Counterfactual thinking, guilt, shame and posttraumatic stress disorder in combat veterans

by

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Introduction to the Portfolio

This portfolio is divided into two volumes. It contains academic, research and summaries of clinical work completed as part of the PsychD in Clinical Psychology.

Volume 1

This volume contains three dossiers: academic, clinical and research. The academic dossier contains four essays, the clinical dossier contains summaries of six clinical placements and five clinical case reports. The research dossier contains the Service Related Research Project, a research logbook and the Major Research Project.

Volume 2

This volume contains five clinical case reports. It also includes information about the six clinical placements including: logbooks of clinical experience, contracts, placement summaries, correspondence written and evaluation forms from each supervisor. As this volume contains confidential material it will be stored in the Psychology Department at the University of Surrey.
Academic Dossier

Four academic essays
Critically discuss the evidence base that people with borderline personality disorder can be treated effectively by general adult mental health services. What implications might this have for the provision of services?

Adult Mental Health Essay

Year 1

January 2003
Introduction

Appropriate assessment and treatment of people with personality disorder (PD), and particularly borderline personality disorder (BPD), is becoming an increasingly important area of focus within general mental health. Keown, Holloway and Kuipers (2002) found that 52% of patients served by a community mental health team (CMHT) in South London met the criteria for one or more personality disorders.

In this essay, the term "general adult mental health services" has been taken to cover community mental health teams (CMHTs) or their equivalent, offering outpatient treatment with day hospital and inpatient facilities available as required. Treatment for people with BPD by general mental health services is currently poor. Bateman and Fonagy (1999) found that standard psychiatric care treatment 'lacked coherence, was inconsistently applied, particularly at times of crisis and was delivered by a number of uncoordinated agencies'. Kingdon (1998) argues that the hallmark of success for a CMHT is the manner in which it offers intervention for this group of people.

The long-term nature of BPD means that people with BPD are likely to always be in touch with services including at times general mental health services. Specialist services are not appropriate or available for all clients so general mental health services need to be offering something as well. In addition, equal access, means ensuring an effective service is available to people with BPD.

The evidence base for effective treatment for people with BPD is limited but two robust studies and a number of prospective studies pave the way for some positive thinking. Looking at common themes of successful studies allows an argument to be made that effective treatment can be delivered within general mental health services. However a big culture shift is needed first.

Borderline Personality Disorder: Definition, Prevalence and Presentations

Historically, there has been some controversy over the PD categories, including BPD. Definition, terminology and use of the BPD label have varied across culture, time and therapeutic approach. Although debate continues, inclusion of BPD in the DSM (Diagnostic and Statistical Manual for Mental Disorders) and the development of structured assessment interviews have facilitated both treatment development and
research of the disorder. Discussion about the validity of the category and refinement of the criteria is too big a subject to explore in detail here. For the purposes of this essay, the DSM-IV category for BPD (American Psychiatric Association, 2000) is accepted as a useful basis for exploring the evidence base. Most of the studies discussed base their definition on either DSM or ICD-10 criteria.

Personality Disorders (PDs) are coded on axis II of the DSM-IV and regarded as 'long-standing, pervasive, and inflexible patterns of behaviour and inner experience that deviate from the expectations of a person's culture and that impair social and occupational functioning' (Davison & Neale, 2001). In DSM-IV, they are grouped into three clusters, A, B & C. BPD falls into Cluster B.

The essential characteristics of BPD are a 'pervasive pattern of instability of interpersonal relationships, affects, and self-image, as well as marked impulsivity. These characteristics begin by early childhood and are present in a variety of contexts' (American Psychiatric Association, 2001). BPD commonly coexists with other mental disorders, particularly depression, anxiety and substance misuse. The frequency of personality disorders in the general population is estimated at between 10 and 20% (Allwood & Gagiano, 1997; cited in Tredget, 2001).

There are several theories concerning the causes of personality disorders and they all tend to recognise the role of genetic personality traits combined with the further development of personality during childhood.

Overview of the Evidence Base

Studies of effective treatment for people with BPD have focused on either whether they can be treated effectively to reduce symptoms and behaviours associated with the diagnosis of BPD or whether they can be treated effectively for other mental disorders, particularly, axis I disorders. Because the two together are too big a subject area, this essay has focused on the former question only.

Before looking at the evidence base for effective treatment for people with BPD it is important to consider whether symptoms of people with BPD are changeable over time and can therefore be treated at all. By its very definition, BPD is a disorder that is stable over time. Sainslow and McGlashan (1998) reviewed studies that examined the natural course of PD. They found that research does show that BPD shows
some degree of remission over time although it is 'unclear whether this change constitutes a reorganisation of personality or a more surface-level change'.

Studies of effective treatment for people with BPD tend to subdivide into two key areas although there is overlap. Some studies have focused on the effectiveness of specific types of intervention whilst others explore the effectiveness of different service models. They are examined in this essay under these two headings.

One difficulty when reviewing the evidence base comes from the variations across the studies. Some studies have focused on BPD whilst others have not differentiated between the personality disorders. Still others have split patients between Cluster A, B & C personality disorders or focused only on severe personality disorders. The second variation is in the use of different terminology and different criteria for BPD itself across different theoretical approaches.

Another variation across different studies is in the different outcome measures they use. The most common measures are changes in symptomatic behaviours like self-harm, global functioning and inpatient admission frequency and duration. Some studies have looked for a reduction in the number of DSM criteria met or changes in personality traits. A few studies have looked at reductions in emotional distress.

**Effectiveness of Different Types of Intervention**

The evidence base for treatment for people with BPD is growing. There have been a number of literature reviews in the area (Sainslow & McGlashan, 1998; Perry, Banon & Ianni, 1999; Bateman & Fonagy, 2000) but the low number of treatment studies available has limited each.

Sainslow and McGlashan (1998) conducted a literature search of both naturalistic outcome and treatment outcome studies for PD. They found that PD showed some degree of remission over the long haul and studies were beginning to paint a more optimistic picture about their changeability. However, they also noted the limited number of controlled trials for treatment outcome. With regard to treatment interventions for BPD they found that overall they demonstrated positive outcomes particularly in changing symptomatic behaviours. For symptoms the outcomes were mixed. In addition, they noted that some level of personality pathology persists. This
review offered a thorough and detailed analysis of the studies up to the time of writing.

Perry et al (1999) focused on fifteen studies of the effectiveness of psychotherapy for personality disorders including four treatment studies for people with BPD and calculated effect sizes for each study. This study is the closest to a meta-analysis that has been conducted. They found that psychotherapy for PDs was associated with about a sevenfold faster rate of recovery than in the natural history studies of BPD. The paper is well argued and the limitations of the study area are well covered however large variations between study types makes comparing effect size less valuable.

Bateman and Fonagy (2000) conducted a literature review looking at the effectiveness of psychotherapeutic treatment of personality disorder. Their review was more inclusive than previous reviews and they found twenty-five papers that met their criteria. They looked at these across the three areas of inpatient, day hospital and outpatient. They found little evidence of specificity of treatment programmes and a lack of comparative outcome studies of different treatments.

The overriding limitation of all these reviews is the availability of so few studies, particularly given the large variations across the studies in terms of diagnosis, treatment type, study type and duration. As Perry et al (1999) point out, 'the confounding of personality disorder types with treatment types and durations of treatment makes it difficult to conclude that any one type of treatment consistently demonstrates greater effect than no treatment or a comparative treatment'.

Cognitive-Behavioural Therapy

Most cognitive-behavioural therapy (CBT) approaches to BPD have worked at modification of both the symptom structure and the underlying maladaptive schemata (Beck and Freeman, 1990). Although there is some evidence of efficacy for this approach most published studies for this group are either uncontrolled or single case studies. However, one form of CBT, called dialectical behaviour therapy (DBT) has delivered some promising results.

DBT, developed by Marsha Linehan (1993) consists of manual-guided therapy integrating individual therapy, group skills training and group supervision. It has three
main aims: to reduce behaviours that interfere with therapy; to reduce symptomatic behaviours like parasuicide; and to increase social and occupational functioning.

The effectiveness of DBT has been assessed in one of the few RCTs of treatment for people with BPD (Linehan et al, 1991). They compared DBT with treatment as usual with participants who met DSM-IIIR criteria. There were significant differences in the number of parasuicides, treatment compliance and inpatient days for those receiving DBT compared with the control. There were no between group differences on any of the measures of mood and suicidal ideation. Some of these differences were maintained at follow up and DBT patients had higher global assessment scores at follow up. The disappointment so far with Linehan's work with DBT seems to be the generally poor long-term outcomes with few differences maintained at further follow up.

Turner (2000) conducted a naturalistic investigation comparing DBT and client-centred therapy (CCT) for patients with BPD. Outcomes showed that DBT groups improved more than the CCT groups on most measures. Interestingly, he also found that the quality of the therapeutic alliance accounted for significant variance in patients' outcomes across both treatments.

**Psychoanalytic Psychotherapy**

Stevenson and Meares (1992) conducted a prospective study to evaluate the effectiveness of a form of psychoanalytic psychotherapy based on a psychology of self. They found statistically significant improvements after one year on every measure (frequency of use of drugs, visits to medical professionals, episodes of violence and self-harm, time away from work, length and frequency of inpatient admissions, self-report index of symptoms, DSM-III criteria) and 30% of patients no longer fulfilled the DSM-III criteria. This improvement had persisted at one year after therapy ended. However, the limitation of this study is the lack of control group.

Bateman and Fonagy (1999) conducted an RCT that compared psychoanalytically oriented partial hospitalisation with standard psychiatric care for patients with BPD. They found significant improvements for the treatment group. Their results are discussed in the next section under Day Hospital.
Pharmacological Interventions

The benefits of drug therapy for people with personality disorders have been fairly limited. In addition, drug treatment needs to be managed carefully because of the high risk of overdoses and the power imbalance that drug therapy can bring to the therapeutic relationship.

With regard to psychopharmacology studies for BPD, Sainslow & McGlashan (1998) found that neuroleptic medication was helpful in reducing transient, psychotic-spectrum symptomatology but only for those patients who exhibit more severe symptoms. Selective serotonin reuptake inhibitor antidepressants showed some effectiveness in treating depression in BPD, while lithium and anticonvulsants remained viable for the treatment of mood instability and behavioural dysfunction.

Other Modes of Therapy

Perry et al (1999) found that dropout from group therapy was higher than individual therapy, particularly for people with BPD. The APA (American Psychiatric Association, 2001) found that there is some support for group work but not above individual work and that there is some support for family and couple work but only when integrated with individual work.

Summary

The evidence base supports the argument that people with BPD will respond to effective treatment. There is a growing evidence base for effective treatment with both DBT and psychoanalytic psychotherapy however there are few robust studies.

Two RCTs conducted by Linehan and colleagues (1991) and Bateman and Fonagy (1999) show promising results for both DBT and psychoanalytic psychotherapy respectively as effective interventions. More research is needed to establish the long-term nature of the resulting changes.

Effectiveness of Different Service Models

Links (1998) points out that no single treatment intervention is likely to meet the diverse needs of individuals with BPD. He argues that patients need "a diversity of modalities delivered by a team of professionals". It makes intuitive sense that with
this group of people the nature of the therapeutic environment and the level of support and commitment offered might be two important factors affecting outcome.

Bateman and Fonagy (2000) looking at different types of intervention argue that ‘there is so much variance within each treatment, and overlap between treatments, that differential treatment effects are likely to be masked’. They conclude that the ‘manner in which treatment protocols are constructed and delivered is possibly more important than the theoretically driven intervention’.

A general, cost reduction drive to move patients from hospitals to treatment in the community in recent years also makes it important that treatment effectiveness of different service models is being fully considered.

In addition, to general adult mental health services, psychiatric services would include outpatient and day hospital specialist services and inpatient specialist services, particularly therapeutic communities. Alongside these services run a range of forensic psychiatric services. This essay has reviewed the evidence base for treatment of people with BPD within inpatient units, at a day hospital and through assertive community teams. Therapeutic communities are briefly discussed.

Inpatient Units

There has been one main literature review that compared the effectiveness of different service models, conducted by Links (1998). He looked at service delivery for patients with personality disorder under the three headings of acute care, continuing care and other community programming. Links found little research that compared inpatient treatment with other treatments. The one systematic study available supports the value of hospital treatment for people with personality disorder however as Links points out, current opinion does not.

Day Hospitals

The key issue seems to be obtaining the right balance between containment and the independent development of functional capacities. Proponents of the therapeutic community argue that optimal containment allows individuals to respond to psychotherapy with structural changes in personality. One question then, asked by Karterud et al (1992) is to what extent can a day hospital therapeutic community provide such containment?
Ogrodniczuk and Piper (2001) conducted a review looking at the empirical support for the appropriateness of day treatment for patients with personality disorder. Their findings suggest that day treatment is effective for this group and it is more effective than standard treatment. They also found preliminary evidence to suggest that day treatment may lead to a reduction in overall health service costs. The limitation here is the exploratory nature of the study.

Karterud et al (1992) conducted a longitudinal study of patients with severely disturbed personality disorders attending a day hospital for long-term psychodynamic psychotherapy. They used DSM-III-R criteria. They found that people with BPD obtained a small but statistically significant reduction in symptoms and increase in psychosocial functioning. However, they noted that it would probably not be possible to conduct a psychotherapy day hospital for people with Cluster A & B alone, the involvement of people with Cluster C diagnoses adds an important additional dimension, which has important service implications. They also noted that a certain level of assistance from a cooperating acute ward is needed.

Bateman and Fonagy (1999) argue that intervention through a day hospital simultaneously balances support and treatment with individual responsibility. In a RCT, they compared psychoanalytically oriented partial (day) hospitalisation with standard psychiatric care for patients with BPD. They found that patients who were partially hospitalised showed statistically significant changes including improvement in depressive symptoms, decrease in suicidal acts and self-harm, reduced inpatient days and better social and interpersonal functioning beginning at 6 months and continuing until the end of treatment at 18 months. As compared with the group that received standard psychiatric care that showed limited change or deterioration. This study is one of the most robust in the field and limitations were well addressed. However, further replication is needed.

**Intensive Community Programmes**

Studies looking at intensive community programming have so far been exploratory rather than systematic. Morant, Dolan, Fainman & Hilton (1999) present qualitative data on the first few months of operation of an innovative outreach service for people with severe personality disorders which suggests successful results. This service includes the provision of individual and group psychotherapies, appropriate links with specialist in-patient provision and management advice to local referrers.
However, Brimblecombe and O'Sullivan (1999) examined a community treatment team that offered rapid assessment and intensive home treatment as an alternative to admission and found that home treatment teams prevented admissions with the majority of people but less successfully with people with personality disorder.

Links's (1998) overall finding from his review was that assertive community treatment for axis II patients can decrease the risk of suicide attempts and decrease reliance on hospital admissions. He suggested that the most effective treatment modality was assertive community treatment with day treatment as the back up when acute situations arise. However, a big limitation of his study was that it did not focus on specific personality disorder diagnoses.

In spite of the specialist and intensive support needed intensive community treatment has still been shown to be cost effective because of the significant reductions in inpatient admissions and this may become a driving force. It is important to be aware of this push when considering effectiveness.

**Therapeutic Communities**

Although therapeutic communities do not fall within the umbrella of general mental health services it is worth mentioning them briefly here for completeness. The "Review of Services for Mentally Disordered Offenders" conducted by the Department of Health and Home Office notes that 'studies of the therapeutic community approach to treatment have shown the most encouraging results of any form of treatment' (Reed, 1994; cited in Warren & Dolan, 1996).

Although therapeutic communities demonstrate some efficacy in treating personality disorders, studies in this area are generally uncontrolled. However, difficulties of conducting RCTs for therapeutic communities mean that it is important not to dismiss these studies particularly when RCTs of other treatment models are still so sparse. It would be worth exploring and evaluating the research of therapeutic communities further to understand the factors that predict positive outcome since some of these may be applied to other community programmes. However, limitations do not allow that exploration within this essay.
Summary

A strong therapeutic community and an appropriate level of containment seem to be a common requirement of successful studies. The most effective way of delivering this is not currently clear from the current evidence base with few robust studies comparing different models. There seems to be limited support for treatment within an inpatient environment. There is some evidence that effective treatment can be delivered within day hospitals and some support for delivery through assertive community treatment.

It may be the case that an element of each of these is important for effective treatment and then a key factor would be a strong interface between these services. However, it may also be that the nature of the service is not as important as other factors affecting its delivery like the strength of the therapeutic relationship and the strong functioning of the team. Further research to explore these ideas is needed.

Limitations of the Full Evidence Base

One of the first overall limitations of the evidence base comes with the definition of BPD and the variance in the use of the term. Different theoretical approaches use different definitions so a comparison across treatments is difficult. Another difficulty lies in applying psychological interventions to what are essentially psychiatric criteria, which has led different psychological orientations to focus on different outcome measures.

A big limitation has been the paucity of robust studies in this area. Although the balance may be beginning to tip, the number of literature reviews in this area exceeds the number of RCTs conducted. So what is it about treatment for people with BPD that makes systematic reviews so difficult?

Bateman and Fonagy (2000) discuss the logistical problems of conducting RCTs with BPD. They argue that the long-term nature of treatment for this group makes any RCT costly. Dropout rates are higher with this group; patient expectations are not necessarily met by randomization and waiting list controls cannot be used over a long period. However, successful studies have shown how by targeting factors leading to non-attendance, dropout rates can be reduced to as low as 12% (Bateman & Fonagy, 1999). The costs of RCTs do not need to necessarily be much higher than the costs of treating these individuals appropriately and successful RCTs have used treatment...
as usual as an effective control rather than waiting lists. In addition, Stevenson and Meares (1992) argue that because personality disorder is relatively enduring, comparisons between different periods of the patients' lives offer a suitable means of obtaining a control.

Another reason for the lack of a good evidence base may be that the diagnosis of BPD and a focus on people with BPD is fairly new compared with other mental health disorders and interest in finding an effective treatment is recent. There seems to have been a general feeling of helplessness and a widely held belief that people with PD are not affected by treatment, which has led to a general reluctance to take on the challenge of developing effective treatments. With more optimistic results coming out of more recent studies this view is starting to change and this shift needs to be pushed.

Another reason why development of effective treatments has not progressed further is the lack of resources available. Treatment with this group seems to require specialist education, time and commitment from a team of individuals. Many CMHT members don't feel equipped to properly deal with these people and feel stretched in their current roles without spending additional time focusing on exploring new approaches.

A final limitation of the research to date has been a lack of the user's perspective. It might be that user involvement is harder to gain with this client group but it is still an important part of developing effective and appropriate treatment.

Implications for Service Provision

Common Themes from Successful Studies

Because of the limited evidence, it is difficult to draw any clear conclusions. However, there are some common themes that run through the successful studies and it would be worth speculating that at least some of these are important.

The first common theme is in the overall aims of the treatment. The common aims of Linehan's DBT work and Bateman and Fonagy's psychoanalytic work seem to be (1) engaging and maintaining the patient in treatment (2) decreasing number of self-destructive acts and suicide attempts (3) improving social and interpersonal functioning (4) reducing reliance on inpatient facilities. One would expect that in the
successful therapies the objectives of treatment better reflect those of the patient and indeed emphasis on a collaborative working relationship and mutual commitment to treatment goals is a key aspect of DBT.

The second common theme is in the integration of both group and individual weekly therapy. This integration echoes the need for a balance between intensive support and more individual responsibility. It also gives a balance between focusing on individual change whilst also learning new skills in developing relationships with others. The third common factor is the well structure nature of the programme. Successful interventions have been well planned and therapies have been manualised. The fourth is the good interface with other services.

Another is the long-term nature of treatment. The American Psychiatric Association found that “studies of more extended treatment suggest that substantial improvement may not occur until after approximately one year of psychotherapeutic intervention as been provided. Many patients require even longer treatment.” All the successful studies have continued therapy for at least a year and some for longer.

Because long-term intervention is necessary to produce changes in personality traits, building trust in the team with clients and changing the expectations that therapist(s) will fail them is also an important element of a successful intervention.

The final factor may be in the attitude and optimism of the team. The fact that the researchers involved have committed to the development and evaluation of new treatments for this group of people indicates a certain level of commitment and optimism about their ability to change. This may actually be a key element in successful outcome. Certainly, by contrast, people with personality disorder are not generally well viewed by the mental health profession and by mental health teams. An assumption of the DBT model is that the therapist be non-pejorative (Linehan, 1993).

Changes to Existing Services

The common aims of the successful studies could also become the aims of general mental health services when working with this group. This will require a shift in attitude through education, an increase in skills through training and an increase in available time of team members. Emphasis on collaborative working is already a part of general mental health although reinforcement of these principles may be required.
General mental health services have the ability to integrate group and individual weekly therapy sessions. The more intensive delivery of therapy will require additional resources but the costs of these can be met by less reliance on inpatient facilities. Group programmes may need to be delivered across wider areas and all of this will require greater planning and coordination between services.

In addition, the well structured nature of successful treatment programmes will pose a challenge for general mental health services and virtual teams may need to be developed across existing services. The need for a strong interface between services means between outpatient, inpatient and day services as well as between CMHTs and boroughs. In addition, team functioning and working relationships within the team will need to improve, not only to strengthen peer support but also to act as effective models.

In changing people's expectations that the therapist will fail them it will be necessary to first change the expectations of the team that they might fail the client. This links to the idea that a positive attitude and optimism on the part of the professionals may be key in the successful outcome of interventions. A big culture shift in general mental health services is required before successful outcomes will be seen with this client group. This culture shift requires effective education and promotion supported by further research.

The long-term nature of treatment also requires a culture shift within general mental health services. Rather than aiming for individuals to move on there needs to be a greater continuity of care. There may need to be a greater acceptance of dependency and a view of inpatient or intensive intervention as an important part of treatment rather than as a sign of failure. There is some evidence that initial support and treatment in a residential setting followed by a gradual move towards a more independent setting is an effective path. This continuum of service delivery means that movement between services needs to be better planned for and managed.

With all these suggestions of change it is important to discuss their planning and implementation. Implementation of change does not have a good history in the NHS. A pilot virtual BPD service functioning within general mental health services might be the beginning but a lot more planning is required.
The results of this essay support a general trend towards more intensive and more specialist treatment programmes. Although in theory, most of the above can be delivered within the framework of general mental health services, resource implications may make this impractical. It is therefore worth mentioning that many of the above changes might also enhance general mental health service treatment for other individuals and can be argued for on a general level as well as with regard to this specific group.

Conclusions

Although there is a great deal of literature on treatment of people of BPD there are very few robust efficacy studies. However, the few robust studies that there are supported by general observations from other studies indicate potential for effective treatment with this client group within general mental health services. Two key treatment interventions that have been shown to be effective are DBT and psychoanalytic psychotherapy. With regard to the service model, day hospital treatment and assertive community treatment both show promising results although most studies are still exploratory.

Common themes from successful studies suggest that effective treatment for people with BPD can be delivered within general mental health services. Delivering this potential will require a major shift in attitude, a better interface between services and an increase in training and resources. The conflicts between National Health Service expectations of fast and effective treatment and the long-term nature of the disorder and of successful treatments need to be resolved. A culture shift and resultant increase in understanding of the needs of this client group will not only help secure more funding for treatment for these people but will also encourage further research.

More studies are needed that specifically examine the response to specific therapies and service models for people with BPD. These need to be both RCTs as well as more observational studies to help discover effective techniques that are not presently documented. A stronger focus now on service models rather than theoretical orientation might be a more appropriate move forward that brings professionals together.

With a significant shift in attitude and outlook within general mental health services effective treatment for people with BPD will be delivered.
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Describe and discuss some of the issues involved in assessing consent in people with learning disabilities

People with Learning Disabilities Essay

Year 1

August 2003
Introduction

Over recent years, a number of initiatives have focused on increasing autonomy and choice for people with a learning disability. Relocation from hospital to community has increased the opportunities for decision-making for a large number of people with learning disabilities (Emerson & Hatton, 1994) and supporting service users in making choices as well as developing competence are two of O'Brien's major service accomplishments of normalisation (O'Brien & Tyne, 1981). Valuing People (Department of Health, 2001a) describes choice as one of the four key principles now at the heart of the government's proposals for people with learning disabilities. This move towards increased choice has been strengthened by the growing advocacy movement. An emphasis on increased choice raises important questions about how to assess capacity to consent in people with learning disabilities. These questions encompass the schools of psychology, philosophy, ethics and law but the main focus in this essay is on the contribution of psychology to the debate. The big challenge for services and professionals is striking the right balance between autonomy and protection so it is important that professionals working with people with learning disabilities are familiar with the concept of capacity, its evaluation and the issues faced.

The three areas that have been given the greatest attention in the literature are those of capacity to consent to sexual activity, to health treatment and to participation in research. However, increasingly, choice in small everyday matters (e.g. what to eat) as well as in larger life-style matters (e.g. what work to do) is encouraged and these need to be considered also. This essay will outline the various approaches to assessing capacity that have been adopted and discuss their merits. It will then consider the key individual and environmental factors affecting capacity that have been explored in the literature and the implications of these for enhancing capacity. It will also look at the implications of these findings for assessment of capacity. Finally, it will describe some of the specific issues in relation to consent to sexual activity, health treatment and research and what happens when a person is unable to consent.

Definition of Learning Disability

The American Association of Mental Retardation (AAMR; 1992) and the British Psychological Society (BPS; 2000a) both define mental retardation or a learning disability as a disability that originates before age 18, and that is characterised by
significant limitations both in intellectual functioning and in adaptive and social functioning. Impairment of intellectual functioning has conventionally become defined as a performance of more than two standard deviations below the population mean on a standardised psychometric test of intelligence. This usually corresponds to an IQ of less than 70. In terms of impairment of adaptive and social functioning, the AAMR (1992) adopt a criterion of impairments in at least two of the following areas: communication; self-care; home living skills; social skills; use of community resources; self direction; functional academic skills; work; leisure and health and safety. The BPS (2000a) suggest that: ‘the individual requires significant assistance to provide for his/her own survival... and/or with his/her social/community adaptation’ (p.6).

Definition of Consent

The Chambers English Dictionary (1990) defines ‘consent’ as "to be of the same mind: to agree: to give assent: to yield: to comply". This definition implies that an individual is in agreement with and accepts a decision. Consenting necessitates making a choice about whether or not something should happen and the advantages and disadvantages of at least two options need to be considered. The Chambers English Dictionary (1990) defines ‘choose’ as "to take or pick out in preference to another thing: to select: to will or determine: to think fit". This definition, may better match what it is that professionals are assessing when they assess capacity to consent. Therefore the terms choice, choice-making, and decision-making are often used in this essay as well as the term consent.

The Department of Health (2001b) guidelines suggest three components of 'informed' or 'valid' consent. These are:

- Information: the person has enough information of sufficient quality
- Competence: the person has the ability to consider the alternatives, risks and benefits
- Voluntariness: the decision is made free from pressure or undue influence
In addition, studies (e.g. Arscott, 1997; Dye, Hare & Hendy, 2003) often identify three components of competence. These are:

- the ability to understand and retain the relevant information;
- the ability to weigh up the information and reach a decision
- the ability to communicate the decision

In England and Wales, an adult is legally assumed to have capacity to consent unless the inability to consent is proven. In addition, the Law Commission (1995) recommend that a person is regarded as unable to make a decision by reason of mental disability if she is unable to understand or retain the information relevant to the decision, unable to make a decision or unable to communicate a decision. The Division of Clinical Psychology (DCP) professional guidelines (1995) suggest that assessment of capacity to consent to psychological treatment involves assessment of a person's ability to understand the information, to deliberate upon it, to make conclusions which are logically consistent, to communicate the decision and to maintain their decision long enough for intervention to begin.

Different Approaches to Assessment of Capacity

The above definitions highlight important factors to consider when assessing consent but do not provide a framework within which to think about consent. Wong, Clare, Gunn and Holland (1999) outline three broad approaches to assessment of consent that have been considered in the literature. The outcome approach determines capacity based upon the consequences of the decision-making process. So if a person makes a decision that is contrary to the opinion of the professional they may be deemed to be without capacity. Although this approach may protect people from the consequences of undesirable decisions, it fails to promote autonomy. In addition, assessment is left to the subjective view of the professional so a person with a similar cultural background may be more likely to make a decision in line with that of the professional and hence be more likely to be considered able to consent. This approach is not in line with legislation and government policy (Department of Health, 2001b; Law Commission, 1995).

The status approach determines capacity based upon a person's membership of a certain group. For example, people under 18 years of age and people with a psychiatric diagnosis are sometimes deemed unable to make certain decisions. Adults with learning disabilities have, in the past, been assumed to be incompetent to
make choices about their lives, based on generalisations about their disabilities. This approach does not take into account the individual characteristics of different members of a group or the variation in ability across time and situation. This approach is also not in line with current government policy for adults with learning disabilities (Department of Health, 2001b).

The functional approach is the approach that has attracted the most support in the literature (Wong et al., 1999). This approach determines capacity based upon an assessment of a person's understanding, knowledge, skills and abilities. Capacity is therefore a fluid concept that varies across time and decisions. This approach recognises that whilst difficulty in making decisions is likely to increase with severity of learning disability, levels of cognitive and adaptive functioning do not alone predict ability to make decisions. Other factors, such as communication and experience of decision-making, are also important. Wong et al. (1999) identify some of the limitations of a functional approach. It is time-consuming, since it demands an individual capacity assessment for every decision. There is no clear agreement on the different abilities that comprise capacity, a threshold for capacity or how any of this might be assessed. Another limitation of the functional approach is its focus on abilities to make rational decisions. As Fisher (2003) points out, professionals need to be wary of denying people with a learning disability the opportunity to make decisions based upon very concrete or emotional factors. Finally, the functional approach focuses on the individual and does not take into account the environment and consent context.

A few alternative approaches have been proposed. Van Hooren, Widdershoven, van den Borne and Curfs (2002) suggest that a sliding-scale strategy be used, where the level of capacity required increases as the risk of an activity increases. This integrates functional and outcome approaches. In line with this, clinicians' experiences suggest that the assessment of capacity is often dependent upon the level of risk of the outcome (Hillery, Tomkin, McAuley, Keane & Staines, 1998). A difficulty of this approach is that the balance between autonomy and risk is often left to the subjective judgement of the professional and there is a danger that assessment of capacity becomes an assessment of the reasonableness of a choice. Again, dependence upon the subjective judgement of the professional means that cultural differences between the person making the choice and the professional may influence whether or not they are deemed able to consent.
The Law Commission (1995) propose another approach that combines both the status and functional approaches. Based on this approach, the functional approach is adopted when a person’s status means that they may not be considered able to consent, for example, if a person has a learning disability. This approach is less time-consuming than the functional approach since a person is only assessed if they fall within a certain group. However, the other limitations of the functional approach still apply and it means people are still categorised to some extent based upon generalisations about their abilities. Fisher (2003) considers assessment of consent in terms of how well the individual’s decisional capacity fits the specific consent context. This approach is possibly the most desirable since it follows the functional approach in part but also considers environmental factors that may affect capacity. It may also reflect the approach that many practitioners are actually taking. However, it is more time consuming than the functional approach alone. It is even more widely open to the subjective view of the professional and the limitations that come with this. Also, within this approach it will be harder still to establish a clear agreement on how capacity might be assessed.

Factors Affecting Capacity

So most currently accepted approaches focus on a variation of the functional approach. Within this framework, the different factors that affect the function of capacity must be considered as well as how capacity might be enhanced.

Comprehension

For an individual to be deemed to have capacity to consent to something, they must have access to the relevant information and the information must be comprehensible to them. It is often a person’s vulnerability in the area of comprehension that means they are deemed unable to consent (Iacono & Murray, 2003). However the professionals can do a lot to enhance comprehension. Arscott, Dagnan and Stenfert Kroese (1999) used treatment vignettes to look at the influence of verbal and memory ability on the capacity of 40 people with a learning disability to consent to treatment and found that capacity was clearly influenced by both verbal and memory abilities. Their study was limited by the small sample size. They also used hypothetical vignettes rather than assessing individual’s when they undergo real interventions. Environmental factors such as power imbalance are not fully represented by a hypothetical vignette and the person’s emotional state might be different if they were considering real treatment options. These factors can affect a person’s decision-
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Making capacity. However the study does suggest that capacity might be enhanced by focusing on verbal and memory abilities. Information could be broken down and repeated (Arscott et al. 1999); vignettes, storybooks, pictures and photos could be used (Arscott, Dagnan & Stenfert Kroese, 1998); written explanations could be kept short and factual (Lacono & Murray, 2003) and memory aids could be used. In addition, it would be important to ensure that information is presented in the person's first language, where possible, and that it is culturally relevant. Harris (2003) points out that people with learning disabilities might not only be unaware of the options available to them but they may also find it harder to gain access to information that they can understand. Support from people close to the person or from advocates could enhance choice-making ability.

Communication

The second aspect of being deemed capable of consenting is being able to communicate a choice. Communication abilities affect capacity to consent in a number of ways. Poor communication abilities may lead to difficulties in obtaining information (Harris, 2003), difficulties in seeking support from others (Rawlings, Dowse & Shaddock, 1995) or difficulties in communicating a decision. Arscott et al. (1998) found that people with higher receptive language skills answered more questions correctly on their tests of capacity. The Law Commission (1995) outlines that professionals should take responsibility for enhancing communication, where possible. Wong et al. (1999) suggest that this includes the use of alternative communication systems. In addition, professionals may need to consider language and the use of interpreters to enhance communication.

Voluntariness

Voluntariness is an important element of informed consent and one that might be affected by both individual factors as well as by aspects of the interview situation. The interview situation is discussed further in the section below on environmental factors. With regard to individual factors, Finlay and Lyons (2002) reviewed the literature and found that acquiescence may be affected by individual factors such as submissiveness, cognitive factors and linguistic abilities. They also found that 'yea-saying is more likely to be found in situations where people do not have an opinion; when the question is ambiguous, when they are uncertain and when the question structure is complex.' (p. 25). They recommend that sentence structures are simplified, content is examined, expression of uncertainty is encouraged and answers
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are checked. A limitation of the study is that it only focused on yeasaying and not on other elements of acquiescence, such as giving other affirmative responses, behavioural compliance and general submissiveness. Dye et al. (2003) recommend that either/or questions or multiple choice questions are used rather than closed questions that require a yes or no response.

**Experience**

Previous experience of decision-making seems to increase capacity to consent by increasing competence, reducing learned helplessness and reducing acquiescence. Rawlings et al. (1995) found that, in an observation study of three people with learning disabilities in different home settings, experience at making choices was one of the key factors affecting choice-making ability. However, the extent to which their observations can be generalised is limited. Jenkinson (1999) gave vignettes about life choices to people with learning disabilities with both high and low learned helplessness ratings. She found that ability to respond appropriately to a decision-making process was strongly related to learned helplessness. There were some limitations to the study (learned helplessness scores were self-rated and the study was limited to vignette situations rather than real scenarios) however others have also cited learned helplessness as a factor affecting decision-making (Morris, Niederbuhl & Mahr, 1993). Experience of choice-making and familiarity of choice-making options are also likely to increase a person's confidence and thereby reduce the likelihood of acquiescence. Finally, understanding of the information presented will be linked to the amount of previous experience of the specific situation or event to which a person is consenting. There may be a need for a long period of supported practice in choice-making before an individual is able to make a desired choice and Iacono and Murray (2003) suggest that people are involved in education sessions aimed at increasing competence.

It also seems to be the case that experience varies across different groups. Stalker and Harris (1998) identified a number of factors affecting how much choice is given to people with learning disabilities. They found that there was more choice in community settings than in hospitals and in smaller newer homes than in larger homes. They also found that people seen as having challenging behaviour might have less opportunity for choice than those without such a label. One of the challenges facing service providers, with limited resources, is ensuring that initiatives
like person-centred planning and increased choice are accessible to all members of a community. This will require the use of interpreters and cross-cultural resources.

Environment

The limitations of a functional approach to assessment of capacity is the focus on individual factors. A number of factors relating specifically to the consent context may also affect capacity. These factors include power imbalances, coercive environments, and uncertainty and might impact on an individual’s comprehension, communication or likelihood to acquiesce. Lindsey (1996) suggests that people with learning disabilities are often surrounded by individuals who assume and exercise decision-making authority and that this creates a coercive environment. This power imbalance may also be affected by cultural differences between the person and the professional and responses elicited may be tailored to suit the cultural expectations of the professional. Arscott et al. (1998) argue that professionals should take into account how a person understands their relationship with the professional in judging whether real consent has been given. The interview situation, as well as affecting capacity, may also deter people from making a choice at all. Harris (2003, p. 19) argues that 'options which are viewed as unacceptable, uncertainty and ambiguity among options, and choice situations where there may be adverse consequences, all deter people from making choices.' Finally, the environment may not just affect acquiescence and suggestibility. Dye et al. (2003) argue that a participant's comprehension abilities and ability to respond to questions may be influenced by the presence of others. Modifying the consent setting to reduce perceived power imbalances and to encourage decision-making will enhance capacity to consent.

Culture

Issues of the rights to choice and consent are culturally based and tied to issues of ethics and philosophy. Whilst the link between choice, ethics and philosophy is really the subject of another essay it is worth noting that there is a strong cultural element to the promotion of any rights (Markova, 1995). The right to autonomy is such a strong value in the UK, as well as in many other countries, that it has been built into government policy. However, it is not necessarily the case that the right to autonomy is a shared value or that it will still be a dominant value in the future. It is useful to recognise that increased choice may not be an important value for all service users and their families who may have certain religious or political views about the right to choice and certain cultural values and customs might be considered more important.
For example, a service user's family may feel very strongly about the need to arrange a marriage for her, despite the fact that she may be assessed as unable to consent to such an arrangement. Although professionals need to follow government and professional guidelines they will also need to be sensitive to these cultural differences.

Assessing Capacity

Within a functional approach, capacity to consent is a fluid concept that will vary from one consent context or scenario to the next. In addition, given the number of factors affecting choice-making ability including individual and environmental factors, assessment of capacity to a specific activity will often not be a one-off assessment. In fact, the research findings suggest that assessment might be part of an on-going process aimed at developing as well as assessing competence. One of the current difficulties with assessment of capacity is the lack of formal frameworks and tests. Arscott (1997) notes that there is little guidance on how capacity should be assessed and there are no commonly accepted standards for assessing it. Stalker and Harris (1998) and Harris (2003) note that although service-providers may believe choice is very important, they may be unclear about how to promote it.

Based upon the above findings, it would seem that an assessment of capacity to consent needs to consider: cognitive skills; communication skills; decision-making experience; tendency to acquiesce; and consent context. In addition, assessment needs to consider the effects of alcohol, drugs and medication as well a person's emotional and mental state and how these might impact on the above. However, assessment of these factors will not necessarily be conducted to determine capacity of consent but may rather guide professionals as to areas in which capacity might be enhanced. Arscott et al. (1999) suggested that their Ability to Consent Questionnaire might be used as a first step in identifying areas where individuals required further assistance rather than as a measure of capacity. They also note that specific tests of IQ, memory and language could help to guide the level at which information is pitched.

There are limited tests available that assess global capacity to consent. One possible reason is the big challenge of setting the right threshold for capacity that is both empowering and protective. Vignettes have often been used in research to assess decision-making ability within hypothetical situations (Morris et al., 1993).
Jenkinson (1999) found consistency across different decision-making vignettes and also found that additional information did not increase decision-making ability. Her findings support the use of vignettes to measure capacity to consent to a specific research study but use of these for general assessment purposes follows the diagnostic rather than functional approach. Arscott (1997) notes that tests that exist to assess capacity to make decisions have not been developed for use specifically for people with learning disabilities although it may be possible to adapt them. The evaluation to sign consent (ESC) instrument was developed by DeRenzo, Conley and Love (as cited in Lacono & Murray, 2003) for use with psychiatric patients in clinical trials and involves a short questionnaire about the study under consideration. The MacArthur capacity instruments (MCI) assess general capacity to consent to research based upon questions about a hypothetical study but this again follows the diagnostic rather than functional approach (Lacono & Murray, 2003). Arscott et al.'s (1998) two part consent form, which asks questions about the study, remains the only instrument for consent to research studied with people with learning disabilities. This instrument assesses a person's knowledge of the activity to which she is consenting. There are other tools that might be useful when considering capacity to consent that focus on a person's knowledge and understanding of a given situation, for example, McCarthy and Thompson's (1992) Sex and the 3Rs which is a sex education pack for use with adults with a learning disability. An assessment of knowledge however, does not take account of the many other issues involved in capacity to consent, and would only form part of an assessment of capacity. In addition, when using any formal instruments for assessing capacity, the professional needs to consider their cultural suitability for a person and they may have difficulty finding appropriate tools in languages other than English.

**Specific Consent Areas**

So far, this essay has focused on factors affecting consent capacity without looking at specific consent scenarios. Although factors affecting competence to make decisions will be similar across different scenarios the type of information the person needs as well as the professional, ethical and legal guidelines relating to that specific area will vary. Consent to sexual relationships, health treatment and research are worth some separate discussion.
Consent to sexual relationships is an area which perhaps best highlights the challenge to the professional of balancing autonomy and protection. Sexual relationships can involve issues of abuse, pregnancy, contraception, sexually transmitted diseases, abortion and parenthood. In legal situations, the onus is generally put upon the professional to assess capacity to consent. One exception is for people with a severe learning disability who, by law, are never considered capable of giving informed consent to a sexual relationship. There are no widely accepted criteria for assessing consent to sexual relationships however there has often been a focus on a person’s knowledge and understanding about the following areas: different sexual acts and their consequences; the appropriate contexts for any activity; the legality and social acceptability of the activity; and that a person has the right to say ‘no’ at any time. Kennedy and Niederbuohl (2001) surveyed 300 psychologists regarding their opinions about various components of sexuality. They found that basic sexual knowledge, knowledge of consequences of sexual behaviour and abilities related to self-protection were generally considered as integral to sexual consent capacity. However, it is worth noting that their study was limited to psychologists and to those who responded and it was very subjective in nature.

Assessment of consent to health treatment would involve a thorough assessment of a person’s understanding of the treatment involved. In English law it is the legal responsibility of the professional providing treatment to judge whether person has capacity to give valid informed consent. Parents and carers cannot give consent on behalf of adults with learning disabilities. There are also certain types of treatment that can only be authorised by the court if a person is deemed unable to consent, for example, sterilisation for contraceptive purposes (Adshead, Sellars, Males, Haywood & Ross, 2002).

Arscott et al. (1998) note that consent to research has largely been shaped by professional codes of practice rather than by empirical study or legal constraints. Fisher (2003) identifies aspects that are pertinent to the research situation that need to be considered. A research participant must understand that the purpose of the research is to deliver wider benefits rather than benefits to the participant themselves. They need an understanding of the ethical protections that exist around research e.g. risk-benefit assessments and confidentiality procedures. They also need to understand the voluntary nature of research and the fact that a participant can withdraw at any time with no negative consequences. Finally, it would be important that participants understand the full nature of what is involved in participation.
When a Person is Unable to Consent

It is worth briefly considering the guidelines in place when a person is deemed unable to consent to an activity. When capacity to consent is not established, professionals are generally guided to act in the best interests of the client and to consult with those who are close to the person and professionals who have knowledge of the person and situation. The Law Commission (1995) outlines that any decisions made on behalf of a person without capacity should be made in the best interests of that person. They suggest that in deciding what is in a person's best interests, the past and present wishes of the person should be considered as well as the views of others whom it is appropriate to consult. In addition, the person should be encouraged and facilitated as far as possible to participate in the decision. They go on to say that no person should be able to make decisions on behalf of others about consent to: marriage; sexual relations; divorce; adoption or freeing a child for adoption; and voting. The Department of Health (2001b) follows a very similar line with regard to consent to health treatment, however, the Division of Clinical Psychology guidelines (1995) suggest that where a client is deemed unable to give consent to psychological treatment, for example, because of a learning disability, it should be obtained from the person seen as having legal authority to give it on the client's behalf. Interventions should then only proceed when they are deemed to be in the best interests of the client. The British Psychological Society's (2000b) Code of Conduct outlines that, in research, where real consent cannot be obtained, the researcher should 'consult a person well-placed to appreciate the participant's reactions, such as a member of the person's family' (p.9). Fisher (2003) suggests that autonomy be conceptualised as a connectedness to others and that efforts to create a goodness-of-fit between the person and the consent context would involve encouraging someone to select a consent partner who can help them arrive at a decision.

Conclusion

The assessment of the capacity of people with learning disabilities to consent to activities is a complex subject area and presents a big challenge for professionals, particularly as people with learning disabilities are given greater autonomy. Professionals are faced with the demands of striking a suitable balance between promotion of the right to autonomy and the right to protection and to do this within a structured, standardised framework. Legal and ethical frameworks for assessment of capacity are moving away from approaches that focus on groups of people or an individual's cognitive functioning towards a more functional approach that focuses on
wider individual factors as well as environmental factors. There has also been a shift in approach to focus more on supporting people to make decisions and enhancing capacity rather than on one of assessments of ability.

Research focused on the factors affecting capacity has highlighted the role of individual factors like comprehension skills, communication skills, experience of decision-making and tendency to acquiesce. In addition, studies have considered the role of external factors like the complexity of information available; efforts by professionals in communicating the information; and factors relating to the consent context such as cultural difference and power imbalance. Given the complexity of the issues relating to consent capacity, increased education and training for professionals has been recommended (Hillery et al. 1998). In addition, people with learning disabilities should be encouraged by professionals to identify those who can help them in the decision-making process.

In terms of research, further work would be useful to identify and understand the mental processes involved in making choices. Jenkinson (1993) argues that decision-making by people with learning disabilities should be studied within the broader context of psychological theories of decision-making. There is also a need for research focused on bridging the gap between subjective assessments and more standardised tools and instruments. Arscott et al. (1999) suggest that we begin to compare formal tests with subjective assessments by professionals. Finally, there is a strong need to develop instruments that are suitable for assessing capacity to consent for people with learning disabilities across different cultures and languages.

With access to these new instruments, and given further education and training, professionals will be well equipped to promote and support increased choice for people with learning disabilities.
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Do cognitive techniques add therapeutic value to working behaviourally with children with OCD?

Child, Adolescents and Families Essay

Year 2

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Introduction

Obsessive-compulsive disorder (OCD) is a disorder characterised by excessive obsessions or compulsions that are distressing, time consuming and significantly interfere with a person’s functioning (American Psychiatric Association, 1994). Community prevalence in adolescents has been estimated to be around 1% (Flament et al., 1988; Valleni-Basile et al., 1996) with average age of onset for childhood OCD ranging from 7.5 years to 12.5 years (Geller et al., 1998). In addition, about 80% of adults report symptom onset in childhood (Pauls, Alsobrook, Goodman, Rasmussen & Leckman, 1995). There is therefore a strong need to establish a psychotherapeutic intervention for childhood OCD with good efficacy and effectiveness.

The Royal College of Psychiatrists (2001) reported on the 1999 British Child Mental Health Survey that looked at OCD prevalence rates for children between the ages of 5 and 15 years. They found an overall prevalence of OCD of 0.25%. Rates were very low in young children, increasing exponentially until they reached adults rates at age of puberty. They noted that compared with normal controls, the OCD group were of a significantly lower social class and income, they had significantly lower IQ and a significantly greater proportion of them were from ethnic minority groups. In addition, the majority were not known to services. Valleni-Basile et al. (1996) conducted a community prevalence study in the southeastern United States. They reported on a sample of 84% white and 16% black adolescents and found a significantly higher risk of OCD in black adolescents compared with white adolescents. These results suggest that age, ethnicity, socioeconomic status and IQ might all be factors to explore when considering treatment packages for different groups.

The American Psychiatric Association (1994) defines an obsession as a recurrent or persistent thought, impulse or image, that is experienced, at some time during the disturbance, as intrusive and inappropriate and that causes marked anxiety or distress. A compulsion is defined as a repetitive behaviour or mental act that the person feels driven to perform in response to an obsession or according to rules that must be applied rigidly. In the literature and in this essay, obsessions are often referred to as intrusive thoughts and compulsions are often referred to as rituals.
This essay begins by defining the different elements of cognitive behavioural therapy for OCD and how they are described in both the adult and childhood literature. It then briefly outlines the current evidence base for cognitive-behavioural therapy (CBT) with adults with OCD. It then looks at the different areas of research within the childhood literature. It describes the current evidence base for interventions based on ERP and for interventions based on a cognitive conceptualisation. The evidence base for both interventions has a number of limitations and these are explored in some detail before considering what conclusions can be drawn about the therapeutic value of the different techniques. Finally, the findings are summarised and the many possible directions of future research are considered.

Cognitive-behavioural Therapy with OCD

Behavioural Perspective

Behaviour therapy with OCD is based on the theory that the performance of a ritual (or compulsion) leads to a reduction in anxiety and it is this reduction in anxiety that reinforces the performance of the ritual (de Haan, Hoogduin, Buitelaar & Keijsers, 1998). The aim of therapy is therefore to reduce the reduction in anxiety by preventing the person from performing the rituals. The main behavioural method is exposure and response prevention (ERP) which involves systematic exposure to the situation that triggers the anxiety without performing the compulsion. Extinction is another behavioural method and this term is sometimes used in the treatment of OCD either to describe the removal of parental reinforcement of unwanted behaviours and more commonly to refer to the removal of the negative reinforcement of the rituals. Other behavioural techniques that have been used with OCD include modelling or shaping of the desired exposure behaviours. Habit reversal is usually associated with OCD-related habit disorders like trichotillomania however some therapists have used this treatment when the compulsive symptoms relate more to a sense of incompleteness rather than anxiety (March, 1995).

In the OCD literature, the term cognitive behavioural therapy, is usually used to describe an intervention based largely upon ERP but with some additional cognitive components. These components include anxiety management training (AMT) which generally consists of relaxation; breathing; cognitive restructuring; constructive self-talk and positive coping strategies. Other cognitive components include narrative techniques like externalising the OCD using ‘nasty nicknames’ and psychoeducation based on a neurobehavioural formulation. Sometimes other behavioural components
are added, such as modelling. This intervention also usually involves the family in some way, either as co-therapists or by exploring with the family how they may be influenced by or be influencing the person's OCD.

Cognitive Perspective

Cognitive theory of OCD proposes that the patient interprets the occurrence and the content of her intrusive thoughts as an indication that she might be responsible for harm to herself or others unless she takes some action to prevent it. This results in attempts to suppress or neutralise the thought, either overtly, through compulsive behaviours, or covertly, through thought rituals (Salkovskis & Kirk, 1997). The term, cognitive behavioural therapy is used at times in the literature to describe an intervention based on a cognitive conceptualisation of OCD that emphasises the need to change a person's responsibility and threat beliefs. Cognitive behavioural therapy provides a cognitive conceptualisation of OCD as an alternative to the fears held by patients about the meaning of their thoughts (Salkovskis & Kirk, 1997). A person's responsibility and threat beliefs are challenged through discussion, education and behavioural experiments including ERP.

CBT approached from either a behavioural perspective or a cognitive perspective often involves the same mixture of behavioural and cognitive components, although perhaps in different proportions, so both approaches are discussed in this essay and perhaps there is no big distinction between the approaches. The benefit of outlining the evidence base from the two perspectives separately is in part because the two have been separated in the adult literature and also because in the childhood literature they have so far generally involved different study designs.

Interventions with Adults with OCD

In terms of symptoms, OCD in children follows a similar pattern to OCD in adults however differences exist between adult and childhood OCD in terms of gender distribution, comorbidity and theories of maintenance (Shafran, 2001). It therefore makes sense to briefly consider the adult literature when thinking about OCD in children but also to be aware of possible differences in models and approaches.

Limitations of the use of medication to treat OCD, such as side effects and frequent relapse when medication is discontinued, have meant that CBT, either alone or alongside medication, is now often considered as the initial treatment of choice for
adults. Abramowitz (1997) conducted a quantitative meta-analysis of the adult literature and found a large effect favouring ERP compared with progressive muscle relaxation. In fact, AMT has actually been used as an active placebo in adult studies (Marks, 1987). Abramowitz (1997) also found no difference in efficacy between ERP and exposure alone or response prevention alone. However, the study was limited, because there were few randomised controlled trials.

Behavioural approaches with adults have shown some limitations. They are difficult to use with patients who ruminate and have no overt behaviours and treatment refusal and drop out is relatively common (Salkovskis & Kirk, 1997). As a result of these limitations, cognitive therapy has become the treatment of choice with some therapists and client groups. Freeston et al. (1997) found that Salkovskis model showed good results with those who did not have overt compulsive rituals. Also, Abramowitz (1997) found a small nonsignificant effect size in favour of cognitive therapy over ERP. However, randomised controlled trials to compare ERP and cognitive therapy, or to provide an analysis of the therapeutic benefits of the different components of CBT have yet to be conducted and the evidence base for cognitive therapy with adults is still growing.

**CBT with Children Based on Exposure and Response Prevention**

March (1995) reviewed the CBT literature for treatment of childhood OCD, through to 1995. He identified thirty-two investigations, most of which were single case reports. He described his results as follows:

"...all but one showed some benefit for cognitive-behavioural interventions. Graded exposure and response prevention form the core of treatment: anxiety management training and OCD-specific family interventions may play an adjunctive role. Poor compliance, inadequately documented and inconsistently applied treatment, and lack of exportability were recurrent problems."

(March, 1995, p.7).

Since then, there have been a number of studies, particularly in the United States, based on a similar therapy protocol but researchers have moved towards larger sample sizes and manualised treatments. There are still a number of limitations of
these studies that are discussed later on but studied together they may suggest something about the relative merits of the different components of treatment.

In 1994, March, Mulle and Herbel reported on a case series of children treated with their newly developed protocol. They found a mean improvement in symptom severity of 50%. The manualised treatment that they used was since published (March & Muller, 1998) and has formed the basis for a number of subsequent studies both by March and colleagues and by other research teams. It is therefore worth outlining the main components of their treatment and other similar treatments. In most of the studies the diagnosis is made by an experienced clinician using DSM-IV criteria but not necessarily using a structured interview. The main outcome measure is the Children's Yale-Brown Obsessive-Compulsive Scale (CYBOCS). It was adapted from the adult Yale-Brown Obsessive-Compulsive Scale (YBOCS) and has been shown to be a valid and reliable measure of OCD severity with children and adolescents (Scahill et al., 1997). It measures obsessions and compulsions separately on time spent, distress, impairment, resistance and control (Goodman et al., 1989). ERP is the main component of treatment, which is conducted over 16 weekly sessions (other studies have used 12 sessions). Session one involves psychoeducation with all the family. A neurobehavioural formulation is presented to help the family ally against the OCD and to avoid blame. In session two, narrative techniques are used to externalise the OCD and the OCD is given a 'nasty nickname'. A stimulus hierarchy is developed in sessions two and three and AMT is introduced in session three. Sessions four to sixteen involve a combination of ERP and AMT. The family are involved in about three sessions and their involvement is limited to psychoeducation; treatment planning; parental response prevention, supporting homework tasks and they are given tips on how to manage themselves with respect to their child's OCD.

Franklin et al. (1998) conducted a trial involving 14 children between the ages of 10 to 17. They used similar manualised treatment to March et al. (1994) but without the AMT component. They also compared intensive with non-intensive treatment. They found that the mean reduction in the Y-BOCS score was 67% posttreatment and 62% at follow up. Their study therefore offered additional support for the efficacy of this ERP-based treatment and suggests that the AMT component is not an important part of treatment. They also demonstrated that differences in intensity of treatment may not affect outcome which means the treatment can be offered to a wider range of individuals to fit in with individual needs.
Wever and Rey (1997) report on the naturalistic outcome of the treatment of 82 children between the ages of 7 and 19 years, in New South Wales, Australia. They offered intensive treatment that included CBT with medication. They found that those children who received CBT with medication showed a 60% improvement in their CY-BOCS scores. A strength of this study was the large sample size however, it was limited by the fact that the study was conducted over 5 years so treatment evolved throughout the study. Thienemann, Martin, Cregger, Thompson and Dyer-Friedman (2001) conducted a naturalistic open trial of group CBT for adolescents with OCD. Their study included 18 adolescents, aged 13-17 years, who received 14 sessions of group CBT based on March and Mulle’s manual (1998). They showed significant improvements on the CYBOCS and also showed client satisfaction with therapy.

De Haan et al. (1998) conducted a randomised trial of 23 children, aged 8-18 years, comparing behaviour therapy and medication. This was the first study in which behaviour therapy and drug therapy were compared in children. The behaviour therapy was ERP with some cognitive components including, in older children, challenging obsessions. They found that behaviour therapy was significantly more effective than clomipramine with a mean improvement of 60% versus 33% on the CY-BOCS. Freeman et al. (2003) have adapted the March and Muller (1998) manualised treatment to develop a family intervention for young children. The initial results, with four children aged 4-11 years, showed a large decrease in CYBOCS scores posttreatment. This small study indicates that treatment with ERP might be suitable for younger children.

Overall, these studies give good support for the use of ERP-based CBT with children and adolescents. Before exploring the contributions of the different components to outcome, this essay first considers the effectiveness of cognitive therapy with children.

**CBT with Children Based on a Cognitive Conceptualisation**

Cognitive therapy has been shown to be effective with children with a range of disorders including other anxiety disorders (Dadds, Spence, Holland, Barrett & Larens, 1997) and depression (Reinecke, Ryan & Dubois, 1998). In addition, there is an increasing evidence base for the treatment of adults with OCD using cognitive therapy (Salkovskis & Kirk, 1997). Also, clinicians routinely report difficulty in engaging children in exposure programs (March, 1995). Piacentini (1999) points out
that children are more present-oriented than adults and are therefore less motivated to engage in anxiety-provoking exposure exercises to achieve some future gain. It is not surprising therefore that more recently there have been a few studies focusing on the use of cognitive techniques with children and adolescents with OCD based upon a cognitive formulation.

Barrett & Healey (2003) conducted a study to look at the applicability of the cognitive theory of OCD in explaining childhood OCD. They looked at six cognitive processes thought to be involved in OCD: (1) overestimation of responsibility for harm; (2) overestimation of harm severity; (3) overestimation of probability of harm; (4) TAF (Thought Action Fusion); (5) self-doubt; and (6) cognitive control. A total of 59 children, aged 7-13 years, took part and they formed three different groups, matched on age and gender: an OCD group; a group of children with another anxiety disorder and a non-clinical group. Their results showed that OCD children displayed cognitive processes of overestimation of harm severity and responsibility; TAF; and they reported higher ratings across these processes than anxious children. However, cognitive control was the only cognitive process that clearly differentiated OCD children from anxious children. The study was limited by a small sample size which meant that significant differences between groups was unlikely and differentiation between ages was also not possible. Also some items were individualised for OCD children and standardised using non-OCD examples for anxious and non-clinical children which raises questions about the controllability of the study. Overall however, their study does give preliminary support for a cognitive conceptualisation of OCD in children.

Shafran and Somers (1998) reported on two case studies of 14 year olds with OCD. They used thought suppression experiments, to provide the adolescents with an alternative to the misinterpretation of the significance of their intrusive thoughts. They found that both clients showed big improvements in therapy. However, the studies were based on clinical impression only and the thought suppression experiments were conducted as part of a CBT program involving ERP and other behavioural tests to challenge their beliefs. Although these results are not generalisable they suggest that one of the reasons for the effectiveness of ERP might be that it alters the personal significance of the intrusive thoughts. By implication, other cognitive methods that alter the child's beliefs might also be as or more effective than ERP.
Kearney and Silverman (1990) report on a case study also involving a 14 year old boy. They alternated cognitive therapy and response prevention. Cognitive therapy consisted of identifying irrational, obsessional thinking and examining more realistic probabilities, similar to cognitive therapy with anxiety or depression. Behavioural experiments and education were used to provide evidence to challenge the beliefs. Results showed that the two methods worked well in tandem with neither showing greater improvement than the other. Interestingly, cognitive therapy seemed to result in a greater improvement in reducing the particular compulsion associated with stronger beliefs whilst response prevention showed the greatest improvement in reducing the other compulsion.

Williams, Salkovskis, Forrester and Allsopp (2002) studied the treatment of six adolescents (12-17 years) using cognitive therapy. Treatment involved a cognitive formulation and focused on appraisals of behaviour. Overall, they showed a 40% improvement on YBOCS-R. Interestingly, they also showed high correlations between responsibility measures and measure of OCD symptoms suggesting that responsibility appraisals are an important mediating factor in treatment. They do not give a clear outline of treatment and its components so it is not useful in analysing the important components but it does suggest that cognitive therapy can be effective in the treatment of adolescent OCD. They suggest that responsibility appraisals are addressed directly to enable OCD to be treated as efficiently as possible.

These three studies are the beginning of a new area of research exploring the efficacy and effectiveness of cognitive therapy with children with OCD. Although there are a number of limitations, discussed in the next section, they show good outcomes for cognitive techniques that play a more central role in therapy. The work has begun with adolescents. If its efficacy with adolescents is shown then studies could begin to explore working with younger children to see how they might respond to a cognitive conceptualisation and treatment.

Limitations of the Current Evidence Base

There are a number of limitations of the evidence base discussed so far and these limitations are best discussed together since most of them relate to several of the studies. All the studies, except one (Wever & Rey, 1997), were based on a small sample size. This means that the groups may not be particularly representative of children with OCD, the results cannot easily be generalisable and the chances of a
type II error are high so statistically significant results are unlikely to be found. It also means that an analysis of the predictors of good or bad outcomes for the different treatments is not possible.

None of the studies used a placebo group, a waiting list control group or any other means of controlling for the effect found. This means that improvements posttreatment might result from: medication; other interventions; the normal course of the OCD; or the placebo effect. Children and adolescents have shown high rates of placebo response (Thienemann et al., 2001) so improvements in non-controlled trials needs to be carefully examined. The effect levels would be smaller if compared to a placebo control. In addition, with the exception of one (De Haan et al., 1998), the studies were not randomised. These studies have all been useful in showing the clinical effectiveness of treatment but there is a need still to demonstrate their efficacy through randomised controlled trials. Most authors (Thienemann et al., 2001; Franklin, Foa & March, 2003) report that this is the direction in which they are heading or intend to head with their research.

Most of the studies used DSM-IV or DSM-III-R diagnoses. Some of the studies used structured diagnostic interviews but many used an unstructured assessment which means the diagnoses are subjective and the samples may therefore vary across studies. The outcome measures were based on valid and reliable tools but they were usually rated by the therapists rather than by blind observers so results would be subjective. Only about half of the studies looked at improvement at follow up. This is important in demonstrating long term effects of the interventions, especially in determining whether these therapies are superior to medication in terms of preventing relapse.

All of these studies involved a treatment package that included several different components. Most studies included a medication component and some improvement may be attributable to the medication rather than CBT. Most of the studies included both cognitive and behavioural components as well as a family component and therapists had varying levels of flexibility over their use of adjunctive components, such as, modelling or challenging the obsessions. Finally, improvements might relate to components that are not explicitly discussed, for example, the therapeutic relationship. Inconsistencies across treatments, the use of multiple components and the lack of controls mean that conclusions about the therapeutic benefit of different components of therapy is limited.
Few of the studies gave ethnic and socioeconomic information and those that did were generally studies of white populations in either Europe or the United States so the results are limited in their generalisability. Research need to consider efficacy of treatments across different ethnic groups. In addition, there may be important aetiological, phenomenological and therapeutic differences across the ages (Shafran, 1998). However, most of the research either only considered adolescents or looked at children and adolescents together but with sample sizes that were too small to make comparisons across ages.

In the adult literature, it has been shown that certain techniques might be more suitable for different symptoms (Freeston et al, 1997). In addition, cultural factors, like religious beliefs, parenting style or age of beginning of sexual relations might play an important part in determining types of obsessions experienced or age of onset of OCD. In any therapy it is important to consider the role that cultural beliefs might play in mediating distress but the evidence base has thus far not explored the interaction between treatment techniques and cultural factors. This is an area for future research.

Although there are a number of limitations to the current research base, there is enough evidence to support the need for a large-scale randomised control trial. Franklin, Foa and March (2003) describe such a study that is currently underway and is due for completion in 2003.

**Therapeutic Value of the Different Techniques**

Analysis of the different components of treatment is difficult because of the many limitations of the studies. Because very few are comparison studies none of them offer clear conclusions on their own about the therapeutic value of the different techniques involved. However, examining the studies together a few conclusions can be made.

ERP is the largest component of treatment in most of the CBT studies and one of the only elements that is common to all of them. This suggests that ERP is largely responsible for the improvements seen. It is also generally thought to be the most powerful element of the CBT program (Thienemann et al. 2001). However, none of the studies, involved ERP alone without any cognitive components suggesting that ERP alone would not be considered to be successful and the role of the other
cognitive components are important. Other behavioural techniques including modelling and positive reinforcement have been applied inconsistently across the studies and it is not possible to separate their therapeutic benefit from the rest of the therapy. For example, modelling may have been an important component in the group treatment (Thienemann et al. 2001) but this is only speculative.

Several studies have discussed or attempted to explore the therapeutic value of the anxiety management training (AMT) component of treatment. As March and Muller (1995) note, the lack of improvement in the first few weeks of treatment in their study suggests AMT may have had no independent effect on outcome. However, their study was a single case design and they recognise that any firm conclusions regarding specific treatment components cannot be made. Franklin et al. (1998) studied the effects of ERP without the AMT component and showed a bigger improvement in symptom severity than most of the other studies. This suggests that AMT has no independent effect on therapy and matches the findings in the adult literature. However, most treatment still includes this component suggesting that, at least in the clinical judgement of the therapists, it may be important. March et al. (1994) suggest that AMT may facilitate the ERP by decreasing the level of exposure-related anxiety and hence increasing the child's engagement with therapy. Also March (1995) suggests that AMT might be effective in targeting co-morbid conditions that might interfere with the OCD treatment.

Several of the studies (March et al. 1994, Wever & Rey, 1997) used cognitive restructuring in the form of "bossing back OCD". It is unclear what role this plays in the outcome. It may be that externalising the OCD empowers the child and decreases anxiety allowing the child to engage better with the exposure or it may be that it has a more direct effect. As with AMT, March and Muller (1995) point out that the lack of notable improvement in the first few weeks of treatment in their study suggests that the narrative techniques may not have had an independent effect on outcome. Although none of the studies focused specifically on the role of the narrative component, the fact it is included in most treatments suggest that the therapists view it as important. However, it is never described in detail and forms only a small part of therapy which suggests that the authors do not view it as the key component.

Although their findings are subjective and limited, Shafran and Somers (1998) results suggest that thought suppression experiments as part of a CBT program may be
effective in challenging a patient's misinterpretation of the significance of their intrusive thoughts. Kearney and Silverman's (1990) also describe a case example with good outcome using traditional cognitive therapy techniques of challenging irrational thinking. However, the study is limited to a single case so drawing any generalisable conclusions from it would be risky.

There is some indication that cognitive techniques based on a cognitive formulation might be a more suitable intervention with certain individuals only. For example, cognitive techniques may add value to working behaviourally for those with covert rituals (Freeston et al., 1997). Kearney and Silverman's (1990) study showed that cognitive therapy was more effective in reducing the compulsion associated with stronger beliefs whilst ERP was more effective in reducing the other compulsion suggesting that the most effective treatment component may depend very specifically on the nature of the obsession or compulsion and the strengths of the beliefs associated with them. This idea needs further exploration.

Other differences between behavioural and cognitive techniques that have not been fully explored are the possible dependence of outcome upon age and the level and nature of family involvement in each. Cognitive therapy tends to individualise the child and might make family involvement more difficult, however, family members might act as co-therapists. It is interesting that most of the ERP based interventions included a strong family component whilst cognitive interventions did not. It may be that cognitive techniques add more therapeutic value with older children whilst family involvement is more important with younger children.

Although the findings tell us a little about the therapeutic value of the different components, they are very general. They tell us nothing about the predictors of good outcome of the different components. Clinical experience suggests that therapy is more effective when it is tailored to the client and to their specific symptoms. What would probably be most beneficial would be a package of treatment involving behavioural and cognitive components that can be tailored depending upon the needs of the client and the known predictors of good outcome.

**Conclusions**

The current evidence base for cognitive-behavioural treatment of childhood OCD is limited but growing. Both behavioural and cognitive theories of OCD provide good
working models on which to base an intervention. Both interventions involve components of the other and both have shown positive results for children with OCD.

The main evidence to date is for the effectiveness of CBT based upon ERP. This treatment usually also involves some cognitive components including psychoeducation, AMT and narrative techniques. The therapeutic value of these cognitive components is unclear although there is some indication that they do add value and that this is mainly in terms of increasing children’s engagement in the exposure work. There is initial evidence for a more direct therapeutic benefit of cognitive techniques based on a cognitive conceptualisation but this is based on only a few single case studies and there have been no group comparisons in this area.

The evidence base is still in its infancy and hence there are a number of limitations to the research. These include small sample sizes, lack of control groups, lack of objective diagnostic and outcome measures, inconsistencies in treatment application. There is also a need to explore treatment outcome across different variables like ethnicity, socioeconomic status, cultural beliefs and age.

Future research needs to focus on randomised controlled trials that compare the different components of CBT with each other and with controls. Eventually research might look at the efficacy and effectiveness of different components for different patient groups, particularly focusing on age, culture, comorbidity, symptom chronicity and severity and also explore the long-term versus short-term benefits of different components. Studies comparing treatment based on a behavioural formulation versus a cognitive conceptualisation would also be interesting and it might be useful to begin by exploring the extent to which appraisal of thoughts has changed and link this to symptom reduction. As research looks more at treatment for younger age groups, there may be a need for a new theoretical cognitive model for childhood OCD taking into account the different cognitive and developmental abilities.

CBT for childhood OCD is still in development and currently comprises a varying mix of both cognitive and behavioural components. This essay has highlighted the two main therapeutic benefits of the cognitive components of therapy and has raised some important implications for future research into the development of treatment packages to suit a range of different clients.
References


Outline some of the major life transitions and their impacts faced in older age. What contributions can psychological theory and practice make to understand and managing such transitions?

Older People Essay

Year 2

August 2004
Introduction

Late-adulthood has the longest span of any developmental period extending from old age (65 to 74 years) and late old age (75 years and over) to death. Given the increasing number of adults living to this age, understanding and managing life transitions during this period is of increasing importance.

There is a wealth of research and literature that looks at life transitions and their psychological impact. The major psychological impacts that are considered include stress and depression. One's adjustment response, however, is strongly influenced by both personal and societal values. These values in turn are influenced by: age; cohort, cultural and religious beliefs; societal trends; socio-economic variables and gender. In addition, financial situation and level of social support can affect how somebody copes with a transition. A life transition may impact family relationships and social networks or trigger a review of one's personal values and interests (Shaw, Patterson, Semple & Grant, 1998).

Societal values have a significant impact. Non-industrialised societies have a high regard for old age. By contrast, older people are often ostracised, ignored and neglected by Western society. People experience a loss of status and respect as they age and older people often believe in the stereotypes themselves, affecting their confidence and self-esteem. These stereotypes will also impact therapists' beliefs. Older people from minority ethnic families may experience additional stresses due to the pain of separation from their country of birth and culture, dependency on their children for language support, experiencing a change in their children's values, and a lack of access to services.

This essay discusses the specific psychological factors that seem to be the most common when thinking about life transitions in old age. Because of limited space, discussion is focused on two transitions, retirement and physical illness. This essay then focuses on the contribution psychological theory and practice makes to understanding and managing these transitions. Many theories have been developed to explain older people's adjustment responses. However, a limitation of many is their focus on explanation rather than intervention. For this reason, and because of limited space, this essay has focused on two main theories, Erikson's life stages and the family life cycle model, which have both been influential models and both offer more guidance on intervention than other models. The models also complement
each other since Erikson's focuses on the individual whilst the family life cycle model incorporates systemic factors. This essay considers both these theories of development and how they are applied. It then links the two models back to the two transitions of retirement and physical illness to exemplify their application. Finally it evaluates the two models and considers the empirical support for the two theories and their application. In conclusion it discusses the direct for future research in this area.

Major Life Transitions and their Impacts

Retirement

In the literature, retirement is usually defined as the transitional period spanning the three phases of pre-retirement, the retirement event and post-retirement (Shaw et al., 1998). Retirement presents as a milestone for a large number of people in old age. Matthews and Brown (1987) found that the impact of retirement as a life event relative to other life experiences was less critical than previous research suggested and other authors support this finding (Bossé, Spiro III & Kressin, 1996). However, research around retirement and its impact seems to have strongly influenced developmental theory, which is why this essay considers retirement in more detail.

Generally, it does seem that about 30% of participants report finding retirement stressful (Bossé et al., 1996; Shaw et al., 1998). The variables that seem to impact on adjustment to retirement include: health, circumstances of retirement, financial situation; gender; and personality factors. Although many researchers have shown that poor health in retirement predicts poor adjustment to retirement, a couple of studies have shown that retirement for health reasons has not predicted retirement stress (Bossé et al., 1996). Involuntary retirement, including the use of coercive tactics by organisations to encourage early retirement, has been linked to increased emotional distress (Shaw et al., 1998; Stuart-Hamilton, I., 1994). Bossé et al. (1996) also note that early retirees reported higher levels of emotional distress. Loss of income is generally a predictor of poor morale and poor adjustment to retirement (Bossé et al, 1996).

In terms of gender, studies have found that many variables generally associated with good adjustment to retirement among men, appear to be unrelated to good adjustment among women. Bossé et al. (1996) found that men of higher socio-economic status were more likely to experience retirement stress whilst women
reporting dissatisfaction also reported lower education and retirement income. In terms of personality, Fletcher and Hansson (1991) studied the predictors of retirement anxiety and found elevated scores for people for whom major social transitions were generally quite difficult. For example, for those who were shy, lonely, had fewer communal traits or those who expected to have little personal control over their lives after retirement. Identity is also an issue. Humans spend most of their adult years working so one might expect that the loss of identity that comes with retirement would lead to difficulties of adjustment. In a society where greater value is placed on work, retirement might cause greater distress as well as feelings of guilt.

Physical Illness

One limitation of the retirement literature has been its focus on individual factors and impacts. Research on physical illness has focused more on the interaction with family. Working in a CMHT for older people, the author became aware of the extent to which physical or mental deterioration, chronic pain or a fear of loss of functioning, were all contributing to people's mental health difficulties. For these reasons, physical illness is considered alongside retirement.

As the population ages, the number of people with chronic health problems in old age increases. Among people aged 65 to 84, arthritis, high blood pressure and heart disease seem to be the most prevalent health problems. For people over 85 years, the risk of cancer and disability increases with cognitive and sensory impairments increasing (Walsh, 1999).

Low self-esteem is often the result of an increase in dependency and is also implicated in the onset of late-life depression (Coleman, Ivani-Chalian & Robinson, 1999). Increased dependency also precipitates feelings of vulnerability and a sense of fear. Anxiety then interferes with a person's ability to use the limited functioning they have. For example, the author worked with a 74 year old lady who had experienced a number of falls following several strokes. Her anxiety relating to the falls was maintaining her dependence because she was afraid to move around her home or leave her house. A major component of adjustment to physical difficulties is also in the individual making changes to their expectations. A compounding difficulty for this lady was her desire to be as independent as she had been before her stroke.
Greater dependency will impact relationships with friends and family, both positively and negatively. Caregiving challenges can be opportunities for healing difficult relationships (Walsh, 1999). Certain aspects of chronic illness can be particularly disruptive for a family, for example, disturbed sleep, incontinence, delusional ideas and aggressive behaviour (Walsh, 1999). Family and friends are generally the main source of support for older people. However, the declining proportion of younger people, families having children in later life and the increasing involvement of women in the workforce all exacerbate the strain on family care (Stuart-Hamilton, 1994, Walsh, 1999).

Older people in poverty, often ethnic minorities, are more vulnerable to poor environmental conditions that heighten pain and deterioration (Walsh, 1999). Krause and Wray (1991) found that although older people in America, from ethnic minority groups had stronger social support systems compared to white older people, they also had a higher prevalence of chronic disabling conditions and a greater need for health care services.

Limitations

One limitation of much of the research on life transitions has been the focus on traditional families, often from White American or European populations. As the diversity of individuals and families requiring services is increasingly recognised, research needs to change. Another limitation of the research is that it is cross-sectional so it is difficult to separate the effects of the life transitions from the normal process of aging. A final limitation is the overall focus on negative impacts of transitions and the decline of functioning in old age. Psychology is increasingly focusing on enhancing well-being and this will help to fight the negative stereotypes of older age.

Psychological Theory and Practice

Santrock (2002) defines development as the pattern of movement and change that continues through the human life span and includes both growth and decline. This section considers some of the models that focus on individual or family development during late adulthood: Disengagement and Activity Theory, Erikson's theory, Gerotransendence Theory and Family Life Cycle Models. These theories consider changes in personality and stages that a person or family needs to go through during late adulthood, to achieve well-being, including coming to terms with their past. Many
other people have also focused on individual development in older age but there is not the space to discuss all their work.

**Individual Developmental Models**

Disengagement theory, originally proposed by Cumming and Henry in 1961, states that to cope effectively, older adults should gradually withdraw from society (Santrock, 2002). Activity theory by contrast, proposes that the more active and involved older people are, the more satisfied they are with life (Santrock, 2002). In particular, activity theory suggests that if people are stripped of their roles through, for example, early retirement, they need to find substitute roles to keep them active. There is little empirical support for either theory although stronger support for activity theory and both have lost favour more recently. They are mentioned here for their historical relevance.

Erikson (1997) identified eight stages of development spanning from birth to old age (see table 1). At each stage, a strength matures from the resolution of a crisis. For example, at birth, hope comes from the resolution of the tension between trust and mistrust. Each step is grounded in all the previous steps, whilst development in any one stage gives new connotations to all "lower" and "higher" stages (Erikson, 1997). At the eighth stage, wisdom matures from the resolution of integrity versus despair. Erikson defines wisdom as "informed and detached concern with life itself in the face of death itself." (p. 61). Successful resolution of the eighth stage happens when the individual can accept what has gone on in their past and accept death (Lowis & Brown, 2001).

Erikson (1997) also emphasises that in old age the qualities of the past assume new values that may need to be studied in their own right. For example, an older person may be struggling with the loss of autonomy, initiative, intimacy or identity all of which are syntonic elements of earlier stages. The idea is that if life review reveals a picture of life well spent then the older person is satisfied and achieves integrity. If life review reveals earlier stages that were resolved in a negative way then the older person will look negatively on his life and this leads to despair (Santrock, 2002).

Joan Erikson in Erikson (1997) introduced a ninth stage that covered the process of reevaluation that goes on in one’s eighties and nineties as one deals with new demands and daily difficulties. Earlier resolved tensions are again confronted. For
Table 1: Erikson’s Life Stages (Erikson, 1997)

<table>
<thead>
<tr>
<th>Old Age</th>
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<th>Integrity vs. Despair: WISDOM</th>
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<td>Generativity vs. Stagnation: CARE</td>
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<td>Young Adulthood</td>
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<td>Intimacy vs. Isolation: LOVE</td>
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<td>Adolescence</td>
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<td>Identity vs. Identity Confusion: FIDELITY</td>
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<td>School Age</td>
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<td></td>
<td>Industry vs. Inferiority: COMPETENCE</td>
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<td>Play Age</td>
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<td>Initiative vs. guilt: PURPOSE</td>
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<td>Early Childhood</td>
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<td></td>
<td>Autonomy vs. shame WILL</td>
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<td>Infancy</td>
<td>Trust vs. mistrust: HOPE</td>
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example, hope may easily give way to despair in the face of increasing dysfunction. She described despair at the eighth stage as compounded by earlier self and life evaluations. She believed that “if elders can come to terms with the dystonic elements in their life experiences in the ninth stage, they may successfully make headway on the path leading to gerotranscendence” (p. 114). This idea of gerotranscendence was based on the work of Lars Tornstam. Tornstam (2003) suggests that human aging is characterized by a move towards gerotranscendence, which he defines as a shift in meta-perspective, from a materialistic, pragmatic view of the world to a more cosmic, transcendent one, which is usually accompanied by an increase in life satisfaction. He believed that the effects of increased gerotranscendence, where the individual looks forward and outward beyond the self, are often misinterpreted as disengagement (Lowis & Brown, 2001).
One of the difficulties with the application of these models is that life transitions are not related to any particular stage so although they may play an important part in the older person's life and may trigger a referral to services they are not easily integrated into these models. However, what Erikson's model does, is point out the key elements that have to be taken into account in any consideration of adjustment (Coleman, 1993).

Life review is an important aspect of Erikson's final stage of integrity versus despair. Robert Butler in 1963 was the first person to give serious consideration to the value of reminiscence (Coleman, 1993) but several clinicians have since developed methods of helping clients in their life review. One other area where the theories have been useful is in increasing the understanding of staff and carers. Signs of gerotranscendence are often erroneously thought to be depression or dementia by carers. Theses theories of development help increase carers sensitivity to the idea that an individual may, rather, be on a chosen path to increased life satisfaction.

Family Life Cycle Models

Benbow et al. (1990) argue that when working with people in old age, involvement with their families is almost unavoidable and that the family generally provides the most important support for an older person. This makes family approaches in managing life transitions extremely valuable. Historically, family therapy has focused on increasing the capabilities of adult children to handle transitions in the lives of older relatives, particularly, for example, by increasing carer's knowledge, skills and use of support service (Myers, 1988). Therapies can also help families draw on prior multigenerational experiences with life transitions and core family beliefs to guide them (Rolland, 1999).

The family life cycle model is a normative model looking at the family rather than the individual life cycle. Carter and McGoldrick (1999a) discuss six stages through which the normal family progresses: leaving home; joining of families through marriage; families with adolescents; launching children and moving on; and families in later life. This final stage spans the period from retirement until the death of both spouses. According to this model, life transitions alter relationship patterns within the family and often require family support, adjustment and reorientation. Many of the difficulties of adjustment, relate to difficulties in family adaptation. An individual's symptoms are indicative of difficulties within the family in negotiating a particular life
cycle passage and intervention is focused on helping the family through this (Walsh, 1999).

At the stage of later life, the key emotional process of transition for the family is thought to be the acceptance of the shifting of generational roles. Changes the family may need help with include: maintaining functioning of later life family member(s) in face of physiological decline and exploration of new roles; support for the more central role of middle generation; making room for wisdom and experience of older people; and dealing with the loss of spouse, siblings and peers (Carter & McGoldrick, 1999a). A family may become stuck on any of these changes. The therapist will also need to consider cross-generational aspects and explore how the timing of the life transition fits with other individual and family transitions. This is particularly relevant since the therapist is likely to be from a different generation from the older person (Benbow et al., 1990).

The family genogram may help the therapist explore the attachments and relationships between the generations with a view to understanding the difficulties and where the family is stuck. As with the individual model, intervention might focus on family life review although the objectives of the review might be different and focused on changing relationships and roles rather than the resolution of individual stages. Carter and McGoldrick (1999b) recommend encouraging the elderly in their life review and urging them to share the story with family members.

**Retirement Revisited**

To consider retirement in terms of Erikson's model the therapist might be guided to focus on certain key elements in a person's development to understand how resolution at each stage might have been impacted. For example, an individual might begin to mistrust their own capabilities or others, particularly in the case of forced retirement. The reduction in autonomy over life choices might cause a reversion to insecurity and a lack of self-confidence. They might experience guilt relating to not working and spending time satisfying oneself, in a society that rates work and where industry is so revered. Their identity might be lost. The reduction in challenges might result in a sense of stagnation taking over.

From a family life cycle perspective the therapist might think about how the couple cope with the husband or wife's retirement, accompanied by their loss of status and
social network or how the retired person is integrated into the home (Walsh, 1999).
The family might need to think about how retirement and a possible increased
financial dependence affect the adult children. There might be an expectation from
the adult children that the parent or parents will now take on a child-caring role or the
retiree might be looking for a new role within the younger family that is not welcome.
The therapist will need to help families renegotiate their relationships and roles within
the family.

Physical Illness Revisited

The application of the two approaches to physical illness, is illustrated with a case
example. Ted was a seventy nine year old man that the author worked. He had
suffering from respiratory difficulties and depression that meant he had difficulty
leaving his house. He became very dependent on his children for care and support,
particularly his daughter. However, he complained to her that she did not care about
him. He telephoned her day and night to ask for her help with the slightest problem.
The more help she gave him, the more helpless he became and a vicious circle
ensued until her marriage began to fail and she became angry with him. She then
withdrew much of her help and it was at this point that he was referred to services by
his GP. It also transpired that the family had never dealt properly with the loss of
their mother a few years previously and the children were angry with their father for
the way he had treated their mother. His wife had always provided Ted with a lot of
support and there was a strong family belief about the role of the female as carer.
The daughter had providing support to her father out of a sense of duty and
compassion.

Thinking about physical illness based on Erikson's model the therapist might consider
whether Ted is beginning to mistrust his capabilities or whether increased
dependency on others and a reduction in autonomy is causing feelings of shame.
Perhaps his effort is consumed with keeping up and his initiative is lacking leading to
guilt. With his industry diminishing he may be feeling incompetent. His role in life
may have become unclear. He feels that he is no longer able to care for himself and
a sense of stagnation might have taken over.

From the family life cycle perspective, therapy might focus on helping the family
accept the shifting generational roles. The therapist might consider helping the
children and their father to communicate their feelings more openly and helping the
family deal with the loss of their mother or wife and a realignment of relationships within the family to occur. There might be a focus on helping the children understand and adjust to their father's increasing dependence; for the daughter to recognise her limitations and for the under-involved sons to join their sister in supporting their father. The children might be encouraged to help their father seek support from other sources within his social network and to help develop the role of their father as grandfather and increase the social contact rather than nursing contact that he has with his children. This example also illustrates how tensions can be heightened when developmental stages occur together. This man's daughter had just started out in a new relationship and had very young children who she needed to care for also.

Evaluation of Theory and Practice

Although there is limited evidence for Erikson's concept of integrity, what evidence there is supports the idea that adults move towards greater self-acceptance in later life (Coleman et al., 1999). Lowis and Brown (2001) reviewed the research supporting Erikson's stage theory and found that successful resolution of psychosocial stages, including ego integrity, correlated with life satisfaction. They also showed significant correlations between age and resolution of the ninth stage. Their results support the idea that individuals who achieve stage nine may choose to voluntarily withdraw as part of their experience of gerotranscendence. Coleman et al. (1999) studied five case studies from a 20 year longitudinal study of aging and found examples of accommodation and self-transcendence in later life. They also found that similar models of coping continued throughout the age bands and there was no support for a distinction between earlier and late old age. However, with only five studies, that may not have been truly representative, one might not expect to see a distinction.

In terms of life review, the way people describe their life in older age has been shown to link to well-being (Coleman et al., 1999) and life review has been shown to have good outcomes in terms of increased life satisfaction and self-esteem and decreased depression (Myers & Harper, 2004). However, Myers and Harper also note that the negative outcome of life review is a sense of despair and cautioned against use of life review inappropriately. Bender and Brown (1997) describe a Life Stages groups, based on Erikson's model, that they ran with older people. They found that clients initially had difficulty understanding the task because a stage approach did not fit with their experiences of life events, such as bereavement. However, they overcame this,
by linking past with present, and developed the group with different clients. The overall impression was that people found it helpful to actively explore their lives and to understand where their stresses and difficulties may have originated, however they did not give any quantitative outcome data. A limitation of all this research is that the application and objectives of life review vary widely and studies have not generally considered whether positive results correlate to the resolution of particular individual or family stages.

The individual development models are useful by providing a structure and normative model within which to understand life transitions. Erikson's model provides a useful framework for resolving the life stages and thereby managing life transitions. One of the advantages of the model is that it presents with a focus for well-being as well as preparing for likely problems that might be encountered along the way. However, the focus of the models is on the individual and the models do not readily account for family or other systemic factors. The models seem to be only suitable for those who fit the normative model and who are not too cognitively impaired. Diversity factors, such as, gender, sexuality, culture and religion, are not accounted for by the model.

One of the benefits of the family life cycle model is that it views the individual as part of a family system and not in isolation. It therefore allows for a more comprehensive assessment of the difficulties associated with a life transition with a focus on social and cultural factors. A limitation of the model used to be its normative function, which might exclude some families, for example, one-parent families or families from ethnic minority groups who tend to have a higher proportion of multigenerational households and closer families (Stuart-Hamilton, 1994). However, approaches are becoming more adaptive and the family model has been expanded, extended and varied to fit the range of different families seeking help. The shared view now is that culture interacts with the family life cycle at every stage. Families differ in their definition of family, in their timings in the life cycle phase and in their rituals, ceremonies and traditions that mark different life transitions (Hines, Preto, McGoldrick, Almeida & Weltman, 1999). Another advantage of the family life cycle model is its emphasis on the potential for growth as much as the negative aspects of change (Walsh, 1999). The model also allows for the consideration of how the therapist interacts with the family and becomes part of the system and how the therapist's family life cycle interacts with that of the client. One of the strong limitations of the family life cycle model is the limited published empirical support for its application, particularly with older people. Benbow et al. (1990) reported on their family life cycle work with later
life families in a psychiatric service for older people. They discussed case studies and concluded that the family life cycle is a useful way of understanding families and helping them through transitions. However, they did not use any quantitative outcome data.

Myers and Harper (2004) also found that psycho-educational approaches, support groups and group counseling were effective for certain interventions, for example, with caregivers, or for specific life transitions, for example, bereavement. However, these groups are not grounded in the theories discussed earlier so are not expanded on here.

Conclusions

The challenges for the application of psychology to the needs of older people have increased dramatically in recent years (Britton & Woods, 1996). The National Service Framework for Older People (Department of Health, 2001) specifically covers mental health needs for the first time but improved mental health services require improved interventions and an increase in research with older people.

This essay has considered the contribution that two influential individual and family developmental models have made to our understanding and management of life transitions with older people. Erikson's model has a good theoretic basis and has been extended and expanded upon by a number of researchers since. Application of the model in practice has been taken forward by practitioners in the form of life review and reminiscence work and there is some empirical support for the theory and its application. A key limitation of the theory is its focus on the individual without taking account of other important factors including social, cultural, gender and family issues.

The family life cycle model has been developed over many years by a number of family therapy practitioners and is applied in many services for older people. It has advanced in recent years and is applicable to the diverse family. It is soundly based in family therapy theory and practice; however, there is little published empirical support for the model. Overall, the two models contribute well to our understanding and management of life transitions in old age. They offer both an individual and family perspective providing the therapist with a choice of approaches depending on where the problem seems to lie.
A major limitation of the theories is their weak empirical base. Research supporting Erikson's theory and life review has been conducted on largely white populations. There is a lack of controlled trials and research is not focused on specific elements of theory or intervention. Component analysis is needed to establish the important components of each intervention and how these relate to the theory on which the intervention is based. Future research also needs to include older people from a range of different groups including different cultural and religious groups, people of different sexual orientations and those with disability.
References


Clinical Dossier

Summaries of clinical placements
and case reports
Adult Mental Health Placement Summary

Clinical Experience

The placement was within a Community Mental Health Team (CMHT) in South London. Twelve people were seen for assessment and / or intervention. They included six women and six men from a range of ethnic and cultural backgrounds. Their ages ranged from 22 to 72 years. Individuals were seen at an outpatient clinic, at the day hospital or on the inpatient ward. Presenting problems included: depression, social anxiety, health anxiety and panic, hearing voices, confusion and memory difficulties, dementia, an eating disorder and post-traumatic stress disorder. The main model used was cognitive-behavioural therapy (CBT). Two individuals were seen for neuropsychological assessments, which involved administration of a structured neuropsychological interview, the WAIS-III and the NART. Other psychometric assessments used with clients included the BDI-II and BAI, Well’s GAD schedule and Young’s Schema Questionnaire. In addition, the placement involved co-facilitation of three in-patient rehabilitation groups with an occupational therapist. Observation of sessions with a psychiatrist and a social worker involved further contact with nine individuals presenting with schizophrenia, depression, eating disorder and personality disorder.

Additional Training Experiences

Additional experiences included attending weekly team meetings for referral and case discussions, attending occasional ward rounds and attending a team away day focused on increasing team effectiveness. In addition two specialist services were visited within the trust: the Henderson Hospital and the Traumatic Stress Service. A training day on child protection and mental health legislation was also attended.
Adult Mental Health Case Report Summary

To maintain anonymity, all names used in this report are fictitious and some details have been changed.

Title

Cognitive therapy with a 40-year-old man presenting with depression.

Referral and Presenting Problem

Robert was a 40-year-old White British man referred to his CMHT with anxiety and depression precipitated by work stress. He attended an initial assessment followed by 13 sessions of cognitive therapy. The main problems for Robert were high levels of anxiety when he left the house, low motivation, no enjoyment of anything, poor concentration, feelings of guilt and low self-esteem. He had been off work for six months. Robert had previously seen a counsellor, which he had found helpful. He had also tried several medications, which had all been unsuccessful.

Initial Assessment

Robert’s initial BDI and BAI scores suggested moderate levels of depression and anxiety. He was currently in a supportive relationship although he had experienced a significant upsetting break up with a woman ten years prior. In the year preceding Robert’s referral he had experienced a series of stressful life events including his mother dying of cancer and he and his partner suffering a miscarriage.

Robert was the youngest of three children. He was born in England but his family moved around the world a lot when he was younger. His mother was unwell throughout Robert’s childhood and Robert felt that he had effectively raised himself. He excelled at school both academically and at sport. He left university in his first year because he did not enjoy it and then traveled the world. He later attended music school for four years.

Initial Formulation

Robert’s symptoms fit a cognitive formulation of depression. His early experiences of moving around a lot, making no long term friendships and being neglected by his parents led to the development of core beliefs of ‘I am a failure’ and ‘I am unlovable’.
The series of stressful events followed by a bike accident and an argument at work overwhelmed Robert and activated his core belief of "I am a failure". This in turn generated a vicious circle of negative thoughts maintained by low mood, feelings of anxiety, anger and frustration, and avoidance of tasks he feared he would fail at.

**Action Plan**

Based on this formulation and on Robert's ability to engage with cognitive ideas a cognitive intervention was chosen. Weekly sessions followed a plan of: goal setting; socialisation to the model; formulation; activity monitoring and scheduling; thought monitoring and cognitive restructuring.

**Cognitive Therapy Intervention**

Robert engaged well with the model and was good at monitoring negative thoughts. He related to the cognitive formulation and could see the maintaining patterns of negative thinking and low mood. However, when sessions focused on challenging these core beliefs and looking for alternative evidence he disengaged. He was keen to discuss what had happened during the week and expand on the disagreements he had had with others rather than focusing on his thinking. It seemed that Robert felt his cognitions were so a part of him that they would be resistant to modification using short-term cognitive therapy methods. His conversation was often focused at a schema level focusing on feelings of failure, high standards and self-sacrifice.

**Schema-focused Cognitive Reformulation**

The focus of therapy therefore shifted to working at the schema level. Using Young's Schema Questionnaire, key schema identified included schemas of self-sacrifice; subjugation; emotional deprivation; failure and unrelenting standards. It seemed that the difficulties at work had triggered schemas of failure and unrelenting standards whilst other schemas had perhaps been activated subsequently. These schema were maintained by a number of behaviours including: avoiding starting activities, setting himself high standards, always doing things for others, giving in to his partner, suppressing his own emotional needs and having unrealistic expectations of others. Robert engaged really well with the new formulation and found it very helpful.

**Outcome and Follow-up**

By the end of therapy, Robert reported reductions in anxiety and was feeling more positive. His BDI scores came down from 28 to 20 however his BAI scores remained
Adult Mental Health Placement

moderate. Robert was also beginning to talk positively about plans for the future, like finding new work and moving house. He was beginning to go out and see friends more. Robert wanted time to consolidate the work that he had done and think about the next step. A follow up session with the psychiatrist was planned and it was agreed that Robert could approach the team for further psychological input in the future.

Critical Evaluation of the Work

Overall, Robert engaged well and worked hard. However, the work presented a number of challenges. The therapist was flexible to the clients needs, reflected well and made good use of supervision to overcome these challenges and achieve a good outcome with the client. The shift to focus on schema rather than cognitions fitted better with the client's view of his difficulties and was helpful. If this work was repeated, it might have also been beneficial if the therapist had been clearer about the session structure and encouraged Robert to make better use of session time as well as working hard earlier on in therapy to help him focus on the process of his interactions rather than the content.
People with Learning Disabilities Placement Summary

Clinical Experience

The placement was within a Learning Disabilities Psychology Service in South East London. Ten people and their carers were seen for assessment and/or intervention sometimes jointly with other clinical psychologists. They included five women and five men from a range of ethnic and cultural backgrounds. Their ages ranged from 22 to 48 years and their learning disabilities ranged from mild to severe. Individuals were seen at home at a day centre or at the service. Presenting problems included: agoraphobia, anger difficulties, anxiety, eating problems, aggressive behaviour, social difficulties, memory difficulties, and depression. The main models used were behavioural, cognitive-behavioural and systemic. Neuropsychological assessments were conducted with two people including administration of the WAIS-III, WMS-R and ABAS (Adaptive Behaviour Assessment System). Full risk assessments were carried out for two individuals. In addition, the placement involved observation of other clinical psychologists and consultation work with a counselling psychologist. The clinical work involved attending three day centres, two residential hostels and a staffed house.

Additional Training Experiences

The induction involved separate meetings with a speech and language therapist, an occupational therapist, a physiotherapist, a community nurse and a social worker to discuss their roles. Additional experiences included attending fortnightly referral meetings, attending a clinical meeting at Guy’s Hospital, attending a funding panel meeting, visiting an in-patient assessment and treatment centre and spending a full day in a staffed house with two clients. The placement also involved giving a one-hour training session to care workers on CBT and a case presentation with care workers.
People with Learning Disabilities Case Report Summary

To maintain anonymity, all names used in this report are fictitious and some details have been changed.

Title

Extended assessment with a 23-year-old man referred with memory problems.

Referral and Presenting Problem

John was a 23-year-old White British man referred to the Adults with Learning Disabilities Psychology Team with apparent memory difficulties. He was not attending appointments and reported not remembering them. He had also lost several bus passes and mobile phones without remembering where or how he had lost them. His CPN wanted to rule out early dementia. John felt that he might have difficulties with his memory although he did not seemed bothered by them.

Initial Assessment

John was born and lived in London. He attended mainstream school until age 11 when he transferred to a special school for children with learning disabilities. After leaving school he helped his father who worked as a window cleaner, for two years. He had since been unemployed. Previous assessments showed John's IQ to be in the Borderline range and reported that John had autistic features. John lived with his mother and was in a relationship of about six months. His male partner did not have a learning disability. John reported that he drank, smoked and used amyl nitrate recreationally. There were no indications of mental health difficulties at initial assessment.

Initial Formulation

Three hypotheses were considered. The first was that John was experiencing problems due to neurological change. Further assessment would be expected to show specific changes in cognitive functioning and changes in mood or behaviour. The second hypothesis was that John's apparent memory problems might be caused by his drug use, the extent of which was still unclear. Then further assessment would be expected to show poor performance on cognitive and memory assessments as well as further exploring drug use. The third hypothesis was that John's apparent
memory difficulties were the result of social factors. His recent new relationship and increasingly enjoyable social life seemed to have reduced his motivation to attend appointments and this was being maintained by inappropriate responses from professionals. Further conversations with John might reinforce this hypothesis.

**Initial Action Plan**

A detailed assessment of John's intellectual and memory functioning was planned using the WAIS-III and WMS-III to establish whether there was a neurological basis for John's memory difficulties. Further interviews with John exploring his drug use and other possible reasons for non-attendance were also planned. The assessment was conducted jointly with another trainee clinical psychologist.

**Extended Assessment**

No neurological basis for John's memory difficulties was found. His intellectual functioning had improved since previous testing and his memory functioning was found to be higher than expected given his full-scale IQ score. It was also established that John did not use any drugs that would cause any significant cognitive impairment or memory problems. Given his performance on the WAIS-III was in the Borderline and Low Average ranges, a profile of John's adaptive functioning was compiled and it was deemed that he did not satisfy BPS criteria for impairment of adaptive and social functioning. He was therefore considered not eligible for services. John's attendance of appointments over the assessment period was erratic but improved over time. He was also able to identify that he was not interested in the services being offered to him.

**Extended Formulation**

A reformulation was adopted based on a social model of disability that suggests that disabled people are often expected to require a number of services to enable them to live within a non-disabled society and this impacts upon their abilities and self-esteem. John was given a learning disability label at an early age when he attended a school for children with special needs. His dysmorphic facial features might also have reinforced this label. This label might have resulted in low self-esteem and sensitivity about his 'learning disability'. These feelings were then reinforced by services and the medical model within which they worked and his mother.
John’s partner was very supportive of John and sought to empower him and change people’s attitudes towards him. As John’s relationship with his partner developed and as he himself matured, John began to resist the disability label and strive for greater independence resulting in non-attendance of appointments with services.

This non-attendance was maintained by services viewing non-attendance as an individual problem rather than as a social issue.

Outcome and Follow Up

By the end, John was attending appointments or cancelling them beforehand. He was speaking up for himself more and expressing his views about what he wanted. These changes may have resulted from the assessment process, which seemed to have increased John’s self-esteem and confidence and the psychology report that seemed to change the way other services viewed John. John moved out of his home with his mother and set up a new home with his partner. He began talking about wanting to contribute financially and find appropriate work.

A shift in support from learning disabilities to mainstream services was recommended because John was no longer eligible and did not seem to be benefiting from the services offered. It was recommended that occupational support services make a reassessment of John’s needs and goals and that there be a shift from a social to a work focus.

Critical Evaluation of the Work

This was a good piece of work. The therapist developed a good relationship with John and the collaborative nature of the sessions seemed to increase his confidence. It is possible that a social formulation could have been explored earlier without the need for a full neuropsychological assessment. However, the assessment did provide clear evidence against an individual pathology of memory problems as well as providing a concrete basis for helping John to move out of the learning disability environment.
Children, Adolescents and Families Core Placement Summary

Clinical Experience

The placement was within a CAMHS (Child and Adolescent Mental Health Service) in Kent. Twelve children or families were seen for assessment and / or intervention including eight boys and four girls. The children ranged in age from 5 to 16 years and families were all of White British background. Individuals were mainly seen at the service and two were observed in school. Presenting problems included: sleep problems, anxiety, hair-pulling, OCD, hyperactivity and disruptive behaviour, aggressive behaviour, suicidal ideation, low mood and language difficulties. The main models used were cognitive-behavioural, systemic family therapy and behavioural. Neuropsychological assessments were conducted with three children and included administration of the WISC-III, WORD and the WPPSI-R. Other tests used included the Family Relations Test (Bene Anthony), the CY-BOCS (Children’s Yale Brown Obsessive-Compulsive Scale), the Achenbach’s Child Behaviour Checklist and Goodman’s Strengths and Difficulties Questionnaire. Work with one family involved consultation with social services and with another involved liaison and meetings with the school. The placement also involved observation of clinical psychologists and family therapists working with families of children presenting with eating disorders, school refusal, Asperger’s syndrome and OCD.

Additional Training Experiences

The induction involved separate meetings with nurses, clinical psychologists, family therapists, an occupational therapist, a counselling psychologist, an art psychotherapist, a child psychotherapist, an education manager and the manage of the inpatient unit. Meetings attended included fortnightly psychology meetings, a CAMHS meeting and a CAMHS away day. Visits included the Child Development Centre and observation of a nursery session, the inpatient unit and attendance of a community meeting and four local schools.
Children, Adolescents and Families Case Report Summary

To maintain anonymity, all names used in this report are fictitious and some details have been changed.

Title
Systemic therapy with the family of a 13-year-old girl presenting with conduct problems.

Referral and Presenting Problem
Sarah was a 13-year-old White British girl referred to the local CAMHS by her GP because of concerns about her temper. She lived at home with her parents and her sister (16). Sarah and her mother, Penny, attended a family appointment and four subsequent sessions. Her mother was concerned about her temper. Sarah was having arguments that often resulted in her breaking things, using 'foul language' and fighting. Sarah blamed herself for all the fighting and arguing.

Initial Assessment of the Problem
Assessment and intervention were conducted jointly with another clinical psychologist. Assessment consisted of a joint session with Sarah and her mother and two separate sessions. There was no clear onset of the problem but a gradual increase in the level of violence during arguments. Both Penny and Sarah would shout, say nasty things and hit out at each other. Sarah's father would then restrain Sarah. Penny recognised that she and the family said awful things to Sarah at times. There was a history of verbal and physical aggression in the parents' marriage and in her father's family of origin. In the initial session, child protection risks were assessed and addressed with the family. The family's use of aggression was monitored on a session-by-session basis and there were no further reports of them hitting out at each other.

Initial Formulation
The problems were best understood from a systemic perspective. It seemed that when Sarah's parents imposed limitations on her activities, she became upset and angry. This led Penny to get upset and the situation to escalate into a violent argument that usually ended with the intervention of her father and everyone's
withdrawal. This withdrawal led to a sense of relief. However, the problem was not resolved which made the escalation of violence more likely the next time. Sarah becoming upset was understood in the context of her feelings of failure contributed to by the fact she was frequently criticised by Penny and other family members. She was also often compared unfavourably with her sister. Sarah's use of violence was understood within the context of the level of violence within her father's family of origin and her parents' use of violence for many years.

Action Plan

A systemic intervention was adopted aimed at reducing the occurrence of the family's negative cycles of interaction and promoting positive exchanges between Sarah and her parents. The plan was to use interventive questioning and reframing with the family to identify, highlight, and amplify connections between beliefs, behaviours and relationships.

Systemic Intervention

From early on, Sarah and Penny were using language fitting a systemic framing of the problem and Sarah's behaviour was not a key focus. Sarah's low self-esteem and the family criticizing her was a key theme in session four and the therapists helped the family identify exceptions including her sense of humour and her achievements at school. In the next session the focus of conversation were the similarities between Penny and Sarah, particularly when they got upset. In session five, the family's story of not hearing each other and all talking or shouting over each other was explored and exceptions identified. Communication was often difficult in sessions. Sarah appeared bored and needed encouragement to talk. Penny talked rapidly using incomplete sentences and jumping about. The therapists were able to model and facilitate listening and turn-taking. Two subsequent family sessions were scheduled but cancelled because other family members would not attend and Penny felt another appointment should not be sent. A letter was therefore sent to Sarah and Penny outlining what the therapists felt they had achieved.

Reformulation

The initial hypotheses were expanded upon with examples and new hypotheses were developed relating to Penny's feelings of low self-esteem, contributed to by her place within her family of origin and the extended family. New exceptions emerged including Sarah's use of humour and the supportive times Sarah had with both her
father and mother. The emphasis also shifted. By the end, the formulation was focused on a family with marital problems that the parents were currently unable to address but which Sarah's behaviour could be seen to be drawing attention to. The family's non-attendance fit with this formulation suggesting the family had made the progress they could at this stage.

Outcome and Follow-up

There was a significant reduction in frequency and severity of arguments between Sarah and her parents. Sarah's self-esteem also seemed to increase with her becoming more assertive with her mother and in her interaction with the therapists. Communication between Sarah and Penny changed throughout therapy. By the end, they were listening more to each other, using more positive language about each other and were able to make each other laugh. In session five, Penny reported that she felt that Sarah and her were 'getting closer now' and that the problem was 'in the family dynamics' and more to do with others in the family.

Critical Evaluation of the Work

Overall, this was a good piece of therapeutic work. An appropriate model was chosen and intervention was conducted effectively with the co-therapists working well together. The outcome for the family was good to the extent that they were ready to change. However, change was limited to only working with two members of the family and a greater attempt to involve others at the outset might have been beneficial. In addition, the use of formal outcome measures would have been helpful.
Older People Placement Summary

Clinical Experience

The placement was within an Older People Community Mental Health Team in South London. Ten people and their carers were seen for assessment and / or intervention. They included six women and four men from a White British background. Their ages ranged from 74 to 84 years. Individuals were seen either at home or at the day hospital. Presenting problems included: anxiety, depression, adjustment difficulties following a stroke, dependency issues, memory problems, confusion, cognitive impairment and aggressive behaviour. The main models used were cognitive-behavioural, behavioural and systemic. Neuropsychological assessments were conducted with four people including administration of the MEAMS, VOSP, WAIS-III, WMS-III, Rey Complex Figures, Hopkins Verbal Learning, NART and Hayling and Brixton Tests. Observations of a clinical psychologist, a psychiatrist and a CPN involved further contact with six people with Alzheimer's and Lewy Body Dementia, depression and memory problems. Other psychometric scales used during placement included the HADS, BDI-II, BAI and WAQ (Worry and Anxiety Questionnaire). The placement also involved co-facilitating a ten-session cognitive therapy group at the day hospital with an occupational therapist. This involved individual assessment with seven people and weekly sessions for four people with generalised anxiety problems. Clinical work involved attending a residential home, the day hospital and the in-patient unit.

Additional Training Experiences

Meetings attended included the weekly referral meetings, team business meetings, day hospital handover meetings and day hospital ward rounds. In addition, the trainee attended a User Carer forum, a Falls Policy meeting, and a meeting on CT scans at the hospital. Visits included a continuing day care centre and a residential continuing care unit. The trainee also attended two CPD afternoons on "Working with Groups" and "Challenging Behaviour and Dementia".
Older People Case Report Summary

To maintain anonymity, all names used in this report are fictitious and some details have been changed.

Title
Cognitive group therapy with four older people presenting with generalised anxiety.

Referral and Presenting Problems
Seven people were referred for an anxiety management group by their keyworkers at the day hospital and four members were assessed as suitable. These included two women and two men aged between 76 and 86 years and all of White European background. All four presented with generalised anxiety. Other presenting problems included low mood and panic attacks.

Initial Assessment of Group Members
Initial assessment involved a 20-minute face-to-face structured interview and completion of the Hospital Anxiety and Depression Scale (HADS). Inclusion criteria were that the person was experiencing excessive, uncontrollable worry about a number of events or activities rather than just within one domain, e.g., social anxiety. Exclusion criteria were cognitive impairment; severe depression; and participation in any conflicting therapy. Further measures used in assessment were specific worry questionnaires (PSWQ, IUS & NPOQ).

Initial Formulation
Presenting problems fit a cognitive formulation of generalised anxiety disorder. Key features of the model include: intolerance of uncertainty; specific beliefs about worry; poor problem orientation; and cognitive avoidance. It seemed that for each group member, initial specific worries activated beliefs and triggered thoughts about worry that were then maintained by a combination of poor-problem orientation, anxiety and cognitive avoidance.

Group Plan
The group was limited to ten one hour sessions and was co-facilitated by a trainee clinical psychologist (TCP) and an occupational therapist (OT). Goals were to
increase members' understanding of worry, to challenge negative beliefs about worry and to increase confidence in decision-making and problem solving. The plan involved four sessions of education and awareness training; three sessions involving a re-evaluation of beliefs about worry; one session on decision-making and problem-solving; one summary session to explore practical ways to demolish worries and a final session to recap and draw together a reformulation. Homework involved reading, worry monitoring and exposure work through behavioural experiments. The group was 

**Group Intervention**

Most people attended each session and nobody dropped out. Participants were responsive to a generalised anxiety formulation and seemed to value sharing examples of worries. Key worry themes included: health concerns; waiting on others; and practical concerns. Participants needed encouragement early on to focus on the process rather than the content of worry. Not all group members were keen to record worries since they felt this increased worry. The group engaged well focusing on beliefs about worry. Two key negative beliefs were about the uncontrollability of worry and about worry leading to a breakdown and these were challenged together in subsequent sessions. The group engaged well in the session on problem-solving strategies and made use of the opportunity to support each other. In this session, group members began to respond to each other rather than the facilitators. This pattern continued through sessions nine and ten.

**Outcome and Follow-up**

Members' feedback was very positive. They felt the group was the right length and at the right level. They found it particularly helpful to share experiences of worry with others. The outcome was assessed using formal questionnaires on worry, uncertainty and problem-solving. The first participant reported an increase in worry. This was attributed to an increase in her understanding about worry and her ability to acknowledge her difficulties and take responsibility for change. She continued with individual therapy. The second participant reported a small increase in worry, which might have been attributed to a reduction in avoidance of thinking about worry. The third group member saw a small reduction in worry overall and the final group member saw a large reduction in worry. He was also visibly less anxious as the group progressed. He was discharged from the day hospital.
Reformulation

The formulation of GAD continued to fit for group members throughout the sessions however the shared formulation shifted from a focus on intolerance of uncertainty to a greater focus on behaviour and thought control strategies maintaining the worry.

Critical Evaluation of the Work

Overall the group went very well. Members engaged well and gained value from the group. The therapists worked well together and learnt from each other. Each group member seemed to have achieved a positive change even when this was not a reduction in worry. It was felt that a future group might benefit from using a tailored measure matched to group goals alongside a briefer set of standardised measures of worry. Additional or follow up sessions where group members could begin to work on an exposure hierarchy would have added value to the group. There were also indications that a supportive therapy group might be a valuable alternative or adjunct.
Specialist - Traumatic Stress Service Placement Summary

Clinical Experience

The placement was within a Specialist Traumatic Stress Service in South London. Seven people were seen for assessment and / or intervention. They included five men and two women from a range of ethnic and cultural backgrounds including four refugees or asylum seekers. Their ages ranged from 24 to 45 years. Two individuals were seen jointly with another psychologist. All individuals were seen at the service. The main presenting problems for each person were symptoms of posttraumatic stress disorder including re-experiencing, nightmares, rumination, avoidance of trauma reminders, hypervigilance, and concentration and sleep difficulties. Accompanying difficulties included: depression, high levels of anger, alcohol use, personality difficulties, bereavement and possible epileptic fits. The main model used was cognitive-behavioural therapy including imaginal reliving and cognitive restructuring. Main psychometric measures used were the PDS (Posttraumatic Diagnostic Scale), the IES-R (Impact of Events Scale) the BDI and BAI. The placement also involved detailed case discussions and consultation at weekly team meetings.

Additional Training Experiences

Meetings attended included the weekly referral and case discussion meeting and a weekly clinical or research meeting. The trainee also visited a local drop-in centre providing support to asylum seekers and met with the service manager, service users and volunteers. She also attended a one-day workshop on Organisational Change.
Specialist - Traumatic Stress Service Case Report Summary

Title

Cognitive-behavioural therapy with a 35-year-old man presenting with posttraumatic stress disorder following a serious accident at work.

Referral and Presenting Problem

David was a 35-year-old White British man referred by his CMHT. He had experienced symptoms of PTSD since a serious accident at work four years prior. He and his wife attended an initial appointment and David attended fourteen subsequent sessions of cognitive-behavioural therapy (CBT).

Initial Assessment

Initial assessment involved three interview sessions and use of standard psychometric measures. David was involved in a serious accident. He was crushed under a piling sheet and rushed to hospital, requiring surgery to his leg. He had intrusive memories of the accident often 'reliving' the experience, particularly where the sheet was falling towards him. He had nightmares where he dreamt of being crushed. He avoided reminders of the accident, had lost interest in activities and felt cut off from others. He also felt angry about the accident. His sleep was disturbed, he was short-tempered and irritable and lacked concentration.

David was born in Kent and raised with his brother by his grandmother. He recalled a happy childhood, did fine at school and had many friends. He left school aged 15 to work in construction and continued in this career until the accident. He always enjoyed his work. He met his wife seven years prior and lived with her and their four-year-old son in a two-bedroom flat.

Since his accident, David had seen a counsellor, social worker and psychologists at his CMHT but these experiences had not been good. He had also received medication, which had not helped.

Initial Formulation

David's symptoms fit a cognitive formulation of PTSD. According to this model, PTSD results from a perception of serious current threat following a traumatic event.
This perception arises based on the nature of the memory for the event and the appraisal of the trauma and its sequelae. For David, there seemed to be one main unprocessed memory: the point where he saw the piling sheet falling towards him and had thoughts that he would die. David also had strong feelings of anger about what had happened to him and how his employer had behaved as well as a sense of permanent change resulting from the accident. These two factors were contributing to a sense of current threat. This, in turn, led to an avoidance of reminders of the accident and a numbing of emotions. This avoidance was then maintaining the problem. Following this formulation, a CBT intervention was chosen.

Action Plan

The treatment plan involved weekly 90-minute sessions of CBT. Sessions followed the usual cognitive therapy structure of agenda setting, homework, summarising and a review of the session at the end. Important stages of therapy included: establishing safety; socialisation to the model and rationale for treatment; elaboration of the trauma memory through imaginal reliving; and identifying and modifying negative appraisals using standard cognitive techniques. At the end, if there had been no change in avoidant behaviours and other residual symptoms then a behavioural intervention was planned. Treatment was monitored using weekly measures.

CBT Intervention

David had expressed concerns about previous treatment so care was taken to ensure that therapy was collaborative and proceeded at his pace and that distress levels were monitored. Treatment involved imaginal reliving of the accident and hospital scene on six occasions. Three hotspots were identified in total. During the third reliving cognitive restructuring was incorporated. As his intrusions reduced, David began to report an increase in his levels of anger and resentment. Reminders of the event now triggered angry thoughts. Treatment therefore shifted to a focus on David’s appraisal of the accident and his core beliefs regarding rules of behaviour, responsibility and morality. Therapy involved: a responsibility pie-chart, socratic questioning, exploring the function and motivation of anger and challenging beliefs about justice and selfishness. Homework involved: explaining the model and treatment rationale to his wife; listening to tapes of reliving and testing beliefs.
Reformulation

A cognitive formulation continued to fit throughout therapy. It was enhanced with information about the impact of the accident on David’s beliefs about others, trustworthiness and selflessness. Another addition to the formulation related to David’s avoidance of all emotions associated with the accident.

Outcome and Follow-up

Overall, David showed substantial change both objectively and subjectively. His self-reported distress ratings came down significantly as did his PTSD and depression symptom scores. The areas where he still reported problems at the end included difficulties sleeping, poor concentration and lack of empathy for others. These seemed linked to his feelings of anger. Because the placement was ending, a review session was scheduled for him following a pending court case where it was agreed he would have the opportunity for more sessions if he felt this would be helpful.

Critical Evaluation of the Work

Overall, this was a good piece of clinical work. It involved a thorough assessment and CBT offered a good model for formulation with a strong evidence base for treatment. David was able to engage well in treatment despite previous difficulties. Important elements of treatment included the reliving and the cognitive restructuring of negative appraisals of the accident. Followed the CBT model the perception of current threat was significantly reduced for David. David was still feeling anger at the end of therapy and it was not possible to work on this further partly because of time but also because of his impending court case. If repeated, it might be useful to focus earlier in therapy on cognitions and use more material from the sessions to explore and test beliefs.
Specialist – Children, Adolescents and Families Placement Summary

Clinical Experience

The placement was within a CAMHS (Child and Adolescent Mental Health Service) in South London. Eight children or families were seen for assessment and / or intervention including five girls and three boys. The children ranged in age from 8 to 17 years and families were all of White British background. Families were seen at the service. Presenting problems included: depression, difficulties managing temper, disruptive behaviour at school, bullying and low confidence, family relationship difficulties, eating disorder and ADHD. The main models used were narrative therapy, systemic family therapy and cognitive-behavioural therapy. Psychometric tests used included Goodman’s Strengths and Difficulties Questionnaire, HoNOSCA, BDI-II and the Connors Parent and Teacher Rating Scales. Two families were seen in the Family Therapy Clinic where the trainee was part of a Reflecting Team. Work with other families involved school meetings and liaison with an Educational Psychologist. The placement also involved observation of a clinical psychologist conducting initial assessment interviews.

Additional Training Experiences

Meetings attended included fortnightly psychology meetings, fortnightly attendance of the team meeting including case discussions, research and CPD sessions, fortnightly attendance of an MDT discussion group and weekly attendance at the Family Therapy Clinic. In addition the trainee attended two team away days and a Trust-wide CPD afternoon on DBT. The trainee visited the Adolescent Resource Team, the Pupil Referral Unit, the Looked After Children Team and a local school.
Research Dossier

Log of Research Experience

Service Related Research Project

Major Research Project
<table>
<thead>
<tr>
<th>Research Skill / Experience</th>
<th>Description of how research skill / experience was acquired</th>
<th>Date research skill / experience acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct a literature search</td>
<td>Literature searches were conducted for all five case reports, four essays, the Service Related Research Project (SRRP), Qualitative Research Project (QRP) and the Major Research Project (MRP). Literature searches were also conducted in relation to clinical work. Searches employed BIDS, OVID, Medline, Psych Info and other search engines. For example, a literature search was conducted on “anxiety treatments (including phobia) for people with learning disabilities” using Psych Articles and Psych Info. Used keywords: learning disabilities; intellectual impairment; intellectual disabilities; mental retardation; mental handicap; anxiety treatment; anxiety management; and phobia. The search obtained 46 and 21 references; 3 of which were relevant.</td>
<td>Years 1-3 (2002-2005)</td>
</tr>
<tr>
<td>Critically review the literature</td>
<td>Literature was critically reviewed for all the above projects as well as for clinical work. For example, the literature on the systemic approaches with conduct disorder was critically examined in the Child Case Report and extensive literature on counterfactual thinking in relation to specific emotions and to trauma was reviewed in the MRP.</td>
<td>Years 1-3 (2002-2005)</td>
</tr>
<tr>
<td>Formulate a specific research question</td>
<td>A specific research question was developed for the MRP using a literature review and discussions with experts in the field and the university supervisor.</td>
<td>January 2004</td>
</tr>
<tr>
<td>Write a brief research proposal</td>
<td>A brief proposal was written for the SRRP that reviewed Trust policy and NHS guidelines regarding user involvement in the CPA review process and then outlined a research design aimed at establishing whether the service was meeting these guidelines. A brief research proposal was also written for the MRP including a brief literature review, an outline of the research questions arising and an outline of a study aimed at answering the research questions. This was submitted to university research supervisors for review.</td>
<td>November 2002 / January 2004</td>
</tr>
<tr>
<td>Date research skill /</td>
<td>Description of how research skill / experience was acquired</td>
<td>Obtain appropriate supervision / collaboration for research</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>June 2004</td>
<td>A detailed research proposal was written for the MRP that expanded on the areas outlined above and included more detailed statistical and ethical considerations. This was submitted to the East Surrey, Crawley &amp; Horsham Local Research Ethics Committee.</td>
<td>A field supervisor was obtained for the SRP within the service where the research was conducted. The QRP involved collaboration between six trainee counselling and clinical psychologists and involved joint qualitative data analysis. Supervision for the MRP was obtained from an expert in the field with additional input from another expert. The research was conducted within a charitable organisation so on-going collaboration was developed and maintained with this organisation throughout the research period.</td>
</tr>
</tbody>
</table>
**Log of Research Experience (continued)**

<table>
<thead>
<tr>
<th>Research Skill / Experience</th>
<th>Description of how research skill / experience was acquired</th>
<th>Date research skill / experience acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain approval from a research ethics committee</td>
<td>Ethical approval was granted for the MRP from the East Surrey, Crawley &amp; Horsham Local Research Ethics committee and the Ethics Committee at Surrey University.</td>
<td>October 2004</td>
</tr>
<tr>
<td>Collect data from research participants</td>
<td>Data was collected from service users for the SRRP through individual questionnaires and two focus groups. Data was collected from undergraduate students for the QRP through tape-recorded focus groups. Recordings were transcribed and analysed for the final report. For the MRP, data was collected from 49 combat veterans through individual interviews that involved a thought-listing task and completion of questionnaires.</td>
<td>Feb 2003 – May 2003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>April 2004</td>
</tr>
<tr>
<td></td>
<td></td>
<td>November 2004 – March 2005</td>
</tr>
<tr>
<td>Set up a data file</td>
<td>A data file was set up for the MRP using SPSS</td>
<td>May 2005</td>
</tr>
<tr>
<td>Analyse quantitative data</td>
<td>Quantitative data was analysed for the MRP using SPSS data, syntax and output files. Statistical analyses included Pearson’s correlations, partial correlations and t-tests.</td>
<td>May 2005</td>
</tr>
<tr>
<td>Analyse qualitative data</td>
<td>Interpretative Phenomenological Analysis was used to analyse transcripts taken from a focus group run for the Qualitative Research Project (QRP).</td>
<td>May 2004</td>
</tr>
<tr>
<td>Summarise results in figures/graphs</td>
<td>Figures and graphs were used to present results for the SRRP and MRP. Figures and graphs were used in most of the case reports to present outcome measure data or neurological assessment results.</td>
<td>June 2003 / Aug 2005</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2003-2005</td>
</tr>
<tr>
<td>Interpret results from data analysis</td>
<td>Results from data analysis were interpreted in detail for the MRP.</td>
<td>August 2005</td>
</tr>
</tbody>
</table>
## Log of Research Experience (continued)

<table>
<thead>
<tr>
<th>Research Skill / Experience</th>
<th>Description of how research skill / experience was acquired</th>
<th>Date research skill / experience acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present research findings to an audience</td>
<td>The SRRP findings were presented to the multidisciplinary team in the service where the audit was conducted. A Powerpoint presentation was also given to trainees at the university. The MRP findings will be presented to the organisation where the research was conducted.</td>
<td>June 2003 / Sept 2003</td>
</tr>
<tr>
<td>Produce a written report on a research project</td>
<td>Written reports were submitted to the University for the SRRP, QRP and MRP.</td>
<td>June 2003 / May 2004 / November 2005</td>
</tr>
<tr>
<td>Defend research project at an oral examination</td>
<td>The MRP will be defended at an oral examination</td>
<td>December 2005</td>
</tr>
<tr>
<td>Submit research project for publication in a journal/book</td>
<td>The MRP will be written up for submission to a journal</td>
<td>January 2006</td>
</tr>
</tbody>
</table>
An audit of service user and team member views on CPA (Care Programme Approach) reviews within a London Community Mental Health Team

Service Related Research Project

Year 1

June 2003
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Abstract

The involvement of service users in the Care Programme Approach (CPA) is a key aim of government policy, which is still finding its way down to service level. This study was conducted within a London Community Mental Health Team (CMHT), where a recent change meant that service users on enhanced CPA were now invited to attend their CPA reviews. This prompted the need for a new set of service standards for reviews in line with government policy. The aim of this study was to establish users' and team members' views about a proposed set of standards. A DoH audit pack questionnaire was tailored and sent to all team members and service users on enhanced CPA. The questionnaire covered areas of user knowledge of and involvement in the CPA review, what the review should cover, and the frequency and length of reviews. Results showed that the majority of users and team members considered all the standards to be important supporting the use of these standards in the future. Some differences between users' and team members' views seemed to emerge particularly around issues of advocacy and medication and these differences were discussed in light of the particular service. The study also highlighted the lack of knowledge the users had about the CPA review and recommendations were made about the provision of further information. Limitations of the study were discussed.

Acknowledgements

The author would like to thank all those who participated in the study including service users and team members. In addition, she would like to thank those service users who attended focus groups, the team manager who helped with the development of the questionnaire and the clinical psychologist who helped co-facilitate one of the focus groups.

She would like to give particular thanks to her field supervisor at the service who helped with the development of the study and the design of the questionnaire and co-facilitated one of the focus groups and to her research supervisor at the University of Surrey.
Introduction

The CPA (Care Programme Approach) was introduced in 1991 as a systematic way of delivering care within the NHS to people with mental health problems (DoH, 1990). It is usually provided by the local community mental health team (CMHT). The National Service Framework for Mental Health (NSFMH) outlines that 'all mental health service users of CPA should...have a copy of a written care plan which...is regularly reviewed by their care coordinator' (DoH, 1999, Section 2, Standard 4).

The NSFMH particularly stresses the involvement of service users (also referred to as users within this study) in the development of care plans and states that 'when service users are involved in agreeing and reviewing the plan, the quality of care improves and their satisfaction with services increases'. However, government policy has not necessarily filtered down to the point of service delivery. Rose (2001) found a very low level of user involvement in care planning and in the CPA review. Schneider, Carpenter and Brandon (1999) also found that current mental health policy and practice seemed to diverge when it came to user involvement in the CPA.

The present study was conducted in a non-specialist CMHT in London. An aim of the service was to better involve users in their care planning and a recent change meant that users on enhanced CPA could now be invited to attend their reviews. This prompted a need for new service standards in relation to how reviews should be conducted and what they should cover. The aim was to reduce variation in practice and ensure minimum standards for clients.

Trust guidelines describe how comprehensive care packages, known as 'enhanced CPA', apply to those people who need a medium to high level of support from more than one professional or agency. They also outline the following key points with regard to the CPA review:

- the health and social care plan should be reviewed regularly but there is no set format for this;
- all those involved in a patient's care should be invited to the review;
- reviews must be held at least once a year;
- the patient must always be involved in the planning and provision of his or her care.

* For reasons of anonymity, these guidelines have not been referenced.
The aim of the study was to develop a comprehensive set of review standards in line with these guidelines. Standards outlined in the DoH audit pack (DoH, 2001), were used as a basis and users and team members were asked for their views as to the importance of these standards. Open questions and focus groups allowed ideas to develop outside the scope of the DoH audit.

The main research questions were:

- How important do users and team members consider these standards to be?
- Do the two groups differ in how important they consider some of the standards to be?
- Are there additional standards that are important and not already included?

In addition, if the study identified any changes the team could make to begin achieving these standards, they would be noted.
Method

Participants

The target population was 15 team members and 154 users on enhanced CPA. Table 1 shows the numbers and ages of the users by gender.

Table 1: Numbers and ages of service users on enhanced CPA by gender

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER</td>
<td>79</td>
<td>75</td>
<td>154</td>
</tr>
<tr>
<td>Mean age (SD)</td>
<td>48.8 (12.3)</td>
<td>45.6 (12.8)</td>
<td>47.3 (12.6)</td>
</tr>
</tbody>
</table>

Materials and Apparatus

A questionnaire¹ was taken from the DoH Audit Pack for Monitoring the Care Programme Approach (2001) and tailored as follows:

Whilst the audit pack was designed to identify what was actually happening, this study was only interested in participants’ views of what should be happening. Questions were turned into statements of what should happen and participants were asked how important each item was. E.g., ‘Did you know everyone who was at your review?’ was changed to ‘Service users know everyone who is at their review’. Participants were asked to rate the importance of each item on a four-point scale from not at all important to very important.

Some questions were removed because they were not relevant to the service.

¹ Some additional statements were included in the section about what the review covers and questions about the appropriate length and frequency of reviews were added.

¹ See Appendix A for the DoH audit questionnaire, the final study questionnaire in full, the memo to the team and the letters and forms sent to service users.
Expert sampling was used to ensure content validity. The final questionnaire was checked against an audit checklist developed from the users’ perspective (Rose, 2001). It was also shown to another clinical psychologist and to the team leader for comments.

The final questionnaire asked for the importance of the following:

• that users know: what a review is; who is responsible for managing it; and what it makes decisions about;

• that users were: invited to reviews; knew everyone there; were able to bring carers and friends; were given a proper opportunity to say certain things and were offered an advocate;

• that the review covers: how well the user is; whether their needs have changed; a review of medication; how things have worked in terms of making changes and the support and service they received.

It was produced on two double-sided sheets of mauve A4 paper. Mauve paper was used to make it more attractive and so it stood out from accompanying letters.

Procedure

Team members were sent the questionnaire together with a memo and pre-addressed envelope. The memo asked them to complete the questionnaire and give feedback so refinements could be made. They were not asked to give their gender, age or date of last review. A reminder memo was sent two weeks later and reminders given at two team meetings.

Team members had no difficulties completing the questionnaire and no changes were suggested. Therefore the same questionnaire was sent with a letter and stamp addressed envelope to all users on enhanced CPA. The letter explained about the CPA review, about what was required of them and what would happen to the data,

1 See Appendix A for the DoH audit questionnaire, the final study questionnaire in full, the memo to the team and the letters and forms sent to service users.
and that their participation was optional. Their consent was assumed if they returned the questionnaire. They were given a deadline of about four weeks to complete the questionnaire, if they wanted to. After two weeks, everyone who had not responded was sent a reminder letter¹ where they were told that they could contact the service if they wished to receive another copy of the questionnaire. Five people did contact the service to request this information.

In the initial letter, users were also invited to attend a focus group to discuss the issues further, if they wished to. They were provided with a form where they could indicate their interest¹. Sixteen users expressed an interest and two different focus groups were held. A total of six users and two carers actually attended the groups. The focus groups were held for one hour, with two facilitators from the team, a trainee clinical psychologist and a clinical psychologist. The agenda was flexible but covered the same areas that the questionnaire covered.

Questionnaire results were collated and descriptive statistics compiled. If a participant did not respond to a question, their answer was not included in the statistics for that question. The content of the open questions were allocated to a number of general themes. The results were presented to the service at a team meeting (see Appendix B).

¹ See Appendix A for the DoH audit questionnaire, the final study questionnaire in full, the memo to the team and the letters and forms sent to service users.
Results

Table 2: The means (and standard deviations) of the service users’ age by gender

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>23</td>
<td>15</td>
<td>39*</td>
</tr>
<tr>
<td>Mean age (SD)</td>
<td>48.0 (12.5)</td>
<td>46.7 (10.1)</td>
<td>47.4 (11.4)</td>
</tr>
</tbody>
</table>

*Two service users did not give this information

Chart 1: The percentage of participants who rated each item as important

10 team members and 41 users responded representing return rates of 67% and 27% respectively. Table 2 shows that the mean age of users was 47.4 years closely matching the mean age of the target population (Table 1).

The four-point ratings given by participants were collapsed to two-point ratings of ‘important’ or ‘not important’. Doing this did not change the findings but meant that results were presented more clearly. ‘Important’ included ratings of ‘very important’ or ‘quite important’ and ‘not important’ included ratings of ‘not that important but would be nice’ or ‘not at all important’. Appendix E shows the results spread across the four ratings.
Charts 1 and 2 show percentages of participants who rated each item as important. Chart 1 shows that every item was rated as important by over 60% of participants and 14 of the 22 items were rated as important by over 90% of participants. Chart 2 shows that, overall, team members gave more important ratings than users. Because of a large difference between group sizes and because of the small size of one group, comparisons between the groups are descriptive only and statistical tests have not been used.

Chart 2 shows that over 80% of participants in each group rated each item in the user knowledge section as important. Additional information that participants felt users should receive were:

- what a CPA review is and why it is held (x 5 participants)
- the duration of the review (x2)
- who was invited (x2)
- that they can have an advocate (x2)
- information about what services and help are available (x2)
- information about drugs and reactions to them
The six items with the lowest percentage of participants rating them as important were all in the user involvement section. Chart 2 also shows that users rated some items in this section as more important than team members did. There were few additional comments in this section but one participant added that users should have a say in who is there. Those who attended the focus groups did not know what an advocate was and some users commented that the word advocate implied some legal capacity. Focus group members also felt that where the continuity of care lay with the care coordinator then the care coordinator should run reviews.

Over 80% of each group rated every item in the review content section as important, with a slightly higher percentage of team members rating each as important. The exception to this was 'a review of medication', where 97% of users felt it was important that this was included whilst only 80% of team members did. Two team members commented that they did not feel that this was part of a review and this is notably the only item that was rated as not at all important by team members. The focus groups also highlighted users frustration about a lack of information about medication and side effects and a lack of involvement in decision-making. There were a number of suggestions of other areas that should be covered in a review:

- Different services and treatments available (x3 participants)
- Users can say what they need (x2)
- Jobs / allowances / income / finances / housing (x5)
- Relationship changes / family life (x2)
- Social activities (x2)
- Risk assessment
Table 3: Service user responses about when their last CPA review was

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of responses</th>
<th>% of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gave date</td>
<td>12</td>
<td>29</td>
</tr>
<tr>
<td>Left blank or entered ‘Don’t Know’ or ‘None’</td>
<td>29</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>100</td>
</tr>
</tbody>
</table>

Chart 3: The percentage of participants giving each response about the length of the reviews

Chart 4: Participants views on how often a review should be

NB. These results do not correlate directly to the questions but have been recoded so that responses are mutually exclusive - see Appendix D for details.
Table 3 shows that 71% of users either did not know when their last review was or did not think that they had ever had a review previously. Focus groups and additional comments suggested that users did not fully understand what the study was about and found it confusing.

Chart 3 shows that the majority of users and team members felt reviews should last for more than half an hour although users were more spread in their views on this. Chart 4 shows a difference between user and team views about the frequency of reviews. The team felt reviews should be held once a year whilst 40% of users felt they should be held more than once a year. Overall users were more interested in reviews being held to suit their needs rather than following prescribed rules about frequency and length.
Discussion

Stallard (1996) found that response rates for mental health services range from 21% to 85% so a response rate of 27% is in the low range. As Stallard discusses, low response rates raise questions about how representative the sample of responses is. Those who have not responded may have felt less involved in their care, may have been less well or may be less literate. In particular, the low response rate may be linked to a lack of user knowledge about reviews. The much higher response rate from team members was probably because they have a greater knowledge of reviews, they received additional reminders, the initiative for the study came from them and they knew the researcher personally.

Overall, the majority of both users and team members considered every item to be important. This reflects the quality of the questionnaire as a set of standards. It also suggests that the same questionnaire could be used in the future as a measure of what is actually happening. Team members generally rated items as more important than users. This again probably reflects a better knowledge of the review process by the team as well as their involvement in the questionnaire design.

The two groups were closely matched on their ratings relating to user knowledge. Within user involvement, there was more variation. However, items were still rated as important by the majority of participants and they reflect government policy on the CPA (NSFMH, 1999). They are therefore still a good set of standards for the service.

The lower importance placed on these items by team members reinforces the suggestion that government policy has not yet filtered down to service level. It is interesting that only half the team members felt it was important that users are offered an advocate to help them speak at reviews. Staff may feel that they should have the skills to properly empower and involve users in the care process without an advocate. It may also be that the service is not yet ready to involve advocates and this may need to be built in to future service standards.

In terms of review content, users and team members were mainly in agreement that the items were important. That many users would like reviews to cover jobs, financial issues and housing is not surprising. Perkins & Fisher (1996) found that, in particular, finances received relatively little attention in care plans. The differing
views on review length and frequency suggest that flexibility may need to be built into the standards. The difference in opinion on medication needs further exploration.

An important issue for this service was that it had been without a consultant psychiatrist for some time. This resulted in a number of locum psychiatrists working with the team for only a few months at a time and this lack of continuity would have affected both service users and team members, both positively and negatively. It is interesting to think about how this might link to changes in user involvement and to the findings of this study.

These changes may have left some users feeling insecure and others empowered. For both groups, user involvement in their CPA Review might be viewed as more important in light of this. This period might also have strengthened user relationships with other professionals on the team, which might lend itself to a move towards a more team around the client approach. In particular, changes in psychiatrists may have made some clients feel less able to discuss their medication and subsequently felt uninformed and uninvolved in decisions. This might begin to explain the discrepancy of opinions on the importance of reviewing medication at a review.

For care coordinators, the changes might have left them feeling more empowered and involved with clients while also feeling under greater pressure and needing to be more vigilant, for example, with regard to risk. Again, these changes are likely to have influenced team members' attitudes towards changes in user involvement. It would be important in future audits to consider how users' and team members' views and expectations about the CPA review might change after the appointment of a new consultant.

One key finding of this study was that many users did not know what a CPA review is or whether they have ever had one. This lack of knowledge is not restricted to this CMHT. Rose (2001) found that users on only one out of seven sites in their study knew who their key worker was and that they had a care plan. In addition, focus groups revealed that users did not know what an advocate was. This information all needs to be made clear for users.

The study resulted in four key recommendations for the service. Firstly, it is recommended that the set of statements in the questionnaire form an initial set of standards for the CPA review for this service. Secondly, further discussion within the
service is needed around the issues of advocacy and medication and the standards might be reviewed in light of these discussions. Future audits could compare what actually happens with these standards, identify areas that might be improved and revise the standards. Finally, it is recommended that the service designs a clear and straightforward CPA Review leaflet that can be sent out prior to each review and covering the key areas summarised by this set of standards.

The study has a few limitations, which should be considered. Use of a postal questionnaire and the nature of the study meant that it is unlikely to have captured the views of those who do not want to be involved in care planning. It is important to view results with this in mind and to think about capturing these users' views in another way, for example, through care coordinators or at outpatient appointments. The last page of the questionnaire was ambiguous and revisions were made when presenting the results. In addition, use of a four-point scale was actually unnecessary at this stage and a different scale or just a two-point scale may be better in the future. Finally, some users found the study confusing. Given that many users had not yet attended a review or had any knowledge of it, something simpler at this stage might have increased the response rate.

In conclusion, the majority of both users and team members viewed each statement within the questionnaire as important and there were no additional standards identified at this stage. There seemed to be some differences between users' and team members' views that merit further exploration. Nonetheless, it is recommended that this set of standards be adopted by the service as a starting point to be reviewed again in a year's time.
References

Department of Health (1990), The Care Programme Approach for People with a Mental Illness Referred to the Specialist Psychiatric Services, Circular HC(90)23

Department of Health (1999), National Service Framework for Mental Health: Modern Standards and Service Models

Department of Health (2001), An Audit Pack for Monitoring the Care Programme Approach


Rose, D. (2001), Users’ Voices: The Perspectives of Mental Health Service Users on Community and Hospital Care, The Sainsbury Centre for Mental Health

Schneider, J., Carpenter, J. & Brandon, T. (1999), Operation and organisation of services for people with severe mental illness in the UK: A survey of the Care Programme Approach, British Journal of Psychiatry, 175, 422-425

Appendices

Appendix A – Questionnaires and letters

- Department of Health Audit Pack, p.22 & 23 – Audit Sheet on CPA Reviews
- Study Questionnaire
- Memo to Team Members
- First letter to Service Users
- Invitation to Focus Groups
- Reminder letter to Service Users
- Invitation Letter to Service Users
1.6 REVIEWS: I have reviews which are arranged when my needs change, which include the people who support me, to revise my care plan and make decisions.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know what a review is.</td>
<td></td>
</tr>
<tr>
<td>My reviews are arranged when it is appropriate to check my progress.</td>
<td></td>
</tr>
<tr>
<td>I have at least one review a year.</td>
<td></td>
</tr>
</tbody>
</table>

The review covers:
- how well I am
- whether I continue to need the same level of support
- whether my needs have changed
- what has been difficult for me in making the changes the care plan intended
- how I could be better supported

I was asked when and where would be convenient

It has been explained to me that a review will make decisions about:
- leaving or going into hospital
- services under S117 of the Mental Health Act (if applicable)
- the content of a new care plan
- who will be my care co-ordinator
- revising the crisis management plan

I have been offered an advocate to:
- help me prepare for my review
- support me at my review
- speak for me at my review.

I know who is responsible for making sure the review meeting is properly managed.

I knew everyone who was there.
<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was asked if I understood the reasons for people being there.</td>
<td></td>
</tr>
<tr>
<td>I know how my carers/relatives/friends/neighbours are included in the review.</td>
<td></td>
</tr>
<tr>
<td>I was given a proper opportunity to say:</td>
<td></td>
</tr>
<tr>
<td>• how I felt</td>
<td></td>
</tr>
<tr>
<td>• whether the services were supporting me</td>
<td></td>
</tr>
<tr>
<td>• what should be changed</td>
<td></td>
</tr>
<tr>
<td>• whether parts of my life had changed (new relationships, accommodation, opportunities etc.)</td>
<td></td>
</tr>
<tr>
<td>There are “rules” agreed by the user forum for how the meetings should be conducted.</td>
<td></td>
</tr>
<tr>
<td>These rules were kept in my review.</td>
<td></td>
</tr>
<tr>
<td>A date was set for the next review (the week if a long time ahead)</td>
<td></td>
</tr>
<tr>
<td>When I have requested a review it has been arranged.</td>
<td></td>
</tr>
<tr>
<td>After I left hospital there was a review within four weeks of leaving.</td>
<td></td>
</tr>
</tbody>
</table>
Study Questionnaire

Questionnaire about the CPA (Care Programme Approach) Review

Age: ___________________________ Gender: ___________________________

When was your last CPA review (if you know): ____________________________________________

Below is a list of statements regarding the CPA review process and service users knowledge of it and involvement with it. Please indicate how important you think each of these is by ticking the appropriate box.

**USER KNOWLEDGE**

<table>
<thead>
<tr>
<th>How important do you think that each of the following is:</th>
<th>Not at all important</th>
<th>Not that important but would be nice</th>
<th>Quite important</th>
<th>Very important</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Service users know what a review is</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Service users know who is responsible for making sure the review meeting is properly managed</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. It is explained to service users what a review will make decisions about</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Is there any other information on the CPA review that you think it is important for service users to know about?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Page 124
# USER INVOLVEMENT

<table>
<thead>
<tr>
<th>How important do you think that each of the following is:</th>
<th>Not at all important</th>
<th>Not that important but would be nice</th>
<th>Quite important</th>
<th>Very important</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Service users are invited to attend their reviews</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Service users are asked when and where would be</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>convenient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Service users are offered an advocate to:</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• help them prepare for their review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• support them at their review</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• speak for them at their review</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Service users know everyone who is at the review</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. Service users understand the reasons for people being</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>there</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Others who support the service user are included in</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the review e.g. carers, relatives or friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. Service users are given a proper opportunity to say:</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• how they feel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• whether the services are supporting them</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• what should be changed</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• whether parts of their life have changed (new</td>
<td>□ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>relationships, accommodation, opportunities etc)</td>
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<td></td>
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</tbody>
</table>

8. Are there any other ways in which you would like service users to be involved in their CPA review?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
WHAT DOES A REVIEW COVER?

A CPA review is generally about half an hour long. What do you think should be covered during this time?

1. How important is it that the following is covered in a review:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Not at all important</th>
<th>Not that important but would be nice</th>
<th>Quite important</th>
<th>Very important</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>How well the service user is</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Whether they continue to need the same level of support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whether their needs have changed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A review of their medication</td>
<td></td>
<td></td>
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<tr>
<td>What has been difficult for them in making the changes the care plan intended</td>
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<tr>
<td>What has worked and not worked in terms of the support they have received</td>
<td></td>
<td></td>
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<tr>
<td>What has worked and not worked in terms of the service delivered by the team e.g. receiving letters, contacting the team</td>
<td></td>
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</tbody>
</table>

2. What other areas should a CPA review cover?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
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________________________________________________________________________
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________________________________________________________________________
### HOW OFTEN AND HOW LONG IS IT?

How often do you think reviews should be arranged? Please tick one box for each of the following:

<table>
<thead>
<tr>
<th>1. Reviews should be arranged:</th>
<th>Yes</th>
<th>No</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whenever it is appropriate to check a service users progress</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>At least once a year</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>More than once a year</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

If you answered 'Yes' to 'More than once a year', how often do you think a CPA review should be arranged?

<table>
<thead>
<tr>
<th>2. How long do you think the CPA review should be?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than half an hour</td>
</tr>
<tr>
<td>□</td>
</tr>
</tbody>
</table>

Is there anything else regarding the CPA review process that you think it would be useful for us to consider?

________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

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________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

Thank you very much for taking the time and effort to complete this questionnaire.

Your responses will help us to monitor and change the CPA review process to better meet the needs of the service users.
As you may already know, for the next few months, I am conducting an audit of the CPA review process on behalf of the team.

The audit involves a preliminary survey of users' and team members' views about the CPA review process. In particular, its aim is to identify what people feel is important in terms of service users' knowledge of and involvement in their CPA reviews and in terms of what should be covered in a CPA review. The results will be collated and presented back to the team to provide a basis for developing a specific set of standards and format for the CPA reviews.

As part of this process, we would like to get your views and would ask you to complete the enclosed questionnaire. This takes about 10 minutes. The form can then be returned to me in the enclosed envelope.

We intend to also send this questionnaire out to users and before we do that I would like to get your feedback on the questionnaire itself. We may not be able to make a lot of changes to it but it would be particularly useful to know of any big difficulties or problems you had completing it or any other important areas that you feel it should cover.

We will be sending the questionnaire out to users in the first week of March so I will need your feedback by 28th February 2003 please. For your information, I have attached a copy of the letter that we are planning to send to users. It would be great if you could encourage all your service users to complete the questionnaire and to even help them complete it, if appropriate.

If you have any questions or any feedback about the audit then I would be really happy to talk to you. I am generally around on Wednesdays and Thursdays or you can leave a message for me on and I will get back to you.

Thank you very much for your help and for taking part.
07 March, 2003

Dear «Title» «Surname2»,

Survey of views about the CPA (Care Programme Approach) Review

We are writing to all our service users who are reviewed under the CPA (Care Programme Approach). We would like to survey your views about the way we should coordinate and manage your care.

Before you decide to take part in this survey, we want you to understand why we are asking you and what is involved. Please read this letter carefully and if you have any questions then please contact

What is the purpose of the survey?

As you may know, a CPA (Care Programme Approach) is a care plan developed to help coordinate the management of your care. At a CPA Review, members of the team review your care plan to ensure that it is still meeting your needs and that you are still getting the right level of support.

As a team, we are currently developing a new format for our CPA Reviews. We would therefore like to find out from you, what you feel is important with regard to a CPA Review. For example, we are interested in who you feel should be invited to attend and what you think the review should cover.

Why have I been chosen?

We are inviting all service users who are currently reviewed under the CPA to take part in this survey.

Do I have to take part?

It is up to you to decide whether to take part. Whether or not you decide to take part will not in any way affect the treatment or service you may be receiving or be entitled to receive.
What do I have to do?

To take part, we would like you to fill in the enclosed form. This takes about 10 minutes. The form can then be sent back to us in the enclosed stamp addressed envelope or given to your care coordinator. The form asks how important you feel certain statements about a CPA Review are. The form is confidential and anonymous.

All responses received will be combined together by the survey coordinator who will provide the team with overall feedback about what the service users consider to be important. This feedback will allow us to make changes to our CPA Reviews and provide a more effective service to users.

The deadline for receiving your form is Friday 11th April, 2003.

Is there anything else?

If you are interested, you can also come to a user focus group. This would give us a chance to get a wider picture of your views and give you an opportunity to express yourself without being limited by the questions included in the survey.

Two focus groups are currently planned for Monday 7th April and Tuesday 15th April 2003. If you are interested in attending, please complete and return the enclosed sheet as soon as possible. You can return the sheet to your care coordinator or send it back to...

Contact for further information

If you have any questions at all then please contact the survey co-ordinator, She will be very happy to talk to you.

Thank you very much for taking part.

Yours sincerely,

Team Manager, CMHT
Service User Focus Groups to Discuss the CPA Review

We would like to invite you to attend a user focus group where we can discuss the CPA review process with you in more detail.

The group would be a one off meeting, with a few service users and one or two members from the team. The meeting would involve a discussion about the CPA review process based around the areas covered in the survey. It would last about one hour.

This would give us a chance to get a wider picture of your views and give you an opportunity to express yourself without being limited by the questions included in this survey.

If you are interested in attending such a group please complete this form.

Please tick:

☐ I am interested in attending a user focus group on the CPA Review

Please tick the date(s) that you can attend:

☐ Monday 7th April at 11.30am at
☐ Tuesday 15th April at 2.30pm at

Name: __________________________________________
Address: _______________________________________
______________________________________________
______________________________________________
Tel No: _________________________________________

Please return this sheet to , or give it to your care coordinator.
21 March 2003,

Dear «Title» «Surname2»,

Your views on the CPA (Care Programme Approach) review

You may remember that we wrote to you a couple of weeks ago. If you have already responded by completing a pink questionnaire about the CPA review then please ignore this letter. We are writing again as a prompt to those of you we have not yet heard from.

The CPA is a care plan developed to help with the management of your care. At a CPA review, members of the team review your care plan to ensure that it is still meeting your needs and that you are still getting the right level of support. We would like to find out who you feel should be invited to attend a review and what you think the review should cover. This will help us develop a new format for the CPA reviews.

To take part, we would like you to read the letter and complete the pink form that we sent to you a couple of weeks ago. Then return the form to the above address using the stamp-addressed envelope that was enclosed with it or give it to your care coordinator. The deadline for receiving forms is Friday 11\textsuperscript{th} April, 2003.

If you have any questions at all then please contact the team base on 020

Thank you very much for taking part.

Yours sincerely,

Team Manager
3 April, 2003

Dear «Title» «Surname2»,

Focus Groups on the CPA Review

Thank you very much for completing our questionnaire on the CPA review. Your feedback will be very useful in helping us develop the service.

In addition, you showed an interest in attending a focus group on the CPA review. I am writing to invite you to attend a group as follows:

Date: Tuesday 15 April, 2003
Time: 2.30pm
Place:

At the focus group, we will have a chance to hear your suggestions for how the CPA review might be improved. In addition, you will have a chance to ask any questions that you might have. The session will last about an hour. Please arrive promptly so that we have plenty of time for discussion. Refreshments will be provided.

It would be helpful to me if I could tape the session to remind me what has been discussed. This tape would only be used as a reminder to me and would be destroyed once I have finished with it. If you do have any problems with the session being taped then please do let me know.

If you have any questions or if you are unable to attend the focus group then please contact me on 020 .

Otherwise, I look forward to seeing you there.

Yours sincerely,
Appendix B – Feedback to the Service

NHS
Mental Health NHS Trust

October 10, 2003

Janet Bradley
Trainee Clinical Psychologist
Psychology department
University of Surrey
Guildford
GU2 1XH

Dear Janet,

I am writing to thank you for your presentation of your service related project at our team meeting on Wednesday this week, which looked at the perceptions of service users and staff in relation to care plan review meetings. The team were very interested in your findings and one outcome is that we are now planning to devise an information leaflet for service users telling them about care plan reviews and what they involve. Thank you for all your hard work, which was very much appreciated by the team. We would like to wish you every success in the future.

Yours sincerely

Consultant Clinical Psychologist

Integrated health and social care for local people with mental health problems
and more specialist mental health services for people throughout the UK
Appendix C – Detailed Results

Chart 5: The percentage of all participants giving each response by question
Chart 6: The percentage of service users giving each response by question

Questions

- Not at all important
- Not that important but would be nice
- Quite Important
- Very Important
- Don't know
Chart 7: The percentage of team members giving each response by question
Appendix D - Recoding

Section four of the questionnaire, about how often the review should be, was ambiguous. Some participants answered each question whilst others seemed to assume that an answer to one question ruled out an answer to other questions i.e. that their answers were mutually exclusive. Because of this and to simplify the results, participants' responses were recoded to suit one of the following mutually exclusive responses:

- once a year
- more than once a year
- as needed only
- don't know

Participants' responses were recoded as follows:

<table>
<thead>
<tr>
<th>Recoded Response</th>
<th>Response on Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>Yes to At least once a year and No to More than once a year or No to More than once a year</td>
</tr>
<tr>
<td>More than once a year</td>
<td>Yes to More than once a year</td>
</tr>
<tr>
<td>As needed only</td>
<td>Yes to Whenever appropriate and no later responses</td>
</tr>
<tr>
<td>Don't know</td>
<td>If don't know to more than once a year</td>
</tr>
</tbody>
</table>
Counterfactual thinking, guilt, shame
and posttraumatic stress disorder
in combat veterans

Major Research Project

Year 3

November 2005
## Appendices

<table>
<thead>
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<th>Appendix</th>
<th>Title</th>
<th>Page</th>
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<tbody>
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<td>A</td>
<td>Ethical Approval</td>
<td>220</td>
</tr>
<tr>
<td>B</td>
<td>Information Sheet</td>
<td>223</td>
</tr>
<tr>
<td>C</td>
<td>Consent Form</td>
<td>225</td>
</tr>
<tr>
<td>D</td>
<td>Demographic Information Sheet</td>
<td>226</td>
</tr>
<tr>
<td>E</td>
<td>Traumatic Event Sheet</td>
<td>227</td>
</tr>
<tr>
<td>F</td>
<td>Thought-listing Task</td>
<td>228</td>
</tr>
<tr>
<td>G</td>
<td>Questionnaire Measures</td>
<td>230</td>
</tr>
</tbody>
</table>
Abstract

Title: A study of the relationships between counterfactual thinking, guilt, shame and posttraumatic stress disorder in combat veterans.

Background: Although guilt and shame are common emotions following trauma, existing models of posttraumatic stress disorder (PTSD) do not fully explain their role. Instead they suggest that problems in emotional-processing lead to persistent symptoms without accounting for specific emotions. Literature on counterfactual thinking ('what if...’ thinking) suggests that counterfactual thoughts may be important in shaping specific emotions and studies show that this type of thinking is both common following a trauma and contributes to symptoms of PTSD. This study therefore considers counterfactual thinking and its relationship with guilt and shame in PTSD.

Method: The study was based on a single group correlational design. Forty-nine combat veterans completed standard guilt, shame and PTSD measures and performed a number of thought-listing tasks measuring counterfactual fluency, content frequency and intensity.

Results: Shame, but not guilt was significantly associated with PTSD. Counterfactual activation was associated with PTSD whilst counterfactual fluency was not. Counterfactual fluency was associated with both guilt and shame whilst activation was associated with shame. Shame was more strongly associated with downward and self-focused counterfactual thinking and both guilt and shame were associated with upward and chance-focused thinking.

Implications: The study extends our understanding of the functions of upward and downward counterfactual thinking and their interactions with specific emotions. The findings suggest that for this clinical group, feelings of guilt and shame might be maintained, in part, because counterfactual thinking is focused on short-term affect-reduction rather than serving a preparative function. The implications of these findings for therapeutic practice are discussed and future research opportunities explored.
Introduction

Overview

Counterfactual thinking (CFT) refers to the process of generating alternative versions of an event with different outcomes. Thoughts often take the form of 'If...then...' statements. This introduction reviews literature on traumatic stress, guilt, shame and CFT and presents a rationale for exploring their interaction. It outlines the main models of psychological adjustment following trauma and discusses their limited focus on non-fear emotions like guilt and shame. It then defines guilt, shame and their relationships with psychopathology before exploring their roles in traumatic stress. It argues that the emotions of guilt and shame are tied up with the process of CFT and outlines the social psychology literature on CFT. It then considers the few studies that have explored CFT following trauma and builds the counterfactual process into a cognitive model of guilt and shame in traumatic stress. Methodological issues are discussed before the aims and hypotheses of the study are presented.

Trauma and Its Psychological Consequences

Trauma has been defined as an event that violates basic assumptions connected to one's survival as a member of a social group (Brewin, Dalgleish & Joseph, 1996). Such events include: physical or sexual assault; bereavement; involvement in a serious accident; military combat; torture; and natural disaster. Following a traumatic event many people report changes in their cognitive, affective, behavioural and physiological functioning. Common examples include: increased anxiety; intrusive memories or recurrent thoughts of the event; increased irritability and anger; difficulty sleeping; and avoidance of stimuli associated with the event. For many people, these initial symptoms reduce with time, but for some people, something about themselves, the event and the recovery context means that this process is somehow impeded and some of the symptoms remain. Posttraumatic stress disorder (PTSD) is associated with disturbances in memory, attention, cognitive-affective reactions, beliefs, coping strategies, and social support (Brewin & Holmes, 2003). According to the DSM-IV (APA, 1994), PTSD occurs following exposure to, including witnessing or learning about, an event that involves actual or threatened death or serious injury. A person's response must involve intense fear, helplessness or horror. Characteristic symptoms include: persistent re-experiencing of the event; persistent avoidance of stimuli associated with the event and a numbing of general responsiveness; and persistent symptoms of increased arousal.
Non-fear emotions like anger, guilt and shame have also been associated with trauma. Guilt about survival and shame are mentioned in the DSM-IV as associated features of PTSD. In addition, Brewin, Andrews and Rose (2000) found that those people who later met other criteria for PTSD but did not feel intense fear, helplessness or horror at the time of the trauma, reported high levels of either anger with others or shame, suggesting that peritraumatic shame is sometimes central to PTSD. Andrews, Brewin, Rose and Kirk (2000) also reported that shame at one month predicted PTSD at six months in victims of violent crime.

Models of Psychological Adjustment Following Trauma

Over the years, a number of models have been proposed to explain why for some people, disturbances in psychological processes persist following a traumatic event whilst for others they diminish with time. Horowitz's stress response theory (1976; 1986) was one of the first. He suggested that following trauma an individual attempts to assimilate new information about the trauma with their existing schemas about the world. However, often the new information does not fit so the individual oscillates between attempts at assimilation and accommodation and avoidance of the trauma memory because of the painful emotions that accompany it. As new information is assimilated there is a gradual reduction in intensity and frequency of intrusions and related emotions. Completion occurs once schemas are up-to-date. Janoff-Bulman (1989) argued that maintenance of existing schemas is the norm and assimilation of new information is preferred to ‘catastrophic change’. One therefore faces a cognitive challenge when one’s basic assumptions are totally shattered. She identified three key categories of assumptions that can be strongly affected following trauma: the benevolence of the world; the meaningfulness of the world and the worthiness of self.

Foa and Kozak (1986) put forward an emotional processing model. They argued that emotional processing occurs when the memory structures that underlie emotions are modified. Fear networks in memory store information relating to: the feared stimulus situation; verbal, physiological and behavioural responses; and information about the meaning of the stimulus. Problems arise when fear structures involve excessive response elements and are resistant to modification. To reduce pathological fear, the fear structure must be activated, and information that is inconsistent with the fear memory must be incorporated.
Brewin et al., (1996) integrated emotional processing and schema models. They differentiated between a more detailed autobiographical memory of an event that can be deliberately retrieved and the more emotion-laden situationally accessible memory that is often automatically triggered. Problems arise when there is a failure to create autobiographical memory that is fully integrated with pre-existing knowledge structures. This leaves much of the trauma memory vulnerable to reactivation by memory cues. More recently, Ehlers and Clark (2000) have developed the cognitive model of PTSD. Their premise is that problems arise when a perception of serious current threat remains following trauma. Similarly integrating the two models, they argue that individual differences in two key processes determine whether or not someone perceives such a threat, that is: appraisal of the trauma and its sequelae; and the nature of the memory for the event. They go on to suggest that the perception of current threat leads to a number of behavioural and cognitive strategies aimed at avoiding the threat, for example, rumination. These strategies are seen as maladaptive because they either directly produce PTSD symptoms, or they prevent change in either the trauma appraisal or memory.

What all these models share is the idea that trauma is usually followed by a period of emotional-processing (Brewin et al. 1996). Secondly, the emotional-processing involves the alignment of the new trauma information with existing schemas and memories, accompanied by feelings of intense emotion and arousal. Thirdly, it is problems in this emotional-processing that lead to persistent symptoms of PTSD. Collectively, the models suggest that problems occur when the gap between new information and existing schemas is too great (Horowitz, 1976; Janoff-Bulman, 1989); the process is impeded by a state of elevated arousal (Rachman, 2001); and emotional coping strategies, like avoidance and rumination, prevent the complete processing of trauma information (Brewin et al. 1996; Ehlers & Clark, 2000; Horowitz, 1976). What these models all lack, however, is a good account of how non-fear based emotions such as anger; guilt and shame are involved in the adjustment process.

Horowitz (1976) suggests that guilt and shame may arise as new self-information matches poorly with ego-ideals. Ehlers and Clark (2000), similarly, acknowledge that emotions such as guilt and shame will arise in relation to specific appraisals of the event. Attribution theorists have suggested that attributions of self-blame and responsibility are an inevitable part of the assimilation process because they allow people to maintain their beliefs in a just world (Heider, 1958; Lerner & Miller, 1978;
Janoff-Bulman and Wortman 1977); their belief that life is controllable (Kelly, 1971); or their belief in the meaningfulness of the world (Janoff-Bulman, 1989). But none of these descriptions expand on how these emotions might assist or inhibit the recovery process.

Difficulties arise, in part, because some of the literature confuses guilt and shame or uses the terms interchangeably. The next section therefore clarifies their definitions and functions and reviews the literature on their relationship to other psychological problems before considering their role in adjustment to trauma.
Guilt and Shame

Definitions and Functions

Theories of emotion agree that guilt and shame both arise in relation to negative evaluations of the self following a transgression or failure. Earlier theories distinguished between them in terms of whether the failure occurred in public or private. If nobody else knows about the misdeed then one experiences guilt rather than shame (Buss, 1980). However, most theorists now adopt the distinction made by Lewis (1971) that shame involves a negative evaluation of the entire self whilst guilt relates to a negative evaluation of one's behaviour. So both emotions can be experienced either publicly or privately (Lewis, 1971; Tangney, Miller, Flicker & Barlow, 1996). In the latter case the emotions are associated with an imagined social interaction (Barrett, 1995).

Either emotion may arise following a moral transgression whilst shame might also be aroused in 'nonmoral' situations, for example, following a defeat or rebuff (e.g. Lewis, 1971; Ferguson, Stegge & Damhius, 1991) or following failure to live up to an ideal (Lindsay-Hartz, de Rivera & Mascolo, 1995; Tangney, Niedenthal, Covert & Barlow, 1998). Shame leads to a sense of shrinking, powerlessness and feeling exposed (Lindsay-Hartz et al., 1995; Tangney, Burggraf & Wagner, 1995). It functions to distance the individual from the social environment and results in a tendency to withdraw and hide (e.g. Barrett, 1995, Wallbott & Sherer, 1995) or more actively, to feel anger and externalise blame (e.g. Tangney, 1995, Wallbott & Sherer, 1995). By contrast, guilt is often accompanied by tension and regret (Tangney, 1995). Guilt functions to keep an individual reconciled with the community (Lindsay-Hartz et al., 1995) and results in a tendency to seek reparation (Barrett, 1995; Lindsay-Hartz et al., 1995).

Links with Attribution

Guilt and shame have often been linked to attributions of causality and self-blame. Gilbert and Miles (2000) found that self-blame (but not blaming others) for criticism, was associated with both shame and guilt. Weiner (1985) identified a controllability dimension to causal attributions and found guilt was linked to controllable (changeable) causes, e.g. behaviour, whilst shame was associated with uncontrollable (enduring) causes, e.g. self. Guilt accompanies a belief that we have control over events (Lindsay-Hartz et al., 1995) and is linked to specific and unstable
attributions whilst shame is linked to global, and stable attributions (Tangney, 1995; Alexander, Brewin, Vearnals, Wolff & Leff, 1999). In addition to attributions of causality, theorists have differentiated between guilt and shame in terms of undoing. Guilt is associated with mentally undoing aspects of one's behaviour whilst shame is associated with undoing aspects of oneself (Tangney, 1995; Niedenthal, Tangney & Gavanski, 1994). Kubany (1998) defines guilt as 'an unpleasant feeling accompanied by a belief (or beliefs) that one should have thought, felt or acted differently.' p. 126.

**Links with Psychopathology**

In the literature both guilt and shame are associated with psychological difficulties. Initially guilt was considered to be the more important emotion in psychopathology whilst more recently shame has been (Harder, Cutler & Rockart, 1992). Lewis (1971) distinguished between the two and argued that in the past shame and guilt were consumed under the label 'guilt'. In separating the two, she argued that shame was more painful and less easily articulated than guilt although both could become maladaptive if not righted. She also argued that one can evoke the other and then they tend to fuse making it difficult to identify and separate shame from guilt. Tangney and colleagues have developed her ideas. They argue that guilt only becomes maladaptive when it becomes fused with shame and that it is the shame element that leads to a vicious circle of affect and cognition (Tangney et al. 1995). However, Harder et al., (1992) maintain that guilt is more involved in symptomatology than the recent emphasis in the literature implies.

Empirically, Tangney and colleagues (e.g. Tangney, 1995) have shown shame but not guilt to be associated with obsessive compulsive difficulties, hostility anger, anxiety, and depression. Whilst, Harder and colleagues (Harder & Lewis, 1987; Harder et al., 1992) have shown both guilt and shame to be associated with various psychological symptoms including depression, anxiety and obsessive-compulsive difficulties. However, when they conducted partial correlations that controlled for the effects of the other variable they found that depression and obsessive-compulsive difficulties were both associated with shame after controlling for the association with guilt but that they were not associated with guilt, after controlling for the effects of shame. This does suggest that shame-free guilt is not associated with these difficulties.
Other empirical studies show mixed associations between guilt, shame and psychopathology. Alexander et al. (1999), with a clinical sample, found shame, but not guilt, was correlated with negative self-evaluation and stable attributional style but guilt, and not, shame was associated with depression. Whilst Andrews and Hunter (1997) found an association between shame and depression in a clinical sample. Guilt has been linked to both self-directed anger (Ferguson et al., 1991) and hostility anger (Harder et al., 1992) and shame has also been associated with both internalised anger (Alexander et al., 1999) and a tendency to blame others (Tangney, Wagner, Fletcher & Gramzow, 1992). Finally, guilt, and not shame, has been associated with empathy whilst shame and not guilt, was associated with self-oriented distress (Tangney, 1991; Cole, Barrett & Zahn-Waxler, 1992).

Some discrepancies in findings may result from differences in definitions and measures used compounded by high associations between guilt and shame, regardless of measures. This is discussed in the later section on methodological issues. Another possible reason is that some studies were with college students and others were with clinical samples. Finally, differences may have arisen because of cultural variations between samples in terms of experiences and definitions of guilt and shame\(^1\). Although discrepancies make it difficult to draw clear conclusions, there seems to be a stronger association between shame and most psychological difficulties than guilt. This overall finding ties with theoretical distinctions between the two emotions.

\(^1\) Wallbott and Scherer (1995) found that shame features were generally significantly different from guilt features in individualistic, low-power-distance and low-uncertainty-avoidance cultures (e.g. Sweden, New Zealand, and USA) whilst shame and guilt were more similar in other cultures.
The Role of Guilt and Shame in Traumatic Stress

A Cognitive Model of Guilt and Shame

As discussed earlier, models of adjustment give little attention to the role of guilt and shame in traumatic stress. They note that both emotions might arise as part of the appraisal process and that heightened emotion may impede emotional processing.

Lee, Scragg and Turner (2001) expand on this and outline a cognitive model of the roles of guilt and shame in PTSD. They suggest that persistent shame and guilt arise when the trauma experience conveys either a shame meaning or a departure from standards of behaviour and this trauma meaning matches with either shame schemas or core assumptions about behaviour (Beck, 1976). This match activates the schemas. The clinical picture when shame schemas are activated is shame-charged intrusions; pervasive shame; and avoidance, which prevents further emotional processing. When conditional assumptions about behaviour are activated then related shame schemas are often activated with them. The clinical picture is then guilt and shame-charged intrusions, pervasive feelings of guilt and shame and a mixture of avoidance and rumination or replaying of the event.

In cases where the traumatic event meaning does not match a deeper meaning about the self, they outline a different clinical picture. Where the event conveys a shame meaning, the picture is of humiliation-charged intrusions and rumination. When the event involved a departure from standards of behaviour then the clinical picture is rumination or guilt-charged intrusions associated with ruminative replay and the motivation to confess and repair the damage done. However, in many cases following a trauma, reparation is not possible. Kubany (1998) argues that transitory guilt in everyday relationships may be functional because it stimulates reparative action but chronic trauma-related guilt, where the traumatic-event may have irreparable consequences is unlikely to be adaptive and may lead to an avoidance reaction rather than reparation. Lewis (1971) also suggested that irreparable injury to others might evoke shame (as well as guilt) in reaction to the helplessness of the self to reverse the course of events. So a clinical picture in this latter situation might well be guilt-charged intrusions, pervasive feelings of guilt and shame and avoidance and rumination.

There is limited empirical support for these ideas. One study by Leskela, Dieperink and Thuras (2002) found that guilt-free shame was associated with PTSD severity.
whilst shame-free guilt was negatively correlated with PTSD severity. This supports the idea that guilt is not pervasive or problematic unless it becomes fused with shame. Nonetheless, Lee et al.'s (2001) model was based on clinical observation and provides a convincing account of how guilt and shame arise following trauma and how these emotions might impede adjustment through the accompanying avoidance and rumination. This study seeks to expand on the role of rumination and its interaction with guilt and shame to either facilitate or impede adjustment.

**Guilt, Shame and Rumination**

Ehlers and Clark (2000) note that the role of rumination in PTSD is still unclear. They suggest that it may be similar to cognitive avoidance. By focusing on 'what if' questions rather than on the experience of the trauma as it happened, the formation of a more complete trauma memory is impeded. In addition, they suggest that rumination might directly increase feelings of dysphoria and hopelessness. Horowitz (1976; 1986) suggested that excessive emotions activate controls to reduce the affect, which in turn interrupt the information processing and lead to a maintaining cycle of repetition of the same information.

Both Ehlers and Clark (2000) and Lee et al. (2001) refer to the process of undoing the event when they describe rumination. Ehlers and Clark (2000) describe 'what if' thinking and Lee et al. (2001) refer to the individual replaying the event again and again, 'looking for indications of how he could have done things differently' p. 462. Although this undoing process is only part of more general rumination about the event it is possibly the aspect of rumination that links most closely to guilt and shame. Tangney (1995) described guilt as involving mentally undoing aspects of behaviour whilst shame involves undoing aspects of the self. In addition, undoing, or CFT, has been shown to be a common response following trauma (e.g. Davis, Lehman, Wortman, Silver & Thompson, 1995).
Counterfactual Thinking

Counterfactual thoughts are thoughts of what might have been; counterfactual meaning 'contrary to the facts' (Roese & Olson, 1997). Frequently these thoughts are conditional statements, for example, 'if only I had not stopped to buy a paper then I would have caught the train'. Changes in antecedents are imagined leading to alternative outcomes. Taken from the literature on social comparison, upward counterfactual thinking (UCT) refers to the process of imagining a better outcome whilst downward counterfactual thinking (DCT) involves imagining how things might have been worse (Markman, Gavanski, Sherman & McMullen, 1993).

Theorists originally suggested that UCT functions to establish causality (Wells & Gavanski, 1989; Lipe, 1991) and hence maintain our beliefs about the world as a just and orderly place, as attribution theory suggests. Indeed, McMullen, Markman and Gavanski (1995) report on a series of studies showing that UCT is associated with increases in perceptions of control and confidence. More recently, theorists have shown a greater association between UCT and perceptions of avoidability rather than causality (Davis, Lehman, Silver, Wortman & Ellard, 1996; Mandel & Lehman, 1996). The suggestion is that by establishing how an event could be avoided, UCT helps a person prepare for a similar event in the future (Markman et al. 1993; Roese, 1994) or helps the individual make sense of the experience (Davis & Lehman, 1995). In fact, UCT has been associated with improved performance on future tasks (Nasco & Marsh, 1999) and with fluency in generating behavioural plans for the future (Elleithy, Brown & Robbins, in press).

CFT is common following negative events (e.g. Davis et al., 1995) however it seems not everyone engages in CFT. One focus of counterfactual research has been to establish in what situations CFT is activated. Kahneman and Miller (1986) argue that CFT is influenced by the mutability of the antecedents to an event. They suggest exceptional antecedents and antecedents temporally closer to the outcome are more likely to be undone. Landman (1987) suggested actions are more likely to be undone than inactions and Markman, Gavanski, Sherman and McMullen (1995) found that perceptions of control over the event influenced the antecedents of imagined alternatives.

Roese and Olson (1997) developed a two-stage model that distinguishes content from activation. They suggest that activation of counterfactuals is actually influenced
by negative affect and then following activation the content of counterfactuals is influenced by their mutability. This idea makes intuitive sense and they provide good evidence for the idea that negative affect is associated with CFT. However, Mandel (2003) found that although emotion was a direct predictor of whether students produced upward counterfactuals, perceptions of control over the event was a stronger predictor. In an academic context, where individuals perceived they had greater control over the event, people were more likely to generate upward counterfactuals than in an interpersonal context. Inconsistencies in these findings might well be attributable to differences in measures of CFT and this is discussed later under methodological issues. What is likely is that both negative affect and perceived control exert an influence on activation and content of counterfactuals.

Several accounts of CFT suggest that, in spite of beneficial effects of UCT, negative emotions are intensified by the process. Markman et al. (1993) argue ‘upward counterfactual thinking may devalue the actual outcome and make us feel worse. However, by simulating routes to imagined better realities, we may learn to improve on our outcomes in the future.’ p. 89. They discuss a trade-off between negative affect and beneficial future outcome. Along similar lines, Roese and Olson (1997) discuss the potential for a vicious circle of negative affect because of the bi-directional link between the two. However, they do suggest that for most individuals negative affect resulting from CFT dissipates fairly quickly, whilst beneficial effects last longer leaving an overall benefit.

There has been less research on the functions of downward counterfactual thinking (DCT) and when it is triggered. In most models, DCT has been considered to serve an affective function, providing comfort by comparing reality to a hypothetical worse scenario (Markman et al., 1993). Markman et al. (1993) argue that motivation for improving one’s outcomes in the future and provision of comfort will vary across situations and will differentially determine the direction of CFT. Indeed, they found that those participants who believed they would be repeating a task generated more upward and fewer downward counterfactuals than matched controls. Other studies suggest that control over the event context is important. Roese and Olson (1995) found upward counterfactuals were more frequent following controllable outcomes whilst downward were more common following uncontrollable outcomes. Mandel (2003) found that in contexts where students felt they had more control over events they were less likely to produce downward counterfactuals. This suggests DCT might
indeed be activated to serve an affective function where there is no opportunity for a preparative function.

A newer idea suggested by McMullen (1997) is that like upward counterfactuals, DCT can serve either a preparative or an affective function depending upon the focus of attention. When attention is focused on the worse outcome rather than on the actual outcome then negative affect is often experienced. However, McMullen and Markman (2000) showed that this negative affect influenced motivation. They found that those students who focused on the imagined worse outcome following a test experienced more negative affect but they were also more motivated to improve their performance in the future than those who focused on the actual outcome in comparison to an imagined worse outcome. So, like UCT, DCT may serve a preparative function if there are opportunities for future control and an affective function if there are not.

In summary, based mainly on research using hypothetical scenarios, CFT seems to be activated following distress. UCT helps an individual derive a sense of mastery or meaning from the event and helps them prepare for a similar event in the future event however it is also likely to result in negative affect. By contrast, DCT is most likely to serve a function of affect-reduction, however it might also serve a preparative function. Whether UCT or DCT is activated depends upon aspects of control over either the event or the future.
Counterfactual Thinking and Emotion

Studies already discussed have focused on direction and content of CFT and intensity of affect. More recently, some have gone beyond these distinctions, exploring interactions between CFT and specific emotions (Mandel, 2003). This is important because different emotions are linked to different cognitive appraisals. For example, guilt and shame have been distinguished in terms of appraisals of controllability (Weiner, 1985). Lerner and Keltner (2000) suggest ‘each emotion activates a cognitive predisposition to appraise future events in line with the central-appraisal dimensions that triggered the emotion.’ p. 477. In the counterfactual thinking literature, Niedenthal et al. (1994) examined the role of CFT in guilt and shame with university students. They argued that associations between CFT and emotion might be mediated by attributions of causality and hence differences in the focus of mutations of the antecedent in CFT will lead to different specific emotions being experienced. They drew on Janoff-Bulman’s (1979) distinction between characterological and behavioural self-blame. Participants either read hypothetical scenarios or described personal experiences evocative of guilt or shame and then generated counterfactuals that ‘undid’ the outcome. Participants generated more counterfactuals relating to behaviour as compared with self (character) in the higher guilt conditions. In another series of studies participants imagined themselves in a hypothetical situation that could evoke either guilt or shame. They were then led to mutate either aspects of their character or aspects of their behaviour to undo the situation. Those led to mutate aspects of their character experienced greater feelings of guilt and shame. In addition, shame feelings were higher than guilt in the self-focused condition and guilt than shame in the behaviour-focused condition. Similarly to Lerner and Keltner, they suggest that a complex bi-directional relationship exists between CT and emotional experience such that “certain types of emotional experiences foster characteristic ways of thinking, which in turn can highlight and intensify the experienced affect”. p. 593.

Zeelenberg et al., (1998) conducted a similar study with university students on the role of CFT in experiences of regret and disappointment. They found that regret was related to counterfactuals that changed aspects of their behaviour whilst disappointment was related to counterfactuals mutating aspects of the situation. They also measured attributions and showed that regret was linked to internal attributions of causality and responsibility whilst disappointment was linked to external attributions of causality. In two further studies they showed that when led to
mutate behaviour participants were more likely to experience regret and when led to mutate the situation participants were more likely to experience disappointment.

Finally, Mandel (2003) explored counterfactuals and specific emotions of university students in response to actual negative experiences. He studied direction of CFT in relation to specific emotions as well as their focus on self or other. He also measured perceptions of control over the situations and how much they blamed themselves and others for the negative experience. He found disappointment, regret, guilt, and shame were all associated with self-focused upward counterfactuals whilst anger, distrust and sadness were not. He found that perceived control over the situation and self-blame were positively associated with guilt, shame and regret and negatively associated with anger and distrust. In addition, interestingly he found that the only emotion associated with DCT was shame.

Although these studies all focus on specific emotions rather than just intensity of affect, they share the limitation that they were conducted with university students rather than with a clinical sample and most used hypothetical scenarios rather than real scenarios. Davis et al. (1995) found that not all findings of scenario-based counterfactual research were replicated in field studies. However, whilst a few studies have explored CFT with people following a real traumatic event they have not tended to focus on specific emotions.
Counterfactual Thinking and Traumatic Stress

In the last few years, researchers have begun to explore the role of CFT in people's reactions and adjustments to traumatic events. Davis et al. (1995) conducted two studies of counterfactuals generated by victims of traumatic events. In the first study they interviewed respondents 4-7 years after the loss of their spouse or child in a motor vehicle accident. In the second study they interviewed respondents at 3 weeks and 18 months following the death of their child from Sudden Infant Death Syndrome.

In both studies, they found that CFT was commonly reported by respondents. In study one, almost half reported still having counterfactual thoughts 4-7 years on. The majority of counterfactuals were focused on the respondents' own behaviour. They also found that the more frequently respondents reported undoing the event, the more distress they reported, even after controlling for general rumination. In addition, they found that those who were still undoing the event at 18 months were more distressed than those who had either never been undoing the event or those who had stopped undoing the event and there was no difference between these latter two groups.

Their findings suggest that for some people CFT served a purpose and then stopped. Whilst for others CFT continued and was linked with distress. They suggest that undoing may, in part, be a distress-driven process given that following a highly stressful event, people seem to search for any behaviour at all that they could imagine performing differently, even 'routine' behaviours. This ties with Roese and Olson's (1997) suggestion that negative affect leads to activation of CFT. Davis et al. (1995) also hypothesised that the link between CFT and distress can become a vicious circle. In particular, in study two, they found that distress at 3 weeks predicted CFT at 18 months, even after controlling for CFT at 3 weeks. This fits with a model of CFT as initially adaptive but becoming maladaptive over time if it is not inhibited. Davis and Lehman (1995) suggest that perhaps CFT becomes a problem when there is no opportunity for future control.

Branscombe, Wohl, Owen, Allison and N'gbala (2003) investigated CFT and blame assignment among women who had been raped. They found that the greater the number of counterfactuals respondents generated relating to their own behaviour the poorer their well-being. Using mediational analysis, they showed that the negative
effect of CFT on well-being was probably mediated by self-blame. This study confirms suggestions that CFT is linked to attributions of causality and blame.

Elleithy et al. (in press) studied counterfactuals generated by victims within 15 months of a physical assault. They used a verbal fluency task to measure counterfactual availability, content, frequency and intensity. They found that whilst counterfactual activation (frequency and intensity) was positively associated with the severity of PTSD symptoms, counterfactual availability (fluency) was negatively associated with symptom severity and appeared to diminish with time for some people. They also found that availability of upward, but not downward counterfactuals was related to the generation of behavioural plans. Again, their findings fit with Roese and Olson's (1997) model of affect-driven counterfactual activation and fit with the idea that for some people CFT serves a purpose and is then inhibited. These findings also support arguments that the function of CFT is in preparation for the future.

Dalgleish (2004) studied trauma survivors up to 51 years after the trauma. He asked them to write down the most prominent and frequent counterfactual they had experienced following the event and found that the majority reported self-related and upward counterfactuals. Interestingly, he found no relation between the content of their most frequent counterfactual and PTSD symptom severity. These results differ from those of Davis et al. (1995) and Elleithy et al. (in press). It may be that activation (frequency and intensity) of CFT links to PTSD severity whilst content does not. Or it may be that the relationship between counterfactual content and PTSD severity is more complex than the upward versus downward and self versus other dimensions allow. For example, perhaps distinguishing between characterological and behavioural CFT might help understand the relationship with PTSD better.

Davis et al. (1995) is the only known study that has looked at counterfactuals and specific emotions experienced following trauma. They found that undoing was associated with guilt, anger, depression and anxiety (on five-item subscales) at both 3 weeks and 18 months. Of these, guilt was the only emotion to correlate with undoing once the other emotions were controlled for, and this was only the case at 3 weeks. Interestingly, they also found that guilt was not associated with parent's hunches about the cause of their baby's death. However, they only used a five-item measure of guilt and they did not distinguish between guilt and shame.
In summary, these few field studies support a theoretical picture of distress-driven activation of CFT. They fit with a picture of UCT serving an initial preparative function but becoming persistent over time for some people and then showing an on-going circular association with distress. There is also initial support for the idea that greater undoing is linked with guilt, particularly early on following trauma. These studies have not particularly explored the role of DCT nor have they attempted to distinguish between emotions in terms of CFT.
Methodological Issues

Guilt and Shame Measures

One difficulty when studying guilt and shame is that different measures reflect distinct definitions of guilt and shame. Harder and colleagues (e.g. Harder et al., 1992) measured guilt and shame using the PFQ2 (Harder & Zalma, 1990). This lists 16 guilt and shame-related feelings like: 'intense guilt', 'regret' and 'remorse' for guilt; and 'embarrassed', 'feeling ridiculous', and feeling laughable' for shame. Respondents rate the frequency with which they experience each feeling. Tangney and colleagues (e.g. Tangney et al., 1995) used the Test of Self Conscious Affect (TOSCA; Tangney, Wagner & Gramzow, 1989) or earlier versions of it. The TOSCA involves hypothetical scenarios and respondents rate the likelihood of thinking, behaving or feeling in ways consistent with shame and guilt. In this sense, the TOSCA is more of a measure of guilt and shame-proneness, whilst the PFQ-2 involves more global ratings of guilt and shame.

Tangney et al. (1995) found higher correlations with both the PFQ-2 guilt and shame scales and the TOSCA shame scale (both >0.43) than with the TOSCA guilt scale (both < 0.28). This explains the differences in their more general findings in the literature. Harder and colleagues have found stronger associations with guilt and psychological symptoms than Tangney and colleagues who argue that shame-free guilt is adaptive.

In the present study, the measures for guilt and shame were chosen so that they matched definitions described earlier and tied with cognitions at the schema and conditional assumptions level, as described in Lee et al.’s (2001) model. Additional constraints of the measures used were that they could be easily and quickly completed and were suitable for people with minimal formal education. The Internalised Shame Scale (ISS; Cook, 1994) is a 30-item self-report questionnaire that has been widely used to measure internalised feelings of shame. Respondents rate the frequency with which they generally experience a number of cognitive, affective and behavioural reactions associated with shame. These items fit with aspects of shame described in earlier definitions including: failure to live up to an ideal; a sense of shrinking and feeling exposed; and a tendency to withdraw and hide. The Guilt Inventory - Trait (GI-T; Jones, Schratter & Kugler, 2000) is a 20-item self-report measure of peoples reactions to things they have done in the past including cognitive (I have made a lot of mistakes in my life); affective (guilt; remorse;
regret) behavioural (worrying; ruminating) and physiological (not eating; not sleeping; getting sick). The focus is on behaviour rather than one's character, as with shame.

Counterfactual Measures

Similarly, different measures of CFT reflect different aspects of the counterfactual process. Early studies tended to count counterfactuals. However, some of these studies measured counterfactuals produced spontaneously following a general prompt whilst others cued participants to undo the event and measured counterfactuals reported. This can produce quite different results. For example, Roese and Olson (1997) found that counterfactual activity was greater following negative outcomes only in a free thought-listing condition rather than when counterfactuals were directly solicited. Another measure that has been used is that of self-reported frequency of CFT (Davis et al. 1995). Then Sanna and Turley-Ames (2000) introduced the notion of measuring self-reported counterfactual intensity, the intensity with which the counterfactual was experienced. They found that counterfactual intensity influences the magnitude of either preparative or affective reactions.

Several studies have coded the content of counterfactuals along hypothesis-driven dimensions. Counterfactuals are often coded in terms of direction (upward or downward) or focus (self or other). However, studies still differ in terms of which counterfactuals are coded. Some studies have counted the total number of counterfactuals of each type whilst others have coded only the first counterfactual generated.

Elleithy et al. (in press) adapted a verbal fluency method described by Macleod (1999) to measure counterfactual fluency. Participants were asked to generate as many counterfactuals as they could in one minute and the number they generated was recorded as a measure of counterfactual fluency. The advantages of this measure are that: it measures counterfactual availability, even when people report no current counterfactual activity, it controls for general verbal fluency, and the content of counterfactuals can be analysed. This seems important given the discrepancies in findings relating to counterfactual activation (frequency and intensity) and PTSD.

The current study used a similar counterfactual fluency method to measure availability of different types of counterfactual thought. Participants were first
encouraged to generate open counterfactuals and then prompted to generate counterfactuals with a specific focus. Counterfactuals were coded in terms of direction (upward or downward) and in terms of focus of antecedent. In addition, both frequency and intensity of each group of counterfactuals was captured.
The Present Study

Predictions of Present Study

One question that remains to be answered properly in the literature is how feelings of guilt and shame contribute to or hinder the adjustment process following a trauma. Difficulties arise answering this question because previous studies of guilt and shame have not always distinguished between the two emotions although there are clearly important differences in terms of their focus and controllability. In addition, most existing models of adjustment following trauma focus on cognitive processes and have not generally explored their interaction with non-fear emotions. The exception to this is the model proposed by Lee et al. (2001) that identifies how existing shame and guilt schemas are activated during the appraisal process, resulting in high levels of guilt and shame, that lead to avoidance and rumination and become pervasive. Their model does not, however, outline the role of rumination in this process. Nor is there much empirical support for their model, as yet.

Tangney (1995) has suggested that both guilt and shame are likely to activate the counterfactual process. She suggests that with shame, there is a shift in thinking from behaviour to the self, which sets in motion CFT relating to the self. However, Niedenthal et al. (1994) show an association in both directions with experiences of guilt and shame influencing and being influenced by behavioural-CFT and self-CFT, respectively. Irrespective of direction, it seems likely that CFT is an important component of rumination within Lee et al.’s (2001) model. However, two questions still arise from the counterfactual literature. Firstly, how are specific emotions distinguished in terms of CFT following trauma? Secondly, how does the relationship between the specific emotions and CFT promote or hinder adjustment?

The main premise of this study is that, by distinguishing between guilt and shame in terms of CFT, we begin to gain an understanding of how guilt and shame become a hindrance to adjustment following trauma and we gain a better understanding of the role of CFT in adjustment. In fact, based on the literature a number of predictions can be made about how guilt, shame and CFT persist following a traumatic event.

Shame Schemas

Following, Lee et al.’s (2001) model, if core beliefs about the self are activated following a shame-based traumatic event then appraisal of the trauma will lead to
pervasive feelings of shame, attempts to withdraw and rumination relating to the self. Based on the counterfactual literature, rumination would be expected to involve self-focused CFT. A similar situation arises if conditional assumptions about behaviour are activated following trauma, and related shame schemas are then activated. In this situation, rumination would be expected to involve behaviour-focused CFT as well as self-CFT. Based on the counterfactual literature, because self-focused CFT gives no opportunity for future control, it is likely to increase negative affect in a vicious circle and counterfactual activity will not be inhibited. In addition, DCT focused on affect-reduction may be activated. The clinical pictures would therefore be pervasive feelings of shame (and guilt in the second scenario), upward CFT relating to self (and behaviour), DCT and avoidance.

**Irreparable Consequences**

Lee et al.'s (2001) model also describes how if the appraisal process is focused on violations of behaviour or standards that do not activate existing schemas, then this will lead to feelings of guilt and rumination about one's behaviour, which is likely to involve behavioural-CFT. The person is likely to seek reparation and behavioural-CFT will eventually become inhibited. However, as discussed earlier, if there is no opportunities for reparation or future control then a vicious circle of guilt and rumination or behavioural-CFT ensues that might also become fused with shame and self-CFT because of the helplessness the person feels. In addition, DCT might be activated focused on affect-reduction. Again, the clinical picture would be pervasive feelings of guilt and shame with behavioural-UCT, self-UCT, DCT and avoidance.

**Primary Shame at Time of Event**

Lewis (1971) argues that when one experiences non-moral shame then one searches for moral failures that make sense of the insult one has experienced. One hypothesis might be that shame experienced at the time of the trauma, leads to an increase in CFT, particularly relating to self, even in the absence of shame schemas. This then results in a vicious circle with shame. Also, feelings of shame relating to the symptoms of PTSD might lead a person to search for moral failures during the event and lead to a vicious circle with shame. Here the clinical picture would be pervasive feelings of shame leading to self-UCT, possibly DCT and avoidance.

In summary, it seems that if shame is experienced following a traumatic event and does not dissipate quickly then self-UCT is activated and a vicious circle ensues.
This might happen in a number of situations including when: shame schemas are activated during the appraisal process; or primary shame is experienced at the time of the trauma; or symptoms of PTSD lead to feelings of shame.

If guilt is experienced following a traumatic event it may trigger feelings of shame and then self-UCT are activated and a vicious circle of guilt and shame and behavioural-UCT and self-UFC ensue. This might happen when one's core assumptions are activated following trauma, which in turn activate shame schemas. Or it may happen when there is no opportunity for reparation or future control, guilt becomes pervasive and it leads to a sense of helplessness and shame.

The clinical picture in each of these situations is one of high levels of guilt and shame, interacting with self and behavioural UCT. In addition, one might expect high levels of downward CFT in an attempt to reduce the guilt and shame affect.

**Relating These to Combat Veterans**

Combat veterans are a group of people who experience high levels of guilt and shame (Kubany et al., 1996 for guilt, Wong & Cook, 1992 for shame) and for whom the counterfactual process is likely to be uninhibited. This makes them an important group of people to focus on to understand what goes wrong.

However, there are some differences between experiences of combat veterans and victims of other traumas like accidents or assault. Issues of guilt and shame are compounded by strong societal views about war; survivor guilt, and guilt relating to atrocities committed. It is outside the scope of this study to consider these additional variables in detail. The focus of this study is on issues of guilt and shame in relation to trauma that might be shared across trauma groups.

It is noteworthy, however, that studies of combat veterans have found that guilt relating to acts of combat were generally the most pertinent (e.g. Hendin & Haas, 1991, Henning & Frueh, 1997). This type of guilt might be expected to be most greatly associated with attributional activity and CFT. For combat veterans there is often little sense of future control because the traumatic event is unlikely to happen again and this might contribute to persistence of CFT. In addition, opportunities for reparation are limited and hence guilt might be expected to become pervasive and fused with shame. It is therefore expected that high levels of CFT will be reported by
this group and will be associated with high levels of guilt and shame. Finally, it is expected that combat veterans might generate more downward CFT than other groups, serving an affective function since there is less benefit to be obtained from upward CFT (Markman et al. 1993).

Specific Questions

Following from the above predictions, the present study aimed to investigate the associations between CFT, guilt and shame with a group of people still experiencing difficulties several years following trauma. Three main questions arise in relation to these predictions and the previous literature.

- Are both guilt and shame associated with PTSD symptomatology?
- How is CFT associated with PTSD symptomatology?
- How does CFT distinguish between guilt and shame following trauma?

Hypotheses

The study used traditional self-report measures of guilt, shame and PTSD symptoms and a cognitive fluency measure of CFT (Elleithy et al., in press) together with measures of frequency and intensity. The study aimed to test the following hypotheses, derived from the above questions and literature.

1. Both guilt and shame are positively associated with PTSD severity.
2. Shame is more strongly associated with PTSD severity than guilt.
3. Counterfactual activation (frequency and intensity) is not associated with counterfactual fluency
4. UCT is not associated with DCT.
5. PTSD severity is associated with counterfactual activation.
6. PTSD severity is not associated with counterfactual fluency.
7. Guilt and shame are associated with counterfactual activation.
8. Guilt and shame are associated with counterfactual fluency.
9. Guilt is more strongly associated with upward CFT than shame.
10. Shame is more strongly associated with downward CFT than guilt.
11. Guilt is more strongly associated with behavioural-CT fluency than shame.
12. Shame is more strongly associated with self-CT fluency than guilt.
Method

Design and Participants

The study was based on a single group correlational design exploring associations between within-group variables. Participants were 49 men who were recruited during a short-break stay at Combat Stress, an ex-servicemen's mental welfare charity. They were all ex-servicemen required to have experienced one or more traumatic events during military service. They were all experiencing some symptoms of post-traumatic stress. All visitors to the centre had English as their first language. Exclusion criteria were anyone with a severe cognitive impairment and anyone who was severely psychotic.

Apparatus and Materials

Structured Interview

The research involved a structured interview that lasted 40-60 minutes. During the interview, participants completed a demographic information sheet, a traumatic events sheet, a thought-listing task and three questionnaire measures (see Appendices). The thought-listing task was recorded on a Sanyo, Compact Cassette Recorder (TRC-850C).

Thought-listing Task

A thought-listing task was used to generate data on the availability, content, intensity and frequency of participants' CFT (Elleithy et al., in press). Participants were first administered a verbal fluency task (Lezak, 1976) which acted as a control task and introduced participants to the general principle of thought listing. The task involves asking individuals to list as many words as they can think of beginning with each of three letters (F, A, S), excluding proper nouns and repeated words with different suffixes. Participants are given 1 minute for each letter and their score is the total number of words listed.

Participants were then asked to list any thoughts they had had about the event. Participants were prompted to list thoughts in the following categories, and in this order: (a) general counterfactual thoughts; (b) upward counterfactuals mutating aspects of their behaviour; (c) upward counterfactuals mutating aspects of their
character; (d) downward counterfactuals mutating aspects of their behaviour (e) downward counterfactuals mutating aspects of their character.

At each stage of thought-listing, participants were introduced to the type of thought, asked whether they had ever had such thoughts about the event and if they said 'yes' they were asked to list as many of these thoughts as they could. For example, in the upward behaviour condition participants were prompted as follows:

In particular, after an event like the one you described, people often have thoughts of "what if...", "if only..." or "at least..." in that they imagine ways that things could have turned out better if they had behaved differently in some way. So they might imagine other ways they could have behaved that would have lead to a preferable outcome. For example, after a car crash, somebody might think, "if only I had been driving more slowly, the crash would not have happened". Have you ever had this kind of thought since the event?

In the same way as you have just done, I'd like you to list as many of these "what if...", "at least" or "if only..." thoughts as you can. Try to begin each one with "I've thought...". Remember, I only want you to list thoughts you have had about other ways you could have behaved that would have led to a better outcome. List as many as you can until I say stop. Are you ready?

Appendix F shows the full thought-listing task. Participants were given one minute to list thoughts of each type. If the direction of any counterfactuals was not clear from what was said, the interviewer clarified this through discussion with the participant at the end of the task. Following each thought-listing task, participants were asked to rate the frequency and intensity with which they had experienced these thoughts in the last month. Ratings were made on two scales ranging from 0 to 6 with 0 being never and very weakly and 6 being all the time and very strongly.

**Questionnaire Measures**

**Guilt Inventory - Trait (GI-T)**

The Guilt Inventory (Jones et al., 2000) is a 45-item scale using a 5-point Likert response format. The GI-T (Appendix G) is one of its three subscales. It is a 20-item scale that measures an on-going sense of guilt unrelated to any one specific event. As previously discussed, items focus on cognitive and affective components of guilt. Kugler and Jones (1992) reported an internal consistency of $\alpha = 0.89$. 
Internalised Shame Scale (ISS)

The ISS (Cook, 1994; Appendix G) is a 30-item scale also using a 5-point Likert response format that has been widely used in the measurement of shame. An internal consistency of $\alpha = 0.96$ has been reported (Turner & Lee, 1998).

Impact of Events Scale – Revised (IES-R)

The original Impact of Event Scale (IES; Horowitz, Wilner & Alvarez, 1979) is the most widely used self-report measure of psychological responses to trauma (Turner & Lee, 1998). It consists of 15 questions using a five-point Likert response format which split into two subscales measuring intrusions and avoidance. The IES-R (Weiss & Marmar, 1997; Appendix G) is a 22-item scale, which adds a third subscale measuring hyperarousal. These subscales measure the three DSM-IV symptom clusters (APA, 1994). The scoring for the IES-R was also changed from the sum of the responses to the mean of the responses to allow immediate identification of the degree of symptomatology against the Likert scale. Weiss and Marmar (1997) report good internal consistency ($\alpha > 0.83$) for the IES-R.

Procedure

Sample Planning

Combat veterans visiting the centre were considered to be a good sample for this study because they were generally all experiencing high levels of post-traumatic stress symptoms many years following the traumatic event. In this sense it was likely that, for many of them, CFT had become a maintaining problem. In addition, it was expected that they would be experiencing high levels of guilt and shame.

A power calculation was conducted based on an expected medium effect size of $r=0.4$. This was anticipated based on reported correlations of $r>0.37$ between undoing and measures of distress or guilt (Davis et al., 1995) and reported correlations of $r=0.72$ between counterfactual activation and PTSD severity and $r>0.41$ for correlations between counterfactual fluency and other variables (Elleithy et al., in press). Based on $r=0.4$ and a power of 80%, a sample size of 48 was required.

Ethics

Ethical approval for the study was obtained from the University of Surrey Ethics Committee and the East Surrey, Crawley and Horsham Local Research Ethics
Committee prior to recruiting participants (See Appendix A). The main ethical concerns related to possible distress caused to participants during the interview. Particular emphasis was made at the beginning of the interview on the fact that participants were free to stop the interview at any time. Participants were asked about distress levels at the end of the study and, where needed, time was given to allow distress to reduce before participants left the interview. If further support was requested, participants were directed towards their key worker at the centre. In addition, after pilot interviews other changes were made to minimise distress and these are discussed in a later section.

Recruitment

The researcher met with the clinical manager and keyworkers prior to recruitment and throughout the recruitment period to explain the study, plan recruitment and answer questions. In addition, posters about the research were displayed on noticeboards in the centre. The researcher also attended fortnightly community meetings at the centre to answer any visitors' questions.

However, participants were all recruited directly by their keyworkers. Participants were given an information sheet (Appendix B) during their admission interview at the centre. During a follow up with their keyworkers a few days later they were asked whether they would like to participate. If they were interested, an appointment was booked with them for the following week. Those people meeting the exclusion criteria were determined and excluded by keyworkers prior to the admission interview. Those people attending the centre for the first time were not initially given information or invited to take part. However, if they showed an interest in participating in the research during their stay they were not excluded.

Interview Procedure

Those people interested in participating met with the researcher in a therapy room at the centre. The researcher went through the information sheet with participants, answered any questions and asked them to read and complete the consent form (Appendix C). In particular, their consent was obtained to tape part of the interview. The participants then completed the demographic information sheet and traumatic events sheet. The researcher was available to answer any questions they had and to check that the information was complete.
The researcher then introduced the thought-listing task by explaining that this was an experimental task where they would be asked to list different types of thoughts they have had about the traumatic event. She explained that, as a warm up to this task, they would initially be asked to list a number of words. These words did not have to relate to the event they had described or to combat but could be on any subject at all. At this point the researcher began recording the interview. The researcher then administered the full thought-listing task. At the end of this task, the tape recorder was stopped and the researcher asked the participant to complete the three questionnaires. The researcher checked for missing data and then answered any questions before checking on their distress levels as described in the ethics section earlier.

Pilot Interviews and Changes

Three pilot interviews were conducted the results of which were not used in the final study. Some changes were made to the final interview based on observation and feedback. The questionnaire measures were initially administered at the beginning of the interview however participants seemed keen to engage in conversation at the beginning so administration of questionnaires was moved to the end. Since completion of the questionnaires seemed to be less distressing than discussing the event, this also allowed for any distress that participants had felt to reduce. In the pilot, participants were asked to briefly describe the traumatic event, whilst the researcher made notes. However, participants struggled to describe the event briefly and it seemed that long discussion about the event was unnecessarily distressing. The format was therefore changed so that participants were asked to briefly describe the event on paper and given just a few lines. This seemed more containing for participants and helped them describe the event in less detail.

Coding of Counterfactuals

All counterfactuals were included in analysis, even when they related to an outcome preceding the event, for example, "If only I had done better at school then I would not have joined the army" or if they related to another event during combat. The content of counterfactuals was coded along two dimensions. The first related to the direction of outcome and was coded as either upward (better outcome) or downward (worse outcome). The second dimension related to the antecedent that was mutated and was coded as either: behaviour (relating to one's thought or action); self (relating to
the one's character or uncontrollable aspect of oneself); other (relating to some aspect of somebody else); chance (relating to some aspect of the situation or time). Two independent raters coded the responses of 14 (29%) randomly selected participants, totaling 91 counterfactuals. Their coding matched 100% on direction of outcome and 95% on the focus of mutation. Given the close match, remaining responses were coded by a single coder.

**Statistical Analysis**

**Overview**

Statistical analysis was conducted using SPSS 12.1 for Windows. To explore the main hypotheses, zero-order and partial correlations were conducted using the Pearson statistic. For some correlations, where variables were either not continuous or not normally distributed, Spearman's rank coefficients were calculated. The t-test was used to compare means between groups in terms of rank. Because of the relatively small sample size, alpha adjustments for multiple testing, to guard against Type I errors were not conducted. This was considered overly conservative and would result in an associated increase in Type II errors. Many theorists have argued against the use of such corrections on these grounds (e.g. Rothman, 1990). Instead, other methods were adopted to avoid Type I errors. Firstly, associations were considered only in the context of theory. Secondly, two-tailed tests were adopted even when a direction was hypothesised. Thirdly, associations were considered in terms of size as well as significance. In reporting of results any association greater than r=0.3 is highlighted in bold.

**Preparation of Variables**

Two measures of counterfactual fluency were obtained, one in the open condition and one across all conditions. In the open condition, participants were prompted to generate counterfactuals but were not asked for any specific counterfactuals. This was therefore a more naturalistic measure of CFT. Participants were then asked to generate different types of counterfactuals following prompts for specific types of thought. Because counterfactuals generated frequently deviated from the prompts, results were collapsed across all conditions and fluency was considered to be the total number of each type of counterfactual across the conditions. This measure provides richer data than just the open prompt and this is the measure most reported on. However, Roese and Olson (1997) noted that spontaneous versus prompted
counterfactuals showed different associations with other variables. Therefore, when considering associations between guilt, shame and upward counterfactual fluency, analysis was conducted using both the open fluency measure and fluency across all conditions. In terms of downward thinking, this was not possible because very few downward counterfactuals were generated in the open condition.

Mean frequency and intensity scores were calculated for upward and downward counterfactuals for each person. These became scores on a continuous range between 0-6. Since frequency and intensity scores were highly correlated (r>0.6, p=0.000) they were multiplied together to create an overall measure of frequency and intensity, referred to as activation.

Participants' final ranks were grouped as privates and equivalent (e.g. private, marine, guardsman, rifleman, able seaman), non-commissioned officers (NCOs; ranks ranging from lance corporal to warrant officer 1st class, and their equivalent) or commissioned officers (2nd lieutenant and above, and equivalent ranks).

Data Preparation

The data were prepared and analysed according to procedures outlined by Tabachnik and Fidell (2001). There were no missing data. Descriptive statistics were checked for plausible maximums, minimums, means and standard deviations and for univariate outliers. Normality was assessed using the Kolmogorov-Smirnov Test, by inspecting histograms, and by examining skewness and kurtosis statistics. Variables that did not fit normality were all transformed. Years in service, Years since the event, and Activation of Downward Counterfactuals were all transformed using a square root transformation. The PTSD symptom severity, Intrusions and Hyperarousal scores were all squared. The counterfactual fluency and FAS scores were all transformed using a log transformation. Bi-variate scatter plots were inspected and all correlations were found to be linear and homoscedastic. Multivariate outliers were looked for through Mahalanobis distance with p< 0.001 and none were found.
Results

Sample Characteristics

Background and Event Characteristics

Table 1: Sample Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Mean (SD) / Number (%)</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>55.7 (14.0)</td>
<td>31-84</td>
</tr>
<tr>
<td>Years in service</td>
<td>11.6 (7.4)</td>
<td>2-29</td>
</tr>
<tr>
<td>Final rank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>18 (37%)</td>
<td></td>
</tr>
<tr>
<td>NCO</td>
<td>30 (61%)</td>
<td></td>
</tr>
<tr>
<td>Officer</td>
<td>1 (2%)</td>
<td></td>
</tr>
<tr>
<td>Traumatic Event</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time since event (years)</td>
<td>30.8 (15.5)</td>
<td>3-63</td>
</tr>
<tr>
<td>Type of event</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combat</td>
<td>36 (74%)</td>
<td></td>
</tr>
<tr>
<td>Serious accident</td>
<td>9 (18%)</td>
<td></td>
</tr>
<tr>
<td>Fire</td>
<td>2 (4%)</td>
<td></td>
</tr>
<tr>
<td>Torture</td>
<td>2 (4%)</td>
<td></td>
</tr>
</tbody>
</table>

Participants were 49 men, ranging in age from 31 to 84 years. 94% described themselves as White British. Table 1 summarises the key characteristics of the group. Mean years of service was 12 years with over half reaching NCO rank. Whilst all participants were asked to focus on a traumatic event during service, almost three quarters identified an event during combat. Time since the event ranged from 2.5 to 63 years with a mean time of 31 years.
**PTSD, Guilt and Shame Measures**

Table 2: Scores on PTSD, guilt and shame measures

<table>
<thead>
<tr>
<th>Symptom Measure</th>
<th>Scale</th>
<th>Range of possible scores</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD symptom severity</td>
<td>IES-R – Total score</td>
<td>0-88</td>
<td>58.53</td>
<td>13.22</td>
<td>15-87</td>
</tr>
<tr>
<td></td>
<td>IES-R – Mean item response score a</td>
<td>0-4</td>
<td>2.66</td>
<td>0.60</td>
<td>0.68-3.95</td>
</tr>
<tr>
<td>Guilt</td>
<td>GI-T</td>
<td>20-100</td>
<td>73.3</td>
<td>12.0</td>
<td>46-96</td>
</tr>
<tr>
<td>Shame</td>
<td>ISS</td>
<td>0-96</td>
<td>60.6</td>
<td>20.3</td>
<td>4-95</td>
</tr>
</tbody>
</table>

aThis is the mean response of all the non-missing items (i.e. mean score of the 22 items)

The mean PTSD, guilt and shame scores are presented in table 2. As expected, scores were all high for this group. 96% of participants scored in a clinically significant range on the IES-R (mean item score ≥1.5; Creamer, Bell & Failla, 2003). 53% scored 60 or more on the ISS, which is indicative of extreme levels of shame (Turner & Lee, 1998). Interestingly, the range of guilt scores was narrower than shame scores with nobody reporting a guilt score of 45 or less.
Counterfactual Thinking

Chart 1: Mean (and SD) of counterfactual fluency scores across conditions, by direction and by focus of antecedent and in the open condition by direction.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Upward Mean (SD)</th>
<th>Downward Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviour</td>
<td>1.92 (2.27)</td>
<td>0.65 (0.95)</td>
</tr>
<tr>
<td>Self</td>
<td>0.78 (1.09)</td>
<td>0.51 (0.80)</td>
</tr>
<tr>
<td>Other</td>
<td>1.31 (1.54)</td>
<td>0.18 (0.53)</td>
</tr>
<tr>
<td>Chance</td>
<td>1.08 (1.36)</td>
<td>0.59 (1.06)</td>
</tr>
<tr>
<td>Total</td>
<td>5.08 (3.51)</td>
<td>1.96 (2.20)</td>
</tr>
<tr>
<td>Open Condition</td>
<td>2.65 (1.79)</td>
<td>0.47 (0.92)</td>
</tr>
</tbody>
</table>

Chart 1 shows the mean number of counterfactuals generated in each condition and the totals across conditions and in the open condition. It is notable that in both conditions, but particularly in the open condition, participants were more likely to generate upward counterfactuals compared with downward. Across all conditions 98% generated at least one upward and 67% generated at least one downward CT. Whilst in the open condition, 90% reported at least one upward CT in the open condition compared with 27% reporting at least one downward.

It is notable that counterfactual activity is spread across the conditions, particularly in the open condition, which is not reported in the chart. Of upward counterfactuals generated in the open condition, 44% related to oneself (either behaviour or character); 29% related to chance or the situation; and 27% related to someone else's behaviour. So less than half were focused on the self.
Table 3: Zero-order correlations between upward fluency thought-focus categories and zero-order correlations between downward fluency thought-focus categories

<table>
<thead>
<tr>
<th>Associations between upward fluency scores</th>
<th>Associations between downward fluency scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviour</td>
<td>Self</td>
</tr>
<tr>
<td>Self</td>
<td>-0.076</td>
</tr>
<tr>
<td>Other</td>
<td>-0.089</td>
</tr>
<tr>
<td>Chance</td>
<td>0.089</td>
</tr>
</tbody>
</table>

*p<0.05 (2-tailed), **p<0.01 (2-tailed), ***p<0.001

Table 3 shows how upward counterfactual fluency scores are not generally associated across conditions whilst most of the downward fluency scores are, particularly chance-focused and self-focused fluency.
**Background and Event Characteristics and Control Variables**

Table 4: Zero-order correlations between background characteristics and control measures and guilt, shame, PTSD symptom severity, CT activation and CT Fluency.

<table>
<thead>
<tr>
<th></th>
<th>PTSD severity (IES-R)</th>
<th>Guilt (TGI-T)</th>
<th>Shame (ISS)</th>
<th>CT Activation</th>
<th>CT Fluency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.243</td>
<td>-0.410**</td>
<td>-0.578***</td>
<td>-0.163</td>
<td>-0.323*</td>
</tr>
<tr>
<td>Years in Service</td>
<td>-0.173</td>
<td>0.129</td>
<td>0.182</td>
<td>-0.215</td>
<td>0.296*</td>
</tr>
<tr>
<td>Time Since Event</td>
<td>-0.226</td>
<td>-0.291*</td>
<td>-0.429**</td>
<td>-0.231</td>
<td>-0.302*</td>
</tr>
<tr>
<td>Verbal Fluency</td>
<td>-0.256</td>
<td>0.039</td>
<td>-0.169</td>
<td>-0.306*</td>
<td>0.170</td>
</tr>
<tr>
<td>General Rumination²</td>
<td>0.133</td>
<td>0.361*</td>
<td>0.354*</td>
<td>0.009</td>
<td>0.443***</td>
</tr>
<tr>
<td>General Rumination³</td>
<td><strong>0.400</strong></td>
<td>0.070</td>
<td>0.283*</td>
<td><strong>0.443</strong>*</td>
<td>0.167</td>
</tr>
</tbody>
</table>

*FAS score, a Number of general thoughts about the event; b Frequency of general thoughts about the event (Spearman’s correlation), * p<0.05 (2-tailed), ** p<0.01 (2-tailed), *** p<0.001

Zero order correlations were conducted to explore associations between age, years in service, time since the event, verbal fluency and general rumination with main outcome variables. The results are shown in Table 4.

Age and time since the event were both negatively associated with guilt, shame and counterfactual fluency so older participants generally scored lower on guilt and shame measures and generated fewer counterfactuals. There was a high association between age and time since the event (r=0.853, p=0.000) so partial correlations were conducted to explore which variable was the more important in terms of its effect on the outcome variables. Table 5 shows the results. Time since the event was no longer associated with guilt, shame and counterfactual fluency after controlling for age whilst age maintained an association with guilt and shame. This suggests that age has the bigger influence on guilt and shame.
Table 5: Partial correlations between age and time since event with guilt, shame and counterfactual fluency

<table>
<thead>
<tr>
<th>Variables</th>
<th>Guilt</th>
<th>Shame</th>
<th>Counterfactual Fluency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (controlling for time since event)</td>
<td>-0.324*</td>
<td>-0.451**</td>
<td>-0.131</td>
</tr>
<tr>
<td>Time since event (controlling for age)</td>
<td>0.123</td>
<td>0.152</td>
<td>-0.054</td>
</tr>
</tbody>
</table>

* p<0.05 (2-tailed), ** p<0.01 (2-tailed), *** p<0.001

To further understand the association between age and guilt and shame, post-hoc analysis was conducted. When shame was controlled for, guilt was no longer associated with age (r=-0.140, p=0.344) however age was still associated with shame when guilt was controlled for (r=-0.465, p=0.001) suggesting that shame was an important factor in the association between guilt and age. Finally, since age and shame were both highly correlated with self-esteem (ISS subscale; r=0.627, p=0.000 and r=-0.715, p=0.000 respectively), self-esteem was controlled for. Age was no longer associated with guilt or shame once self-esteem was controlled for (r=-0.118, p=0.423; r=-0.238, p=0.103, respectively).

Table 4 also shows that verbal fluency was negatively associated with counterfactual activation. Frequency of general thoughts about the event was associated with PTSD severity and counterfactual activation, whilst fluency of general thoughts about the event was associated with guilt, shame and counterfactual fluency.

To examine whether 'final rank' affected any of the outcome measures, t-tests were conducted. There were no significant differences between privates and NCOs and above on measures of guilt, shame, PTSD, counterfactual activation, verbal fluency and general rumination (p>0.05; Appendix H). However, NCOs scored significantly higher than privates on the counterfactual fluency measure (t(49)=-2.256, p=0.029).
Hypotheses Testing

_Guilt, Shame and PTSD_

Table 6: Zero-order and partial correlations between guilt, shame and PTSD severity

<table>
<thead>
<tr>
<th></th>
<th>Guilt (GI-T)</th>
<th>PTSD Severity (IES-R)</th>
<th>PTSD Severity (controlling for guilt or shame)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guilt</td>
<td>GI-T</td>
<td>0.265</td>
<td>0.055</td>
</tr>
<tr>
<td>Shame</td>
<td>ISS</td>
<td>0.543***</td>
<td>0.410**</td>
</tr>
</tbody>
</table>

*p<0.05 (2-tailed), **p<0.01 (2-tailed), ***p<0.001

_Hypothesis one: both guilt and shame are positively associated with PTSD severity_

Zero-order and partial order correlations were conducted to assess the associations between guilt, shame and PTSD severity and test hypotheses one and two. Table 6 shows the results. As predicted in hypothesis one, shame and guilt were both positively associated with PTSD severity, however, only the association between shame and PTSD severity is statistically significant at the 0.05 level.

_Hypothesis two: shame is more strongly associated with PTSD severity than guilt._

Supporting hypothesis two, the association between shame and PTSD severity was moderate whilst the association between guilt and PTSD severity was small and non-significant.

Table 6 also shows that, as expected, guilt and shame scores were highly correlated. Partial correlations were therefore conducted controlling for guilt or shame. Table 6 shows that shame was still associated with PTSD after controlling for guilt whilst guilt was not at all associated with PTSD after controlling for shame. This provides good additional support for hypothesis two that shame is more strongly associated with PTSD severity than guilt.
Counterfactual Thinking Measures

Table 7: Zero-order and partial correlations between counterfactual fluency and counterfactual activation

<table>
<thead>
<tr>
<th></th>
<th>UCT - Activation</th>
<th>DCT - Activation</th>
<th>UCT - Fluency *</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCT - Activation</td>
<td>0.365**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCT - Fluency *</td>
<td>0.146</td>
<td>0.191</td>
<td></td>
</tr>
<tr>
<td>DCT - Fluency *</td>
<td>0.130</td>
<td>0.666***</td>
<td>0.201</td>
</tr>
</tbody>
</table>

*Controlling for verbal fluency (FAS), *p<0.05 (2-tailed), **p<0.01 (2-tailed), ***p<0.001

General verbal fluency (FAS score) was measured in the fluency task and is used to control for individual differences in verbal fluency. Correlations of counterfactual fluency throughout this study are therefore usually reported as partial correlations controlling for FAS, as indicated.

Hypothesis three: Counterfactual activation is not associated with counterfactual fluency

Table 7 shows the associations between counterfactual activation and fluency. As predicted, upward activation was not associated with upward fluency, however, against predictions downward activation was highly associated with downward fluency. Since shame was considered as a potential covariate in this association, a partial correlation was conducted. Downward activation and downward fluency were still strongly associated when controlling for shame (r=0.596, p=0.000).

Hypothesis four: UCT is not associated with DCT.

Against predictions, table 7 shows that upward and downward activation were associated. However, when PTSD was controlled for this association was considerably reduced and no longer significant (r=0.194, p=0.186). In support of hypothesis four, upward and downward fluency were not associated.
Counterfactual Thinking and PTSD

Table 8: Zero-order and partial correlations between upward and downward counterfactual thinking and PTSD severity.

<table>
<thead>
<tr>
<th></th>
<th>Counterfactual Fluency</th>
<th>Counterfactual Activation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Up</td>
<td>Down</td>
</tr>
<tr>
<td>PTSD (IES-R)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD (controlling for general rumination)</td>
<td>0.005</td>
<td>0.255</td>
</tr>
</tbody>
</table>

*Controlling for verbal fluency (FAS), **Controlling for fluency of general thoughts in associations with counterfactual fluency and frequency of general thoughts in associations with counterfactual activation

* p<0.05 (2-tailed), ** p<0.01 (2-tailed), *** p<0.001

Hypothesis five: PTSD severity is associated with counterfactual activation.

Table 8 shows the associations between PTSD severity and CFT. As predicted in hypothesis five, counterfactual activation, both upward and downward is strongly associated with PTSD. This association holds, even after controlling for frequency of general rumination about the event.

Hypothesis six: PTSD severity is not associated with counterfactual fluency.

In support of hypothesis six, table 8 shows that counterfactual fluency was not significantly associated with PTSD severity even after controlling for verbal fluency and general rumination.
Guilt, Shame and Counterfactual Thinking

Table 9: Zero-order and partial correlations between upward and downward counterfactual thinking and guilt and shame.

<table>
<thead>
<tr>
<th></th>
<th>Counterfactual Fluency</th>
<th>Counterfactual Activation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Up</td>
<td>Down</td>
</tr>
<tr>
<td>Guilt (GI-T)</td>
<td>0.355*</td>
<td>0.251</td>
</tr>
<tr>
<td>Shame (ISS)</td>
<td>0.395**</td>
<td>0.368**</td>
</tr>
<tr>
<td>Shame (controlling for PTSD)</td>
<td>0.398**</td>
<td>0.298*</td>
</tr>
</tbody>
</table>

*Controlling for verbal fluency (FAS), * p<0.05 (2-tailed), ** p<0.01 (2-tailed), *** p<0.001

Hypothesis seven: guilt and shame are associated with counterfactual activation

Supporting hypothesis seven, shame showed a positive and statistically significant association with both upward and downward counterfactual activation. However, against predictions, guilt was not associated with counterfactual activation. Partial correlations were conducted to control for PTSD severity, in the association between shame and counterfactual activation. As table 9 shows shame was not associated with counterfactual activation after controlling for PTSD symptoms.

Hypothesis eight: guilt and shame are associated with counterfactual fluency

In support of hypothesis eight, both guilt and shame were moderately associated with upward counterfactual fluency. So somebody experiencing higher levels of guilt and shame was also more able to bring to mind alternative versions of the event. They were both more strongly associated with upward than downward counterfactual fluency.
Table 10: Partial correlations between upward counterfactual thinking and guilt and shame, controlling for verbal fluency.

<table>
<thead>
<tr>
<th></th>
<th>Guilt</th>
<th>Guilt (controlling for shame)</th>
<th>Shame</th>
<th>Shame (controlling for guilt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCT - open condition *</td>
<td>0.374**</td>
<td>0.317*</td>
<td>0.210</td>
<td>0.002</td>
</tr>
<tr>
<td>UCT - across all conditions *</td>
<td>0.355*</td>
<td>0.177</td>
<td>0.395**</td>
<td>0.253</td>
</tr>
</tbody>
</table>

*Controlling for verbal fluency (FAS), * p<0.05 (2-tailed), ** p<0.01 (2-tailed), *** p<0.001

Hypothesis nine: guilt is more strongly associated with upward counterfactual fluency than shame

Table 10 compares associations between guilt, shame and UCT in both the open condition and across all conditions. The results show that whilst shame is more strongly associated with UCT when data are collapsed across all conditions, only guilt is associated with UCT, in the open condition. In fact, it is quite notable that shame shows no correlation at all with UCT once guilt is controlled for. This finding, suggests that there is some support for hypothesis nine, when open CFT is measured but that when more specific counterfactual thoughts are prompted, guilt and shame are equally associated with UCT or shame more so.

Hypothesis ten: shame is more strongly associated with downward counterfactual fluency than guilt

Because participants produced very few downward counterfactuals in the open condition, associations with DCT in the open condition could not be explored.

However, table 9 shows associations between guilt and shame and DCT across all the conditions. Shame showed a medium correlation with downward fluency whilst guilt showed a small non-significant correlation. However, when shame was controlled for, guilt was not at all correlated with downward fluency (r=0.094, p=0.525).
Table 11: Partial correlations between guilt, shame, behaviour-focused and self-focused counterfactual fluency, controlling for verbal fluency

<table>
<thead>
<tr>
<th></th>
<th>UCT*</th>
<th></th>
<th>DCT*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Behaviour</td>
<td>Self</td>
<td>Behaviour</td>
<td>Self</td>
</tr>
<tr>
<td>Guilt</td>
<td>0.101</td>
<td>0.184</td>
<td>0.151</td>
<td>0.166</td>
</tr>
<tr>
<td>Shame</td>
<td>0.144</td>
<td>0.100</td>
<td>0.198</td>
<td>0.284*</td>
</tr>
</tbody>
</table>

*Controlling for verbal fluency (FAS). * p<0.05 (2-tailed), ** p<0.01 (2-tailed), *** p<0.001

Hypothesis eleven: guilt is more strongly associated with behaviour-focused counterfactual fluency than shame.

Table 11 shows the associations between guilt, shame and behaviour and self-focused counterfactuals. Against predictions, neither guilt nor shame was significantly associated with upward or downward behaviour-focused CFT.

Hypothesis twelve: shame is more strongly associated with self-focused counterfactual fluency than guilt.

Supporting hypothesis twelve, shame was associated with self-focused CFT whilst guilt was not. However, shame was only associated with downward self-focused thinking, not upward. Examples of downward counterfactuals relating to the self include: “If I was not so forceful then I would have lost more people” and “what if I wasn’t so controlled with my anger then afterwards things might have been a lot worse”.

Page 185
Table 12: Zero-order correlations between guilt, shame and upward counterfactual thinking in the open condition using Spearman's correlation.

<table>
<thead>
<tr>
<th></th>
<th>Behaviour</th>
<th>Self</th>
<th>Other</th>
<th>Chance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guilt</td>
<td>0.175</td>
<td>0.102</td>
<td>0.128</td>
<td>0.326*</td>
</tr>
<tr>
<td>Shame</td>
<td>0.025</td>
<td>0.233</td>
<td>-0.059</td>
<td>0.338*</td>
</tr>
</tbody>
</table>

*p<0.05 (2-tailed), **p<0.01 (2-tailed), ***p<0.001

Additional findings

Because the anticipated hypotheses were not supported, post-hoc analysis was conducted in the open condition to explore whether focus of CFT distinguished in any other way between guilt and shame. Table 12 shows the nonparametric associations between different upward categories of thinking and guilt and shame. Interestingly, both guilt and shame showed moderate and significant correlations with chance UCT. Examples of upward chance counterfactuals generated in the open condition include: "If only the plane had been empty of cannons like all the other planes" or "If only I had been standing two foot to the right or to the left then I would not have been injured". Compared with behaviour and other-focused counterfactuals, shame showed a higher association with self. However, this association was not statistically significant.
Anecdotal Findings

There were a few anecdotal findings, which are worth brief comment. Some participants generated counterfactuals relating to much earlier antecedents, for example, 'if only I had had a better home life and had not run away to join the army'. A few participants volunteered information that their counterfactuals had changed over time. For example, a couple suggested that they would not have had a certain thought several years ago whilst others commented on how the frequency or intensity of thoughts used to be different. Many participants also commented that they could not easily imagine how they could have acted differently since they were following orders or responding to training. This suggests they felt they had low control over the events.
Discussion

The present study was conducted to explore how a greater understanding of CFT would help in the treatment of guilt and shame in PTSD. The results replicate existing findings supporting the idea of shame as a more distressing emotion than guilt. The results also build on previous findings of field studies of CFT and PTSD. They support a distinction between current counterfactual activity (activation) and general counterfactual availability (fluency). They develop the argument that counterfactual activation is distress-driven and thereby associated with symptoms of PTSD whilst counterfactual availability is not. Most importantly this study extends research on emotion-specific associations with CFT. It demonstrates a tentative distinction between guilt and shame in terms of upward counterfactual availability. However, mainly, it shows that whilst shame is strongly associated with downward CT availability, guilt is not. Finally, there is some differentiation between guilt and shame in terms of antecedent focus.

Initial Overview

Sample Characteristics

Guilt, shame and PTSD levels were high for this group and closely matched results from previous studies of combat veterans with a diagnosis of PTSD. The mean IES-R score of 2.66 was similar to Creamer et al.'s (2003) reported IES-R mean of 2.64 for Vietnam veterans in hospital treatment for PTSD. It is also noteworthy that most of this sample (96%) scored over their cut-off for a diagnosis of PTSD. The mean ISS score of 61 was similar to Wong and Cook's (1992) reported ISS mean of 59. The mean guilt score of 73 was similar to Henning and Frueh's (1997) mean Gl-T score of 70.

98% of participants generated at least one upward counterfactual suggesting that CFT is a normal activity for this group of people. 67% reported at least one downward suggesting that downward thinking is comparatively less common, however, perhaps more common than in other studies. Also the spread of counterfactuals across conditions is different from other studies following trauma. In this study, participants were equally likely to mutate aspects of their behaviour or character as compared with somebody else's behaviour or some aspect of the situation. In other studies, participants' responses have been largely upward and
self-focused (e.g. Branscombe et al., 2003; Dalgleish, 2004) although measurement differences weaken comparisons.

The difference in counterfactual focus across studies may reflect differences in the point at which studies were conducted. A change in counterfactual content over time has been observed in other studies (Davis et al., 1995) and previous theorists have observed a shift in the focus of attributions of blame over time from self to environmental factors (e.g. Janoff-Bulman & Wortman, 1977). The suggestion is that causal concerns that are initially adaptive become maladaptive over time (Downey, Silver & Wortman, 1990). In fact, participants in this study anecdotally acknowledged a change in both content and level of counterfactual activity over time. As discussed later, the lack of association between counterfactual fluency and activation suggests that the direction or frequency, at least, of CT has changed over time.

Counterfactuals might also be more focused on uncontrollable antecedents for this group because they felt that they had low control over their actions during the event. Certainly, Mandel (2003) found an interaction between perceived control over an event and the focus of counterfactuals. In fact, the proportions of self to other counterfactuals in this study are similar to his findings with university students recalling a negative interpersonal experience where their level of control over the situation was perceived to be low. Indeed, anecdotally, many participants reported that they could not imagine how they could have acted differently since they were following orders or responding to training. Finally, the focus on other people's behaviour or aspects of the situation might serve an affective function, an idea that is discussed later.

**Background Variables**

In terms of background variables, age was a significant negative predictor of guilt, shame and counterfactual fluency over and above time since the event. That is, older veterans experienced lower levels of shame. Detailed consideration of this finding is outside the scope of this study, however post-hoc testing suggested that self-esteem was a covariate with age and shame, fitting with models of later-life adjustment that suggest increased self-acceptance and improved self-esteem is associated with older age (e.g.; Coleman, Ivani-Chalian & Robinson, 1999; Erikson, 1997).
Counterfactual activation was negatively associated with verbal fluency, which is likely to reflect the impact of increased distress on concentration. However, there was no such association between verbal fluency and PTSD. It may be that those who struggled on the verbal fluency task experienced increased distress during the interview and this increased their activation ratings. General rumination about the event, either frequency or fluency, was associated with all the outcome variables as might be expected.

**Counterfactual Measures**

This study supports a clear distinction between two measures of CFT. The first, activation, is a self-report measure of current counterfactual activity, in this case, frequency and intensity. The second, availability, is a measure of counterfactual fluency or an ability to generate counterfactuals. It is less clear exactly what construct this scale captures. As a measure of the ease with which counterfactuals can be brought to mind, it seems to reflect a trait-like ability to generate counterfactuals which may related to a number of individual factors but which is also likely to have been shaped by a history of CFT relating to an event. How far back the history goes is likely to depend upon both the importance, and hence memorability, of the counterfactuals for the individual and the extent to which they have been repeated over time.

**Initial Findings**

*Distinguishing Between Guilt and Shame in Terms of Distress*

The finding that shame is more closely associated with PTSD symptom severity than guilt supports the predicted clinical picture of shame as the more distressing of the two emotions and thereby the more problematic in PTSD. The fact that guilt showed no association with PTSD once shame was controlled for fits with the predicted clinical picture of guilt becoming maladaptive when it becomes fused with shame and replicates findings of Wong and Cook (1992). In addition, these findings highlight the problems of studies that consider only guilt following a traumatic event without measuring shame. From a statistical perspective, it could be argued that shame showed a stronger association with several variables, not just PTSD and that this might be due to the greater range in shame scores, increasing the strength of correlations. However, guilt did show greater associations than shame with some variables, for example, upward counterfactual fluency, which weakens this argument.
What is not clear from a correlational association is the direction of causation. Increases in guilt and shame might lead to an increase in PTSD symptom severity or increased symptom severity might result in increased guilt and shame. Or, the link may be bi-directional. Or, perhaps a third variable that was not measured in this study, like depression or anxiety, contributes to both. From a theoretical perspective, the link is assumed to be bi-directional. Guilt and shame cognitions lead to increased distress (intrusions and arousal), which leads to increased avoidance in a maintaining circle (e.g. Ehlers & Clark, 2000, Lee et al., 2001).

Although there seems to be an association between shame and counterfactual activation, this association disappears when PTSD symptoms are controlled for suggesting that this relationship is mediated by distress. This is also the most theoretically plausible explanation for the association and adds support to the idea of shame as the more distressing emotion. However, the correlational nature of this study means that the direction can only be speculated.

**Counterfactual Activation as Distress-driven**

This study was based on a model of counterfactual activity as distress-driven (Roese & Olson, 1997). In line with this model, hypothesis five was supported showing that counterfactual activation was associated with PTSD severity. This replicates findings of Davis et al. (1995) and Elleithy et al. (in press). In addition, fitting with this model and in support of hypothesis six and the findings of Elleithy et al. (in press), counterfactual availability was not associated with PTSD severity. The association between upward and downward activation also fits with a model of counterfactual activation as distress-driven. If both variables were influenced by PTSD severity, then when PTSD severity was controlled for the association would disappear. In fact, the association did become non-significant when PTSD was controlled for. Once again, no direction of causation can be assumed. Counterfactual activity could be seen to lead to increased distress and therefore increased symptoms of PTSD as well as the other way round. In reality the likelihood is a bi-directional link.

**Guilt, Shame and Counterfactual Thinking**

This study predicted that both guilt and shame would be associated with counterfactual activation and fluency. It was interesting therefore that guilt was not associated with counterfactual activation whilst shame was. However, this is easily
understood in terms of activation being distress-driven and shame as the more
distressing emotion, two ideas that have already been discussed. As predicted, guilt
and shame were associated with fluency suggesting there is an interaction between
specific emotions and CFT. To understand this interaction better upward and
downward CFT are considered separately.
The Function of Downward CFT

There is much evidence from this study to support the argument that DCT serves a primarily affective function. Based on an understanding of shame as the more distressing emotion linked to less controllable attributions, the expectation was that shame would be more strongly associated with DCT serving an affective function than guilt. In support of hypothesis ten, shame was indeed significantly associated with DCT and guilt was not. In addition, PTSD was a covariate of this association suggesting distress might mediate the association between shame and DCT. Mandel (2003) also found that shame but not guilt was associated with DCT. Although direction of causation is not clear, the most theoretically plausible explanation for this is a picture of shame leading to increased levels of distress and triggering downward counterfactuals serving an affective function. Whilst downward CT serves an affective function, it does not contribute to a re-appraisal of the event and hence feelings of guilt and shame remain and DCT continues in a maintaining circle.

The high associations between the different antecedent categories for downward fluency versus upward suggest that antecedent focus of counterfactuals is not as important in the downward direction as in the upward. If the affective function of downward thinking involves focusing on a worse outcome as compared to the actual outcome, then the focus of the antecedent might indeed be relatively unimportant, particularly compared to UCT serving a preparative function. Finally, it is interesting that downward activation and downward fluency were associated whilst upward activation and fluency were not. A likely reason for this association is that downward fluency more closely represents current activity than upward fluency. This would suggest that downward counterfactuals are less memorable than upward counterfactuals, which again fits with a picture of antecedent focus being less important for downward. Another possible explanation is that shame and PTSD mediate the association between downward fluency and activation. However, when shame was controlled for, the association remained strong. So overall it seems that one function of DCT is to reduce distress through a contrast-effect focusing on a worse hypothetical outcome as compared to the actual outcome irrespective of the antecedent. This matches with the social psychology literature (Markman et al., 1993).

What is more novel is the specific association between self-focused DCT and shame. It seems unlikely that downward self-focused counterfactuals lead to an increase in
shame. Considering a typical example, "If I was not so forceful then I would have lost more people", it is unlikely that this would lead to an increase in shame unless the thought was actually a form of denial and the person felt that they were not at all forceful. However, this has not been previously suggested of counterfactuals. What is more likely is that increases in shame lead to an increase in self-focused DCT in an attempt to reduce the feelings of shame or change the shame appraisal. This suggests that DCT is not only involved in distress-reduction through the contrast effect irrespective of antecedent but also that the mutation of specific antecedents can be involved in the reduction of specific affect. Confirming this was the finding that self-focused DCT was not at all associated with PTSD suggesting that it was not distress that activated DCT but the specific negative emotion of shame. Self-focused DCT seems to be more aimed at reducing affect by modifying shame appraisals, as was predicted by this study. The fact that the association was with DCT rather than UCT was not predicted but it makes sense when one considers that the function was not preparative. So the findings point towards two DCT processes. One focused on distress-reduction using a contrast effect and the other focused on affect-reduction through re-appraisal.
The Function of Upward CFT

Preparative Function

Both guilt and shame were associated with greater upward counterfactual fluency and this association does not seem to be linked to distress. Neither PTSD nor upward activation was associated with upward fluency. So whilst UCT is activated by distress, it then seems to influence and be influenced by guilt and shame in a different way. A possible explanation for their association is that the generation of counterfactuals during the interview increased feelings of guilt and shame because the questionnaire measures were completed after the thought-listing task. However, the use of trait measures of guilt and shame would have minimised the likelihood of this effect. In addition, general rumination and DCT were also associated with guilt and shame and it is harder to see how these thoughts during the interview would lead to increases in guilt and shame. It is more likely that the association between guilt, shame and counterfactual fluency occurred outside the room and perhaps over a period of time.

Upward counterfactual fluency was not associated with upward activation suggesting that, for this group, ability to generate upward counterfactuals was not linked to current CFT. This points towards a change in CFT over time and fits with the idea that previous CFT served a preparative function and has now been inhibited (Davis et al., 1995). This idea is supported by the finding discussed earlier that participants in this study tended to generate fewer behaviour and self-focused counterfactuals than has been found in previous studies. One might expect that the preparative and reappraisal functions of CFT might be no longer beneficial so many years following an event.

A prediction of this study was that guilt would be more strongly associated with UCT than shame and this was based on an understanding of UCT serving a preparative function. In fact it what was found was that whilst guilt, and not shame, was associated with UCT in the open counterfactual condition, guilt and shame were both associated with UCT across all the conditions. There are two reasons for this difference worth considering. Firstly, one of the conditions specifically prompts for upward self-focused thoughts, so the proportion of self-focused thoughts is actually greater across all the conditions than in the open condition. Although shame was not significantly associated with self-focused UCT there was a small positive association and this might have contributed to a greater association between shame and UCT
across all the conditions. Another suggestion is that the open condition elicited thoughts that were more easily accessible, and more strongly associated with guilt, whilst the later prompting elicited less easily accessible and perhaps more painful counterfactual thoughts, that were also associated with shame. It is an interesting idea that guilt and shame might be distinguished in terms of the accessibility of counterfactual thought. However, this idea is only speculative and needs further investigation. Overall, it seems UCT did not clearly distinguish between guilt and shame and hence the preparative nature of UCT is again questioned.

Another prediction of this study was that guilt would be more strongly associated with behaviour-focused UCT, based on their preparative function. In fact, neither guilt nor shame was significantly associated with behaviour-focused thinking. This is likely to be because, as already discussed UCT does not seem to serve a preparative function for this group.

Another prediction of the study was that shame would be more strongly associated with self-focused UCT. This prediction was based, in part, upon the study conducted by Niedenthal et al. (1994) showing an association between self-focused UCT and shame. Their study distinguished between self-chronic undoing that focused on personality traits, for example, "if only I was not so..." and self-acute undoing focused on transient aspects of personality, for example, "if only I had not been so...". In terms of control, self-acute is not that different from a focus on behaviour. Transient aspects of personality can still be changed in the future so UCT focused on these antecedents might still serve a preparative function. In their study, most people undoing aspects of themselves undid self-acute antecedents. So their finding was based mainly on undoing transient aspects of personality associated with transient states of guilt and shame.

The current study was focused on trait guilt and shame rather than on transient states. It was expected that undoing permanent aspects of one's character might be associated with trait shame. However, the majority of upward self-focused counterfactuals generated in this study would also be categorised as self-acute, for example, "If only we had been more forceful..." suggesting that upward self-chronic undoing is either too painful or serves no preparative function so people do not tend to engage in it. In support of this idea is the finding that although participants were prompted to generate upward self-focused counterfactuals they actually generated
more other-focused upward counterfactuals and almost as many chance-focused upward counterfactuals.

It could also be argued that following the activation of schema, feelings of guilt and shame are no longer associated solely with appraisals of the event but with higher order appraisals about oneself, the world and others and hence in the current study UCT focused on the event was not associated with feelings of guilt and shame in the way that it might be in the first few months following an event or when core guilt and shame beliefs are not activated. In the treatment of people with chronic depression it has been suggested that a focus on schemas rather than automatic thoughts is needed (Young, 1999). In the same way perhaps, changes in schema and associated feelings of guilt and shame might not be achieved through CFT focused on the event. Indeed, some individuals in this study, whilst thinking about the event, moved higher up the chain of antecedents and mutated aspects of their childhood and what led them to join the army suggesting they were searching for higher order meaning.

Interestingly, since this study was conducted, Mandel and Dhami (2005) published research where they explored the effects of CFT on blame, guilt and shame in prisoners. Their participants clearly differed greatly from the participants of this study, they were not focused on a traumatic event and they probably had more control over the events in question. Nonetheless, it is interesting that they found no effect of counterfactual content focus (behavioural or characterological) on guilt or shame. So it may be that these associations are confined to hypothetical situations.

**Affective Function**

Since predictions based on the preparative function of CFT have largely been unsupported by the findings of this study, it is worth considering what alternative function UCT might serve. It is interesting that those people scoring higher on trait guilt and shame were also more likely to generate counterfactuals undoing aspects of chance. Since this finding was not predicted it requires some consideration. Firstly, it may be that counterfactuals undoing completely uncontrollable aspects of the situation intensify feelings of frustration and lead to a sense of helplessness which in turn leads to an increase in feelings of guilt and shame. This fits with Lewis's (1971) suggestion that "irreparable injury also evokes shame – in reaction to the helplessness of the self to reverse the course of events." (p. 44). Dunmore, Clark
and Ehlers (1999) postulate that undoing might cause intense frustration that the 'clock cannot be turned back'. However, this idea does not explain why participants generated chance-focused counterfactuals in particular.

McMullen (1997) demonstrated with students that under certain conditions UCT can lead to positive affect through a focus on the vividly imagined alternative event rather than an evaluative focus on the actual event. Although there has not been much research extending this idea, it provides a possible explanation for the associations between guilt, shame and chance-focused thinking in this study. It could also explain the association between guilt, shame and UCT in general. That is high levels of guilt and shame lead to UCT and a focus on the vividly imagined better outcome. The mutation of chance-focused antecedents helps avoid thinking about one's own behaviour or character fitting with Ehlers and Clark's (2000) suggestion that undoing might be a form of cognitive avoidance and with Horowitz's (1976) idea that excessive emotions activate controls to reduce the affect.

A final suggestion is that chance-focused UCT is activated as part of a process of re-appraisal focused on reducing specific affect rather than just distress-reduction. Individuals make changes to chance-focused rather than behaviour or self-focused antecedents in an attempt to re-appraise the event and reduce feelings of guilt and shame. However, re-appraisal is not successful in the long term because underlying schemas are not altered, as discussed earlier. Janoff-Bulman (1992) suggested that only when the job of assimilation and accommodation is too difficult does one changes one's view of the world, self and others. It may be that for this group of people, assimilating information about the event with existing shame-based schemas is too painful and instead individuals attempt to change their view of the world or others through CFT focused on chance antecedents.

Of course, there is always the possibility that a fourth unmeasured variable, like anxiety or depression is influencing guilt, shame and chance-focused thinking. It is also worth considering that the explanations for associations might differ between guilt and shame. It may be that the association between shame and chance-CT is a distress-reduction one whilst the association between guilt and chance-focused thinking relates to re-appraisal. Overall, what the findings from this study do show is that perhaps UCT can serve an affective as well as a preparative function. In addition, a new finding is that the affective function of CFT is not merely distress-reduction but also specific affect-reduction through re-appraisal. So the interaction
between specific emotions and CFT is important following real-life trauma as well as in hypothetical situations.
General Discussion

Overall, the findings of this study fit with the model of guilt and shame outlined in the introduction. This group of people fit a clinical picture of persistent shame and shame-fused guilt that are likely maintained because of activation of shame schemas and low opportunities for future control and reparation. The findings of this study extend our understanding of the role of CFT in this process. In particular, it seems that for this clinical sample, CFT is focused on affect-reduction rather than future preparation or re-appraisal. However, because affect-reduction is short-term, guilt, shame and therefore PTSD are maintained in the long-term. In addition, re-appraisal and a reduction of guilt and shame are not achieved through CFT focused on the event because of underlying schemas. The findings of this study also extend our understanding of the process of CFT. In particular, the study provides evidence for a clear distinction between upward and downward CFT in terms of function and process. The findings also support the idea that a counterfactual's function depends upon the focus of attention as well as direction.

Three counterfactual mechanisms were identified through which affect-reduction might be attempted and which seemed to fit with the findings of the study although direction of causation can only be hypothesised. The first was distress-reduction through DCT and the contrast effect. This function of DCT is already widely supported in the literature. The second was UCT and a focus on the vividly imagined better outcome as a form of cognitive avoidance. The third was through a focus on antecedents and attempts at re-appraisal. In the case of DCT, participants attempted to reduce feelings of shame by imagining a worse outcome, based on changing aspects of their character, thereby highlighting the aspects of their character that led to the better actual outcome. In the case of UCT, participants focused on chance antecedents thereby directing focus away from changes to their behaviour or character that might have led to a better outcome. Overall, what is particularly interesting is that participants seemed to engage in UCT aimed at reducing affect as well as DCT.

In summary, results fit with existing literature on CFT and PTSD. Distress following a negative event activates CFT focused on re-appraisal, increased control and preparation for the future as well as affect-reduction. Counterfactual content is shaped by event information and schemas. If guilt and shame are transient and schemas are not activated then UCT and emotions are eventually inhibited and
information reconciled. However, sometimes, assimilation and accommodation is too difficult. This might be because schemas are activated that interact with emotions in a maintaining cycle or opportunities for future control or reparation are limited and guilt becomes shame-fused. Emotions are then intensified and CFT is focused on affect-reduction not evaluation thereby impeding the process of assimilation.
Clinical Implications

Given, that guilt and shame can be important secondary emotions in the development and maintenance of PTSD, treatments addressing guilt and shame are needed alongside exposure-based treatments for PTSD. The aim of this study was to understand how the process of CFT was involved in the maintenance of guilt and shame in PTSD and hence how a focus on CFT might be therapeutically beneficial. Findings relate to a clinical sample for whom PTSD is established and for whom guilt and shame are persistent. The study suggests that for these people, CFT maintains these emotions largely through avoidance of re-appraisal, fitting with Ehlers and Clark's (2000) model of PTSD. Given this picture, an understanding of CFT is likely to contribute to treatment in a number of key ways.

Firstly, the results point to the need for a detailed assessment of CFT breaking down the concept of 'undoing' as measured by Dunmore et al., (1999). Clinical assessment needs to, firstly, distinguish CFT from other types of rumination and, secondly, distinguish different types of counterfactuals in terms of direction, antecedent focus and focus of attention. This could contribute to a good formulation and might help identify active schemas. For example, based on the findings of this study, self-focused DCT might be expected to be associated with feelings of shame and therefore possibly shame schemas. An assessment could be conducted along similar lines to the research interview focused on the different types of CFT that people engage in and the nature, frequency and intensity of such thoughts.

A clinically plausible suggestion of this study was that more pertinent counterfactual thoughts might be less easily accessible. In particular, it seemed that more painful upward counterfactuals associated with shame were not easily available following an open prompt. Encouraging the generation of counterfactuals in a contained therapeutic environment might help individuals draw on more pertinent thoughts and perhaps on more functional upward counterfactual thoughts. Horowitz (1976) discusses the use of conscious awareness as a means of change allowing "irreconcilable conflicts to be resolved" (p. 103) and this is an important element of exposure work in PTSD therapy. Counterfactual thoughts are not always in the form of "if...then" statements. In fact, they may be in the form of images or incomplete statements. However, people seem readily able to relate to 'what if' or 'if only' thinking and almost everyone seems to be able generate these thoughts following a
traumatic event. Explicitly encouraging people to focus on counterfactual or “if only...” statements may help in the re-appraisal of the event.

Close monitoring of frequency and intensity of intrusions is often used in PTSD treatment as a means of assessing and tracking change during treatment, particularly relating to re-living. Similarly, if CFT is activated by distress and maintains guilt, shame and PTSD through an avoidance of re-appraisal, monitoring the nature, frequency and intensity of counterfactuals might provide a measure of the re-appraisal process. In particular, a reduction in affect-reducing CFT might indicate progress. However, as change occurs through treatment and emotions are reduced, the function of CFT might also change. CFT might change direction or focus of attention might change so that CFT serves a preparative function or facilitates re-appraisal. This process would require strong attention to the specifics of counterfactuals and therefore their function. This idea also requires further research first to understand how CFT changes over time and how UCT serving a preparative function interacts with specific emotions.

Branscombe et al., (2003), studying the counterfactuals generated by victims of rape suggested helping clients change the content of counterfactuals during therapy. In particular, they suggest assisting people to generate CT where the outcome was worse in an attempt to lower self-blame and improve well-being. This study does not support this idea. In fact, this study suggests that counterfactuals serving an affective function may maintain feelings of shame and guilt rather than reduce them. In fact, one suggestion arising from this study, might be to help people stop generating counterfactuals aimed at reducing affect and help them generate counterfactuals that might facilitate effective re-appraisal. As part of their cognitive therapy for trauma-related guilt, Kubany and colleagues encourage clients to keep a note of statements that include the words ‘if only’, in order to make it easier for them to stop using them (Kubany, 1998). However, this treatment does not distinguish between CFT that might be beneficial and CFT that is avoidant. In addition, most treatments for PTSD would suggest that client’s work on reducing maintaining behaviours, like avoidance, at the end if they have not declined naturally as distress is reduced. Finally, although further research is required to confirm the role of shame schemas in the model, the suggestion from this study is that work might be needed at the schema level rather than the counterfactual level.
Limitations

One limitation of this study was that aspects relating to some of the hypotheses were not fully measured. It was suggested that guilt might be problematic for this group of people and become fused with shame because participants either had little control over the events at the time, had no opportunities for future control because the event was unlikely to be repeated or because they had little opportunity for reparation. However, none of these were actually measured. If this study were repeated, it would be useful to measure self-reported perceptions of control over the event and self-reported opportunities for reparation and find out the extent to which people felt the event had helped prepare them for future events.

There was a strong ceiling effect on the frequency and intensity measures of CFT, which was reduced in the analysis through transformations. However, it could have been reduced initially by defining the end points of measures differently so that people were more likely to give ratings across the range of the scale. In addition, it might help to practice using the scale and encourage participants to make use of the full range prior to beginning the task.

A criticism of the fluency method of measuring counterfactuals is that it might elicit new counterfactual thoughts that the participant has not previously experienced. This was guarded against by asking about the frequency and intensity of each type of thought during the last month. However, it might also have been useful to ask participants whether any of the thoughts that they just listed were thoughts that they had not had before today.

A final limitation was in the recruitment process. The sample was self-selecting. Despite, many meetings with key workers and some with visitors to the centre to explain the research, the study was perceived by many participants as an opportunity to talk about their experiences and associated feelings of guilt and shame. This may have biased the sample. It may have meant that those people most likely to participate were also those people who valued the opportunity to talk about their combat experiences and this factor might co-vary with the fluency, content or function of their CFT. In addition, the study might have excluded people who would experience high levels of shame thinking about their combat experiences, particularly with somebody of a different gender, who they did not know and who had no experience of combat or of the services. If it were repeated, more consideration
would be required early on to think about how to present the study to the centre and to keyworkers so that they did not view it as a discussion of experiences and feelings but more as a structured task.
Future Research

While the current study has identified some new findings with regard to the emotional function of CFT and its associations with guilt and shame, the methodological weaknesses of a correlational design limit the strength of the conclusions. It would now be useful to conduct a series of manipulation studies to explore the direction of causation of some of the associations shown in this study. For example, a study with a similar group of people, might involve taking an initial measure of state shame, encouraging participants to generate particular types of counterfactuals in relation to the event, for example, self-focused downward counterfactuals, and then measuring state shame again hypothesising that there would be a short-term reduction in affect. In addition, prospective studies would tell us more about causation as well as the change in function of counterfactuals over time. Finally, there are a number of variables that it would be important to control for in larger, future studies. These include depression, anxiety and overall negativity or distress.

Findings from this study suggest that the focus of attention is important in determining the function of CFT and its influence on affect. However, the focus of attention was not explicitly measured and it might be useful to try and measure this in future studies. In addition, it would be helpful to conduct manipulation studies instructing participants to generate counterfactuals and to focus on the antecedent, actual outcome or alternative outcomes and then measure the impact on specific emotions. For example, a focus on the antecedent might lead to feelings of guilt thinking about what could have been done to avoid the event while a focus on the negative outcome in contrast to the better alternative might lead to an increase in feelings of shame and helplessness at the fact that something else was not done.

Not all behaviour-focused counterfactual thoughts are likely to lead to feelings of guilt or shame. For example, “if only I had not got into the vehicle that day then I would not have been injured” may lead to a feeling of regret rather than guilt. In addition, an unexpected finding of this study was the high number of upward counterfactuals that were not focused on behaviour or self, suggesting other emotions might be involved. Zeelenberg et al. (1998) explored an interaction between behaviour-focused versus situation-focused UCT and regret and disappointment. Guilt and shame were chosen in this study because they have been highlighted as particularly problematic in PTSD however future research would benefit from looking at other emotions like regret and disappointment and their associations with CFT and PTSD.
Guilt and shame have been linked to attributions of self-blame and causality (Gilbert & Miles, 2000, Weiner, 1985). Associations between guilt, shame and behaviour-focused and self-focused UCT, serving a preparative function, might be expected to be mediated by or linked with attributions of causality and self-blame. For example, guilt might be more strongly associated with self-blame and attributions relating to controllable aspects of the situation than shame. It was outside the scope of this study to explore these associations but it would be important in future studies.

This study has highlighted the complexity of the interaction between CFT and emotion, particularly, with a clinical sample. Whilst previous research on CFT has generally been quantitative, this study points towards the benefits of breaking down the construct of CFT further. In particular, these findings indicate the benefits of a qualitative study exploring in detail different aspects of the counterfactual process, including content, direction, focus of attention, contrast effects and how all these aspects interact with specific emotions and how they change over time. This may involve paying attention to counterfactual imagery as well as “if...then” statements.

Questionnaires were administered at the end of the interview to allow time for distress to diminish after the thought-listing task. However, as mentioned earlier, there is a possibility that generation of counterfactuals influenced questionnaire responses. In a future study it would be good to counterbalance for this and administer questionnaires at the beginning or end for different groups. Likewise, in the thought-listing task, prompts were presented to participants to lead them through the task in a progressive way. However, there could be a priming effect of order and in the future it might be useful to counterbalance for this.

The use of a counterfactual fluency measure in this study was important because of the focus it allowed on different counterfactual content. The study also measured a number of different aspects of CFT, providing detailed information about its relationship with emotions and symptoms. Other studies have been limited by their poor measurement. A written task to measure the same aspects of thinking would have been difficult with this sample group and would have likely resulted in many incomplete responses. However, the process was extremely time-consuming, requiring fifty hours of interviews plus additional time coding responses. Future research needs to think about different methods of exploring counterfactuals but without losing the level of detail, which was valuable in this study. A limitation of this study was also that it used single-item scales to measure frequency and intensity of
CFT, however no multi-item measures for activation were available. Future studies, focused on developing and validation of good counterfactual measures would be valuable and would lead to greater consistency across studies.

A group of combat veterans were chosen for this study because of their history of high levels of guilt, shame and PTSD. However, the generalisability to other trauma groups, particularly, those people who do not experience long-term difficulties, is limited. It would be interesting to now repeat this study with a non-clinical population following trauma. It might be expected that UCT would work to facilitate appraisal and reduce specific emotions. This study would predict that guilt and shame would be more likely to be associated with behaviour and self-focused UCT soon after the event in a group for whom core beliefs are not activated. It would also be interesting to repeat this study with a group of people who might have felt they had a high level of control at the time of the traumatic event. It might be expected that people would engage in more UCT in this context. It would be interesting to repeat this study with combat veterans who are not experiencing high levels of PTSD. These may be people for whom counterfactual activation is low but fluency is high because UCT served its purpose and was inhibited. Until recently following a change in roles, few women in the military were directly exposed to trauma. In the future, it would be interesting to look at the responses of women and compare these with men. In this study, guilt, shame and counterfactual fluency were all associated with age. It would be useful to be able to directly control for age by repeating the study with a younger age group. In the same way, it would be interesting to repeat the study with combat veterans who have more recently been exposed to trauma. Again, higher levels of UCT might be expected.

Finally, one assumption of this model, which was not tested in this study, was the idea that core shame-schema or conditional assumptions are activated following an event and these contribute to feelings of guilt and shame and shape the associated counterfactual thoughts. A piece of future research might look at associations between CFT content and related cognitions and schemas. Although difficult, it would be useful to conduct a prospective study measuring guilt and shame-proneness prior to combat to understand how schemas interact with events during combat. Anecdotally, it was noted that some participants did not just generate counterfactuals relating to the outcome of the event but also to outcomes explaining their involvement in the event. For example, ‘if only I had had a better home life and had not run away to join the army’. As the focus of counterfactuals moves further up
the causal chain to earlier events, they are also more likely to relate to one's core beliefs or schema rather than one's behaviour or character during the event. They may therefore be an important part of the assimilation and accommodation process and might suggest a more adaptive style of thinking. It was outside the scope of this study to explore this further but coding counterfactuals in terms of where they come in time might be an important dimension in future research.
Conclusions

Imagining how things might have turned out differently seems to be an almost universal response to a traumatic event. The social psychology literature tells us that these counterfactual thoughts can have beneficial outcomes despite possible increases in distress. In particular, UCT is considered to serve a preparative function or facilitate a search for meaning whilst DCT is considered to serve an affective function. The aim of the current study was to explore the process of CFT and its relationship with specific emotions. In particular, the focus was on the counterfactual process with a clinical group experiencing high levels of guilt, shame and PTSD.

As anticipated, results suggested that high levels of CFT were involved in the maintenance of guilt and shame and hence PTSD. However, rather than contributing to feelings of guilt and shame via the appraisal process as was expected, it seemed that CFT was impeding the process of re-appraisal and adjustment through a focus on affect-reduction instead of evaluation. Specifically, the findings suggest a complex interaction of CFT and function. At least three potential mechanisms were identified through which CFT might contribute to temporary reductions in affect. Further research is needed to extend these findings and to explore the interaction of counterfactuals and emotion in a non-clinical sample.
References


Rothman, K.J. (1990), No adjustments are needed for multiple comparisons. *Epidemiology, 1,* 43-46.


role of counterfactual thought in the experience of regret and disappointment.

Organizational Behavior and Human Decision Processes, 75, 117-141.
Appendices

Appendix A – Ethical Approval

26 October 2004

Ms Janet Bradley
Trainee Clinical Psychologist
University of Surrey
Department of Psychology
Guildford GU2 7XH

Dear Ms Bradley,

Full title of study: Study of the role of counterfactual (what if...) thinking in guilt, shame and post-traumatic stress following service-related trauma
REC reference number: 04/Q1910/44
Protocol number: 1

The Chair of the East Surrey, Crawley & Horsham LREC reviewed the above application.

Ethical opinion
Response reviewed by the Chair and deemed to be satisfactory. University sponsorship was dealt with & up to date proof of university public liability insurance & professional indemnity insurance were submitted. Overlap with the other study occurring in the same organisation was addressed.

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

The favourable opinion applies to the following research site:

Principal Investigator: Janet Bradley

Conditions of approval
The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Approved documents
The documents reviewed and approved at the meeting were:

<table>
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<tr>
<th>Document Type: Application</th>
<th>Document Type: Janet Bradley CV</th>
<th>Document Type: Protocol</th>
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An advisory committee to Surrey and Sussex Strategic Health Authority
Management approval
The study may not commence until final management approval has been confirmed by the organisation hosting the research.

All researchers and research collaborators who will be participating in the research must obtain management approval from the relevant host organisation before commencing any research procedures. Where a substantive contract is not held with the host organisation, it may be necessary for an honorary contract to be issued before approval for the research can be given.

Notification of other bodies
We shall notify the research sponsor, and the Medicines and Health-Care Products Regulatory Agency that the study has a favourable ethical opinion.

Statement of compliance (from 1 May 2004)
The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

REC reference number: 04/Q1910/44 Please quote this number on all correspondence

Yours sincerely,

Sarafcane Richards
RESEARCH ETHICS COORDINATOR
15 November 2004

Ms Janet Bradley
Trainee Clinical Psychologist
Department of Psychology
School of Human Sciences

Dear Ms Bradley

Guilt and shame following service-related trauma v.1 (EC/2004/91/Psych)

On behalf of the Ethics Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the submitted protocol and supporting documentation.

Date of confirmation of ethical opinion: 15 November 2004

The list of documents reviewed and approved by the Committee is as follows:-

Document Type: Application
Version: 1
Dated: 15/09/04
Received: 16/09/04

Document Type: Insurance Proforma
Version: 1
Received: 16/09/04

Document Type: NHS Research Ethics Committee Application Form
Version: 3
Dated: 01/04
Received: 16/09/04

Document Type: Research Protocol
Version: 1
Dated: 06/09/04
Received: 16/09/04

Document Type: Interview Schedule
Dated: 06/09/04
Received: 16/09/04

Document Type: Demographic Information Sheet
Dated: 06/09/04
Received: 16/09/04
Guilt and shame following service-related trauma

You are being invited to take part in a research study. Before you decide to take part in this study, we want you to understand why we are asking you and what is involved. Please read this information sheet carefully and if you have any questions then please discuss them with your keyworker or with the researcher.

What is the purpose of the study?

There is some evidence that feelings of guilt and shame contribute to symptoms of post-traumatic stress following a traumatic event. If we could understand more about how these feelings come about and how they affect the symptoms then we could provide better treatment for people suffering from post-traumatic stress. This study aims to explore how different thinking styles might contribute to feelings of guilt and shame following service-related trauma.

Why have I been chosen?

We are inviting all those who visit to take part in this study. It was felt that people who come to are likely to suffer some stress symptoms following combat and that they may be happy to contribute to research to help future treatment.

Do I have to take part?

It is up to you to decide whether to take part. Whether or not you decide to take part will not in any way affect the treatment or service you may be receiving or be entitled to receive.

What do I have to do?

You will be asked to very briefly discuss a traumatic event that you experienced during your time in service. You will be asked to answer some questions on paper about the event and how it made you feel. You will then be asked about different thoughts you may have had about the event. In total, it will take about 30 minutes.
What are the advantages and disadvantages of taking part?
Unfortunately, there are no specific benefits for you in taking part. However, many people do find that they are glad of the opportunity to discuss the traumatic event with somebody. On the other hand, it may be that thinking about and talking about the event causes you some distress. If this is the case, you will be given time afterwards to relax, de-stress and discuss your feelings with the researcher.

Confidentiality
If you agree, part of the study will be audio-taped so that we have a back up copy of what you have said. The recording will be kept completely anonymous. All your responses will be kept strictly confidential and anonymous. You cannot be recognised or identified in any way.

Contact for further Information?
If you have any questions about the study or are unsatisfied about any aspect of the study then you can contact

Thank you very much for taking part
Consent Form

Guilt and shame following service-related trauma v.1

I voluntarily agree to take part in this study of feelings of guilt and shame following a traumatic event.

I have read and understood the Information Sheet provided. I have been given a full explanation by the researcher of the nature, purpose and duration of the study, and of what I will be expected to do. I have been advised about any distress that may result. I have been given the opportunity to ask questions on all aspects of the study and have understood the advice and information given.

I understand that all personal data is held and processed in the strictest confidence, and in accordance with the Data Protection Act (1998). I agree that I will not seek to restrict the use of the results of the study on the understanding that my anonymity is preserved.

I understand that part of my interview with the researcher will be audio-taped and that the recording will only be used as a back up copy of what I have said. This recording will be kept strictly confidential and anonymous.

I understand that I am free to withdraw from the study at any time without needing to give a reason and without prejudice.

I confirm that I have read and understood the above and freely consent to participating in this study. I have been given adequate time to consider my participation and agree to comply with the instructions and restrictions of the study.

Name of volunteer ................................... (BLOCK CAPITALS)
Signed ..................................................
Date .............................................

Researcher .................................................. (BLOCK CAPITALS)
Signed ..................................................
Date .............................................
Appendix D – Demographic Information Sheet

Participant Number: ________________________________

General Information:

Age: ____________________________________________

Gender:   M / F

Ethnic Background: ________________________________

Service-related Information:

Years in service: _________________________________

Final rank: _____________________________________
Appendix E – Traumatic Event Sheet

Information about the Traumatic Event

A. Please tick which of the following traumatic events you have experienced:

- Combat or war zone □
- Accident or fire □
- Natural disaster □
- Sexual assault □
- Nonsexual assault □
- Imprisonment □
- Torture □
- Sexual abuse □

B. Which of the above traumatic events has disturbed you the most in the past month?

________________________________________________________________________

C. How long ago did the traumatic event happen?

________________________________________________________________________

D. Where did the traumatic event happen?

________________________________________________________________________

E. In the following space only, please very briefly describe the traumatic event?

If several events come to mind, focus on the one event that has disturbed you the most in the past month.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Appendix F – Thought-listing Task

Thought Listing Task

After a traumatic event, like the one you just described, people often find themselves looking back and thinking about the event. Have you thought about the event since it happened?

In the same way as you have just done with the letters, I would like you to list as many of these thoughts as you can until I tell you to stop. You might include memories, images, or thoughts. Try to begin each one with “I’ve thought...or I thought about”. For example, after a car crash, someone might respond, “I thought about what I had done that day...I’ve thought about seeing the car coming towards me...I’ve thought how angry I was at the other driver.” List as many thoughts as you can until I say stop. Are you ready?”. Give them one minute to list thoughts.

Then show them the following scale and ask them “How frequently have you had those thoughts in the last month with 0 being ‘never’ to 6 being ‘all the time’?

Never Quite often All the time
0 1 2 3 4 5 6

Counterfactual Thought Listing Task

After an event like the one you described, people often have thoughts of “what if...”, “if only..” or “at least...” in that they imagine ways that things could have turned out differently. Have you ever had these kinds of thoughts since the event?

In the same way as you have just done, I’d like you to list as many of these “what if...”, “at least” or “if only...” thoughts as you can. Try to begin each one with “I’ve thought...”. List as many as you can until I say stop. Are you ready?

Again ask them to rate frequency again using the same scale as previously. In addition, ask them to rate intensity by showing them the following scale and asking them “When you’ve had these thoughts in the last month, how intensely have you experienced them, from 0 being ‘very weakly’ to 6 being ‘very strongly’.

Very Weakly Moderately Very strongly
0 1 2 3 4 5 6

Upward Counterfactuals Relating to Behaviour

In particular, after an event like the one you described, people often have thoughts of “what if...”, “if only..” or “at least...” in that they imagine ways that things could have turned out better if they had behaved differently in some way. They might imagine other ways they could have behaved that would lead to a preferable outcome. For example, after a car crash, somebody might think “if only I had been driving more slowly, the crash would not have happened”. Have you ever had these kind of thoughts since the event?

In the same way as you have just done, I’d like you to list as many of these “what if...”, “at least” or “if only...” thoughts as you can. Try to begin each one with “I’ve thought...”. Remember, I only want you to list thoughts you have had about other ways you could have behaved that would lead to a better outcome. List as many as you can until I say stop. Are you ready?

Again, ask them to rate frequency and intensity in the last month of any thoughts they list.
Upward Counterfactuals Relating to Self

In particular, after an event like the one you described, people often have thoughts of "what if...", "if only.." or "at least..." in that they imagine ways that things could have turned out better if they were different in some way. They might imagine changes to themselves that would lead to a preferable outcome. For example, after an assault somebody might think "if only I was not so timid, they would not have attacked me". Have you ever had these kind of thoughts since the event?

In the same way as you have just done, I'd like you to list as many of these "what if...", "at least" or "if only..." thoughts as you can. Try to begin each one with "I've thought...". Remember, I only want you to list thoughts you have had about changes to yourself as a person that would lead to a better outcome. List as many as you can until I say stop. Are you ready?

Again, ask them to rate frequency and intensity in the last month of any thoughts they list.

Downward Counterfactuals Relating to Behaviour

In particular, after an event like the one you described, people often have thoughts of "what if...", "if only.." or "at least..." in that they imagine ways that things could have turned out worse if they had behaved differently in some way. They might imagine other ways they could have behaved that would have lead to a worse outcome. For example, after a car crash, somebody might think "at least I was not driving any faster, if I had been then I might be dead now". Have you ever had these kind of thoughts since the event?

In the same way as you have just done, I'd like you to list as many of these "what if...", "at least" or "if only..." thoughts as you can. Try to begin each one with "I've thought...". Remember, I only want you to list thoughts you have had about other ways you could have behaved that would lead to a worse outcome. List as many as you can until I say stop. Are you ready?

Again, ask them to rate frequency and intensity in the last month of any thoughts they list.

Downward Counterfactuals Relating to Self

In particular, after an event like the one you described, people often have thoughts of "what if...", "if only.." or "at least..." in that they imagine ways that things could have turned out worse if they were different in some way. They might imagine changes to themselves that would lead to a worse outcome. For example, after an assault, somebody might think "what if I was not such a calm person, then I might have come to much greater harm". Have you ever had these kind of thoughts since the event?

In the same way as you have just done, I'd like you to list as many of these "what if...", "at least" or "if only..." thoughts as you can. Try to begin each one with "I've thought...". Remember, I only want you to list thoughts you have had about changes to yourself as a person that would have lead to a worse outcome. List as many as you can until I say stop. Are you ready?

Again, ask them to rate frequency and intensity in the last month of any thoughts they list.
Appendix G – Questionnaire Measures

IES-R

Following is a list of difficulties people sometimes have after stressful life events. Please indicate how distressing each difficulty has been for you during the past 7 days with respect to the event you have described. How much were you distressed or bothered about these difficulties?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Any reminder brought back feelings about it</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>I had trouble staying asleep</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Other things kept making me think about it</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>I felt irritable and angry</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>I avoided letting myself get upset when I thought about it or was reminded of it</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>I thought about it when I didn’t mean to</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>I felt as if it hadn’t happened or wasn’t real</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>I stayed away from reminders about it</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>Pictures about it popped into my mind</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>I was jumpy and easily startled</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
<td>I tried not to think about it</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>I was aware that I still had a lot of feelings about it, but I didn’t deal with them</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
<td>My feelings about it were kind of numb</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
<td>I found myself acting or feeling like I was back at that time</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td>I had trouble falling asleep</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
<td>I had waves of strong feelings about it</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
<td>I tried to remove it from my memory</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
<td>I had trouble concentrating</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
<td>Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
<td>I had dreams about it</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21</td>
<td>21</td>
<td>I felt watchful and on guard</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22</td>
<td>22</td>
<td>I tried not to talk about it</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
GI-T

Read each of the following statements carefully and circle the number to the right that indicates how much you agree with that statement.

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have made a lot of mistakes in my life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>If I could do certain things over again, a great burden would be lifted from my shoulders</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>I have never felt great remorse or guilt</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>There is something in my past that I deeply regret</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Frequently, I just hate myself for something I have done</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>My parents were very strict with me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>I often feel &quot;not right&quot; with myself because of something I have done</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>If I could live my life over again, there are a lot of things I would do differently</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Guilt and remorse have been a part of my life for as long as I can recall</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Sometimes, when I think about certain things I have done, I almost get sick</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>I do not believe that I have made a lot of mistakes in my life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>I often have a strong sense of regret</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>I worry a lot about things I have done in the past</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>There are few things in my life that I regret having done</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td>I sometimes have trouble eating because of things I have done in the past</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td>Sometimes I can't stop myself from thinking about things I have done which I consider to be wrong</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td>I never have trouble sleeping</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18</td>
<td>Guilt is not a particular problem for me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>There is nothing in my past that I deeply regret</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20</td>
<td>If I had my life to begin over again, I would change very little, if anything</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Read each of the following statements carefully and circle the number to the right that indicates how often you find yourself feeling or experiencing what is described.

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Almost always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel like I am never quite good enough</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>I feel somewhat left out</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>I think that people look down on me</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>All in all, I am inclined to feel that I am a success</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>I scold myself and put myself down</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>I feel insecure about others’ opinions of me</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Compared to other people, I feel like I somehow never measure up</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>I see myself as being very small and insignificant</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>I feel I have much to be proud of</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>I feel intensely inadequate and full of self doubt</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>I feel as if I am somehow defective as a person, like there is something basically wrong with me</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>When I compare myself to others I am just not as important</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>I have an overpowering dread that my faults will be revealed in front of others</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>I feel I have a number of good qualities</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>I see myself striving for perfection only to continually fall short</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>I think others are able to see my defects</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>I could beat myself over the head with a club when I make a mistake</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18</td>
<td>On the whole, I am satisfied with myself</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>I would like to shrink away when I make a mistake</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>I replay painful events over and over in my mind until I am overwhelmed</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21</td>
<td>I feel I am a person of worth, at least on an equal plane with others</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22</td>
<td>At times I feel like I will break into a thousand pieces</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23</td>
<td>I feel as if I have lost control over my body functions and my feelings</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24</td>
<td>Sometimes I feel no bigger than a pea</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>25</td>
<td>At times I feel so exposed that I wish the earth would open up and swallow me</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26</td>
<td>I have this painful gap within me that I have not been able to fill</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27</td>
<td>I feel empty and unfulfilled</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28</td>
<td>I take a positive attitude toward myself</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29</td>
<td>My loneliness is more like emptiness</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30</td>
<td>I feel like there is something missing</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix H – Statistical Analysis

Table 13: Independent sample t-tests comparing scores on outcome measures between privates and non-commissioned officers and above.

<table>
<thead>
<tr>
<th>Outcome measure</th>
<th>Privates (mean)</th>
<th>NCOs (mean)</th>
<th>t(49)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD (squared)</td>
<td>3678</td>
<td>3549</td>
<td>0.302</td>
<td>0.764</td>
</tr>
<tr>
<td>Guilt</td>
<td>71.3</td>
<td>74.4</td>
<td>-0.859</td>
<td>0.395</td>
</tr>
<tr>
<td>Shame</td>
<td>55.8</td>
<td>63.4</td>
<td>-1.282</td>
<td>0.206</td>
</tr>
<tr>
<td>Counterfactual activation</td>
<td>17.4</td>
<td>15.8</td>
<td>0.644</td>
<td>0.523</td>
</tr>
<tr>
<td>Counterfactual fluency (log)</td>
<td>0.77</td>
<td>0.93</td>
<td>-2.256</td>
<td>0.029</td>
</tr>
<tr>
<td>Verbal fluency (log)</td>
<td>1.47</td>
<td>1.48</td>
<td>-0.277</td>
<td>0.783</td>
</tr>
<tr>
<td>General rumination</td>
<td>5.39</td>
<td>5.94</td>
<td>-0.864</td>
<td>0.392</td>
</tr>
</tbody>
</table>