee
Registry

cc: [Name], Chairman, Ethics Committee
CLIENT INFORMATION SHEET

Title of Project: A study of how the workshop environment affects service-users well being.

Name of Researcher: Dawn - Marie Crockard (Dee)

You are invited to take part in this research study.

Before you decide, it is important for you to understand why the research is being done and what it will involve.

Please take time to read the following information carefully and discuss it with others if you wish.

Do ask if there is anything that is not clear or if you would like more information.

Take time to decide whether or not you wish to take part.

Consumers for Ethics in Research (CERES) publish a leaflet called Medical Research and You. This leaflet gives more information about medical research and looks at some questions that you may want to ask. A copy can be obtained from CERES, Po box 1365, London, N16 0BW.

Thank you for reading this.

What is the purpose of the study?

The Department of Health is trying to help people with mental health problems to gain paid work.

Little is known about which specific aspects of the workplace help service-users to feel better about themselves and their work.

The aims of this study are to find out what aspects of sheltered work unit environments service-users value the most. In order to do this it is necessary to ask service users’ their views on whether certain features of the workplace environment are present or not present in their current place of work and how they currently feel about themselves and their work. This will be done using a questionnaire.

Why have I been chosen?

All people who attend the sheltered workshop services, provided by XXXXX NHS Trust, are being approached.

Do I have to take part?

It is up to you to decide whether or not to take part. You may take as long as you want to decide whether or not you wish to take part. Please keep this information sheet and feel free to talk to other people about it.
If you do decide to take part you will be asked to sign a consent form before you complete the questionnaire.

If you do decide to take part you are still free to withdraw at any time and without giving a reason.

A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive.

**What will happen to me if I take part?**

If you choose to take part, please write your name on the tear-off slip, which is given at the end of this information sheet. Please give this slip of paper to your manager or the researcher. The researcher will then arrange a convenient time for you to complete the questionnaire.

Should you decide to take part you will be asked to sign a consent form and complete a basic information sheet, which will ask you for some details about yourself and your work experience.

You will then be asked to complete a questionnaire. It should take you no longer than half an hour to complete the questionnaire. The researcher will be present throughout to answer any questions you may have.

If you choose to take part, keep this information sheet and read the consent form carefully. When you have completed the pack please pass it back to the researcher.

If you choose to take part, the researcher may ask you to complete half of the questionnaire again, one week after you completed the full questionnaire. This is to make sure that this part of the questionnaire is asking you reliable questions.

You will not be approached about this research at any other time.

**What are the possible disadvantages of taking part?**

Some people may find it distressing to think about their work and how they feel about themselves.

The researcher will wait outside the work unit for 10 minutes after people have completed the questionnaire should you wish to arrange a free and confidential advice/de-briefing session. This will include giving advice about gaining further support. Alternatively, you could talk to your Key Worker or Work Unit Manager.

**What are the Possible Benefits of Taking Part?**

By finding out what aspects of the work unit environment that service-users value, this may help XXXX NHS Trust to think about what type of work services they wish to provide service-users in the future. It may also help future research to understand what features of the work unit environment need to be present, in order for people to gain the most benefit.
Will my taking part in this study be kept confidential?

All information, which is collected during the course of this research, will be kept strictly confidential and anonymous.

The consent form will be kept separately from your questionnaires and held in a locked filing cabinet. No form of identification is kept with the questionnaires.

What will happen to the results of this study?

The results of the study will be used as part of the researcher’s training course in Clinical Psychology. XXXX NHS trust may also wish to use the results for the future planning of work-based therapy services.

Anyone who chooses to take part in the study will not be identified in any report or publication.

Who is organising the research?

The research is being organised by a Trainee Clinical Psychologist as part of a PsychD Training Course in Clinical Psychology. The research is being supervised by Dr XXXX (XXXX), and Dr. XXXX, Research Tutor (University of Surrey).

Who has reviewed the study?

The XXXXXX Local Research Ethics Committee has reviewed the study.

The study has also been reviewed by the supervisors (named in the above section), and the University of Surrey research panel.

Contact for Further Information

If you any queries regarding the research, please contact Dee Crockard, Trainee Clinical Psychologist via e-mail at XXXX or at the XXXX on XXXX.

THANK YOU FOR YOUR TIME.

Dawn – Marie Crockard (Dee) Supervised by Dr XXXXXXX
Trainee Clinical Psychologist
DATE: April 2003 VERSION: 2

Tear-Off Slip

I am interested in taking part in the study titled:
“A study of how the workshop environment affects service-users well being”

MY NAME IS

Please tear-off this slip and give it to your workshop manager or to the researcher.

Thank you
Appendix E

Consent Form
CONSENT FORM

Title of Project:
A study of how the workshop environment affects service-users well being.

Name of Researcher:
Dawn – Marie Crockard

Please initial box

1. I confirm that I have read and understand the information sheet dated April 2003 (version .1) for the above study and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.

3. I agree to take part in the above study.

Name of Service-User _____________________ Date _____________________ Signature _____________________

Name of Person taking Consent (if different from Researcher) _____________________ Date _____________________ Signature _____________________

Dawn – Marie Crockard

Researcher _____________________ Date _____________________ Signature _____________________
Appendix F

Histograms for Distributions of Raw Scores on WES Items

WES Item 1: “How much choice do you have in your job about what to do and when and how to do it?”

Item 1 assessed the degree to which opportunity for control over job content and procedures was present in the sheltered work environment. The scores ranged from 0, which was the floor of the scale, to 9, which was the ceiling of the scale. The median was 7 and the mode was 8. The distribution of scores was significantly negatively skewed ($z = -2.72, p<0.01, N=71$) (Clark-Carter, 1997, pp. 416), indicating that a greater number of participants perceived the opportunity for intrinsic control over their work as present to a greater degree.

WES Item 2: “How much variety is there in your job? How often do you have to do different things, using different skills and talents?”

Item 2 assessed the degree to which the amount of variety in type of work was present in the sheltered work environment. The scores ranged from 0, which was the floor of the scale, to 9, which was the ceiling of the scale. The median and mode were both 8. The distribution of scores was significantly negatively skewed ($z = -3.99, p<0.01, N=71$) (Clark-Carter, 1997, pp. 416), indicating that a greater number of participants perceived the amount of variety in their work as present to a greater degree.

WES Item 3: “How clear is it to you what you are expected to do when at work?”

Item 3 assessed the degree to which clarity in role requirements was present in the sheltered work environment. The scores ranged from 2, which was slightly higher than the scale’s floor of 0, to 9, which was the ceiling of the scale. The median and mode were both 8. The distribution of scores was significantly negatively skewed ($z = -4.91, p<0.01, N=71$) (Clark-Carter, 1997, pp. 416); indicating
that a greater number of participants' perceived clarity in role requirements as present to a greater degree.

WES Item 3: "Environmental Clarity (role requirements)"

Item 3 assessed the degree to which role requirements (job clarity) was present in the sheltered work environment. The scores ranged from 0, which was the floor of the scale, to 9, which was the ceiling of the scale. The median and mode were both 8. The distribution of scores was significantly negatively skewed (z = -3.59, p< 0.01, N=71) (Clark-Carter, 1997, pp. 416), indicating that a greater number of participants perceived the availability of clear and well-defined role requirements as present to a greater degree.

WES Item 4: “To what extent are other people at work supportive and friendly towards you?”

Item 4 assessed the degree to which opportunity for interpersonal contact (friendship opportunities) was present in the sheltered work environment. The scores ranged from 2, which was slightly higher than the scale's floor of 0, to 9, which was the ceiling of the scale. The median and mode were both 8. The distribution of scores was significantly negatively skewed (z = -3.59, p< 0.01, N=71) (Clark-Carter, 1997, pp. 416), indicating that a greater number of participants perceived the availability of friendly and supportive interaction as present to a greater degree.

WES Item 5: “To what extent do other people in the workshop rely on you to do certain jobs that only you can do?"

Item 5 assessed the degree to which externally generated goals (traction - jobs designated the responsibility of the particular individual) was present in the sheltered work environment. The scores ranged from 0, which was the floor of the scale, to 9, which was the ceiling of the scale. The median was 3 and the mode was 2. The distribution of scores was approximately normal (z = 1.71, p > 0.01, N=71) (Clark-Carter, 1997, pp. 416).
Item 6 assessed the degree to which externally generated goals (time demands - amount of work expected of the individual) was present in the sheltered work environment. The scores ranged from 1, which was just above the scale’s floor of 1, to 9, which was the ceiling of the scale. The median and mode were both 5. The distribution of scores was approximately normal ($z = -0.12, p > 0.01, N=71$) (Clark-Carter, 1997, pp. 416).

Item 7 assessed the degree to which clarity about future job security was present in the sheltered work environment. The scores ranged from 0, which was the floor of the scale, to 9, which was the ceiling of the scale. The median was 5 and the mode was 8. The distribution of scores was approximately normal ($z = -0.84, p > 0.01, N=71$) (Clark-Carter, 1997, pp. 416).

Item 8 assessed the degree to which opportunity for interpersonal contact (amount of contact necessary to carry out work tasks) was present in the sheltered work environment. The scores ranged from 0, which was the floor of the scale, to 9, which was the ceiling of the scale. The median was 5 and the
mode was 8. The distribution of scores was approximately normal (z = -0.29, p > 0.01, N=71) (Clark-Carter, 1997, pp. 416).

Distribution of Scores on WES Item 8
Interpersonal Contact (quantity)

WES Item 9: “How important do the general public think your job is?”

Item 9 assessed the degree to which social value attached to the role of employee was present in the sheltered work environment. The scores ranged from 0, which was the floor of the scale, to 9, which was the ceiling of the scale. The median was 5 and the mode was 5. The distribution of scores was approximately normal (z = -0.81, p >0.01, N=71) (Clark-Carter, 1997, pp. 416).

Distribution of Scores on WES Item 9
Valued Social Position

WES Item 10: “To what extent does your supervisor give you clear feedback on your job performance?”

Item 10 assessed the degree to which information was clearly given about consequences of actions (feedback) was present in the sheltered work environment. The scores ranged from 1, which was just above the scale’s floor of 0, to 9, which was the ceiling of the scale. The median and mode was 8. The distribution of scores was significantly negatively skewed (z = -3.76, p < 0.01, N=71) (Clark-Carter, 1997, pp. 416); indicating that a greater number of participants’ perceived clarity in feedback of work performance as present to a greater degree.

Distribution of Scores on WES Item 10
Environmental Clarity (feedback)
WES Item 11: “How much pay do you get for your job?”

Item 11 assessed the degree to which the availability of money (amount of pay available) was present in the sheltered work environment. The scores ranged from 0, which was the floor of the scale, to 9, which was the ceiling of the scale. The median was 2 and the distribution of scores was multi modal. The distribution of scores was significantly positively skewed ($z = 4.82$, $p < 0.01$, $N=71$) (Clark-Carter, 1997, pp. 416), indicating that a greater number of participants’ perceived the availability of pay as present to a lesser degree.

WES Item 12: “How comfortable are your physical working conditions?”

Item 12 assessed the degree to which physical comfort of the building was present in the sheltered work environment. The scores ranged from 0, which was the floor of the scale, to 9, which was the ceiling of the scale. The median and mode was 8. The distribution of scores was significantly negatively skewed ($z = -5.52$, $p < 0.01$, $N=71$) (Clark-Carter, 1997, pp. 416); indicating that a greater number of participants’ perceived physical comfort of the work environment as present to a greater degree.

WES Item 13: “How much say do you have in the way the workshop is run and the type of work that is done there?”

Item 13 assessed the degree to which opportunity for extrinsic control over employment conditions and workshop policies was present in the sheltered work environment. The scores ranged from 0, which was the floor of the scale, to 9, which was the ceiling of the scale. The median was 4 and the mode was 2. The distribution of scores was approximately normal ($z = 0.83$, $p > 0.01$, $N=71$) (Clark-Carter, 1997, pp. 416).
WES Item 14: "How much does this job make use of your skills and abilities?"

Item 14 assessed the degree to which opportunity for using current skills was present in the sheltered work environment. The scores ranged from 0, which was the floor of the scale, to 9, which was the ceiling of the scale. The median and mode was 8. The distribution of scores was significantly negatively skewed ($z = -3.79, p < 0.01, N=71$) (Clark-Carter, 1997, pp. 416); indicating that a greater number of participants’ perceived opportunity for skill use in the work environment as present to a greater degree.
Appendix G

Histograms for Distributions of Scores on Well-Being Measures

Distribution of RSE Scores

Rosenberg Self-Esteem Scale Total Score

Distribution of GSE Scores

Generalised Self-Efficacy Scale Total Score
Distribution of Self-Efficacy at Work Scores

- Mean = 28.6
- Std. Dev = 7.03
- N = 71.00

Distribution of Self-Esteem at Work Scores

- Mean = 20.3
- Std. Dev = 5.85
- N = 71.00
### Appendix H

**Summary Statistics for Transformed Scores on WES Items**

<table>
<thead>
<tr>
<th>WES Item</th>
<th>Description</th>
<th>N = 71</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min. Score used</th>
<th>Max. Score used</th>
<th>Range</th>
<th>Skewness</th>
<th>Kurtosis</th>
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<td>1</td>
<td>Control (intrinsic)</td>
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</tbody>
</table>

*Distribution of scores were significantly skewed (Clark-Carter, 2002, pp. 416).
Appendix I

Histograms for Distribution of Scores on Composite Variables

AD Raw Total

CE Raw Total

Std. Dev = 15.16
Mean = 64.2
N = 71.00

Std. Dev = 4.19
Mean = 13.8
N = 71.00
Appendix J
Scatter-Plots for WES Composite Variables and Well-Being Measures

Scatter-Plots illustrating the relationships between the total scores on the GSE and AD Raw, AD Transformed and WES Raw Total scales.
Scatter-Plots illustrating the relationships between the total scores on the RSE and AD Raw, AD Transformed and WES Raw Total scales.
Scatter-Plots illustrating the relationships between the total scores on the Self-Efficacy at Work scale and AD Transformed and WES Raw Total scales.

Scatter-Plots illustrating the relationships between the total scores on the Self-Esteem at Work scale and AD Raw, AD Transformed and WES Raw Total scales.
Appendix K

Scatter-Plots for WES items and each of the four Well-Being Measures

*Scatter-plots illustrating the relationship between the raw scores on “Opportunity for Intrinsic Control” work feature and raw total scores from each of the four indices of psychological well-being.*

![Scatter-plot for Opportunity for Intrinsic Control](image1)

![Scatter-plot for General Self-Efficacy](image2)
Scatter-plots illustrating the relationship between the raw scores on "Variety" work feature and raw total scores from each of the four indices of psychological well-being.
Work Environment Survey Item 2
Scatter-plots illustrating the relationship between the raw scores on "Role Requirements" work feature and raw total scores each of the four indices of psychological well-being.
Scatter-plots illustrating the relationship between the raw scores on “Quality of Interpersonal Contact” work feature and raw total scores from each of the four indices of psychological well-being.
Scatter-plots illustrating the relationship between the raw scores on “Traction” work feature and raw total scores from each of the four indices of psychological well-being.
Scatter-plots illustrating the relationship between the raw scores on “Time Demands” work feature and raw total scores from each of the four indices of psychological well-being.
Scatter-plots illustrating the relationship between the raw scores on “Certainty of Future” work feature and raw total scores from each of the four indices of psychological well-being.
Scatter-plots illustrating the relationship between the raw scores on “Quantity of Interpersonal Contact” work feature and raw total scores from each of the four indices of psychological well-being.
Scatter-plots illustrating the relationship between the raw scores on "Valued Social Position" work feature and raw total scores from each of the four indices of psychological well-being.
Work Environment Survey Item 9

Scatter-plots illustrating the relationship between the raw scores on "Clarity in Feedback" work feature and raw total scores from each of the four indices of psychological well-being.

Work Environment Survey Item 10
Scatter-plots illustrating the relationship between the raw scores on "Availability of Money" work feature and raw total scores from each of the four indices of psychological well-being.
Scatter-plots illustrating the relationship between the raw scores on "Physical Security" work feature and raw total scores from each of the four indices of psychological well-being.
Scatter-plots illustrating the relationship between the raw scores on “Opportunity for Extrinsic Control” work feature and raw total scores from each of the four indices of psychological well-being.
Scatter-plots illustrating the relationship between the raw scores on “Opportunity for Skill Use” work feature and raw total scores from each of the four indices of psychological well-being.